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Wild card workshops 2 S
Workshops by invited presenters,
strongly orientated to complexity and uncertainty
WC-001–WC024

Workshops 6 S
WS-001–WS067

Oral presentations 19 S
OP-001–OP300

Posters 86 S
Disease prevention and health promotion
Disease prevention P-001 – P-135
Health promotion P-136 – P-207

Education and research in family medicine
Philosophical considerations regarding the profession P-208 – P-217
Research P- 218 – P-223
Teaching and learning family medicine P-224 – P-269

Essentials of clinical practice
Pharmacotherapy, treatment, medicaments P-270 – P-290
Ethics P-291 – P-294
Narrative medicine P-295 – P297
Organ-specific diseases P-298 – P-421
Psychosomatic problems P-422 – P-436, P-556

Health policy in family medicine
Emergency concepts P-437 – P450
Gender issues P-451 – P-463
Health economics P-464 – P-471
Health policy P-472 – P-496
Informatics, e-health P-497 – P-509, P-557, P-558
Interface to nursing, hospital care, social sciences P-510 – P-523
New practice organizational models P-524 – P-555

Index of first authors 205 S
Index of all authors in the PDF at www.smw.ch

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WC-001

Multiprofessional care for the chronically ill – still a long way to go?

Rosemann T. (Zurich), Steurer-Stey C. (Zurich), Schwendimann R. (Basel), De Geest S. (Basel)

Background: To face the challenge of an in increasing number of people living with multi-morbidity and chronic illnesses new models of care are required to overcome the limitations of the prevailing acute care paradigm. The aim of this workshop is to discuss the Chronic Care Model (CCM) and to highlight needed competencies for health care workers in a CCM as well as associated opportunities and challenges of interdisciplinary collaboration between physicians and Advanced Practice Nurses (such as nurse practitioners) in CCM. The current situation in different health care settings, specific challenges, approaches and perspectives will be addressed.
Methods: This workshop will be based on the most recent international literature concerning CCM.
Key areas: The Chronic Care Model (CCM) is an organizational approach to caring for people with chronic disease in a primary care setting. The system is population-based and creates practical, supportive, evidence-based interactions between an informed, activated patient and a prepared, proactive practice team. The CCM identifies essential elements of a health care system that encourage high-quality chronic disease care: (1) the community; (2) the health system; (3) self-management support; (4) delivery system design; (5) decision support, and (6) clinical information systems. Core competencies as postulated by WHO, needed to work in CCM are: (a) Patient centered care; (b) Partnering; (c) Quality improvement; (d) Information and communication technology; (e) Public health perspective. The integration of Advanced Practice Nurses in a multiprofessional CCM is dependent on a number of drivers (i.e. health care needs of population; educational preparation, practice patterns, workforce issues and practice patterns.
Discussion round: A template for a framework how multiprofessional care can be provided in a primary care setting will be presented and discussed in a discussion round with the audience.

WC-002

Putting prevention into practice: how can you do it ethically, effectively and efficiently?

Litt J. (Adelaide), Weingarten M. (Tel-Aviv)

Aims: The workshop will guide participants through both ethical and implementation issues that influence the delivery of preventive care. One or two prevention areas will be used to focus the discussion. Participants will work through these issues in small groups before reconvening to summarise the issues that were raised in a plenary session
Implementation: Principles: What principles should be considered when implementing prevention? Receptivity: What are the benefits and costs of implementing a systematic approach to the delivery of preventive care? Ability: Is there adequate knowledge, skills and time and resources? Coordination: What planning and coordination will help to make it happen? Targeting: Is there an assessment of the barriers, both actual and potential? Iterative cycles: Is there a cyclical planning process? Collaboration: Are all the key players involved? Is there adequate teamwork? Effectiveness: What systematic and evidence-based implementation strategies and processes are used?
Ethics: Autonomy: Do relative risk reduction, and number needed to prevent an event constitute appropriate information for consent? Is absolute risk reduction a more useful statistic? How does a patient oriented approach accommodate doctor initiated prevention? Does systematic preventive care set up a conflict between the best interests of the individual patient and the public? Is there victim blaming of the patient? Equity: How do you justify diverting the doctor's/ the practice's time and money from the sick to the healthy? Do external quality targets for preventive medicine compromise care for the poor? Conflict of interests: Do external audit driven incentives (P4P) present a conflict of interests and compromise the fidelity of recording, and hence the doctor's trustworthiness?

WC-003

Doctor, what can I do for my health? Concepts and practical examples of patient-driven health promotion in primary care

Neuner-Jehle S. (Zürich), Deppeler M. (Zollikofen)

Aims: Participants gain an overview over activities in research and newly developed programs for primary care physicians in Switzerland, focussing patients' needs and preferences related to prevention and health promotion. Participants are encouraged to share their practical experience in this field, so contributing to bridge the gap between theoretical concepts and daily clinical work.
Methods: Short presentations by competent co-referents will give us inputs to facilitate discussion and to share experience between the participants of the workshop. In a first part, we set the baseline about doctors and patients' **attitudes, perceptions and expectations** in relation to health promotive activities. First results from a Swiss focus group study among primary care physicians and data of surveys on patients' needs and preferences in the field of prevention are presented. Secondly, we will discuss an **example of operationalizing theoretical concepts** in health promotion like patient centeredness, empowerment, motivational interviewing and the transtheoretical model of behavioural change (TTM), leading to a program called "Gesundheitscoaching" ("Coaching for Health"), ready to run in primary care offices. Important topics as healthy nutrition and body weight, physical activity, coping with psychological stress, alcohol consumption, tobacco smoking and further more are addressed in this program. A third part widens the horizon to **public health and community**, presenting an example of a Swiss health network called "Dialog-Gesundheit" ("dialogue-health"). Within this network, partners like patients, health professionals, politicians, scientists and others try to contribute equally to an improvement in health literacy and competence by rising relevant questions and defining problems, disussing them and finding adaequate solutions. Practical issues of this concept are presented and discussed.

WC-004

The potential for research using electronic medical record and ICPC–2

Bhend H. (Aarburg), Soler J.K. (Malta), Zoller M. (Zürich), Kuehlein T. (Heidelberg), Zoller M. (Zürich)

Aims: The fundamental aspects of data analysis using icpc-2 will be presented. Combining Electronic medical record and ICPC-2 Classification for Research in Primary Care is a potential tool to improve quality and position of primary care: The workshop will motivate us for using both EMR and ICPC-2 in daily practice.
Description: The ICPC-2 Classification System and data analysis based on it will be presented. The prerequisites and the potential of an electronic medical record dedicated to perform as well in research as in daily routine will be discussed. Finally the potential for research based on (semi-) automatic uploaded and anonymized data to a central server will be demonstrated on the basis of the FIRE-Project.
Background: In several countries such as the UK, Germany, Australia, Malta etc. electronic databases facilitate research in General Practice Settings. Locally a lot of clinical data are stored. With the modification of an uniform Coding or Classification such as ICPC-2, this data could be collected and used for research. Ideally data from practices are uploaded directly from Electronic Medical Records (EMRs) to a central server, using a primary care classification. Analyses of ICPC data is the core process of any research in primary Care. In Switzerland at the moment still less than 13% of GP practices are fully equipped with EMRs. In this situation the executive board of the Swiss society of general practitioners together with the institute of general practice at the University of Zurich started a project named FIRE last year. FIRE stands for Family Medicine ICPC Research using Electronic medical record. This project and its first results will be presented. The further way of building a database for continuous monitoring and research in Primary Care will be discussed.

WC-005

Out-of-hours primary care: examples from the Netherlands and Switzerland

Giesen P. (Nijmegen), Huibers L. (Nijmegen), Hugentobler W. (Nürensdorf)

Aim: – We present an overview of the different organizational models for out-of-hours primary care, their assessment and expected future developments. – We will focus on developments in the Netherlands and Switzerland. – Comments and reflections from both perspectives will be made. – We will discuss future plans, ideas and health care policy with participating GP's.
Abstract: Western countries have many different models for out-of-hours primary care, varying from individual GP care, to large-scale GP cooperatives. An increasing number of countries are shifting towards large-scale primary care organizations, as in the United Kingdom, Denmark, and the Netherlands. The main causes of this tendency towards large-scale out-of-hours care are the increasing workload with non-urgent demands and self referrals, the lack of commitment of GPs to be on call, and the shortage of GPs. In Switzerland the direction and reasons for changes in out-of-hours primary care are similar, but the process of transformation is less advanced. The diversity of models for out-of-hours care might be even greater in Switzerland, because of the larger number of political players involved (26 cantons and federal government). What are the consequences of these developments? Does this shift lead to a higher GP commitment? Does it lead to a better access, quality and safety in the out-of-hours primary care? Does this shift lead to better triage and collaboration with ambulance care and accident and emergency (A&E) departments of hospitals? In this workshop we will try to get an answer on these questions. The participants will get insight in the assessment of the

different organizational models and in the quality of out-of-hours GP cooperatives in the Netherlands, especially in telephone triage and collaboration with the A&E departments. Topics among Swiss GP's will be discussed using experiences from the Netherlands.

WC-006

Motivate healthy habits (part 1): helping yourself and your patients change

Botelho R. (Rochester, NY)

Health behavior change is a complex learning process. You can learn how to help your patients change when evidence-based interventions do not work.
Goals: You will 1). Experience how to develop personal evidence about deep change that overcomes the limitations of evidence-based guidelines that address surface change 2) Learn how to improve your own health habits before guiding patients through the same learning process. Methods: You will sample a learning method that will help you and your patients learn how to motivate healthy habits. Working in small groups conducted in your first language or English, you will partner with a colleague to complete three learning exercises:
1) explore the emotional and cognitive implications of goal-setting, 2) identify and address discrepancies in your values between what you say and what you do, and 3) clarify your issues in terms of your resistance and motivation to change based on what you think and how you feel.
Results: Sharing your important take-home messages about completing these learning exercises with your partner and debriefing about these shared experiences within your small group will help you gain first-hand experience of developing personal evidence.
Conclusion: Replicating this learning process with your patients in autonomy-respectful ways will help you create meaningful and constructive dialogues about change. However, this strategy has significant limitations in terms of having a population-based impact.
Future Directions: Trainers can disseminate scalable group and individual learning programs (online/offline) by first engaging interested practitioners and staff to improve their own health habits. In turn, they can deliver the same programs to their patients and train patients to organize voluntary programs led by patients and for patients, inside and outside of practice settings. These strategies can develop learning organizations and communities to generate social movements that promote healthy habits.

WC-007

Making complexity understandable: how to use and implement findings from systematic reviews

Van de Laar F. (Nijmegen)

Aim of workshop: It is impossible for general practitioner or researcher to keep up with the enormous bulk of literature that is produced each day. Systematic reviews (SRs) are a sound and appraised method to summarize and assess all available scientific data on a certain topic. In this workshop we aim to demonstrate and practice how to identify reliable SRs, and how to effectively read and use them.
Organization of workshop: A short introduction is given in which the basics of SRs will be explained with a special emphasis on Cochrane SRs. Next, we will discuss in groups a number of abstracts from SRs on variable topics and of different methodological quality.
Expected result (learning objectives) of the workshop: The workshop has the following learning objectives: how to differentiate between a traditional review and a systematic review, what are the core methodological qualities of a SR, how to appraise external validity, how to read and understand data from meta-analyses. Impact of the workshop for daily practice. Participants will be able to find evident answers from good quality SRs when they encounter questions about prognosis, diagnosis or therapy.

WC-008

Complexity and electronic patient records

Greenhalgh T. (London)

Distributed ("networked") electronic patient records are intended to make healthcare safer, more efficient, more integrated and more accountable. But electronic record projects in healthcare fail in an estimated 50–80% of cases, and the more integrated and ambitious the system, the greater its chances of failure. The mismatch between the vision for networked electronic record systems and the reality of their implementation is often huge – with the designers' utopian dreams of "timeless, placeless, universal records" stubbornly refusing to materialise. Bruno Latour said that "all technology projects are fictions", and Haridimos Tsoukas said that the more complex and comprehensive the information system, the more difficult it will be to access and use the information in it. Unpredictability and stochastic crises are, of course, inherent properties of complex systems – so why do we expect electronic record systems to behave according to Bayesian rules? After a brief introduction to theory, this workshop will explore examples offered by members of the audience. Therefore, if you want to come to this workshop, please bring an example of an attempt to introduce an electronic patient record system in your local, regional or national healthcare system. We will discuss both "successes" and "failures", mainly in relation to complexity theory, and we will also question what we mean by "success" in this context. Prof Greenhalgh, who will lead the workshop, is currently leading the evaluation of the introduction of a system of nationally-accessible electronic patient records in the UK.

WC-009

Transforming your practice into a youth friendly health service: why do it and how?

Sanci L.A. (Melbourne), Meynard A. (Geneva), Pejic D. (Doboj), Sredic A. (Doboj), Narring F. (Geneva), Haller D. (Geneva)

Introduction: Primary care has a key role to play in responding to young people's health needs. Yet young people meet barriers in accessing primary care services. The WHO has led a call for youth-friendly primary care services that address these barriers by being available, accessible, acceptable, appropriate and equitable for young people.
Objectives of the workshop: The workshop aims to 1) provide an overview of the characteristics of youth-friendly health services and the rationale for introducing such characteristics in primary care and 2) offer examples from Australia and Bosnia & Herzegovina on the complex process of making a practice youth-friendly. Following the one-hour workshop, the authors will be available for further discussion and exchange with participants who may have their own experience of transforming a practice into a youth-friendly health service.
Methods: Interactive discussions and a quiz format will be used for part one. A more formal presentation format will prevail in part two, followed by more informal discussions. This workshop will also be an opportunity for family doctors interested in young people's health to share experiences and network.

WC-010

Disease concepts of GPs – a hidden influence on the patient-doctor consultation

Wilm S. (Witten), Brockmann S. (Bern), Kreher S. (Fulda), Sielk M. (Middelburg), Wollny A. (Düsseldorf)

Aim: Participants shall experience and realise how complex concepts of disease of patient and doctor are.
Organisation: In this workshop results of a multidisciplinary qualitative research work on concepts of disease using GPs' narratives will be presented (Kreher S et al. Bern: Huber; 2009). Input presentations will interact with participants' involvement. Expected results (learning objectives): It is well known that patients have their own concepts of their disease. They bring these concepts into the patient-doctor consultation, and it is important for GPs to elicit the concepts and to make patients talk about it to reach common ground in decision making. Our research hypothesis is that doctors have concepts of disease, too. Surprisingly, these do not root in medical knowledge only, but have manifold, enormous non-professional facets. At least parts of these are subconscious, but strongly influence GPs' daily behaviour. Impact for daily practice: To sensitise participating GPs to the crucial role which their own concepts of disease have for the patient-doctor relationship.

WC-011

Cardiovascular prevention: What can we learn from each other? Evidence on the impact of GP care on patients from 10 European countries (EPA-Cardio Study)

Szecsenyi J. (Heidelberg), Saner H. (Bern), Beijaert R. (Utrecht), Walma E. (Rotterdam), Giampaoli S. (Roma), Hobbs R. (Birmingham)

Aim and purpose: This workshop reveals data from the EPA cardio study, a unique set of internationally comparative data on cardiovascular (CV) risk management (RM) provided in primary care and on health-related lifestyles of patients in Europe, that include the views of doctors & patients on innovative preventive services for CV diseases (CVD).
Design and Methods: An observational cross-sectional study was carried out in 10 European countries, and stratified samples of 36 practices per country were recruited in 2008. In each practice, three samples of 15 patients each were sampled: patients with coronary heart disease (CHD), patients at high risk for CVD, and healthy adults. The quality of CV-RM was assessed based on 44 performance indicators taken from an audit of medical records and an interview with the practice. Lifestyle (smoking, physical exercise, diet) was measured with validated patient questionnaires. Additional measures included practice characteristics and exposure to programs to improve CV care.

Results: Comparisons among countries on the quality of CV-RM services for patients with established CHD and for patients with high risk for developing CVD; health-related lifestyle (smoking, physical exercise, diet) in high risk patients and in healthy patients in general practice across Europe. Association e.g. between the quality of CV-RM provided and a) exposure of a practice to quality improvement programs; b) patients' lifestyles; c) characteristics of patients, health professionals, primary care practices, and countries with different health care systems.
Conclusions and learning objectives of the workshop: A panel of international expert-practitioners will discuss with participants the key findings of EPA Cardio, with special reference to CVD prevention a) in the Netherlands; b) by teaching primary care physicians (Projetto cuore/Italy); c) and the contribution of research – to what we all may learn from best practices and innovative programs across Europe.

WC-012

From complexity to individuality – the homoeopathic approach to the patient

Bichsel B. (Schiers), Bösch P. (Schaffhausen), Frei-Erb M. (Thun/Bern), Schnyder-Etienne H. (Leuk)

Aim: To gain an insight into the daily work of a homoeopathic general practitioner
Content: 1. Case description of a young woman with posttraumatic stress disorder and multiple allergies; 2. Search for the patient's – hidden – complexity which led to the actual disease (the homoeopathic anamnesis); 3. Collection and organization of the complex symptoms (different levels: body,soul,mind; homoeopathic hierarchy of the symptoms); 4. The homoeopathic remedy and its complexity (short insight into the variety of the homoeopathic remedies; deeper understanding of the remedies); 5. Search for the individuality which appears within the patient and the remedy; 6. The follow up – generally and case-related.

WC-013

Motivate healthy habits (part II): using web 2.0 & 3.0 technologies to generate social movements

Botelho R. (Rochester, NY)

A learning process has been developed to help you become the researcher of your own health behavior change. You can develop your own personal evidence about change that overcomes the limitations of evidence-based guidelines. This process can help you experience transformational learning by expanding your worldviews about evidence and behavior change. Web 2.0 & 3.0 Technologies can use these high-touch learning processes to create meaningful experiences about change for both individuals and groups Goals: 1) Describe how transformational learning can develop the leadership capabilities to disseminate learning programs about healthy behavior change.
2) Outline how organizations can build transformational leadership networks to develop professional movements that promote healthy habits in population-based ways.
Methods: This dissemination process first begins by developing transformational leadership within and between organizations. Such leadership begins with self-change. When leaders gain first-hand experience of developing personal evidence, they can engage interested trainers, practitioners and staff more effectively in the same learning process. In turn, health care settings can deliver similar programs (online/offline) to their patients and train patients to organize voluntary programs led by patients and for patients, inside and outside of practice settings.
Results: Participants will learn about how high-tech, high-touch programs can create high-impact learning experiences.
Future Directions: Social networking strategies that use Web 2.0 & 3.0 technologies will accelerate the dissemination of highly scalable programs that motivate healthy behavior change. Leadership development networks are essential for developing top-down, professional movements that in turn foster bottom-up, social movements, such as online learning communities.

WC-014

Psychosomatics in general practice – an appetizer

Langewitz W. (Basel), Loeb P. (Basel)

Aim: This workshop will try to propose an approach embedded in Psychosomatic Medicine as a promising tool to deal with difficult patients in General Practice.
Background: Some of the most difficult patients are those who do not share the professional's concepts about the origin of complaints and the consequent treatment options. Many present *multiple vague complaints* that cannot be ascribed to a certain biomedical disorder. As there is no generally accepted definition of Psychosomatic Medicine, the defintion of the *Swiss Academy of Psychosocial and Psychosomatic Medicine SAPPM* will be presented: A psychosomatic approach is characterised by the attempt to create a common reality to which both sides, patient and professional contribute their share. This attitude calls for a certain communication style that is characterised by the professional's willingness to invite the patient into a narrative of his or her complaints.
Methods: Using examples from participants or from transcripts from a GP project in Liverpool, participants identify segments of patient's utterances that most typically represent the "difficult patient". GP's responses to these complaints will be collected from participants and discussed in the workshop. A theoretical framework will be presented that offers a taxonomy for vague complaints. Participants will use certain communication techniques to deal with vague complaints. These include the use of structuring utterances, an explicit explanation for the use of closed questions in dealing with vague complaints, and opportunities to continue talking about them.

WC-015

Psychosomatics for gourmets

Begré S. (Bern), Kiss A. (Basel)

Aim: Improvement of diagnosis and therapy of depression in the daily practice of general practitioners has become a major target of intervention. Such interventions to improve the skills of general practitioners differ substantially from country to country.
Methods used in the Workshop: The workshop will be interactive, consisting of exercises with participants, followed by a discussion of the benefits and shortcomings of the exercises. Emphasis will be put on the communication with the patient concerning diagnosis and treatment of depression rather than on pharmaceutical aspects of antidepressants. Short input presentations based on interesting research in general medicine will be given to enhance the discussion with participants on what kind of presentation is used for interventions to improve the skills of general practitioners in this field. Although the focus of the workshop is more on how to do such interventions there will be an outlook on the effectiveness of such interventions in general practitioners.
Outcome: At the end of the workshop participants will have a notion of how such workshops could be carried out, they know the most important elements to improve the knowledge, attitudes and skills of GPs caring for their patients with depression.

WC-016

Everything for everyone? Rationing in family medicine

Hurst S. (Geneva)

Limitations on health care resources are a reality in all health systems and cost-containment strategies have different impacts on family medicine. In this context, should individual doctors do their best to provide everything for all their patients? Should they implement limitations in their day-to-day practice? If so, which ones and how? Such controversies often disregard the complexities of clinical practice. In a survey of physicians in Switzerland, Norway, Italy, and the UK (N = 656, response rate 43%), 56.3% reported having rationed interventions. In another study, we showed that US physicians' strategies in scarcity mobilized considerable creativity and negotiation. These data outline physician participation rationing as inevitable, perhaps even desirable. The first part of the workshop will explore participants' experiences with limit setting against this background. Our European study also outlined two forms of systemic strategies. In Norway and the UK, physicians are limited by rules In Italy and Switzerland, they are free under pressure. This is one of the ways in which physicians witness day-to-day effects of health policies on systems' accessibility and fairness to patients. This will be the second point of discussion with participants. One of the reasons why physicians' participation in limit setting may be desirable is their ability to adapt decisions to individual patients. This requires them to bring considerations of fairness to their allocation decisions. Our third study showed that physicians think about fairness in allocation in remarkably complex ways; but articulating this value is difficult, despite agreement on its importance. The final part of this workshop will explore participants' justice-based reasoning in their own practice, and enable them to share their experiences with each other.

WC-017

The challenge of complexity – anthroposophic and conventional medicine in dialogue

Ephraim M. (Zoetemeer)

An international interactive workshop
Introduction: The potential of uncertainty in medicine 7 min
Ursula Wolf, Bern, Switzerland
+ Questions: Why patients demand for Anthroposophic Medicine 7 min

Marco Ephraïm, Zoetermeer, The Netherlands
+ Questions: Why doctors practice Anthroposophic medicine 7 min
Michael Evans, Stroud, UK
+ Questions
Anthroposophic Medicine at a State Hospital 7 min
Danielle Lemann, Langnau i.E. Switzerland
+ Questions
How does Anthroposophic Medicine perform in routinePractice? – The AMOS- and IIPCOS-Studies 7 min
Harald Hamre, Freiburg, Germany
+ Questions
Discussion 20 min.
Aim of the workshop: Participants receive an impression of the creative potential of uncertainty in medicine, gain insights into Anthroposophic Medicine as method to approach complexity, and experience the synergistic power of pluralism in medicine.

WC-018

Gender issues: adding complexity to our daily practice?

Jaunin-Stalder N. (Lausanne), De Torrente G. (Lausanne), Lagro-Janssen T. (Nijmegen), Zemp E. (Basel)

Aim: To convince primary care doctors with one clinical and one public health presentation followed by a small group discussion about the importance of implementing gender sensitive care in their daily practice.
Presentations: – Prof. T. Lagro-Janssen, Nijmegen, Netherlands: "The importance of gender in health problems in general practice". Based on the Continuous Morbidity Registration in Dutch general practice, the presentation will illustrate how sex differences influence the risk factors, the prevalence and the course of disease, and the access to care. It will also show how gender and socio-economic status are strongly intertwined. 15 minutes presentation, 5 minutes discussion. – Prof. E. Zemp, Basel, Switzerland: "Life expectancy: the gender gap is narrowing". Based on Swiss data, the presentation will illustrate temporal trends of gender differences in life expectancy and to what extend socio-demographic factors, biographic transitions, health behavior, help seeking as well as concepts of masculinity and femininity influence health of older men and women. 15 minutes presentation, 5 minutes discussion.
Discussion in small groups: – Why is it necessary to implement a gender sensitive care in general practice and how can we do it. 10 minutes
General conclusions: Gender aspects should be considered from public to individual health and should be integrated in daily practice without forgetting the other social determinants of health. 10 minutes

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WC-019

Achieving equity – personal and professional opportunities for women in family medicine

Howe A. (Norwich), Pas B. (Nijmegen), Frohlich F. (Winterthur), del Olmo Fernandez S. (Madrid), Braun B. (Basel)

Abstract Background: Family medicine organisations have a commitment to the achievement of the best outcomes possible for both practitioners and patients in family medicine, regardless of background. In spite of an increasing number of women entering medicine, there is still evidence that women are less likely to progress in their careers at the same pace and level as men: and they are also more likely to perceive barriers to their career because of their need to balance work and personal commitments. The reasons for these issues are complex, and relate to societal, personal and organisational factors, which may appear to give women equal rights but do not always facilitate equitable uptake of opportunities and resources by women. Wonca has adopted a policy to aim for gender equity through and within its member organisations.
Purpose of workshop: to learn from new research and organisational work on the challenges for women family physicians. Examine options such as mentoring and organisational leadership as a means of supporting and developing equity for women doctors. Look at the complexity of these issues across Europe and across the career lifecycle. Draw together conclusions for action post-workshop.
Hosts: Chair – Professor Amanda Howe, Chair of the Wonca Working Party for Women in Family Medicine (www.womenandfamilymedicine.com)
Keynote speakers: – Berber Pas (MBA), School of Management & General Practice, Women Studies. Radboud University Nijmegen, The Netherlands – "Barriers and facilitators for balancing professional and personal priorities"; – Beatrice Braun, Medical Women Switzerland – "Mentoring – the Swiss scheme as a model for professional support for women doctors"; – Amanda Howe – "Making demands – working within organisations to achieve equity" Panel commentators – Dr Fiona Frohlich (Medical Women Switzerland), Dr Sara del Olmo (Vasco da Gama, Spain).

WC-020

Epigenetics:
being human – are we determined by our genes?

Koechlin F. (Münchenstein)

A loser at school, the aggressive youngster are they the product of their genes? Latest research in epigenetics gives new aspects to the old discussion of hereditary determination versus environment, social and cultural influence. It was shown, for example, that the food of a pregnant mouse mother can influence the genome of her offspring ("You are what your mother ate"). In another experiment, even social behaviour – a rat mothers care of her pups – left traces in the genome of her siblings. It looks as if the environment can have direct influence on the genetic level – through epigenetic systems. These systems seem to be forming a bridge between the genome and the phenotype – AND the environment. So was Lamarck on some right tracks after all? We look at the history of genetics, with special emphasis on epigenetics.

WC-021

Researching diagnosis and prognosis in general practice

Donner-Banzhoff N. (Marburg), Griffiths F. (London), Herzig L. (Lausanne), Knotterus A. (Maastricht), Buntinx F. (Leuven)

Patients present in practice with symptoms that are often ambiguous. Aetiologies range from benign self-limiting disease to serious, life-threatening conditions. The patient's history, the physical examination and simple point-of-care tests help to reduce diagnostic and prognostic uncertainty. However, the evidence base for these is slim, especially for items of the history. A paradigm for the cross-sectional diagnostic study has been developed over the last 20 years. But how does this apply to general practice? The aim of our workshop is to discuss and to develop the design of diagnostic studies in general practice. The results of these studies can help GPs to deal with the complexities of the patient encounter and their own uncertainty. Brief presentations will introduce pertinent problems, pitfalls and suggestions. Participants will discuss their experiences and propose new solutions. Researchers who have gathered experience with diagnostic studies in primary care or who plan to conduct such studies are invited to take part (maximum: 30).
Topic no. 1: Complex reality – crude methods. GPs collect rich data from their patients during the consultation. These include not only what is said, but also how it is said, what the patients looks like, what the GP knows from previous encounters, and what is not said. All these are potential diagnostic and prognostic indicators, they may also interact with each other in complex ways. How can descriptive and evaluative study designs capture this reality? (introduced by Frances Griffiths, University of Warwick, UK)
Topic no. 2: The right test to choose. GPs use not only conventional items of the history and the physical examination. They have also developed rules and heuristics adapted to their working environment. Some of these have been investigated in diagnostic studies (introduced by Frank Buntinx, University of Leuwen and Maastricht, B/NL).
Topic no. 3: Delayed-type reference standard: a practical experience. For low prevalence conditions standard study designs are often not feasible. Instead, the delayed-type reference standard has been suggested. The experience from a large diagnostic study (n = 1200) is reported (introduced by Norbert Donner-Banzhoff, University of Marburg, D).

WC-022

Deprivation at the office: complex situations which cannot be ignored

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Aims(s) and purpose: Material and social deprivation have been identified as risk factors for many diseases or behaviours which have an important global burden on health. General practitioners now use empirical methods to take into consideration material or social deprivation in the care they offer. This requires time and communication skills during encounters which increases the complexity of a GP's work. This workshop offers the opportunity to define deprivation, overview the actual state of scientific knowledge on the relationship between deprivation and health issues and explore the possible mean which can be offered by a general practitioner (GP) to prevent patients from developing mental and physical sufferance related to their state of deprivation.
Design and Methods: This workshop will be organised in three parts. The first part will present results from two non-published systematic reviews. One defining deprivation at the GP's office and the other documenting the relationships between GP's interventions, deprivation and health (Slide show). The second part will illustrate how the patient's state of deprivation can influence a GP's activity (Video). The third part will consist of group discussions on the following points:

a) How can GPs improve the detecting of deprivation? b) Is handling deprivation a part of the GP's work? c) How do we communicate our concern for these factors with our patients? (Clinical vignette)
Results: Learning objectives are 1) to be able to identify factors which are related to deprivation at an individual level, 2) acquire sound knowledge on the association between health and those factors, and 3) explore potential solutions to help patients face their state of deprivation.
Conclusions: This workshop will not only help GPs integrate scientific knowledge on deprivation in the care they give, but will also help researchers plan studies in fields GPs feel a need for.

WC-023

Malnutrition management in older outpatients

Kressig R.W. (Basel), Pitkälä K. (Helsinki), Sieber C.C. (Nürnberg)

Aim: to present available screening methods for older adults' malnutrition in ambulatory settings throughout Europe and to discuss possible prevention and treatment options.
Abstract: Based on concrete case presentations the different malnutrition screening methods as well as possible malnutrition treatments in older outpatients will be discussed and developed together with the workshop participants, taking into account the social, economical and cultural differences throughout Europe.

WC-024

Family medicine in a changing society

Schneuwly F. (Solothurn), Bauer W. (Küsnacht), Kaufmann M. (Bern), Koch R. (Bern)

Goals: To explore, what the primary health care needs of the society of 2039 will be. To endorse the World Health Organisation (WHO) and United Nations (UN) principles that health is a basic human right and that equality of access to healthcare for all citizens requires necessary policy and legislation.
Three steps: In a first step the possible future need of primary health care services will be discussed
– Governments lead the process of deciding the main health system objectives, based on epidemiological data and involving all the major stakeholders. – Organisations and individual care givers need to balance the competing influences and demands while building coalitions to achieve the main health system objectives. – Organisations set clear policy priorities while maintaining an overview of social interests. – Organisations and governements ensure the necessary regulation (of prices, the education of health care providers an professional practice, through licensing and accreditation, etc.) and – encourage a climate of transparency and accountability, through performance assessment. – The public has access to transparent information about the quality, price (and volume) of care services, products and is therefore in the position to make an informed choice. Based on the Health Care Consumer Index EHCI 2008 [1] strategy and several UN and WHO policies (e.g. the EFNNMA / WHO Europe statement on Health Systems Stewardship 2008[2]), possible processes and structures are outlined. Possible future roles of health care professionals and models of collaboration in primary health care will be discussed [1].
http://www.healthpowerhouse.com/index.php?option=com_content&view=category&layout=blog&id=36&Itemid=55[2]
http://www.euro.who.int/document/NFM/EFNNMA_Tashkent_statement.pdf

Workshops

WS-001

EGPRN's and Wonca Europe's European Research Agenda for General Practice

Hummers Pradier E. (Hannover), van Royen P. (Antwerp), EGPRN Research Agenda Group

Background: The new European Research Agenda for General Practice/Family Medicine (GP/FM) has been developed by the European General Practice Research Network (EGPRN). It traces the current state of evidence related to WONCA Europe's definition of GP/FM, and points out research needs and required research methodologies.
Methods: Starting from the 6 core competencies of the definition, a comprehensive literature review using keywords and MeSH terms was performed.It covered the 4 domains of health services research, clinical research, educational research and research methodology. Literature selection was done with regard to relevance for general practice/primary health care. Analysis by the author group used pre-defined steps with emphasis to conclusions and need for further research. Key informant discussions were organised at several stages within international conferences. Feedback from international groups and experts was considered in the final version.
Results: Many aspects of primary care management, specific problem solving and, to a lesser extent, patient-centred care are relatively well covered by research. However, most research focussed on local situations, individual diseases or very specific aspects of care. However, there is little research on community orientation, and almost no evidence for a comprehensive or holistic approach. MeSH terminologypoorly reflects core elements of GP/FM.Future researchneeds more instrumental and outcome development, and longitudinal studies, and should feature (among others) multimorbidity, and the effectiveness of specific primary care approaches.
Conclusion: The research agenda will be presented as an official EGPRN/WONCA Europe document, which can serve as reference paper for researchers, health policy makers or funding organisms. It defines key issues of GP/FM research, summarizes theexisting evidence on definition aspects and the clinical tasks of GPs, and points out research needs and evidence gaps.

WS-002

Desktop electronic guidelines: harm or help for the patient-doctor relationship?

Alenius H. (Lempäälä), Jousimaa J. (Helsinki), Teikari M. (Kirkkonummi)

Aims: Desktop computer has become an essential tool for a general practitioner. It is not only used as an interface to the electronic patient records but also to consult clinical guidelines at the point of care. Modern general practice entails mastering of a vast amount of knowledge. Easily searchable and concise electronic guidelines have made it much easier to find right information at the right time during the consultation. This is an enormous asset considering correct clinical practice and patient safety. Yet, the use of a computer at the patient's presence may greatly harm the direct human interaction between the physician and the patient. The aim of the workshop is to consider how to make the best use of a computer as an information source in the presence of the patient yet not disturbing the patient-doctor relationship.
Organistaion of workshop: The topic will be covered with the following elements: – Key factors of a successful patient-doctor interaction; – Electronic guidelines on the physician's desktop: the Finnish experience; – Role play in groups.
Discussion: Online access to electronic clinical guidelines during the patient visit: pros and cons. Possibilities to increase patient involvement.
Learning objectives: To understand the possibilities of online electronic guidelines during consultation for better quality of care and to realize the possible caveats involved.
Impact for daily practice: To make the use of electronic guidelines as a natural part of every day practice without the doctor-patient interface being replaced by the doctor-computer interface.

WS-003

Global standards for family medicine education and training

Kidd M. (Adelaide), Demarzo M. (Sao Carlos), de Silva N. (Colombo), Maagaard R. (Skodstrup), Švab I. (Ljubljana), Wass V. (Manchester), Žebiene E. (Vilnius), and members of the Wonca education working party

Aims and Purpose: This workshop is being hosted by the members of the Wonca Education Working Party. The Wonca Education Working Party is developing a set of standards for medical student education, postgraduate training and assessment in family medicine / general practice and continuing professional development for family doctors. The first two standards developed by the working party were formally

adopted at the Wonca World Conference in Singapore in 2007. Called the "Singapore Statements", they stated that: "Every medical school in the world should have an academic department of family medicine / general practice, or an equivalent academic focus." "Every medical students in the world should experience family medicine / general practice as early as possible and as often as possible in their training."
Design and Methods: The Working Party seeks the input from conference delegates in this workshop on the development of further global standards for the education of medical students, for doctors undertaking postgraduate training and assessment in family medicine / general practice, and for the continuing professional development of experienced family doctors.
Results: Examples of possible global standards to be discussed at the workshop include: "Every family doctor should complete a 2–4 year postgraduate program, or equivalent." "Training in family medicine should be community-based." "Family doctors should have the opportunity for further training in special skills, such as rural and remote medicine, public health, occupational health, care of older people, sports medicine." "Each country should have a formal mechanism to recognise those who have demonstrated competence in family medicine."
Conclusions: The final set of standards will be presented to the Wonca World Council in 2010. This work builds on the leadership of Wonca member, the late Dr Jack Rodnick.

WS-004

It helps if you know more about them: meeting adolescents in the primary care consultation

Meynard A. (Geneva), Vilaseca A. (Geneva), Narring F. (Geneva), Haller D. (Geneva)

Introduction: Meeting adolescents' health needs in primary care implies knowledge of the developmental as well as psychological, social and physical specificities of this age group. Developmentally appropriate communication skills are useful to the practitioner. Being aware of specific adolescent health issues is also helpful. This includes understanding the role of families, the need for confidentiality, networking with schools, social services and other key individuals in the lives of these teenagers. Primary care physicians are rarely exposed to such knowledge in the course of their training. The contents of this workshop are based on EuTEACH recommendations (www.euteach.com), a European network of Adolescent Health Specialists the goal of which is the improvement of adolescent health in Europe through the development of a training curriculum. The Adolescent and Young Adult Program in Geneva is part of this network.
Objectives of the workshop: The workshop aims to provide an introduction on how to(1) Conduct a developmentally appropriate interview in primary care (2) Identify the main goal for the consultation as well as the hidden agenda (3) Use the interview as an opportunity to introduce prevention/health promotion messages (4) Use multidisciplinary networks.
Methods: video taped interviews and small group discussions will be used to illustrate the practical and theoretical aspects of conducting an interview with an adolescent in various settings. If they wish, participants will have the opportunity to practice using role-play. Participants are welcome to bring clinical situations from their own practices. This workshop will also be an opportunity for family doctors to share experiences and network (training and clinical issues).

WS-005

Sense and sensibility (what we know is not what we feel)

Panhofer B. (Ungenach), Rabady S. (Windigsteig), Degn B. (Wien)

Aim: The aim is to identify skills we use in an intuitive way to deal with complexity and hence to learn to utilize them more intentional and purposeful.
Assumptions: Family doctors believe they "know", but "act" by intuition and by using many different senses. Intuition develops upon cumulated knowledge and by experience of many sources. Decision making results from a hermeneutic process that is highly individualized by variations in respect of doctors and patients characters and "mind maps".
Methods: Knowledge café (also known as world café)
1. Open ended key questions are defined: what are our key skills and features to manage complexity in daily work? What is decision making alleviated by? 2. The facilitator introduces the topic and poses the questions. 3. Small groups of about six are formed to discuss the questions, sitting at round tables, hosted by a "coffee house owner". Ideas are written on the table covered by a paper – e.g. based on mindmaps. 4. After 15 minutes the group changes tables, except for one participant, who hosts the next group, presenting the predecessor's results, then a new discussion starts combining views from both groups. 5. This rotating principle continues till the time specified. 6. Participants return to the large group for a final 20 minute session to share thoughts, insights and ideas.
Results: We expect to increase our awareness and knowledge on the kind of soft skills, features, attitudes, mindsets and insights family doctors implicitly use, and to analyse in which ways they should be utilized to serve us in our daily work with patients. This will help to understand and manage complexity in General practice.

WS-006

CanMEDS-Family Medicine: A new competency framework for family medicine education and practice in Canada

Tannenbaum D. (Toronto), Walsh A. (Hamilton), Organek A. (Toronto)

Aims and purpose: Family physicians are required to be competent clinicians, and skilled communicators, collaborators, health advocates, managers, scholars and professionals. The aim of the workshop is to introduce participants to a new competency framework for family medicine from the College of Family Physicians of Canada, entitled CanMEDS-Family Medicine (CanMEDS-FM), an adaptation ofCanMEDS 2005 of the Royal College of Physicians and Surgeons of Canada, inwhich the competencies are organized into sevenRoles; and to compare and contrast this framework with others that have been adopted internationally.
Design and Methods: The rationale and process used in the development of CanMEDS-FM will be described. Participants will discuss the roles that family physicians assume in professional practice, and will determine whether CanMEDS-FM adequately defines the required roles and competencies. Other frameworks will be presented and participants will consider the relative strengths and limitations of CanMEDS-FM. Means of implementing the framework in the training and continuing professional development of family physicians will be explored.
Results: Learning objectives include the following. After attending this workshop, participants will: 1. Develop an understanding of CanMEDS-FM as a description of the competencies required in the comprehensive practice of family medicine in Canada; 2. Recognize the inherent differences in other competency frameworks; 3. Apply an understanding of a competency framework to the development of educational programs for family physicians in training and practice.
Conclusions: The workshop will assist participants to: 1. Articulate the competencies required for the practice of comprehensive family medicine; and 2. Determine means to acquire the competencies during professional training and maintain them in clinical practice.

WS-007

Asklepion: postgraduate education for the GP "from the source of knowledge"

Van der Jagt L. (Utrecht)

Aim and purpose: In 2007 the Dutch College for General Practitioners started the introduction of courses called 'The Asklepion courses'. In addition to the traditional core business of the Dutch College of producing guidelines and implementation products, this new development and organisation of fixed educational courses is a new challenge. In the six months Asklepion courses the participants monthly meet in small groups together with the experts in the field of family practice. Other characteristics of the courses are the use of the modular system (a construction of round and complete programmes, built on several themes), instructions in between the meetings; the use of interactivity in the group, and guidance by their own moderator. At this moment Asklepion offers three courses and a yearly one-day conference. Aims of the workshopare to learn how the Dutch College faces this challenge, to learn about its outcomes and to reflect on applicability in other countries.
Design and methods: Programme of the workshops as follows: presentation of the different courses, followed by discussion about strong and weak points of this formula, illustrated by a presentation of facts and figures of the evaluation. The workshop will be ended by discussion about the applicability in other countries.
Results: The participants of the workshop are able to compare their own strategy of continuous medical education (CME) to our strategy.
Conclusions: The participants determine the necessity and possibility of the organization of CME by the professional organization of GP's and the desirability of CME "from the source of knowledge".

WS-008

Dealing as an individual with individuals – the doctor's personal way of practice

Litschgi L. (Basel), Schlumpf A. (Basel), Handschin M. (Gelterkinden)

Objective: The goals of primary care are universally accepted. However, achieving these goals is strongly dependent upon the individual GP's way of practice. We develop our methods according to our special capabilities, our own biography, as well as our personal concept of medicine. Patients choose a general practitioner because they can identify with his personal manner of conducting his

consultation. How does this approach manifest itself. In group discussions we have the opportunity to get to know about our own approach.
The study: We analyzed twelve patient's visits at twelve general practitioners each. We used quantitative and qualitative methods to analyze different parameters of communication – among others the allocation of speach, the layout of medical subject matters (coded according to ICPC 2), as well as handling of narrative elements, i.e. the stories that patients tell without expecting therapeutic interventions. Comparing the twelve physicians we find common ground, typical for our institutional behaviour. We also find great differences as empirical evidence for the personal approach of each individual physician.
Conclusions: The many-sided situations during a patient's consultation require an act of composition and decision making at our own discretion in which no rule can assist. The manner in which we compose a patient's consultation and make these decisions is an expression of our personal way of practice. Our patients chose this approach when they select us as their general practitioner. Thanks to the development of this personal approach we are also better able to conciliate our medical work with ourselves. This individual design of patient's consultations should be given at least as much attention as standardized thematic communication.

WS-009

EQuiP-Workshop:
European Practice Assessment (EPA) –
effective change in practice with indicators that matter

Szecsenyi J. (Heidelberg), Kuenzi B. (Zuerich)

Introduction: The European Practice Assessment (EPA) is an indicator based method aiming to improve the organisation of general practices in a systematic way. It was developed and validated by a working group of approx. 60 GPs and experts from 6 European countries in which it was also field tested in a larger sample of practices. In the meanwhile EPA is used on a routine basis in some European countries. The assessment is multidimensional, including self-assessment by GPs, evaluation by patients and members of the practice team such as nurses and assistants and by an outreach visitor. The visitor functions not only as an assessor but also as a facilitator for feedback and improvement in the practice. In a recent before/after study with 107 GP practices in Germany it showed 7.1% overall improvement on a set of 192 indicators.
Goals: After a short introduction about different concepts of quality development and quality management in primary care, participants will learn about how to develop and implement good indicators for the assessment of practice organisation, the role of practice visits and the role of feedback and team approach for the improvement of practice management.
Methods: This workshop will be interactive with demonstration of different parts and tools of EPA as well as to learn from experiences of visitors.

WS-010

How "soft facts" shape family medicine:
reflecting on the blurred field of complexity

Abraham A. (Bern), Kissling B. (Bern), Neuenschwander S. (Bern), Hartmann H. (Bern)

Aims and purpose: The term "complexity" represents an empty bubble which is often stated but hardly ever explained in practice related ways. In order to become an established and acknowledged discourse in family medicine and related fields, «complexity» needs to be enriched with practice related content, messages, and concepts. Thus, the purpose of this workshop is to collect and examine aspects of family medicine that constitute complexity, and to present methodologies which can grasp and analyse complexity scientifically. The Swiss quality circle Elfenau/Bern is working for over 4 years with a social anthropologist, building a bridge between practical experiences with complexity issues and research on complexity.
Design and Methods: The workshop consists of four parts: (I) "Narrating complexity": Presentation of narratives as expressions of complexity written by GPs of the Swiss quality circle Elfenau/Bern which provide insight into the manifold ways GPs' decision making works. (II) "Complexity is…": Group discussion on the aspects of family medicine that constitute complexity. (III) "Researching complexity": Presentation of methodological possibilities to scientifically analyse the different layers, functions and mechanisms of complexity. (IV) Final discussion.
Result: In this workshop the attendants will learn and critically reflect the mechanisms through which complexity shapes family medicine. They will get insights into practical as well as scientific levels of complexity issues.
Conclusions: The impact of this workshop for daily practice is an increased awareness that so called "soft facts" do have a crucial impact on decision-making and patient-centred care. With the provided information GPs learn that these daily aspects can be objectified through systematic qualitative methodological procedures. With the assistance of such approaches, GPs' daily experiences are to be re-integrated instead of being dismissed in current biomedical, EBM dominated discourses.

WS-011

Worth a trial – coming up with the right questions
in primary care research –
workshop of VdGM together with EGPRN

Freund T. (Heidelberg), Hummers Pradier E. (Hannover), Colaço T. (Porto), Bulut S. (Istanbul)

Aim: Asking the right question is crucial for successful research. Primary care is a complex field where more high quality research is needed. This workshop aims to help prospective researchers in identifying appropriate questions in Primary Care Research and to evaluate their relevance, originality and feasibility.
Design: First, we will give a short presentation of the involved organisations (Vasco da Gama movement and EGPRN) as established frameworks for research support. Afterwards we will have a tutorial about strategies to initialize research. This includes aspects like creativity, literature review and the identification of project related pitfalls. The participants will then work on the idea of a specific research topic to train the skills facilitated before.
Learning objectives: We offer a jump start in primary care research by training useful skills to identify emerging research topics in the field and to initialize an own, specific project.
Conclusion: Participants will be able to start planning their own research projects after this workshop. They will know how to draw up a research plan and to look for additional support. As primary care is a growing research field, it should be our aim to improve quality in upcoming research to make future results considerable for other researchers and general practitioners in the practice.

WS-012

Rural practice: present and future

Banque Vidiella J. (Spain), Gomez Bravo R. (Spain), Schmidt M. (Germany), Wynn-Jones J. (UK), Petrazouli F. (Italy), Lygidakis C. (Italy), Pekez-Pavlisko T. (Croatia)

Aim: Through the differences between GP rural training programs across Europe we explore the need to make guidelines highlighting the keys issues for this special training.
Methods: The great variation in the GP training program has been shown in the systematic review we realized between European countries, from the length of postgraduate medical training (3 to 5 years depending on the country), to the structure and quality of the GP vocational training schemes. Comparing experiences through GPs training questionnaires we realize the needs of improve the rural program.
Results: The evaluation shows the shortage of education in rural practice and the important differences among European countries, also the lacks of stuff, the isolate situation and the hard conditions of working as a rural GP. Using a thought-starter guidelines from Euripa, we try to complement the knowledge and motivate the trainees for develop the postgraduate training.
Conclusions: Rural general practice is a very important part of the GP training and actually discover the kind of real doctor you are. This is the mean reason why a guidelines could be an useful tool to improve the compulsory GP training program. All this issues will be discuss during the Wonca workshop.

WS-013

Environmental medicine in family practice

Steiner E. (Schaffhausen), Aufdereggen B. (Visp), Bhend H. (Chur), Gilli Y. (Wil), Moll Furter R. (Böckten), Röösli M. (Bern), Semadeni C. (Zürich), Huss A. (Bern)

Environmental medicine is increasingly a part of family medicine. Epidemiological studies have shown that environmental exposures such as ozone, NOx, particulate matter, noise or second hand smoke are associated with causing or exacerbating illness. Environmental exposures should be considered when patients have medically unexplained symptoms. Also, a rising number of patients attribute headache or sleep disorders to electromagnetic fields. Which exposure is relevant? How do you discover these? What can you do if you think an environmental exposure is playing a role? And what can you do for the patient? The society of doctors for the environment of Switzerland has developed a way to incorporate environmental medicine into our everyday work. In the workshop, we will give an overview over relevant environmental exposures and introduce our pilot project that started in January 2008. In small working groups we will present and discuss examples. We will also present tools that were developed to assess an environmental exposure history, and how to include such information into counselling in family practice.

WS-014

Humanities as an aid to lateral thinking in medicine

Charlton R. (Coventry), Prince R. (Coventry), Xavier M. (Solihull)

Aim and purpose: To consider how using the humanities may enrich our development as clinicians and so lateral thinking
Design and methods – organisation of workshop literature: Background-art and music aid our thinking and are three of the humanities which enhance our learning. They can be used to stimulate lateral thinking in relation to health, illness and disease and so the whole person. The new UK general practice curriculum focuses on this through 1 of the 6 domains of competence; a holistic approach. As delegates assemble for the workshop, two poems with clinical themes are distributed for reflection; Saint Peter by Ursula Fanthorpe and the Whitewashed Wall by Thomas HardyTwo paintings are shown – The Doctor (1891, Luke Fildes) & Science and Charity (1897, Pablo Picasso), to facilitate reflection on science and caring in primary care. Interactions will stimulate discussion of the marriage of healing and curing and defining holistic practice. Experiencing a piece of music entitled; Threnody to the Victims to Hiroshima, a musical composition for 52 string instruments, by Krzysztof Penderecki, composed1960. It has been described as; "one of the most moving pieces of music ever written" and can heighten understanding of pain and suffering. The distributed poems are read and reflections stimulate further debate and group interactionThe workshop culminates with the delegates creating an Illness-Health Diagram as an aid to lateral thinking as clinicians.
Learning objectives of the workshop: Exposure to the humanities as a vehicle of celebrating values and ideas in medicine. Exploration of the RCGP motto Cum Scientia Caritas. European definition of General Practice, pictorially represented as the WONCA tree.
Conclusions: Impact of the workshop for Daily Practice. An alternative way to help clinicians think holistically and laterally.

WS-015

Climate change and general practitioners: what can we do about it?

Harvey J. (London), Ballard T. (Marlborough)

Aims and purpose: Climate change is probably the biggest future threat to human health. Its effects are complex and unpredictable. Uncertainty is uncomfortable. Primary care physicians' consultations with patients are complex interactions in areas of uncertainly. We will need to develop our competence to handle uncertainty, and to understand how we and organisations such as the Royal College of General Practitioners can influence attitudes and encourage patients, doctors, and policy makers to adopt sustainable objectives. The aim of the workshop is for GPs from different countries to share their concerns, experience and actions on climate change, and to explore how they can promote sustainability, both in the consulting room and outside it.
Design and methods: 1. An introductory presentation to communicate sufficient basic information on climate change and health to enable participants to contribute to informed discussion. (15 minutes) 2. Large group brainstorm to identify issues. (15 minutes) 3. Small group discussions of those issues. Aim to share experience and ideas and to draw up list of actions which general practitioners can take on climate change. (20 minutes) 4. Plenary to share group work (30 minutes) and draw out action points (20 minutes).
Results: Learning objectives: a better understanding of the direct and indirect health effects of climate change; how these may impact on general practitioners, their practices and patients; actions to tackle climate change and its consequences, in particular the possible roles of general practitioners as lobbyists and leaders in their profession and communities.
Conclusions: Participants will be better informed and empowered to influence health care activities aimed at promoting sustainabilty. We will also leave participants with a clear understanding of the way that co-benefits accrue when bringing about such change.

WS-016

Teaching primary care at Basel university – a successful educational experience: 10 years long-term 1:1-tutorials in general practitioners practice and more …

Bally K. (Basel), Romerio Bläuer S. (Basel), Banderet H. (Basel), Heiniger S. (Basel), Halter U. (Basel), Müller Y. (Basel), Martina B. (Basel), Tschudi P. (Basel)

Insight into a motivating curriculum, based on a strong and enduring collaboration with community-based teachers and hospital specialists: presentation of a great variety of learning approaches (lectures, problem-based teaching groups, teaching skills in courses and one-on-one tutorials), leading to a substantial increase in knowledge and skills and also satisfied students and teachers. We introduced long-term one-on-one tutorials for medical students early on in their academic education directly in general practitioner practices. Students reported improvement in knowledge, social and communicative skills and personal motivation. The overall rating of the one-on-one tutorials obtained 5.3 on a 6 point scale and achieved the top ranking among all university medical faculty classes. The aims of this presentation are to demonstrate different possibilities of teaching family medicine by university-affiliated general practitioners cooperating with hospital physicians. Furthermore, it will show how family medicine can be taught and one-on-one tutorials are able to convey to students that general practice is an attractive future. This workshop is an interactive presentation, including short lectures, video films and real life examples with participation of teachers and students from the Basel university medical school.

WS-017

Ethical dilemmas in GP/FM

Maier M. (Vienna), Weingarten M. (Tel Aviv)

Introduction: At the WONCA 2000 Conference in Vienna a symposium entitled "Challenges to our professional attitudes – past and present", was held. As a result, a Special Interest Group of WONCA on ethical issues was founded and symposia and workshops on clinical situations of everyday practice involving ethical dilemmas are since then regularly presented at WONCA Conferences.
Goals: It is the aim of the workshop to present situations involving ethical dilemmas as they occur in General Practice / Family Medicine and to discuss their background and possible consequences for the patient, his/her family and the physician.
Method: The group work will start with short presentations of situations demonstrating ethical dilemmas. The participants may then select specific situations, will split into small groups and will discuss the following issues: 1. The patient's history and other factors, which resulted in the development of the particular ethical problem presented. 2. The possible consequences of the situation for the patient and the physician 3. Possible solutions. 4. What are the basic ethical principles demonstrated by this situation?
Expected outcome: The goal of this workshop will be to increase the awareness for ethical standards and attitudes as applicable to future medical graduates and General Practitioners.

WS-018

Centre-based incident reporting in general practice. Why and how?

Van den Broek S. (Utrecht), Zwart D. (Utrecht)

Aim: Incident reporting is a tool to uncover (near-) misses in daily practice. By registration and analysis of these unintended events, organisational learning and patient safety can be improved. This workshop will present and discuss guidelines for starting an incident reporting procedure in general practice as proposed by the Dutch College of GPs. The procedure is based on literature and on the results of a Dutch study, called SPIEGEL. In this prospective observational study the implementation of a centre-based incident reporting procedure in five general practice health care centres was evaluated.
Organisation: Plenary, interactive presentations, discussion and exercise in small groups.
Learning objectives: A deeper understanding of the principles of patient safety.Increased knowledge of different approaches to manage patient safety.Familiarity with guidelines for starting an incident reporting procedure for general practice as proposed by the Dutch College of GPs.Knowledge of facilitators of and barriers to the implementation of incident reporting.
Impact on daily practice: After this workshop participants will be able to begin to implement a centre-based incident reporting system in their general practices.

WS-019

Informing in a motivational way in primary health care settings

Sommer J. (Geneva), Junod-Perron N. (Geneva), Gache P. (Geneva)

The literature shows how little patients understand the given explanations and follow the instructions of their primary caregiver. Efficient communication skills of informing are proven to achieve better understanding and adherence and can be learned.
Aims: – to identify and practice communication skills that can efficiently enhance patients' understanding and adherence.
Methods: Through interactive and practical exercises, the participants will explore the four stages of the informing process that make information understandable and useful for the patient: 1) exploring the patients' views, perspectives, knowledge and needs; 2) informing: using a simple language adapted to the patient's knowledge and needs; 3) responding to the patients' feelings; 4) checking the patient's understanding and his preferences.The participants will practice the informing process through practical exercises: informing about a treatment, a health behaviour (smoking, alcohol consumption, etc) or an investigation. The participants will be using motivational

interviewing's collaborative and person-centered guiding communication skills (open questions, reflection of thoughts, facts and emotions, empathy and empowerment of personal strengths). All through the four stages, the "elicit-provide-elicit" model will be practiced.
Learning objectives: – to become aware of one own's way of informing; – to name the four stages of effective informing; – to practice the four stages of effective informing and the "elicit-provide-elicit" model.
Conclusion: The workshop will provide the tools for efficient patient-centered informing taking into account the patient's prior knowledge, his health perspectives, preferences and needs. Being patient-centered and structuring the informing will enhance patients' understanding and adherence.

WS-020

Get acquainted with the International Maturity Matrix (IMM)

Eriksson T. (Copenhagen), Bekkers M.J. (Cardiff), Thesen J. (Oslo)

Aims: The aim of this IMM/EQuiP workshop is to present the International Maturity Matrix (IMM) as a tool for formative self-assessment to facilitate GP team discussions and goal-setting about the practice's development and organisation. We will describe the tool and the process through which it was developed and give the participants the opportunity to get acquainted with the tool through a role-play involving the participants.
Methods: IMM comprises a formative evaluation instrument designed for primary care practices to self-assess their degree of organisational development in a group setting, aided by an external facilitator. It was developed in the years 2005–2007, involving GPs and others from more than 20 European countries, A feasibility study was conducted in 2008, including 12 countries and 73 practice teams. A mixed learning approach will be used incorporating a PowerPoint presentation, followed by a simulation exercise involving participants and an open floor discussion.
Results: The learning objectives of the workshop are that by the end of this workshop, participants should have obtained: A general knowledge of the IMM and the way it was developed, pilot tested and the ways it can be made to use in European General Practice development. A clear view of how the IMM is being used practically in practices and the human and other resources needed to implement it in a country.
Conclusion: The pilot study proved that the IMM works well, diverse teams seemed to understand the dimensions and levels, and it provoked good self-questioning and debate. Online benchmarking feature was perceived as very useful, particularly to prioritise where efforts to develop practice organisation and quality improvement should be directed. The tool is feasible for use across countries/cultures, and IMM self-assessment offers the basis for more in-depth quality improvement work by practices.

WS-021

Hippokrates – European exchange programme for medical doctors specializing in general practice / family medicine

Del Olmo Fernandez S. (Spain), Poppelier A. (France), Spezia C. (Italy), Kallestrup P. (Denmark)

In June 2000 the Hippokrates programme was launched through EURACT, WONCA Region Europe. The aim of the programme is to encourage exchange and mobility among young Medical Doctors in the course of their professional formation as General Practitioners providing a broader perspective to the concepts of Family Medicine at both professional and personal levels. Through exchange visits of two weeks duration the participants acquire insight of the context of General Practice in the Primary Health Care of the European Countries. This inspires them to take an active part in the scientific as well as structural development of European Family Medicine. Exchanges have continuously taken place and still do. From initially 5 participating countries the programme has expanded to now comprise 11 European countries. Over the last years an important step has been achieved by means of VdGM members and an update for the program is in action at the moment. VdGM-representatives, country coordinators from participating countries and hopefully some of the young doctors who have taken part in an exchange will attend this workshop to share their experiences with us. Emphasis will also be on attracting new participating countries with emphasis on advice how to launch Hippokrates in your country. Delegates from various countries that are preparing their entry to the programme will also be present in the final open discussion. The programme is accessible on www.euract.org under Activities. During the conference in Basel more information will be provided at the WONCA Europe and VdGM booths.

WS-022

EUROPREV workshop:
Putting prevention into practice:
ingredients for success in a complex world

Litt J. (Adelaide), Brotons C. (Barcelona), Kloppe P. (Madrid), Bulc M. (Ljubljana), Pas L. (Brussels)

Background: While there are established guidelines for many areas of prevention in general practice, implementation has remained a challenging issue. For example, evidence-based guidelines for GP smoking cessation activities have been available for 20 years. Nevertheless, GPs only ask two-thirds of their patients about smoking and provide advice to only half of these. The evidence base supporting implementation has grown in the last 10 years with several countries publishing monographs or providing guidance on best practice in the implementation of prevention (United States, see http://www.ahrq.gov/clinic/ppipix.htm,; Australia, see http://www.racgp.org.au/guidelines/greenbook; Canada, see http://www.effectivepractice.org/, Europe, see EUROPREV http://www.europrev.org/). This workshop will provide some practical examples of evidence-based implementation of prevention from a range of countries.
Description of the workshop: Aims: to outline some key principles that can improve the delivery of prevention to share a range of effective implementation strategies that have been tested 'in the field' to promote a framework for the delivery of best practice in the implementation of prevention. This workshop will highlight some of the key ingredients for the implementation of prevention guidelines in general practice. It will provide examples that draw upon the experience of several countries in a range of prevention activities. A number of presenters will each provide a brief case study (12 mins) of the implementation of a prevention activity, the lessons learned and tips for success. The presentations will be followed by a plenary where the common and effective implementation ingredients will be summarised and discussed. There will be ample opportunity (60 mins) for a wider discussion of the strategies.

WS-023

How can a busy physician help patients take prescribed medicines correctly?

Kardas P. (Lodz), Vrijens B. (Visé), Matyjaszczyk M. (Lodz), Lewek P. (Lodz)

Aims: Many doctors do not realise that up to 50% of their patients are non-compliant. Thus, they are not prioritising the prevention of non-compliance in routine care. When directly confronted by a non-adherent patient, they may feel uncertain by how best to proceed. The aim of this workshop is to encompass those barriers with both knowledge and skills necessary to help patients make the most of the treatment, and save a lot of their time and effort, by solving the problem of low compliance with both short-term and chronic treatments.
Design: The workshop will be divided in several sections: 1. Background: prevalence, forms, reasons, and consequences of non-compliance 2. "Compliance, adherence, concordance" – how to find the terminology that does not blame the patient nor the physician, and how to select the appropriate assessment methods. 3. Legal issues connected with non-compliance 4. Protective measures and interventions available at the GP level 5.
Roundtable discussion: Can non-compliance management be adopted in daily GP practice? The presentations will be illustrated by short scenes played by simulated doctors and patients.
Results: Through the provision of evidence-based information, and active involvement of the participants, the workshop will lead to increased knowledge and improvement of skills necessary to help family physicians recognize and manage non-compliance. Participants of this workshop will be also able to convey the message of the role of patient compliance in modern family medicine to their staff, trainees, and society.
Conclusions: Raising the awareness of the problem of non-compliance and promoting non-compliance management is a growing need in these days of increased use of long-term medication for the chronic diseases of an ageing society. Family physicians can help their patients get fullest benefits from their medicines by routinely taking care of the prevalent problem of non-compliance.

WS-024

The death of a patient: how does it affect me?

Verhoeven A. (Groningen), Schuling J. (Groningen), Maeckelberghe E. (Groningen)

Aims and purpose: The purpose of this 2-hour workshop is reflection on and exchange of experiences of personal involvement when being confronted with the death of a patient.
Method: In small groups, we will exchange experiences how the death of a patient affects our professional and personal life. At the end of the workshop, we will situate the reported factors in a GP-patient model.

This model is the result of qualitative study among Dutch GPs on how they deal with the deathbed of a patient. In this model professional and personal values as well as influences of society qualify the position of the doctor when dealing with the death of a patient.
Learning objectives: At the end of the workshop, participants will be aware of factors that influence their care for dying patients and understand interpersonal and intercultural differences in this care. This may help them to deal with the death of a patient in future.
Conclusions: The presented model clarifies the complex situation of a doctor who is confronted with the death of a patient.

WS-025

Improving quality of telephone triage in out-of-hours primary care

Holla S. (Nijmegen), Huibers L. (Nijmegen)

Triage is a fascinating way of bringing some certainty in a field of uncertainty. In itself it is a process with its own complexity, bringing on new uncertainties.
Background: In Western countries there is a trend towards the use of triage nurses to decrease GP workloads. Especially in out-of-hours services many calls are handled by triage nurses.But, we know little about the quality and safety of decisions made by triage nurses, although telephone triage is considered as a complex and vulnerable part of out-of-hours primary care.
Aims: – provide background information on telephone triage in different western countries; – brief presentation of recent research results and discussion concerning organisation (triage support systems, role of GP's and other professionals) quality systems (guidelines, training, measuring instruments and indicators); – reflection on efficiency and safety of telephone triage and ways to improve it.

WS-026

The complexity of implementing information technology in primary care – a sociotechnological approach

Meer A. (Bern), Weber A. (Zürich), Huber F. (Zürich)

Background: Switzerland is having a federalistic and very fragmentated health care system. Many colleagues are still practicing in single offices however, more and more GPs are organized in physician networks and cooperatives. This leads to closer and more intense interactions, data and information exchange. However, the implementation and use of information and communication technology (ICT) in Primary Care is still in its infancy. Currently only about 12% of the Swiss GPs are using an electronic patient record (ERP) in their daily practice. While many European countries spent considerable strength and resources in defining and realizing an e-Health Strategy during the last years, the Swiss Government only recently approved according steps.
Aim: To demonstrate and discuss the complex and subtle sociotechnological interactions when implementing ICT in health care.
Organisation: This workshop is about a Swiss GP association who is planning to use ICT more professionally in order to support their chronic care management activities. Based on a case study the organizational development process stimulated by the mutual sociotechnological interactions will be presented. The case study starts in 2007, when the GP association defined a new strategy. During the workshop, the two year organizational development process of the association is gradually disclosed. The progression and throwbacks of the according change management processes will be discussed with the audience and certain pitfalls will be identified. Principals to manage complex sociotechnological interactions will be presented.
Learning objectives: To be sensitized, that implementing ICT in Primary Care is neither a technological nor an organisational developement process alone. It is rather a complex sociotechnological interaction, which has to be recognized and managed appropriately.
Impact for daily practice: To become familar with some principals which might aid to manage complexity.

WS-027

Re-training of GPs – a EURACT survey

Clarke O. (Navan), Lindh M. (Gävleborg), Price R. (Leicester), Svavarsdóttir A.E. (Reykjavik)

Background/aims: Amongst the aims of EURACT are to promote teaching and learning in general practice and to do surveys to collect information on educational issues with the ultimate aim to strengthen General Practice/Family Medicine. We know that doctors working as GPs have different educational backgrounds. Some have received speciality training or re-training, others not. We wish to gather information on the situation in individual countries. We also know that there is significant migration of doctors trained in GP/FM to countries other than the one in which they were trained. The migrating doctors face the challenge of integrating in a foreign country where there are differences of language, culture, traditions and importantly a different health service infrastructure. To further explore the situation in different EURACT member countries we decided to conduct a survey.
Method: SurveyThe main strands of our survey were to identify the following;(a) is specialist training mandatory for GP/FM in EURACT member countries and what training if any is available for doctors working as GPs, who have not had GP Specialty training in that country? (b) What supplementary training and/or orientation (if any) are provided for trained family doctors moving between EURACT member countries?
Workshop plan: A short presentation of the results of the survey. The workshop will provide an opportunity with an international audience to discuss these results. We will discuss the strengths and weaknesses of the different systems in use. We would also hope to identify the unmet training and orientation needs of general practitioners in the circumstances outlined. This will enable us to draw conclusions and recommend strategies to enhance the effectiveness of GP/FM in these areas.

WS-028

Beyond the medical record – creative writing for doctors

Koppe H. (Lennox Head)

And now for something completely different …
As doctors we are involved in writing "stories" every day. The medical record is our interpretation of our patients' stories (History) and a summary of our response to this (Examination and Management Plan). The medical record does not allow for much creativity on the part of the writer, and is very limited in its ability to assist the doctor in making sense of what has gone on for them at a personal level. The purpose of this creative writing workshop is to assist participants in remedying this problem. The workshop will allow participants an opportunity to experience the use of stories and creative writing as a means of helping them to make better sense of what it means to be a doctor. Practical writing exercises will guide participants through a series of creative tasks which assist them in reflecting on the effect the practice of medicine has on their lives, both professionally and personally. The goal of the workshop is to increase participants enjoyment of medicine and of their life in general. Most of all, it will be an opportunity for some light hearted fun with colleagues.

WS-029

Assessment of signs of regulative disorders and neural therapeutic palpation techniques

Gold-Szklarski K. (Vienna), Spiegel W. (Vienna)

Neural therapy is a medical method to diagnose and treat regulative disorders and chronic pain syndromes through injecting scars, trigger points, peripheral nerves, autonomic ganglia, glands, and other tissues with local anaesthetics. After a general introduction in the diagnosis of regulative disorders and its underlying pathphysiology the typical clinical signs of regulative disorders will be demonstrated. In this hands-on workshop participants will be able to practice the palpitation techniques which are used by neural therapists. In addition, the most frequently used methods of neural therapeutic infiltration techniques will be demonstrated.

WS-030

Challenges to our professional attitudes: ethical implications of uncertainty in GP/FM

Maier M. (Vienna), Weingarten M. (Tel Aviv)

Background: General Practitioners are faced with uncertainty almost every day, especially if they work in solo practices. The areas concerned may relate to the classification of a suspected health problem or the diagnosis of a disease, to the therapeutic options, to the degree of cooperation from a particular patient, to issuing medical certificates, or to the medical or professional competence of a young trainee or oneself. With increasing experience most colleagues will get accustomed to these situations; however, some situations may become increasingly problematic resulting in specific ethical difficulties.
Method: In this symposium selected perspectives covering the "uncertain doctor", the "uncertain patient", the phenomenon of overcertainty and the overwhelmed trainee will be presented. Ethical aspects such as public health versus individual health, third party influences, OTC medications, over demanding patients, the limits of the duty to treat and mentor-trainee-relationships will be addressed by four speakers.
Results: The presentations will be discussed with the audience and the symposium will conclude with a short summary.

WS-031

Primary care research is not a lost cause!

Bandi-Ott E. (Zürich), Senn O. (Zürich), Seidenberg A. (Zürich), Zoller M. (Zürich), Steurer-Stey C. (Zürich), Bhend H. (Zürich), Gnädinger M. (Zürich), Chlibec T. (Zürich), Doenecke C. (Zürich), Hartmann A. (Zürich), Fässler M. (Zürich), Biller-Andorno N. (Zürich), Rosemann T. (Zürich)

To characterise primary care research as a "lost cause" is unhelpful and wrong. Research in primary care is essential and an important part in the different fields of clinical research in Switzerland. General practitioners add an essential and crucial contribution to the health care of the population Clinical and preventive care, and the factthat the bulk of clinical care in most countries is delivered in primary care must be underpinned by research evidence. The Department of General Practice and Health Services Research of the University of Zurich will focus on six different topics such as the primary care setting for chronic disease management and self management programs, the scientific evaluation of a new model in emergency service in a hospital based general practice, the implementation of a diagnostic code in electronic medical records, an investigation of the practicability of hospital covering service during night hours and a placebo intervention trial in general practice. Successful research in primary care requires also organizational measures to involve GPs on all levels of the projects. We describe this aspect in our project-organization. The aim of this presentation is to show that primary-care research should and can affect clinical practice and most of all to increase theawareness of general practitioners that investment in research in primary care must be recognized not only as an investment in the generation of clinical evidence, but also an investment in clinical leadership and service quality.

WS-032

Conflicting roles:
How do GPs deal with their own children in case of illness?

Ballieux M. (Utrecht), Dijkstra R. (Utrecht), van der Jagt L. (Utrecht)

Aim: Even in families of general practitioners children may become ill. Illness of the child of a GP means a confrontation between two different roles (parent and GP) and this can lead to conflicts and uncertainty. How to combine the role of parent and of the medical professional? Who takes care of the diagnosis and treatment? What are dilemmas and influencing factors? In order to answer these questions the Dutch College of GPs sent out a questionnaire on this topic, with a response of 164 GPs. It turns out that 30% of the responders encounter somehow difficulties. Aim of this workshop is to gain more insight in the conflicting roles that GP parents may face in case of illness of their own child and to stimulate the participants to discuss their own attitude and dilemmas on this topic.
Organisation: Video: interviews with several GPs dealing with this topic Interactive questionnaire. Presentation of the results of the questionnaire about the attitudes and behaviour of GPs regarding the illness of their own children. Discussion in small groups on this topic, based on case histories and experiences of the participants of the workshop. Presentation of a model for the conflicting roles.
Discussion: Take home messages.
Results: GPs are aware of the dilemmas and the different roles when their own child is ill. They start to find out what's the best strategy for themselves.
Conclusion: The GP will realize that there may be conflicting roles in case of illness of his own child.

WS-033

Building patients' commitment to lifestyle change: a focused brief intervention programme for health care professionals

Neighbour R. (London), Wells S. (London)

Patients suffering from chronic disease often fail to make medically advised changes in lifestyle, either because their level of motivation has not reached the necessary tipping point or because the advice has not been sufficiently tailored to their own personal goals. Busy family doctors, moreover, are under increasing pressure to make the most efficient use of time and resources. This workshop will offer health care professionals a toolkit of semi-structured brief interventions, suitable for a primary care setting, designed to mobilise patients' motivation for lifestyle change and to strengthen their commitment to treatment plans. The approach is based on: 1. the grief or loss reaction which follows diagnosis, and which influences the patient's perceived degree of control over his or her own health; 2. a version of Maslow's "hierarchy of needs", to identify and prioritise those aspects of the patient's life which have been put in jeopardy by the illness; 3. developing a degree of cognitive dissonance, to encourage the patient to break out of old habits and to formulate treatment and lifestyle goals matched to his or her unique circumstances and priorities. These principles underpin a short programme of brief interventions which identify the patient's individual motivational response to illness and harness it to an overall treatment plan, including lifestyle change. The workshop will present theoretical and practical accounts of the interventions, supported by printed materials, demonstrations and exercises. Participants will gain ideas and techniques with which they (or other members of their healthcare teams) can improve the effectiveness of lifestyle advice and enhance concordance. Some of the consultation skills presented will be transferable into other areas of participants' daily clinical practice.

WS-034

Theme: Meeting with the patient:
Between fascination and routine, certainty and doubt – how do doctors cope and develop emotionally and cognitively?

Otten H. (Wienhausen and Berlin), Puel M.A. (Paris), Jablonski H. (Stockholm), Kjeldmand D. (Eksjö), Salomon M. (Ottawa)

*The Balint method*s one, among others, in which doctors can develop *their own* personal psychological and relational capacities. Thus it helps the doctor by experiential learning to integrate the medical technical aspects on the one hand, with the personal understanding of the patient, the interplay between the doctor and his patient, on the other. A controlled study showed that participation in a Balint group increases the doctor's professional self esteem and work satisfaction. The doctor-patient-relation is essential to safe-guard a proper medical care for the ordinary citizen. How do doctors handle the span between protecting the patient against authorities and protecting public welfare values from individual excessive demands? How are doctor-patient relations affected by cultural differences? How do we cope with the complexity and fascination about an individual patient? Do the drugs available today combined with the work load tempt the doctor to prescribe a more or less standardised treatment programme to his patient rather than relating? How can we maintain and develop a holistic approach to our patients? We will highlight a number of everyday issues which GP colleagues are wrestling with in their clinical practice and which they bring to discuss in Balint groups all over Europe. These are meetings that can be challenging to even very experienced GP's. The contributors to this workshop have a long experience as leaders of Balint groups and other educational forms. We will also give a short demonstration "on stage" about a clinical issue, and how it is worked through in a consultation group of colleagues, a Balint group. Workshops for "Try-it-out-" Balint groups will be arranged during the congress in French, English, German.
Otten: The psychosomatic patient and the doctor-patient relationship. Elder: The problem of feelings in general practice: Balint and the move towards a more personal evidence-based medicine.
Puel: What is about patients – what is about doctors? Thoughts about relational uncertainty in complicated consultations. Jablonski: Personal gap and cultural gap – fascination and uncertainty in a relational and transcultural context.

WS-035

Hypnosis in the general practice of a family physician

Wehrli H. (Turbenthal), Klauser C. (Agno), Emch F. (Hessigkofen)

From time immemorial, the family practice has been a place where suggestions are frequently given and where spontaneous trance states (moments of intense inner life combined with hightened suggestibility) always and again take place. Such trance states usually occur unintentionally and, unfortunately, do not always serve the optimal well-being of the patient. Thus, the better we can take conscious, concerted advantage of these spontaneous occurrences, the more we can employ them therapeutically for the enhancement of treatment. The roots of modern therapeutic hypnosis can be traced back to the American psychiatrist MILTON ERICKSON (1901–1980). Erickson transformed the age-old healing art of hypnosis into a modern, scientific method of healing which aims at utilizing the specifically personal ressources of each patient with the help of trance states. This is possible by means of both direct (statements, examples etc.) as well as indirect (stories, metaphers etc.) suggestion. In this way, changes in both (conscious / unconscious) behavior and physiological parameters can be evoked. Methods of hypnosis can be easily learned and can be used to enhance treatment in virtually every therapeutic context. All we have to do in this regard is to practice giving our usual intellectual emphasis on cognitive goal-oriented treatment a new focus upon experiential expression-oriented therapy. This new perspective helps stimulate consultations, allows more freedom for creativity and emotion, and often introduces a certain easiness and "lightness" into otherwise very difficult, "heavy" situations. This workshop aims at introducing the methods of hypnosis suitable for the general practitioner by enabling the participant "hands-on" experience with the demonstrations after a short theoretical introduction of each method.

WS-036

Risk, uncertainty and indeterminacy in clinical decisions

Strand R. (Bergen), Rørtveit G. (Bergen), Hannestad Y.S. (Bergen)

Calculations of risk in individual clinical decisions are useful but also problematic due to the uncertainty introduced in the inference from scientific knowledge on the population level to the individual patient. In this workshop we will shed light upon the various sources and types of uncertainty. Results from recent theoretical work on uncertainty assessment and management in other fields (notably those of technological and environmental hazards) will be applied onto the clinical context. After a theoretical introduction, the workshop will be participatory as all participants will be engaged in a plenary discussion of uncertainty sources and types. The workshop will include the following elements: 1. The distinction between risk (quantifiable uncertainty), strict (not quantifiable) uncertainty and ignorance (the presence of unidentified outcomes). It will be shown how inference from population level knowledge to the individual patient can introduce strict uncertainty and ignorance. Accordingly, risk-cost-benefit calculation-based decisions can only under some conditions be shown to be rational in the decision-theoretical sense. The addition of "clinical judgement" onto the risk-cost-benefit consideration does not necessarily secure the rationality of the decision. Furthermore, it will be shown how Bayesian methods do not solve this problem.
2. The distinction, due to STS scholar Brian Wynne, between risk/uncertainty/ignorance and indeterminacy. Indeterminacy is a higher-order uncertainty that can be described in two (related) ways: (a) The impossibility of giving a unique definition of the system to be decided upon due to its essential open boundaries, (b) the multitude of different framings of the decision. Indeterminacy implies that the fact/value-distinction is not absolute. Patient autonomy under uncertainty hence should be conceived in terms of framings and not only preferences. These theoretical points will be applied onto frequent clinical decision types.

WS-037

Vasco da Gama Movement (VdGM) workshop about the European VdGM survey on vocational training in GP/FM

Blauth E. (Heidelberg), Emaus C. (The Netherlands), Fasoletti D. (Trento), Peters-Klimm F. (Heidelberg), Roos M. (Heidelberg), Sklarova K. (Prague)

Aim and purpose of the workshop: To report work in progress of an ongoing survey on motivation in and satisfaction with Vocational Training in GP/FM in Europe and to exchange experiences on the national level concerning the milestones of the project. To invite further *national teams* to adopt the survey and its procedure.
Expected Audience: *European Council Members of VdGM and of EURACT*. Interested GP trainees, young GPs, GPs and GP-trainers interested in Vocational Training in GP/FM.
Design and methods: *Education and Training Theme Group of VdGM* has developed and implemented a web-based English questionnaire during 2008 and shown its feasibility at the WONCA conference in Istanbul 2008. Since then, Council Members of VdGM were invited to establish a national team that takes responsibility for their national survey, which means to translate a valid national version, to implement it web-based and to recruit participants.
Results: At the moment of the submission of this abstract, *VdGM Council Members* from Italy, Czech Republic, The Netherlands and Germany committed themselves to build *national teams* to undertake the survey. By the Basel conference VdGM will report the work in progress and supposedly will be able to present the first comparative data from the involved countries in the first line.
Workshop plan: Presentation of work in progress. Interactive session with mixed formats to learn on the strength of the past experiences. Assignment of new national teams. Closing open discussion about the future conduct.

WS-038

What the arts can teach us about medical uncertainty

Wellbery C. (Washington)

Aims(s) and purpose of workshop: Art, because it implies subjective experience, creates and even celebrates uncertainty. Using examples from a variety of arts, the workshop will show that expressions of ambiguity and uncertainty in art can be useful to clinical practice.
Design and Methods: The first part of the workshop focuses on the theme of medical uncertainty: what do the arts say about the nature of uncertainty, and how, specifically, can these statements affect clinical practice? Using two poems, participants will compare and contrast the art and science of medicine. They will then build on the insights gleaned from these poems to discuss how art can realign patient and physician priorities when faced with scientific uncertainty. The second part of the workshop concerns art as interpretation. Participants will engage in a series of brief exercises illustrating art's ambiguities and discuss what implications these might have for clinical practice. The themes of withholding judgment and remaining open to interpretation will be applied to uncertainty in the physician-patient counseling relationship. The discussion will include specific examples of how physicians can draw on works of art to improve doctor-patient communication around issues of uncertainty.
Results: At the end of this workshop, participants will be able to articulate and prioritize the separate aims of the art and the science of medicine. Participants will understand the role of art in addressing ambiguity and uncertainty in a manner relevant to clinical practice.
Conclusions: By using art to emphasize the limitations of certainty in science and the seminal role of uncertainty in human relationships, the workshop will encourage physicians to practice reflective and behavioral techniques geared towards improving communication with patients.

WS-039

The complexity of polymedication in the elderly

Vogt-Ferrier N. (Geneva), Dahinden A. (La Neuveville), Aubert J. (Le Landeron), Gartenmann C. (Le Landeron)

A peer group of Swiss GPs conducted a study on the medication of 180 patients over 75 years of age. We will present the results of this study and the difficulties encountered by the group when setting priorities for polymedicated patients at high risk of drug interactions. The participants of the workshop will discuss the case of a polymedicated patient and evaluate the levels of danger/risk of the drug interactions they identify. In a second task they will have to try to diminish the medication. The results of the small group work will be discussed in the plenary and Nicole vogt-Ferrier M.D. specialist in pharmacology and toxicology from the gerontopharmacology unit of the University Hospitals of Geneva will show helpful ways to handel these complex issues.

WS-040

Narrative-based medicine – how homeopathy can complete the work in daily general practice

Frei-Erb M. (Bern)

Background: Homeopathy is a system of therapeutics used for more than 200 years. Aim of homeopathic treatment is to enable the natural self-regulating mechanisms in the mind and body to function more efficiently, and to mobilize and reinforce the healing resources, that already naturally exist. The key to successful homeopathic treatment is identifying the similarity between the effects of the original substance in healthy people and the pattern of disease in the ill individual. This is called the law of similars or similia principle. During case-taking the homeopathic physician listens carefully to all the symptoms and stories the patient tells and he tries to understand the inner feelings of the patient. Aim: to show how homeopathy can complete the work of general practioners.
Method: examples of 3 cases for acute, subacute and chronic diseases demonstrate the homeopathic approach to the problems of our patients.

WS-041

Cinema for educating global doctors: from emotions to reflection, approaching to the complexity of the human being

Blasco P.G. (São Paulo), de Benedetto M.A. (São Paulo), Moreto G. (São Paulo), Janaudis M.A. (São Paulo), Pinheiro T.R. (São Paulo)

Purpose: Complexity comes mostly from patients, not from diseases. While the technical knowledge helps in solving disease-based problems, the patient affected by these diseases remains a real challenge for the practicing doctor. To care implies having an understanding of the human being and the human condition and for this endeavor humanities and arts help in building a humanistic perspective of doctoring. Through this workshop the audience will understand the cinema teaching methodology, and how to use it to help students, residents and doctors to be more reflective and promote empathic attitudes, qualifying themselves for a better approach to the complexity of the human being.
Design and Methods: Learning through aesthetics-in which cinema is included-stimulates learner reflection. In life, important attitudes, values, and actions are taught using role modeling, a process that impacts the learner's emotions. Since feelings exist before concepts, the affective path is a critical shortcut to the rational process of learning. While technical knowledge and skills can be acquired through training with little reflection, reflection is required to refine attitudes and acquire/incorporate values. Since 2000, SOBRAMFA- Brazilian Society of Family Medicine has developed this cinematic teaching methodology in which movie clips are used to promote reflection on attitudes and human values. This workshop aims to share this methodology and our experience in teaching through movies and

fostering reflection in the audience.
Results: We expect an interactive discussion with the audience, high feed back from the participants, and a pleasant scenario to construct through emotions new paths to approach the complexity in which surrounds every single patient.
Conclusion: The cinema teaching scenario provides Family Medicine educators with an innovative resource to broad the range of human experience for better understanding the human being.

WS-042

EURACT workshop:
Continuing professional development, accreditation and re-certification in GP/FM:
A state of art in European countries?

Vrcic-Keglevic M. (Zagreb), Kalda R. (Tartu), Jurgova E. (Piestany), Phylaktou P. (Larnaca), Rindlisbacher B. (Steffisburg), Spatharakis G. (Itea-Phokida), Vainiomaki P. (Turku)

Background: Continuing Medical Education (CME) / Continuing Professional Development (CPD) is in fact the longest part of the whole continuum of medical education. In many countries CME/CPD is steered by accreditation of the specific events and programs offered and linked to the re-certification/re-licencing of the individual doctors. The purpose of the whole process of CME/CPD in General Practice/Family Medicine (GP/FM), its accreditation and re-certification is to assure the best possible practices for primary medical care: to make sure that when a citizen (healthy or not) visits a general practitioner, he will have easy access and get up-to-date care in a professional and humanistic context. Main objective of workshop: To explore and disseminate information about the situation in European countries concerning: the accreditation of the CME/CPD events and programs in GP/FM and the re-certification/re-licencing procedures for general practitioners.Methods of work: – Presentation of first results of a study by questionnaire within EURACT Council on the situation of accreditation in CME/CPD in GP/FM and on re-certification / re-licensing in Europe. – Exploring and exchanging personal experiences in different countries in small groups and finding conclusions based on these experiences. Questions to be discussed: Accreditation and re-certification rules and procedures in different countries? Relationship between CME/CPD and re-certification? How the individual educational needs can be fulfilled within the re-certification process? What is the role of peers? What is the role of governmental and university instances? Who should and could finance the procedure? How to collect the evidence? What are the quality assurance criteria?

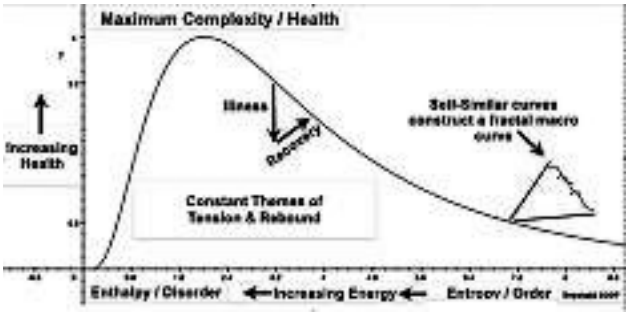
WS-043

Chaos theory and complexity science – they help make the best medical home

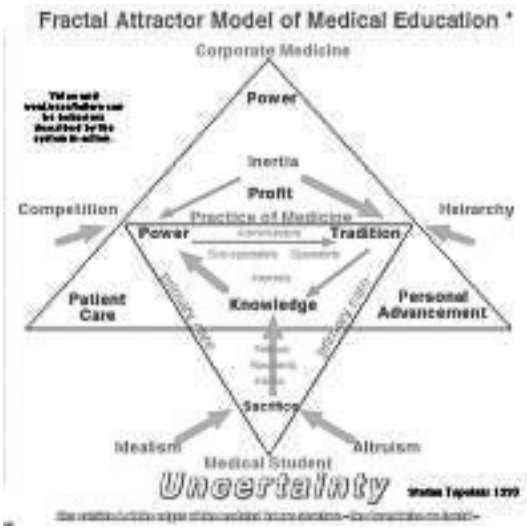
Topolski S. (Shelburne Falls)

The call has gone out in some Family Medicine organizations for a "medical home" for every person and every person in a "medical home." Though we do have a fairly good idea for the medical home, we have no clear path to succeeding in making it work in difficult and chaotic times. The current medical non-system is chaotic and resistant to almost all change. Most observe health care organization becoming progressively worse. Chaos Theory and Complexity Science can provide new and useful insight into what makes a medical home a home. Scientific principles from these disciplines support many of the philosophical and organizational precepts promoted at the beginning of the Family Medicine movement 40 years ago. With large change in health care inevitable, why aren't we using the sciences of complex change to get there? We will review the foundations of Chaos Theory and Complexity Science and then apply them in clear and robust qualitative-quantitative methods. Fractal concepts and three dimensional Health Trajectories provide a better understanding of health and the medical homes we are called to create to protect our patients' health. Pictures are worth a thousand words. Come enjoy them with us.

Health - Entropy Curve



Fractal Model of Medical Profession



WS-044

To teach complexity: why, what, how and when?

Bischoff T. (Lausanne), Widmer D. (Lausanne), Pilet F. (Boudry), Gilgien W. (Palézieux), Rodondi P.Y. (Pully)

Introduction: Complexity and uncertainty are an intrinsic part of the work of GPs and are a difficult topic to teach: How can we give students solid medical references and at the same time initiate them into living the fragility of certainty and the uncertain issue of complex situations? How can we stimulate the student's curiosity for this topic in the context of a medical culture mainly based on evidence?
Aims(s) and purpose: To develop together strategies to teach complexity in general practice, based on our specific and different experiences in each country.
Design and Methods: First, the group will define the aspects of complexity that are relevant in general medicine and needed to be transmitted to students or trainees. Next, we would like to compare our experience at the Faculty of Medicine of Lausanne, Switzerland, with situations in other countries. Finally, the participants of the workshop will elaborate recommendations how to implement the teaching of complexity in medical faculties.
Conclusions: "The simple is always wrong and the complicated is useless" (Paul Valéry)

WS-045

Interdisciplinary approach to patients with a background of migration

Gelzer D. (Basel), Waldvogel R. (Basel), Baumgartner J. (Basel), Zeugin S. (Basel)

Immigrants of low socio-economic status form one of the most complex group of patients in PHC. As GPs we have not only to deal with problems of language and culture but are often confronted with problems of unemployment, poverty, legal status (of residence) and so on. Most GPs in Switzerland are not at all prepared to this task. What can we do to give good medical support to these patients? Since 15 years we have organized regular meetings with health care professionals and social workers (interpreters, nurses, psychologists, psychiatrists, physiotherapists and GPs) who deal with immigrants in their daily work. We meet four times a year to bring together the different professional lenses or approaches. A case record is presented usually by two participants who care for the same patient or family. We try to answer the following question: In this particular case, do we have to deal with a culture specific problem or are other problems involved which have nothing to do with the immigration status of or patient or family? We experience this sort of exchange of views as extremely useful for our professional work. It alleviates our emotional burden and it helps our understanding of our patient's expectations and explanatory models.
Program:
Introduction: Why do we need a particular formation on problems of patients with a background of migration?
Background: The specific situation of Switzerland. Presentation of the workgroup and the method. Presentation of a case record.
Discussion: Conclusions and proposals for the realisation of this kind of meetings. The workshop will be directed y an interdisciplinary team.

WS-046

Teaching palliative care in an undergraduate medical curriculum – contribution of primary care medicine

Bally K. (Basel), Gudat H. (Basel)

Workshop's objective: Based on the existing infrastructure at the respective universities the curriculum, as well as a report and recommendations of a workshop on palliative care education and training for doctors in Europe (EAPC) we will interactively develop ways how GPs together with palliative care specialists from hospices and hospitals can teach students palliative care knowledge, skills communication techniques, as well as ethical and psychosocial capabilities.
Contents: Treatment of chronic diseases is gaining importance in public health and especially in primary care. These days one out of two people die after chronic disease. 90% of these are cared for by their GPs until their death. It is a great discrepancy that palliative care so far has not entered the curriculum at Swiss universities. Only gradually it is being introduced. However, no professorships have been created. Primary care, together with hospices and clinics has been asked to teach palliative care. Based on the needs of the respective medical faculty and the possibilities, which you as a teaching GP have, this interactive workshop develops the fundamentals for the implementation of palliative care into an existing or developing curriculum. The focus will be on the following: 1. Requirements for collaboration in curricula and the board; 2. Palliative care curriculum: knowledge, skills communication techniques; 3. Various teaching approaches to teach various subject matters: Basics, self-awareness, treatment of symptoms, symptom control, psychosocial and spiritual aspects, communication, ethics and legal aspects, interprofessional collaboration with nursing staff; 4. Faculty development and continuing education; 5. Evaluation, scientific teaching support, design of exams.

WS-047

General Practice: Towards special interests or a generalist view? Workshop on the European Research Agenda for General Practice

Hummers Pradier E. (Hannover), Ungan M. (Ankara), van Royen P. (Antwerp)

Background: EGPRN's and WONCA Europe's new European General Practice Research for General Practice (RA) is structured according to the core competencies of the European definition. In contrast to the definition which emphasizes the generalist vision of primary care, many GPs interested in research and development organise themselves in special interest groups (SIGs) nowadays.
Methods: Comprehensive literature reviews as well as expert and key informant discussionswere the basis of the current RA, which summarizes existing evidence on definition aspects and points out research needs and evidence gaps.
Results: The RA, as well as the definition, focuses on overall, generalist aspects of primary care. However, most past and current research focussed specific disorders, or specific aspects of care. Research needs exist with regard to both aspects: There is relatively little research on the benefits of general aspects like patient-centred, comprehensive/holistic and continuous care, and there is a need for health services and clinical research in primary care settings, and on GPs diagnostic reasoning and therapy.
Workshop Plan: – Invitation of WONCA Europe's SIGs, and other interested parties/delegates. – Brief presentation of the RA's approach and main results. – Brief presentation of the present SIGs. – Interactive discussion, and possibly small group work on the SIG's point of view, and their reflection on reconciling special interests, cutting-edge clinical research in cooperation with specialists, and a large, generalist approach which mind the specificities of the discipline of GP/FM. Results of this discussion could be a starting point for planning future conferences, or for joint position papers.

WS-048

Saint Vincent declaration … So what?

Wens J. (Antwerp)

Thanks to "Saint Vincent" a lot of political interest as well as many resources were directed towards type 2 diabetes. At a higher rate than ever, scientific studies were published in different diabetes related clinical domains and new drugs became available. Though, unfortunately, today we still have to face the increasing burden of the disease and its life threatening complications. Twenty years after Saint Vincent declaration it is clear that the targets are not met. One might reflect on the reasons why this happened. According to Wagner's "Chronic Care Model" and the WHO "Improved Care for Chronic Conditions framework" better outcomes for patients suffering from chronic conditions are only possible if well prepared, motivated and informed (primary) health care teams and community partners, together with patients and their family members work together within a positive policy environment. These preconditions are not completely established in most European countries today. Type 2 diabetes registers are scarce, European consensus on diagnostic criteria and diabetes management performance indicators are missing besides interchangeable data based on electronic medical health records. And less than half of the EU's 27 Member States actually have introduced a national diabetes plan or policy framework for diabetes. The outcomes desired for chronic health problems differ from those considered necessary for acute problems. The needs of patients with chronic conditions differ as well. They need more than solely biomedical interventions but rather an integrated comprehensive care that gives answers at their anticipated personal needs. Patient centeredness here focuses on patients' own needs which nobody except themselves can prioritize better. Physicians now need to become aware of their new guiding role, rather than being medical expert who knows best. In a workshop format we will actively search for possible solutions how GPs might be helped in this changing role.

WS-049

Disease-mongering

Heath I. (London)

There is a lot of money to be made from telling healthy people that they are sick. The process of medicalising ordinary life is now better described as disease-mongering: deliberately widening the boundaries of treatable illness in order to expand markets for those who sell and deliver treatments. Pharmaceutical companies now actively sponsor the definition of diseases and promote them to both prescribers and consumers. The familiar notion that illness is socially constructed is becoming redundant is light of a new phenomenon: the corporate construction of disease. Disease mongering is closely linked to the measurement and recording of human biometric variation. It seems that disease appears or extends in the wake of the invention of every new measuring device and, of course, as the definition of disease widens, so does the scope for selling remedies. The workshop will explore the concept of disease mongering through discussion of specific and well-documented examples and the tentative devising of new conditions. Participants will then be set the challenge of formulating an appropriate response.

WS-050

Systems and complexity in health. A workshop for providers, researchers and teachers

Sturmberg J. (Wamberal), Martin C. (Dublin), Price J. (Brighton)

Aims: This workshop aims to give an overview of systems and complexity frameworks, and to demonstrate its application in the areas of health care provision, health care research and the education of health professionals.
Design: The workshop will introduce systems and complexity concepts and outline how these concepts can contribute to our understanding of the multiple interconnected issues facing primary care. 15-minute presentations by researchers and practitioners having applied complexity principles will showcase examples from health care, health services research and health professionals' education. Presentations will have a special emphasis on highlighting how systems and complexity approaches have helped to advance our understanding in the areas of interest. In addition to employing complexity as an explanatory framework, we will attempt to show how the use of systems and complexity thinking can inform the design of research and educational programmes, as well as guiding our clinical practice. The second half of the workshop will be interactive. We encourage participants to bring to the workshop research ideas, be they clinical, educational or indeed health services related, and for which they might be considering a systems or complexity approach. Participants will have the opportunity to explore their issue of interest in small group discussions with the workshop facilitators, and there will also be opportunities for large group discussion and feedback.
Expected outcomes: The workshop will offer a forum for conversations around the ideas of systems and complexity in health facilitate networking between like-minded health professionals looking for novel approaches to clinical practice, teaching and research, and should establish the basis for the foundation of a WONCA Special Interest Group on Systems and Complexity in Health.

WS-051

Diagnosing suffering in palliative care: a proactive approach

Dees M. (Nijmegen), Rijswijk E. (Nijmegen)

Aim: To gain insight into different dimensions of suffering of patients in palliative care and to develop a proactive attitude to diagnose and treat suffering in an early stage.
Organization of the workshop: We will start with a short introduction about suffering of patients in palliative care and the goals of palliative medicine aimed to focus the participants on the subject. Short audio fragments of an interview with a patient, her informal care giver and her treating physician will be used to stimulate the participants to

discuss their own subjective perception on suffering in small groups. An interactive approach will be used to harvest the products of these discussions and to gain insight into the physical, psychological, social and spiritual aspects of suffering. The outcome will provide a starting point for the participants to formulate, once again in small groups, an approach that can be used, in an individual way, to talk about suffering with patients in a palliative stage of their disease. Finally these divers approaches will be presented to all participants and an effort will be made to formulate recommendations to diagnose and treat suffering in an early stage.
Learning objectives: – Knowledge of the four dimension of suffering of patients; – Awareness of the effect of one's own perception of suffering on the quality of palliative care; – Insight in the advantage of a proactive approach with regard to suffering.
Impact of the workshop for daily practice: A proactive approach to discuss feared and actual suffering of patients in palliative care in an early stage of their disease, might help to treat suffering before it becomes unbearable, thus improving the quality of life of patients and their informal care givers.

WS-052

Burnout: An intervention model for GPs

Flury H. (Rheinfelden)

Aims of the workshop: An intervention model for general practitioners in the treatment of burnout patients will be presented. Burnout patients are a big challenge for general practitioners often presenting complex psychosomatic symptoms and demanding specific diagnostic and therapeutic procedures. GPs are key players in early intervention, treatment and. prevention of burnout.
Organisation of the workshop: Basic concepts involved in burnout and specific diagnostic and therapeutic procederes for the GP will be presented, illustrated and discussed by case histories.
Learning objectives of the workshop: The participants will become familiar with the basic ideas behind the artificial entitiy known as "burnout", including its history and definition, somatic, psychological and social symptomatologies and options for treatment and prevention. The perspectives of everyone involved will be discussed including the individual concerned, his or her family, the doctors and psychotherapists as well as the workplace.
Conclusion/Impact for daily practice: Burnout is a complex concept that was not developped in the medicial world, but is becoming an issue of rising importance in medicine. For the people involved the concept actually has an anti-stigmatizing effect, as it helps patients to talk about psychological problems and psychiatric illness particularly in the context of the workplace. The complexitiy of the symptomatology as well as the areas of intervention demands specific intervention tools for medical professionals and the workplace involved. A model to help GPs to understand the dynamics and to coordinate the various treatments is presented including burnout specific tools and strategies. This model allows early intervention, using burnout specific elements and optimal psycho-social coordination. This makes interventions more efficient and reduces the suffering of these patients as well as their absences from work.

WS-053

Cancer drugs – management of oral cancer therapy – a new role and responsibility for primary care

Grossenbacher-Villiger M. (Ringgenberg), Bachmann-Mettler I. (Zürich), Krähenbühl S. (Basel), Nadig J. (Bülach)

New Cancer therapy especially with highly potent oral drugs and chronic application is a rapidly evolving successful and demanding field of modern ambulatory medicine. Most cancer patients in this setting are elderly, likely to be multi morbid and consuming different kind of medicines. Control of side effects and interactions is becoming an important issue of safety and efficacy of therapy. This is a new challenge, as patients purchase their medication in the pharmacy and apply the therapy at home. These patients escape the continuous control by a medical specialist: monitoring, prevention and management of relevant side effects as well as prevention of interactions will be in many different hands. Many i.e. cumulative and unexpected side effects and interactions will be observed but are rather likely to be misinterpreted or underreported. Questions of compliance will arise and we will have to find the best answers. Hence it is our duty to ask how to deal with this new situation, how to manage these sensitive points as well as how to ensure safety and best use of these very useful and expensive drugs. These considerations led to the conception of "Cancerdrugs" with the aim to continuously inform doctors involved in primary and special care by a multi professional and multidisciplinary board of experts. The neutral communication platform is a website (www.cancerdrugs.ch) combined with topic oriented trainings. Cancerdrugs gives medical doctors the possibility to quickly and extensively inform themselves and exchange opinions about this essential and ongoing topic. The autors are multiprofessional: a family doctor (GP), a oncolgy-nurse, a oncologist and a clinical pharmacologist

WS-054

Quality issues in complex consultations: when the patient is a doctor

Rochfort A. (Dublin), Lefebvre L. (Brussels)

Aim: The aim of this workshop is to explore the topic of quality for (1) the doctor as patient and for (2) the treating doctor, in the context of a consultation where the patient is medically qualified. This type of consultation is complex in many ways; for example we know that paradoxically many doctors do not seek regular healthcare from a personal Family Doctor; doctors are reluctant patients and many doctors prefer not to treat patients who are also doctors. The dynamics of the doctor-patient relationship changes when both parties are doctors. However, doctors may experience symptoms of physical or psychological illness at any time during their medical career. It is therefore reasonable to predict that a doctor will need to obtain personal medical advice from another doctor or to give such advice to a medical colleague sometime during their lives.
Design and Methods: A blended learning approach will be used incorporating a PowerPoint presentation, followed by small group work and an open floor discussion to generate a consensus outcome for the workshop.
Results: The learning objectives of the workshop are that by the end of this workshop, people should be able to: a) Recognise the complexity of the doctor-doctor consultation; b) Describe the factors that influence the quality of a consultation between two doctors; c) Consider ways to optimise these factors for a higher quality outcome.
Conclusion: This workshop should help us to explore and define specific issues of quality (knowledge, skills, attitudes and values) that may be advantageous to doctors in (1) the role of being a doctors' doctor and (2) the role of being a medically qualified patient of another doctor.

WS-055

No more back pain: help yourself in your surgery!

Bueno-Ortiz J.M. (Murcia), Sarmiento Cruz M. (Lleida), Ramirez-Manent I. (Palma de Mallorca), Esteban-Redondo E. (Cartagena-Murcia), Galvez-Alcaraz L. (Malaga), Kovacs F. (Palma de Mallorca)

Introduction: Back pain (BP) is, after respiratory infections, the most frequent cause of consultation in primary health care. Since our surgeries were computerised it is also one of the most common diseases we suffer from. Since 1995 we have run more than 60 Back-School Workshops in National and Regional Spanish Conferences in which one third of their time is devoted to teaching stretching exercises and ergonomics to doctors.
Goals: Family doctor should learn ergonomics regarding the use of their working place. FD should learn a series of easy stretching exercises (for their own benefit) to be carried out during their surgery and at home.
Methodology: Interactive. Each FD will have a facilitator who will be in charge of supervising FD while they perform their exercises and ergonomics. Group discussion of BP tackling in our FD daily consultation.
Conclusions: We expect that after the workshop FD will take care of themselves in an active way and will suffer form less back pain and that they will recommend their patients with back pain ergonomics and stretching.

WS-056

A new model in basic medical education in primary care

Rothenbühler A. (Bern), Schaufelberger M. (Bern), Frey P. (Bern)

The target audience for this workshop are teachers and other individuals engaged in medical education in primary care. The objective is to create a forum for discussion and exchange of information with international colleagues around a new curriculum we initiated in 2007.
Keypoints of the new program are: a 1:1 teaching situation (1GP and 1 student), from year 1 to 4 (8 half days per year from year 1–3 and a 3-weeks block in year 4), every year with its own learning objectives, evaluation, and exams in year 1 and 3.
Objectives of the new program: early clinical exposure, doctor-patient relationship, long term relationship between GP and student, confrontation with the realities of general practice, motivation for the profession. The development of the curriculum will be presented and results of the first evaluation shared with the audience. This will form the basis for small group discussions of the following points: teaching complexity, chronic care and multimorbidity in this setting; early clinical exposure; teacher\'s education; expected outcome and benefit for students.

WS-057

About quaternary prevention

Jamoulle M. (Gilly)

Aims: Encounter in General Practice/Family Medicine is a meeting point between illness and disease. Looking at patients and doctors beliefs and attitudes, one can define four fields of activity describing the major working areas in GP/FM. Considering clinical prevention as the management of processes over a length of time, one can define four main prevention domains. This approach enables us to clarify the concepts of Primary, Secondary and Tertiary prevention while defining a new one: Quaternary prevention. The latter encompasses the consequences of the encounter between the anxiety of the patient and the uncertainty of the doctor and gives insight into the propensity of this kind of meeting to distil sickness, thus creating false positive with its cohort of avoidable human, social and economic costs and suffering.
Methods: Launched in 1986 and presented for the fist time in Wonca Hong Kong 1995 the concept of Quaternary prevention has reached the internaional community of GPs. Though a review of the published papers on the theme, the evolution of the Quaternary prevention will be discussed. The concept is explained and the published papers are quoted on the web site http://docpatient.net/mj/P4_citations.htm
Results: This concept rises some ethical issues which will be discussed in the related workshop.

WS-058

Recurrent "trivial" infections: not so trivial

Romerio Bläuer S. (Basel), Hess C. (Basel), Weisser M. (Basel)

Patients presenting with recurrent infections pose a common dilemma to the generalist. The clinician does not want to miss a treatable diagnosis – both common and uncommon – but also does not want to subject patients to the expense and inconvenience of potentially unnecessary investigations. In this workshop we aim at discussing the approach to the patient with recurrent infections from the point-of-view of a generalist, an immunologist and an infectious disease specialist. Specifically we would like to establish – on the basis of case vignettes – how a patient's history, clinical signs and symptoms and basic imaging/laboratory investigations provide a reliable basis to dissect the nature of the clinical problem. More often than not these basic investigations will allow placing the problem 'recurrent infection' into one of only a few distinct categories – such as primary or secondary, iatrogenic/man-made, anatomic/structural – which in turn facilitates solving the problem or directing more specialized investigations.

WS-059

Practical tools to screen, counsel and treat patients with problematic psycho-active substance use in primary care

Broers B. (Geneva), Haaz S. (Geneva), Haller D. (Geneva), Meynard A. (Geneva), Humair J.P. (Geneva)

Aims: To provide practical tools for the screening, brief intervention and treatment of problematic substance use in primary care.
Organisation of the workshop: This interactive workshop will alternate work in small groups, plenary discussions and presentation of theoretical background. The workshop is based on several case studies with different types of substance use and levels of motivation to change. Participants will split in small groups to practice identification of substance use, brief counselling and offer of appropriate treatment options for each case.
Learning objectives: At the end of the workshop the participants will be able to: – cite the prevalence of tobacco, alcohol, cannabis and other psycho-active substance use among primary care patients (adolescents and adults) and their respective public health impact; – define occasional use, harmful use and dependence; – identify use of psycho-active substances by primary care patients, based on the patient history or questionnaires; – provide brief and appropriate advice about substance use; – know the main therapeutic strategies for the treatment of tobacco, alcohol and other substance dependence within the scope of primary care.
Expected impact of the workshop for daily practice: primary care physicians will more systematically screen for psycho-active substance use by their patients, and offer brief interventions and treatment to those who need it.

WS-060

Balint group-friendly place to struggle with uncertainty

Blazekovic-Milakovic S. (Zagreb), Stojanovic-Spehar S. (Zagreb), Tiljak H. (Zagreb), Vukovic H. (Zadar)

The aim of the Balint workshop is to increase confidence, competence and satisfaction of the family doctors in their ordinary work and help them to be more flexible dealing with complexity and uncertainty.
Design and Methods: a) Lecturers (4X10 min) – Traditionaly diagnosis oriented doctor; – Confinement; – Patients' psychosocial factors; – Addicted patients
Dealing with their competencies and characteristics, according European definition of Family Medicine, family doctors balance between complexity and uncertainty among patients, professionals and environment. They have to handle patients with acute, chronic diseases, emotional problems, complex biopsychosocial problems and elderly people with multiple pathologies.
b) Small group work (fishbowl Balint group, 10–15 GP) (60 min)
Traditional educated doctors commonly have a fairly rigid protocol for making a diagnosis. Therefore psychological problems are often ranked lower and less important than physical diseases. Doctors commonly believe that their approach to patients is purely to make a correct diagnosis and does not of itself influence the patient. The research of the Balint groups contradicted this.
c) Discussion (20 min)
Learning objectives: – to teach that family doctors have very individual attitudes to patients, expectations of them and ways of dealing with them; – to show that ways shaped by their personalities and beliefs; – to see the doctor-patient relationship (consultation style) as the most potent, therapeutic tool.
Results: – to show how a good doctor-patient relationship, became the central question in complex and uncertainty everyday work of GP; – increase of the doctor's self-awareness that they as professionals feel more at ease with patients and with themselves as doctors and can help their patients more constructively and with less stress to recognize and access desirable goal.

WS-061

Gut feelings as a guide in diagnostic reasoning of GPs

Stolper E. (Maastricht), Hauswaldt J. (Hannover), van Royen P. (Antwerpen)

Aims and purpose: GPs are often faced with complicated, vague problems in situations of uncertainty, which they have to solve in short-term. In those situations gut feelings seem to play a substantial role in the diagnostic reasoning process. Research in the Netherlands, Belgium and Germany discerned two kinds of gut feelings: a sense of alarm and a sense of reassurance. However, gut feelings and evidence are uneasy bedfellows and not every GP trusts his or her intuitive feelings.
Designs and Methods (workshop plan): 1. Introductory lectures: how our research deepens our insights into the role of gut feelings in diagnostic reasoning (reached consensus on the description of gut feelings, the significance of determinants such as experience, contextual knowledge and interfering factors and, their role in daily practice). 2. Discussion between the participants about the significance of these results for daily practice and medical education with the help of vignettes and a questionnaire on the role of gut feelings and the significance of some determinants. 3. Summary and conclusions, making transparent the "dance of reason and affect" in diagnostic reasoning as result of interacting analytical and non-analytical cognitive processes.
Results of the workshop: Participants will gain insight into the role of gut feelings in GPs' diagnostic reasoning in situations of uncertainty and complexity and, into the contribution of contextual knowledge, experience and interfering factors.
Conclusions: Impact of the workshop for daily practice: The participants will learn that gut feelings are useful, especially in general practice and can be trusted in the diagnostic reasoning process when combined with analytical tools.

WS-062

Complexity theory: implications for leadership and management in primary care

Price J. (Brighton)

Leadership and management in primary care are increasingly important areas for health care professionals. In the UK and elsewhere, health policy now clearly focuses on the importance of the "clinical engagement" of all doctors, and in particular GPs, as well as other primary care health professionals, and this means involvement in leadership and management roles. In this workshop we will embark on a fascinating journey through the essentials of complexity theory, something that can open up new vistas for the understanding of day-to-day practices. We will demonstrate how it might inform the processes of both 'leadership' and 'management' in primary health

care. We will begin a conversation about this new way of thinking and why it might be important in the leadership and management roles many of us have to undertake. Our view is that everyone in primary care can be a 'leader', and in this workshop we will attempt to introduce you to a more holistic approach to leadership at every level. It is anticipated that participants will bring their own experiences to the group conversation, allowing all of us to benefit by the sharing of leadership experiences. The workshop will not assume any prior knowledge of systems or complexity theory, but will assume that participants have open minds to new ideas and approaches in order to strengthen their leadership and management roles in primary care settings.
Learning outcomes: By the end of the workshop participants will have: Considered how primary care leadership and management can be understood utilising the notion of 'complexity' as both theory for action as well as metaphor; Conversed and discussed how complexity might influence leadership and management roles; Considered some practical applications of complexity for use in day-to-day practice. No prior knowledge needed.

WS-063

How to build research capacity and leadership in the complex world of primary care: the combined vocational and research training programme

Van der Wel M. (Nijmegen), Oldehartman T. (Nijmegen), van Weel C. (Nijmegen), Rosser W. (Kingston)

Introduction: To face the ever increasing complexity of care in general practice (GP), physicians able to transfer observations from daily practice to research and implement research findings into daily practice are of utmost importance. To facilitate this growing demand for versatile GP's a combined vocational and research training programme will prepare young doctors to set the future standard.
Aims: Introduce the concept of the combined vocational and research training programme Inventory of (need for) current programmes in different countries Discuss opportunities and threats in the development and implementation of a combined programme Start a network to facilitate development and implementation.
Design: Workshop with brief introductory presentation; group discussions based on themes, plenary feedback and evaluation.
Methods: Based on over 10 years of experience we will inform the audience about organisation and results of the combined vocational and research programme in The Netherlands during a 10 minute presentation. This introduction will be the kick off for two discussion rounds where the audience will discuss in small subgroups about aims 2 and 3. Each aim will be evaluated plenary before continuing to the next item. Subgroups will be formed based on minimum of 4 different nationalities per subgroup.
Results: Participants – will know of at least one example of organisation of a combined training and research programme. – will comprehend pitfalls and possibilities in starting a combined program. – are enabled to form a network to exchange ideas, knowledge and persons.
Conclusions: This workshop may form the basis for increasing research capacity and leadership in primary care. and be the start of a fundamental change in the international organisation of training programs for GP residents.

WS-064

People with asthma who smoke / smoking cessation in a busy practice

Henrichsen S.H. (Oslo), Thomas M. (Aberdeen), Ostrem A. (Oslo), Botelho R. (Kansas City)

Aim of the workshop: Discussing asthma management in the context of smoking. Practical approach to smoking cessation made easy (5 min) in a busy practice. Background: Smoking asthmatics are often poorly controlled because cigarette smoking leads to steroid resistance. 33% of our asthmatics are smokers. How to treat them? Smoking cessation is the single most cost effective intervention we can do in primary care. The cost of saving one life is around EUR 7500.– which includes costs of medication. Studies have shown that there is a great potential to improve smoking cessation efforts in primary care.
Objectives: The workshop will give a general introduction to smoking cessation with focus on nicotine addiction, motivation of patients and medical options. To achieve a change in behavior is a challenging task for the busy primary care physician. We aim to offer help on how to do this and the model can be used for other behavior changes like weight reduction and exercise. Practical suggestions on how to implement smoking cessation into a busy general practice will be given. In addition we would like to discuss with the participants their barrier to practice smoking cessation and how we can overcome these. The workshop will be interactive and there will be ample opportunities to questions and discussions.
Key message: As primary care physicians we have a key role to play in smoking cessation. It is the single most important intervention we can do in primary care. It does not need to take more than a few minutes.

WS-065

Refugees and undocumented migrants in general practice

Van den Muijsenbergh M. (Nijmegen), Pronk C. (Utrecht), Besson M. (Geneva), Pieper H.O. (Galway)

Aims and purposes: General practitioners (g.p.'s) all over Europe meet in their practices refugees and undocumented migrants (UDM). Providing good primary care for them is not easy. G.P.'s experience problems in the field of communication, access to healthcare and finances, specific knowledge on ethnicity and culture, so was the outcome of a workshop on this theme last year at WONCA-Europe 2008 in Istanbul. The aim of this workshop is to expand our knowledge about these patients and good practices, and to continue the discussion about solutions for the problems in daily care.
Design and methods: The workshop is prepared for by an international group of general practitioners with much experience with these patients. After four presentations as an introduction discussion will take place with all participants. The abstracts of the presentations you find separately in the abstract book.
Program: Presentations: *Undocumented patients in General Practice.* 1. Medical problems of UDM in general practice in the Netherlands (Carolien Pronk); 2. Access to General Practice for UDM in the Netherlands (Maria van den Muijsenbergh); *Good Practices*; 3. Redistribution to uninsured patients of unused medicines collected by community pharmacies in Geneva (Marius Besson); 4. The use of a multilingual poster as communication aid to address language barriers in General Practice (Hans-Olaf Pieper).
Results: learning objectives: Participants will acquire knowledge about these patients and about solutions to some of the problems experienced in daily practice. Besides new topics for research in general practice will be formulated.
Conclusion: impact for daily practice: The acquired knowledge can help GP's in handling medical problems and barriers in access to GP of these patients and stimulate them to introduce some improvements in their own practice.

WS-066

Anthropological immersion: a new concept of continuing professional development to improve attitudes in general practice

Ouvrard P. (Angers), Widmer D. (Lausanne)

Aim and purpose: The situation of the doctor in front of his patient is analogous to that of the anthropologist who immerses himself in a new world before having identified his theories. The latter will come to him whilst listening to the accounts of his interlocutors. This conception of the practice can have consequences on the doctor's attitude.
Design and methods: The animators will present the work carried out by GGRAM (General Practitioners' Medical Anthropology Research Group), then will lead a group discussion on the use of a format for GP consultations. Presentation of the work of GGRAM: A group of about 20 doctors played the role of an anthropologist to learn about health practices in various countries (Senegal, Benin, Southern India (Tamil, Nadu and Karnataka) and the Himalayas (Sikkim, Nepal and Tibet)). They shared regularly, in pair groups, their experiences during their voyages. They then evaluated the changes brought about in their GP practices under the supervision of a professional anthropologist.
Results of the work of GGRAM: The changes resulting from 6 voyages can be resumed in 3 categories: 1. Acquisition of written narrative ability. 2. Modification of patient questioning methods during consultation. 3. Greater self-awareness during the consultation: negative attitudes, preconceptions, emotions. The group deliberations resulted in the creation of a consultation evaluation table which will be discussed in the workshop.
Results (learning objectives of the workshop): Group discussion, following the presentation of a clinical situation, with use of the evaluation table.
Conclusion: The use of this table should, by modifying the attitude of the doctor, result in a better understanding of the narrative dimension of a consultation.

WS-067

A simple way to treat a complex problem: medical didgeridoo playing against sleep apnoea and snoring

Suarez A. (Nesslau), Dahinden A. (La Neuveville)

A publication of a study in the British Medical Journal (Milo A Puhan, Alex Suarez et al. Didgeridoo playing as alternative treatment for obstructive sleep apnoea syndrome BMJ. 2006;332:266–70) shows that playing the medical didgeridoo can diminish sleeping apnoea and stop snoring. In this workshop the participants will be informed about the results of the study and they will have the opportunity to experience themselves the therapeutic way of playing the medical didgeridoo. Mr Suarez, who developed the method and teaches it in Switzerland and Germany, will bring 20 medical didgeridoos to the workshop. the participants can start to learn how to play medical didgeridoo in a therapeutic way. If there are more than twenty participants it will be possible to enable three times twenty participants to try their hand at playing the didgeridoo.

OP-001

Weight distribution is an important factor of functional outcome of ischemic stroke

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Introduction and purpose: Increased body weight and abdominal obesity augment the danger of cardiovascular incidents. Abdominal obesity has been proven that is a better prognostic indicator in relation to body mass index (BMI). The aim of the present study is to appreciate and compare the total and abdominal obesity with the endpoints of Ischemic Stroke (IS).
Material and methods: This is a prospective study. We watched 123 patients at 77.6±6.8 years old that were hospitalized between Jan. 2007 to Feb. 2008, during hospitalization and after three months. We reviewed their neurological progress based on NIHSS (0-41). As end points we considered the appearance of new IS or death. Analysis of our data was generated by t-test, logistic regression and Fisher's exact test.
Results: Our observation did not associate increased weight (BMI >25) and bad outcome (death or new IS) during hospitalization as well as after three months ($p = 0.960$ and $p = 0.485$ respectively). Abdominal obesity in men (waist >102 cm) seemed to be an important unfavorable factor during hospitalization ($p = 0.035$) and marginally after three months ($p = 0.071$). Likewise in women, abdominal obesity (waist >88 cm) was correlated marginally with negative outcome only after three months ($p = 0.087$) and not during hospitalization.
Conclusions: Increased body weight does not appear to be considerably related in the functional outcome of IS. Abdominal obesity contributes considerably unfavorable in the prognosis of IS mainly in men.

OP-002

Mortality associated with diabetes mellitus in comparison with history of cardiovascular disease in older women

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Current treatment guidelines consider diabetes to be equivalent to existing cardiovascular disease (CVD), but few data exist about the relative importance of these risk factors for total and CVD mortality in older women. We studied 9704 women aged >= 65 years enrolled in a prospective cohort study (Study of Osteoporotic Fracture) during a mean follow-up of 13 years and compared all-cause and CVD mortality among non-diabetic women without and with history of CVD at baseline and diabetic women without and with history of CVD. Diabetes mellitus and CVD were defined as self-report of physician diagnoses. Cause of death was adjudicated from death certificates and medical records when available. Ascertainment of vital status was 99% complete. Multivariate Cox hazard models adjusted for age, smoking, physical activity, systolic blood pressure, waist girth and education were used to compare mortality among the four groups with non-diabetic women without CVD as the referent group. At baseline mean age was 71.7 ± 5.3 years, 7.0% reported diabetes mellitus and 14.5% reported prior CVD. 4257 women died during follow-up, 36.6% were attributed to CVD. Compared to non-diabetic women without prior CVD, the risk of CVD mortality was elevated among both non-diabetic women with CVD (HR = 1.82, 95% CI: 1.60–2.07, P <0.001) and diabetic women without prior CVD (HR = 2.24, CI: 1.87–2.69, P <0.001). CVD mortality was highest among diabetic women with CVD (HR = 3.41, CI: 2.61–4.45, P <0.001). Compared to non-diabetic women with CVD, diabetic women without prior CVD had a significantly higher adjusted HR for total and CVD mortality (P < 0.001 and P <0.05 respectively). Older diabetic women without prior CVD have a higher risk of all-cause and CVD mortality compared to non-diabetic women with pre-existing CVD. For older women, these data support the equivalence of prior CVD and diabetes mellitus in current guidelines for the prevention of CVD in primary care.

OP-003

Primary cardiovascular prevention: effects of two different interventions on management of patients with hypertension and high global cardiovascular risk

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Aims and purpose: To compare the effect of a simple versus a complex educational intervention on management of patients with known hypertension and high cardiovascular risk (CVR) in primary prevention.
Methods/design: Prospective longitudinal cluster-randomised intervention trial with 94 GPs consecutively enrolling 40 patients each with known hypertension. All GPs received a written manual specifically developed to transfer the concept of global CVR into daily practice. After cluster-randomisation, half of GPs additionally received a clinical outreach visit by a trained peer. Main outcome measure was the improvement of calculated CVR in patients at high CVR in primary prevention, defined as 10-year-mortality >= 5% according to the European SCORE formula, six months after intervention.
Results: 1602 patients (48% of the overall study population) were at high cardiovascular risk (SCORE >= 5%) with no history of cardiovascular disease. For this patients we found significant reduction of CVR in the "simple intervention group" (from 14,3% to 13,4%) as well in the "complex intervention group" (from 13,4% to 12,3%). However no significant difference between both intervention groups could be observed. The hypertension control rate (RR <140/90 mm Hg) increased significant in both intervention groups from approximately 37% to 46% with no significant differences between the two groups.
Conclusions: We found no additional effect of the complex intervention compared to the simple intervention. Similar improvements in both groups may indicate causal effects of both interventions but may also influenced by higher attention of GP\'s on cardiovascular prevention within study participation or by external factors like the implementation of disease management programs in Germany.

OP-004

Prevention of dementia by intensive vascular care (PREDIVA)

Moll van Charante E. (Amsterdam), Richard E. (Amsterdam), Ligthart S. (Utrecht), Achthoven L. (Almere), Vermeulen R. (Amsterdam), van Gool P. (Amsterdam)

Aims and purpose: Cardiovascular risk factors are associated with an increased risk of dementia. Whether interventions aimed at cardiovascular risk factors in elderly reduce dementia risk is largely unknown.
Design and methods: This study is designed as a large cluster-randomized trial with a 6-year follow-up in 3700 non-demented elderly subjects (70–78 y) to assess whether nurse-led intensive vascular care in primary care decreases the incidence of dementia. Primary outcomes are incident dementia and disability measured with the AMC Linear Disability Scale. Secondary outcome parameters are mortality, incidence of vascular events, and cognitive functioning. Intensive vascular care comprises treatment of hypertension, hypercholesterolemia and diabetes according to strict guidelines and reducing overweight, smoking cessation, and stimulating physical exercise, in 4-monthly visits to a practice nurse. Statistical analysis is based on estimates of cumulative dementia incidence (Kaplan-Meier).
Results: Inclusion of 3700 patients was finished in early 2009. Baseline data show that 87% of the community-dwelling elderly have 1 or more cardiovascular risk factors amenable to treatment. Systolic hypertension is present in 75% of the subjects and 79% of the subjects receiving antihypertensive medication still have a systolic pressure of >140 mm Hg, illustrating insufficient treatment. Hypercholesterolemia and obesity is present in more than 25%. Follow-up visits of the subjects are currently ongoing.
Conclusions: In community-dwelling non-demented elderly patients, a very high percentage of subjects with cardiovascular risk factors are undertreated, in spite of clear guidelines for vascular risk management. This illustrates the large window of opportunity for the multi-component cardiovascular intervention this trial, which will hopefully lead to a decrease of incident dementia, in addition to the decrease in cardiovascular events.

OP-005

Prevention of cardiovascular diseases, diabetes mellitus and chronic kidney diseases in general practice

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Purpose: To study the attitudes and working methods of general practitioners (GPs) in primary prevention of cardiovascular diseases, diabetes mellitus and chronic kidney diseases.
Methods: A questionnaire with questions about primary prevention of cardiovascular diseases, diabetes mellitus and chronic kidney diseases in general practice was sent to a representative sample of 1100 Dutch GPs. The data were analyzed using frequency tables, chi-square and ANOVA.
Results: 330 GPs completed and returned the questionnaire. Less than half of the GP's actively invite patients for preventive measurements. Preventive measures are mainly performed by the GP when a patient asks for it or when patients visit a GP for other complaints. The main reasons for performing preventive tests were a positive family history, obesity and smoking. Most GPs consider detection of these diseases as worthwhile, but detection should particularly focus on the group of patients with the highest risk on these diseases.
Conclusion: GPs have a positive attitude towards primary prevention of cardiovascular diseases, diabetes mellitus and chronic kidney diseases, but primary prevention should be focused on patients at risk.

OP-006

Promoting implementation of current care guidelines dealing with cardiovascular risks in Päijät-Häme region, Finland

Kuronen R. (Lahti), Jallinoja P. (Helsinki), Patja K. (Helsinki)

Aims and purpose: Physicians use guidelines in diagnosing and treating diseases, less often in preventive actions. Preventive work concerns all health professional, though there is a little information of guideline use of nurses. Recent recommendations stress lifestyle change and emphasize the evidence base of prevention and the role of general practitioners and primary care nurses in cardiovascular prevention. Current Care Guidelines Implementation Program (VALTIT) was conducted between spring 2006 and 2007 in Päijät-Häme Health and Social Care District in Finland. This study explores the familiarity with and use of the guidelines on cardiovascular risks among primary care professionals and can the familiarity and use be enhanced with a training intervention.
Desing and methods: Data for the study was collected by questionnaires before and after the intervention. It included items e.g. attitudes and use of the current care guidelines in general and specially the guidelines on cardiovascular risks which were in use in year 2004 (Hypertension, Dyslipidemia, Adult obesity and Smoking cessation). Intervention included regional training session and local workshops.
Results: Among nurses the reported familiarity with all the guidelines studied here and use of the "medication centred" guidelines (hypertension and dyslipidemia) increased. An association between use of the guidelines and participation in VALTIT- training was noticed. Perceptions concerning readiness to take the guidelines in use changed positively during the study period among nurses and were more positive among those who had taken part in at least one centralized training session or a local workshop.
Conclusions: There seems to be a need for guideline training for primary care nurses in this district. Increased reported use among nurses happened in respect of the medication centred guidelines: is the focus still on treating single risk factors than on global risk and lifestyle change.

OP-007

Characteristics of resistant hypertension confirmed by ambulatory blood pressure monitoring

Ros Domingo N. (Barcelona), Fernandez Ruiz S.S. (Barcelona), Martinez Guarne L. (Barcelona), Pelegri Santos A. (Barcelona)

Aims: To know the importance of white-coat effect in patients with resistant hypertension (RH). Are there any differential characteristics between the group with and the group without sustained hypertension confirmed by Ambulatory Blood Pressure Monitoring (ABPM)?
Design: Prospective case-control observational study in 65 patients >18 years old, successively diagnosed ofRH in primary care, defined as blood pressure (BP) >140/90 mm Hg, in spite of 3 or more antihypertensive drugs, including a diuretic. All patients were monitorised by ABPM while taking the antihypertensive treatment: those with 24h systolic BP mean >135 mm Hg and/or 24 h diastolic BP mean >85 mm Hg were defined as cases and the rest, as controls. Cardiovascular risk factors, target organ damage and vascular disease were recorded in both groups. Descriptive statistical analyses were performed.
Results: ABPM confirmed lack of BP control in 33/65 patients. Cases had higher rate of diabetics (53% vs 21%, p <0.01),higher Body Mass Index (30.8 ± 4 vs 28.3% ± 3.8, p <0.01), higher albuminuria level (97.5 ± 285 vs 306 ± 505 mg/gr Cr, p <0.05), higher pulse pressure mean (70.6 ± 15.8 vs 55.9 ± 9.37, p <0.05), and higher rate of patients with abnormal circadian pathern of ABPM (77.4% vs 63.6%, pNS). No differences between groups in sex, age, number of antihypertensive drugs, diuretic dose, waist circumference, presence of left ventricular hypertrophy or kidney disease (GFR <60) were detected.
Conclusions: ABPM allows us to detect that about 50% of patients with RH in office have good ambulatory BP control; this confirms a high prevalence of white-coat effect. Diabetics were more likely to have sustained RH. There was also a higher prevalence of obesity and albuminuria in those who were really resistant. In addition, the significantly higher pulse pressure in the poorly controlled hypertension group demonstrates a more difficult systolic BP control.

OP-008

Is the adherence at treatment in hypertension a real problem?

Vaquero Cruzado J.A. (Barcelona), Delgado Diestre C. (Barcelona), Gardeñes M. (Barcelona), Herrera A. (Barcelona), Fernandez S. (Barcelona), Figuerola M. (Barcelona)

Aim and purpose: Multiple variables affecting physicians and patients contribute to non-adherence, which negatively affects treatment outcomes. The purpose of this study was to examine patient adherence to hypertension medications in Primary Health Care.
Design and methods: During a period of 30 days, patients with the diagnosis of hypertension who had come to their family physician were interviewed in our Primary Health Center. The interview was made by another doctor after the visit , using the Morinsky-Green and the Batalla tests and he contrasted the answers with the medical opinion about treatment fulfilment of each patient.
Results: 273 hypertensive patients taking at least one antihypertensive drug class were interviewed. Age ranged from 30 to 92 years; the diagnosis of hypertension had been since 1 to 45 years ago. According to Batalla´s test and Morinsky-Green's test, a percentage of 87.9% (n = 40) and 80,2% (n = 219) of patients respectively, regularly take the medication. The medical opinion classified 90,5 % (n = 247) as good reliable . Otherwise, the concordancy grade, by Kappa's index showed a poor relation between the differents tests.
Conclusion: Adherence rates with all antihypertensive medications were high. A 89.7% of people who we interviewed had a high level of knowledge about hypertension. A 80.2% of them can be classified like good reliable. Finally, medical opinion exceeded the good compliance in a 10% but it wasn't statistically significant.

OP-009

"You know, aboriginal people, we think differently and we live a different lifestyle": nutrition education for indigenous Australians

Abbott P. (Sydney), Moore L. (Sydney), Davison J. (Sydney)

Aim and purpose: There is a wide gap in the health status of Aboriginal and non- Aboriginal Australians, with Aboriginal people continuing to experience a high burden of diabetes and chronic disease, a life expectancy 17 years less than non Aboriginal Australians and socioeconomic disadvantage. Despite their greater need, Aboriginal people access medical care and health education at lower rates. In order to increase the accessibility and effectiveness of nutrition and diabetes education for this group, a series of cooking courses for Aboriginal people with diabetes and their families was held at the Aboriginal Medical Service Western Sydney (AMSWS), an urban Aboriginal community-controlled primary health service. We will present key findings from the qualitative evaluation of the program, with a focus on factors that contributed to the course effectiveness and the major barriers participants faced to dietary change.
Design and methods: The research team, comprising a general practitioner and two Aboriginal health workers, conducted twenty-three in-depth semi-structured interviews with course participants in 2008. Thematic analysis was undertaken.
Results: The effectiveness of the cooking courses was increased by cultural targeting and promoting the social aspects of the program. Other successful course components were the supportive small group learning, availability of transport and access to primary health care while at the course. The main barriers to participants making healthy dietary changes were lack of family support, perceived social isolation by dietary changes, the higher cost of healthy food and poor oral health.

Conclusions: The effectiveness of nutrition education for Aboriginal Australians is enhanced by being culturally appropriate, enjoyable, supportive and practical. Nutrition education should target the family as well as the patient and consider the financial and medical barriers to dietary change.

OP-010

Factors related to adherence to lifestyle counselling in patients with chronic conditions

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Aims and purpose: To ascertain the influence of the quality of clinical interview on lifestyle counselling adherence.
Design and Methods: Patients diagnosed with high blood pressure (HBP) in a twelve-month period in five Primary Health Centres (n = 410) were surveyed regarding to their current lifestyle customs (smoking, physical exercise)l -yes/no-) and previous lifestyle advices provided by their physicians about these habits and weight control. In addition, we asked some questions about HBP information received (4 items), perceived provided-patient interaction (7 items) and "locus of control" (independent variables). Body mass index (BMI) was calculated according to the information provided by the medical record. The survey instrument was distributed by mail with a telephone reminder. Lifestyle counselling adherence (dependent variable) was considered as positive when a patient followed a particular lifestyle habit (including BMI <30 for weight control) after receiving the corresponding counselling. Data were analysed using logistic regression, adjusting by all the significant variables in the univariant analysis.
Results: Response rate was 73.0%. Physical exercise counselling was provided to3/4 parts of patients while only 63.2% and 65.2% received advices on smoking avoided and weight control respectively. Compliance rates were high for physical exercise (73.7%) and smoking avoided (73.8%) and moderate for weight control (54.8%). Adherence to smoking avoided is more probably in women (OR 4.11; CI95%: 1.7–10.6), and patients who received written information on HBP (OR: 4.3; CI95%: 1.6–12.5). Weight control is influenced positive for the locus of control focused on Family Physician (OR: 2.8; CI95%; 1.4–5.8).
Conclusions: The degree of adherence to lifestyle counseling is significantly influenced by the quality of clinical encounters apart from patient's psychological and demographic characteristics.

OP-011

Lifestyle attitudes: the views of patients. Europreview patient study

Jurgova E. (Piestany), Brotons C. (Barcelona)

Aims and purpose: To assess patients' beliefs and attitudes regarding a) lifestyles and the impact of these atitudes on their behaviour, and b) the support recieved from their general practitioners (GPs) to modify lifestyle behaviour.
Design and methods: International survey. At least 10 practices (clusters) were randomly selected from each of the 22 participating countries (stratum). 40 patients from each practice were included in the study – randomly selected on different days during 2008. The study questionnaire was translated into the original language of each country using a method of translation and back-translation. The questionnaire was self-administered with the supervision of an investigator. Data was recorded in a custom designed database using a code-protected webpage (www.europrevstudy.net) in order to assure data confidentiality.
Results: To date, 4895 questionnaires have been recorded, 51.71% (95%CI 49.34–54.08) women. Mean age (SD) was 50.39 (95%CI 49.82–50.95) years, 76,09% of patients were married and 58.85% were employed. Healthy eating habits were followed by 82.8% of the respondents and 77.97% carried out appropriate levels of physical activity. 70.57% gave up smoking more than one year ago or were non smokers and 73.98% consumed alcohol less then 2 times per week. When GPs offered advice to patients with harmful habits, 55.72% accepted it to improve eating habits, 52.27% to increase physical activity, 41.96 to give up smoking and 15.5 to give up drinking. 53.18% of patients who regularly consume alcohol thought that GP advice was not applicable, while the percentage in the other areas of interest (eating, physical activity and smoking) was less than 15%.
Conclusions: Patients are aware of the importance of following healthy habits. Although patients are conscious of what healthy habits entail, they are still confused regarding alcohol consumption limits and most are not able to modify their behaviour.

OP-012

Backache – how the change in life-style can help

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Aim: Assuming that up to 80% of population experience backache episode at least once during their lifetime, and that in up to 90% of patients with backache we cannot find the cause, several interventions in life style could help in overcoming this problem, which is also one of major reasons for absence from work.
Design and methods: This was a 550 backache patients (230 men and 320 women) prospective study practiced in one urban and one rural healthcare areas. Patient education was performed individually in their doctors' offices. After clinical examination, which is the base of diagnostic procedure, patients were adviced to stay active although the pain can be worsened when patients are active, but avoiding activity and inactivity could led to a cascade of negative impact; to take some pain-killers strictly recommended by their practicioner (NSAID), to use cold or warm compresses, to use physical rehabilitation, medical excersise and gymnastics which will strengthen their muscles and improve coordination of movement. Individual approach enabled to use variety of possibilities according to the age, gender and physical condition of each patient, all with the purpose ro reduce pain and improve the quality of life of the patient with backache.
Results: Backache prevalence 23%. 85% improved their quality of life and 48% their drug abuse. Secondary care specialist consultation dropped 64%, their follow-up and control improved 89% and working drop outs felled down 76%. Sleep disturbances dropped 71%. An empowerment in education and information for backache patients is needed to be fostered.
Conclusions: We achieved less patient disabilities, drug abuse, sick leaves and significantly improved the quality of life of patients quality of life. The key of the success was the individual approach. This enabled us to involve psychologist when necessary, but also physiatrist, vertebrologist or neurologist, but in very few cases when it was really needed.

OP-013

Researching salutogenic birth through the lens of complexity: joyful childbirth as an emergent phenomenon

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In the UK, official documents such as the recent maternity element of the Children's National Service Framework support normal childbirth as the optimum outcome for most pregnant women and their babies. Official publications from the World Health Organisation and the International Confederation of Midwives are equally supportive of this goal. Despite this, rates of reported spontaneous vaginal birth are falling across the industrialised world. This raises questions about the nature of normal childbirth, and about its relevance in a late capitalist world of risk-averse "consumers". Indeed, it is hard to make a case for normal birth, since little existing research on physiological norms in childbirth has been undertaken in settings where physiological birth without intervention takes place routinely. This paper will present examples of maternity care that normalises childbirth, and reduces maternal mortality, in both resource rich and resource poor settings. The presentation will integrate theories of complexity, salutogenesis, uncertainty, and realist review (what works for who in what circumstances) with an emphasis on understanding emergence, initial conditions, connectivity and edge of chaos phenomena. In the process, the paperwill consider the potential for this kind of approach to maximise the potential for joyful, salutogenic, and safe childbirth, in both wealthy and poor maternity care settings.

OP-014

Home births analysis in Solothurn/Langenthal region from 1987 to 2008

Bernath R. (Solothurn), Simic T. (Solothurn)

Background: The aim this study was to measure the risk of outcomes for mother and child in planned home births in Solothurn/Langenthal Region in Switzerland, irrespective of where the birth actually occurred.
Design and Methods: This is a retrospective, population-based study using data from the Medical Birth Register in Solothurn /Langenthal-Region, Switzerland from 1987–2008. A total of 530 planned home births were retrospectively analysed.
Main outcome measures: Prevalence of mortality and morbidity among mothers and children, emergency conditions and instrumental and operative delivery was analysed.
Results: During this period in Solothurn/Langenthal Region, Switzerland, neonatal mortality rate was 2 promills in the home birth

group (one child with Trisomy 18, Edwards Syndrom) compared to national average of5 promills. One percent of emergency complications were found in the home birth group. The risk of having a Caesarean section or instrumental delivery was significant lower in home birth group (4% versus 10% from WHO-Rate and versus 30% according Switzerland-Rate).
Conclusion: In Solothurn/Langenthal Region in Switzerland between 1987 and 2008 were 530 home births. The perinatal mortality was 2,0 promills, the perinatal morbidity 1%, and Caesarean section rate was 4%. The proportion in all these categories was higher compared to hospital births. Women in the home birth group were not different from the Swiss average in regard to age, number of pregnancies, gestational age and birth weight. The condition demanding Caesarean section may occur less frequently in home birth group but this cannot explain the big difference in Caesarean section-rate.

OP-015

Hypertension and pregnancy in General Practice: screening and orientation of a pathological pregnancy by the General Practitioner

Laporte C. (Clermont-Ferrand), Hoffet M. (Marseille)

Introduction: Gestational hypertension (GH) is the first complication in pregnancy and the second cause of maternal death. Although delivery is the only available treatment, a decrease in morbimortality is observed through early screening and monitoring. The goal of this study was to explore and better understand the attitude of general physicians (GP) when confronted to GH, and to propose optimizations in the role of the GP.
Material and Methods: A qualitative study was pursued through semi-directive interviews of 14 liberal GPs in the Gard area between May and July 2008. These GPs monitored more than 5 pregnancies per year. The interviews were recorded and literally transcribed. A thematic analysis was then performed.
Results: GH, regarded as potentially hazardous, was systematically screened by GPs: monitoring of arterial pressure, proteinuria and other clinical signs. The decision to reroute the patient to a specialized monitoring was the negociated consequence between theoretical knowledge, professional experience, medical and paramedical environment. GPs regretted the weak initial and ongoing training, the lack of coordination between professionals (obstetricians-gynecologists and midwives), the undervaluation of their role in perinatality.
Conclusion: Management of GH could be improved by: the training of GPs through an adaptation to the difficulties of the practice; the coordination between health professionals through a more pertinent action of the regional perinatality network; and a clarification of the GP's role in the monitoring of pregnancy through rethinking the organization of the health system.

OP-016

Integrated palliative care in the PizolCare medical network: improving quality of care and patient satisfaction

Keller U. (Wangs), Schneiter-Rusconi B. (Wangs)

Introduction: Caring for patients in palliative situations is complex and expensive. Therefore collaboration between all care giving persons and institutions is crucial. To improve collaboration between hospital, general practitioners, community nurses and physiotherapists the PizolCare Medical Network located in a rural part of Eastern Switzerland did the following.
Methods: – Development of a common palliative care concept; – Establishing the job of a chief coordinating community nurse, who is in charge of the project; – Creation of common nursing guidelines; – Elaboration of treatment guidelines in the GP's quality circles; – Making an agreement with regional physiotherapists; – Creating simple but secure ways of communication.
Results: – We created three simple and easy-to-use documentation forms: Quality of life, Doctor's prescription and an Admission/Dismission form – We developed a dossier with guidelines in treatment and care of patients with chronic diseasesfor all care givers involved; – We introduced new and secure e-mail-accounts (HIN, health info network) for all community nursing centres; – We created rules of communication between the GP's and hospitals; – We set up periodical joint meetings for interdisciplinary education involving doctors, nurses and physiotherapists; – We introduced CIR (critical incident reporting) on all levels.
Discussion: The efforts of the PizolCare Medical Network aiming at the improvement of documentation and communication in palliative care led to a better understanding between care givers. This was mainly the result of closer cooperation by joint meetings for interdisciplinary education and introduction of simple and secure ways of communication. Weather this will lead to an improvement in patient satisfaction remains to be seen.

OP-017

In-patient versus out-patient withdrawal programmes for medication overuse headache: a 2-years randomized trial

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Medication-overuse headache (MOH) may affect about 1% of adults in the general population. The choice of withdrawal programs remains a matter of debate, and few prospective comparative trials have been conducted in this field. Given to the cost and the constraints related to hospitalizations, we planned a prospective and randomized study to compare efficacy of in-patient versus out-patient withdrawal programs. We included 82 patients adressed to Saint Etienne's pain center for MOH, from march 2003 to December 2005. MOH diagnosis was confirmed with a headache diary. After randomization, withdrawal was performed during at least eight days, under the control of the general practitioner or the neurological service. Follow-up consultations were programmed two months and two years after drug-withdrawal. The primary outcome measures was the reduction in number of headache days compared with the baseline period. Responders were defined as patients with decrease of headache days per month greater or equal than 50 % and with an intake of acute treatments of headaches less than 10 days per month. Statistical analysis was performed in intention to treat (Mann-Whitney U-test and c2 Fischer exact test). Of the 82 patients initially enrolled, 75 patients responded to the inclusion criteria, 71 of them had a complete drug-withdrawal. Reduction of headache frequency and subjective improvement were not different in both groups either after two months or two years (responder rate respectively = 47% – 44% p = 0.810 in out-and in-patient groups). The experience of withdrawal tended to be perceived as difficult by a greater number of patients in the in-patient group (51% – 31%; p = 0.094). Since we did not observe a difference of efficacy between in and out-patient withdrawals, out-patient withdrawal may be proposed in a first approach to patients with uncomplicated MOH.

OP-018

Interface between levels of care changes course in terminal illness

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Introduction: According to the definition of the role of the General Practitioner (GP) presented in the statement of the European WONCA 2002, one of its features is the ability of coordination of care, and management of the interface with other specialties. However, there are serious problems of coordination between the levels of assistance, as showed by the discontinuity of care when patients are hospitalized.
Objective: To present and analyze a particular case of interface between the Primary Health Care and Hospital Care and how important is the success of a good collaboration.
Methods: The authors reported a case about a particular episode of poor coordination between Primary Health Care and Hospital Care (General Surgery), in a patient with the diagnosis of gastric terminal cancer. A review on the *Pubmed* database, about coordination between these levels of assistance was done.
Results: Initially there was no effective coordination between the Hospital and Primary Health Care with injury to the patient. Due to his GP the interface becomes effective, with clear benefit to the patient, changing the course of his terminal illness. The literature searched, describe some health systems worldwide that face the same difficulty of interface. International models were recently created to give a better response to the care coordination.
Conclusions: A proper interface and coordination of care contributed to better health and satisfaction of patients, with positive repercussions for their families, to health professionals involved and to the National Health Service. The completion of the GP core competencies will only be possible when they will be recognized and known by all the other health professionals.

OP-019

A practical approach to teaching medical students about community services

Flegg K. (Canberra)

Aims(s) and purpose: To assist medical students experience and understand the range and role of community services in primary health care and to then be able to select appropriate services for patients and work within a multidisciplinary team that optimizes care.
Design and Methods: The Australian National University Medical School General Practice teaching program requires that medical students undertake visits to community services/organisations that provide services to the patients of our GPs. Twelve visits must be undertaken with 5 being compulsory (sexual health service, after hours GP service, maternal /child health clinic, aged care assessment,

special education) and 7 being selected from a large list of possibilities. Students appraise these 7 visits of their choosing.
Results: Placements are divided into 6 groups and these will be discussed. Feedback obtained from students is qualitative and quantitative and largely positive. Students report that community placement visits increase their understanding of services available, both government funded allied health services as well as non government organizations (NGOs) providing disease specific assistance to patients and families.They are also a source of personal and professional development.
Conclusions: Educating medical students about community services available to GPs and their patients is an important part of GP education which yields positive results on a professional and personal level.

OP-020

Screening for domestic violence in primary care setting

Steinmetz D. (Tel Aviv), Tabenkin H. (Afula)

Objective: To assess the dimensions of the problem of domestic violence among patients in primary care practice. and the various kinds of violence Methods: A detailed questionnaire was given in the clinic waiting room to patients age 18 and over. It was filled out anonymously, put in an envelope and handed to a research assistant. The physicians selected for the study were those who have worked for several years in the same practice. The study was approved by the Ethics Committee of the "Emek Medical Center".
Results: 517 patient questionnaires were collected, The physicians conveyed information pertaining to 268 patients. 67.1% were females and 32.9% – males. 18.6% had been exposed to some form of domestic violence in the past. 5% were currently being exposed. Women were slightly more exposed to violence than men (women – 5.1%, men – 4.8% – P = 0.89). 72% of those currently undergoing domestic violence had also suffered from it in the past. The kinds of violence: 60% – threats, 24% – beatings and 16% – rape or sexual abuse. Violence of spouse is perpetrated in 58.3% of the cases. 33.3% of victims of domestic violence were in need of medical attention. It was found that the lower the education, the higher the incidence of domestic violence (P = 0.014). Moreover, among workers and students there is less incidence of violence than among the unemployed, pensioners and housewives (P <0.0001). 51.1% think that the family physician is the "right address".
Conclusion: In most cases the family physician is unaware of these cases of violence. Family physicians should be aware of the high risk patients for violence. Only one-third of the victims of violence think that the physician is the right person to turn to. It suggests that a deeper probe into the subject is necessary.

OP-021

Familyquest

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Title: strategies for family history-taking in general practice
Context: The strategies used to collect a patient's family history have never been described nor assessed; therefore we defined and assessed five such strategies in primary care.
Objective: Identify the best method to take a patient's family history in primary care.
Method: Fifteen pairs 'resident/general practitioner' used three methods of history-taking, to assess both the duration of interrogation and the number of collected facts: a general question (G), the enunciation of pathologies looked-for in the family history (P), and the identification of the family members (F). Patients were randomized in two groups, one first interrogated with G then P then F and another first with G then F then P. Thus, five strategies could be compared: G, GP, GF, GFP, GPF.
Results: 219 patients were interrogated. Mean duration of G strategy is 34 seconds; it is 2 minutes for GF and GP, 3'24" for GFP and 3'18" for GPF. Mean number of facts collected is 1.42 with G, it is 4.58 with GP and 2.42 with GF. GP strategy collects significantly more facts than GF (p <0.0001). There is no difference between GPF and GFP. The interrogation brings out more facts in women than in men, whatever the chosen strategy. GP strategy is more effective than GF in the collection of the following facts: hypertension, phlebitis, hypercholesterolemia, obesity, psychiatric diseases and allergies. The efficiency of GF and GP strategies do not differ as regards cardiovascular diseases, diabetes, cancer.
Conclusion: GFP and GPF strategies are the most effective and do not differ one from the other, but they are time consuming. If a two-step strategy is to be used in order to save time, then GP should be preferred to GF.

OP-022

A different cultural aspect for intimate partner-sexual violence in Turkey: a preliminary study

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Aims and Purpose: Social perception about violence, particularly about sexual violence, is a complex issue and may differ by region and culture. This study aimed to test the power of a question to identify domestic sexual violence in Turkish women.
Design and Methods: A cross-sectional study was carried out at the Family Medicine Outpatient Clinic of Cukurova University, Turkey. Every other married women (n = 91) admitting to the outpatient clinic in October 2007 were enrolled in the study. The response rate was 91.2% (83/91). One new question *"Have you ever thought that sexual relation has been your duty?"* was added to four domestic violence screening questions to emphasize the cultural aspects of intimate partner sexual abuse in Turkish society. The questionnaire was administered face-to-face by two trained physicians. The questions were; 1. Within the past year have you been hit, slapped, kicked, or otherwise physically hurt by your spouse? 2. Have you ever been hit, slapped, kicked, or otherwise physically hurt by your spouse? 3. Has your spouse forced you to have sexual activities? 4. Are you afraid of your spouse?
Results: The mean age was 42.6 ± 16.1 years (range = 18–81 years). The prevalence of physical abuse in the past year was 6%. The prevalence of being physically abused by intimate partner at least once during the marriage was 47%. Of women, 27.7% was afraid of their partners. The prevalence of «being forced to sexual relation» was 43.4%. We accepted the third question as the gold standard. The number of true-positives, false-positives, false-negatives, and true-negatives were 15, zero, 21 and 47, respectively. The sensitivity and specificity of the recently added new question were found as 42% and 100%, respectively.
Conclusions: Although the sample was small we may suggest that the new question was highly specific in recognizing sexual partner violence in Turkish women. Further qualitative studies are required on this perception issue.

OP-023

Decision support to dealing with family violence in primary care by web based case management in Flanders

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Aims: To study the contribution of web based case management support to deal with family violence integrated into a global strategy for counselling psychosocial problems in Flanders throughout projects.
Method: GP and social services staff were taught in all provinces in Flanders to run training courses locally. All sessions are given by two teachers: a GP and social servant. A web based facility was created linking a decision flow chart on family violence to background documents and disclosure of relevant services. A pilot project in the province of Antwerp studies the contribution of this web based care support system as complement to country based training. Problems highlighted during web based interactive case management are submitted to the project team. In case actual consensus does not answer the questions this is submitted for further advice to the local social services and feedback given to respondents. This study is supported by the Ministry of the Flemish Community.
Results: The development of the interactive website was more elaborate work than expected. Trainers of social services may tend to divert form the planned training by promoting overall functioning of their services in stead of specifically dealing with family violence. Cases encountered in general practice have often more complex features that illustrated in the flow chart protocol.
Conclusions: Web based documentation and decision support may be a powerful training and research tool to collect data on problems when dealing with family violence in general practice. Such tools can be made available internationally and may be of great help to refine protocols for shared care.

OP-024

Womens' evaluation of abuse and violence care in general practice (WEAVE): trial protocol and baseline results

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Aims and purpose: Intimate partner abuse (IPA) is a common hidden problem among women attending general practice. While women report a willingness to disclose to health professionals, the response of general practitioners lags behind other groups. weave aims to evaluate if an intervention involving screening with feedback, training

for general practitioners, and a brief counselling intervention for women increases safety behaviours, psychological wellbeing and quality of life.
Design and methods: This is a cluster randomised controlled trial involving 40 general practitioners. GPs were randomly invited to participate from solo and group general practices representing a range of socio-demographic areas in Victoria, Australia. For each GP, 400 community-based women, aged 16-50 years who visited the participating GP in the last year, were screened for fear of partner/ex-partner in last year (n = 16000). Following baseline assessment of eligible women, GPs are randomly assigned to either an i) 8-hour IPA management training program and their female patients invited for 3–6 sessions of counselling or ii) basic education and usual care for patients. Quality of life, safety and psychological wellbeing are assessed by survey at 6 and 12 months.
Results: The response rate for the screening phase was 30% (4800 women). Twelve percent of women (576) screened positive for fear of partner/ex-partner. Sixty-five percent of women had completed high school, 71% were employed and 25% reported feeling down, depressed or hopeless most or all of the time. Eight percent (380) were eligible to enter the trial (i.e. afraid and willing to be contacted by the research team), 60% (228) of whom returned their baseline survey and were enrolled.
Conclusions: Presentation of methodological and ethical challenges in a complex intervention trial will inform future research. Preliminary findings will inform practitioners of the types of women found in practice when screened for IPA.

OP-025

Patient satisfaction of primary care for musculoskeletal diseases: a comparison between neural therapy and conventional medicine

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Background: Patients with musculoskeletal disorders are increasingly choosing complementary medicine in the search for cures to their problems. The main objective of this study was therefore to assess and compare patient satisfaction with Neural Therapy (NT) and conventional medicine (COM) in primary care for musculoskeletal diseases. The study is part of a nationwide evaluation of complementary medicine in Switzerland and was funded by the Swiss Federal Office of Public Health.
Methods: A cross-sectional study in primary care for musculoskeletal disorders covering 77 conventional primary care providers and 18 physicians certified in NT with 241 and 164 patients respectively. Patients and physicians documented consultations and patients completed questionnaires at a one-month follow-up. Physicians documented duration and severity of symptoms, diagnosis, and procedures. The main outcomes in the evaluation of patients were: fulfillment of expectations, perceived treatment effects, and patient satisfaction.
Results: The most frequent diagnoses belonged to the group of dorsopathies (39% in COM, 46% in NT). We found significant differences between NT and COM with regard to patient evaluations. NT patients documented better fulfilment of treatment expectations and higher overall treatment satisfaction. More patients in NT reported positive side effects and less frequent negative effects than patients in COM. Also, significant differences between NT and COM patients were seen in the quality of the patient-physician interaction, where NT patients showed higher satisfaction. Differences were also found with regard to the physicians' management of disease, with fewer work incapacity attestations issued and longer consultation times in NT.
Conclusions: Our findings show a significantly higher treatment and care-related patient satisfaction with primary care for musculoskeletal diseases provided by physicians practising Neural Therapy.

OP-026

Do primary care patients benefit from spinal manipulative therapy in acute low back pain?

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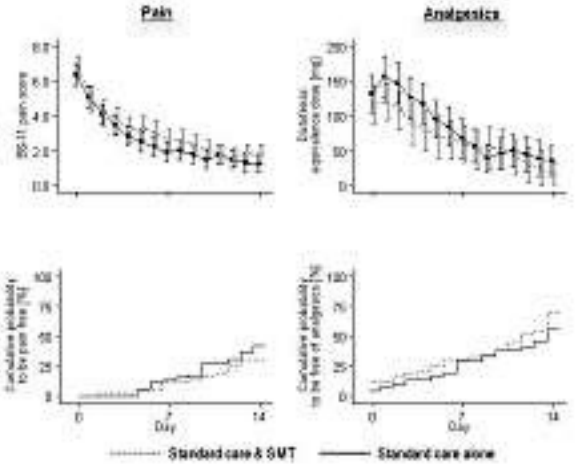
Objective: To determine whether treatment with spinal manipulative therapy (SMT) administered in addition to standard care is associated with clinically relevant early reductions in pain and analgesic consumption in a primary care population.
Methods: We randomised 104 patients with acute low back pain to SMT in addition to standard care (n = 52) or standard care alone (n = 52). Standard care consisted of general advice and paracetamol, diclofenac or dihydrocodein as required. Other analgesic drugs or non-pharmacological treatments were not allowed. Primary outcomes were pain intensity assessed on the 11 point box scale (BS-11) and analgesic use based on diclofenac equivalence doses during days 1 to 14. An extended follow-up was performed at 6 months.
Results: Pain reductions were similar in experimental and control groups, with the lower limit of the 95% confidence interval (95%-CI) excluding a relevant benefit of SMT (difference 0.5 on the BS-11, 95%-CI -0.2 to 1.2, p = 0.13). Analgesic consumptions were also similar (difference -18 mg diclofenac equivalents, 95%-CI -43 mg to 7 mg, p = 0.17), with small initial differences diminishing over time. There were no differences between groups in any of the secondary outcomes and stratified analyses provided no evidence for potential benefits of SMT in specific patient groups. The extended follow-up showed similar patterns.
Conclusions: SMT is unlikely to result in relevant early pain reduction in primary care patients with acute low back pain.

Means and 95% confidence intervals for BS-11 pain scores (upper left) and diclofenac equivalence doses in mg (upper right) at days 0 to 14 in the standard care plus SMT (dotted lines and open circles) and standard care (solid lines and black circles) group



OP-027

Time, complexity and chronic back pain

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Back pain that lasts more than six weeks is common but can be difficult to manage. Evidence suggests a range of treatments are somewhat effective but evidence is lacking about how to tailor treatment plans to individual patients. Aim to find a new approach to classifying back pain that will tailor treatment. Design and methods Secondary analysis of interviews from 15 people living with chronic back pain collected at three time points over 12 months. Analysis based on understanding individuals as open complex systems, constantly adapting but with potential for transformation. Analysis involved identifying each illness trajectory, summarising the emergent present at baseline, 6 months and 12 months and classifying individuals by the pattern of change at each time. Focus groups with physicians and physical therapists validated the analysis. Results At base line 10 interviewees were classified as 'stuck and struggling', 3 as 'pain as reminder' and 2 as 'resigned or becalmed'. By 6 months 8 interviewees remained in the same category, 4 changed category from 'stuck and struggling' to either 'pain as reminder' or 'resigned or becalmed', and 3 were lost to follow up. By 12 months a further 5 were lost to follow up, 1 did not change and 6 changed category: 3 from 'stuck and struggling' to another category – 2 to 'resigned or becalmed' and 1 to 'pain as reminder'; 2 changed from 'resigned or becalmed' to 'pain as reminder' and 1 vice versa. Conclusions It is possible to classify individuals with chronic back pain based on their pattern of change at the present time. These patterns change for individuals over time. Different patterns of change may respond to different management. The approach has potential for classifying patients in clinical practice prior to tailoring their management plan.

OP-028

May a proactive intervention on general practitioners influence pain, functionality and quality of life in patients with knee and/or hip osteoarthritis?

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Aims and purpose: The main objective of this study was to evaluate whether a proactive intervention on general practitioners (GPs) to avoid clinical inertia, could improve pain, functionality and quality of life (QOL) perception in patients with hip and/or knee osteoarthritis (OA).
Design and methods: This was a randomized, multicenter, prospective, parallel-group study in which 1,361 GPs were selected

and assigned using a cluster sampling method to one of these groups: Group 1 or intervention (n = 403, 30%) and Group 2 or control (n = 958, 70%). Therefore, GPs included 4,076 patients (Group 1, n = 1208; Group 2, n = 2868) with hip and/or knee OA. Only GPs in Group 1 received a 45–60 minute scientific training session about therapeutic goals, motivational techniques and EULAR recommendations on OA management. Both groups were informed about the use of VAS, WOMAC and SF-12 questionnaires to evaluate pain, functionality and QOL. Patients were evaluated at baseline and after six months.
Results: Compared to baseline, a significant improvement was observed in the overall population (Group 1+ Group 2) in the VAS, WOMAC and SF-12 scores (p <0.0001). Nevertheless, there were no differences between the improvement observed in the intervention Group compared with the control Group.
Conclusions: This specific proactive intervention on GPs did not produce a greater improvement in pain, functionality or QOL perception in patients with knee and/or hip OA. Yet, minor interventions, such as the use of functionality indexes, proved to be more effective in our sample. Other potentially modifiable factors contributing to clinical inertia, besides physician-related factors, should be further investigated in patients with OA.

OP-029

Hygiene and wound healing in doctors' offices

Burghuber F. (Rohrbach)

The study's aim is to proof that the common standard of hygiene in Upper Austrian offices of general practitioners and medical specialists is sufficient. Therefore the percentage of pp-wound healing, the effort for sterility and the specifics of patients and their wounds were asked via questionnaire. The Resident Doctors' Association of the Medical Chamber of Upper Austria charged the Work Group for System Optimization of Clinic Research Projects (ASOKLIF) from the Department of Applied Systems Research and Statistics of Johannes Kepler University Linz with the biometrical planning and evaluation of the study. A group of doctors who practice wound treatment in their offices were invited to participate in the study. Actually 53 Upper Austrian doctors completed the questionnaires, describing 271 cases of wound treatment in their offices between the second and fourth quarter in 2007. The cases, which had been isolated using their settlement position, were taken in chronological order from their notes in the patient files. The doctors who have participated in the survey are representative for all resident doctors in Upper Austria. Actually in 1% of the treated wounds infectious complications occurred. (95% confidence interval, upper limit 3%) That means that it can be said with a certainty of 95% for the population of all resident doctors in Upper Austria that in no more than 3% of the wounds – that are being treated with the usual sterility effort in the offices of general practitioners and medical specialists – infectious complications occur, no matter if injury or operation wound. 9% of the treated wounds were classified as even "strongly contaminated", 22% were "moderately contaminated"! Therefore the quality of wound treatment in resident doctors' offices is very high and in a top position also on an international level!

OP-030

Elderly patients self-assess the impact of common chronic diseases on their functionality and quality of life

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Aim: Estimation of the impact of common chronic diseases on functionality and quality of life in elderly patients differs between doctors and patients themselves. We asked elderly patients to self-rate the impact of common chronic diseases on their functionality. This information can be a useful tool in a physician's practice.
Design and methods: 3749 patients, 2317 women (61.8%), 1432 men (38.2%), with at least one chronic disease, followed up in our primary care unit during the last three years. They were asked to self-rate, using a ten-grade scale of severity, the impact of common chronic diseases on quality of life and functionality and also to hierarchically rank these diseases according to the magnitude of their deleterious effect on quality of life.
Results: Musculoskeletal pain/ restricted mobility was the most important cause of loss of function, according to its self-reported frequency (3037 patients, 81%) and severity (scored 9 in the ten-grade scale, first in the overall ranking). Vision impairment and hearing loss scored 9/10 and 8/10 respectively, in a smaller proportion of patients (787- 21%, 674- 18%). Psychiatric disorders and dementia completed the top-5 causes. Surprisingly, less severe was considered the impact of cardiovascular diseases, diabetes mellitus, chronic obstructive pulmonary disease and hypertension, diseases that attract the most of their doctors' concern.
Conclusions: The contribution of chronic diseases in loss of function and diminished quality of life in the elderly is substantial. Among these conditions very important are considered by elderly themselves, diseases that restrict their mobility (osteoarthritis, osteoporosis and instability), vision impairment and hearing loss. Prevention, early detection and treatment of such conditions are essential for physicians dealing with geriatric populations.

OP-031

Age-related differences in the use of guideline-recommended medical and interventional therapies for acute coronary syndromes: a cohort study

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Purpose: Recent guidelines for patients with acute coronary syndromes (ACS) recommend early medical and interventional therapies for older patients. We therefore compared the use of guideline-recommended medical and interventional therapies in older vs. younger patients with ACS.
Design & Methods: In this prospective cohort study, 11932 patients with ACS were enrolled between March 1, 2001, and June 30, 2006 in 55 hospitals in Switzerland. ACS definition included ST-segment elevation myocardial infarction (STEMI), non-ST-segment elevation myocardial infarction (NSTEMI), and unstable angina (UA). We measured the use of medical and interventional therapies determined after exclusion of patients with contraindications and after adjustment for comorbidities. Multivariate logistic regression models were used to calculate odds ratios (OR) per year increase in age.
Results: Elderly patients were less likely to receive acetylsalicylic acid (OR, 0.976 [95% CI, 0.969–0.980]) or beta-blockers (OR, 0.985 [95% CI, 0.981–0.989]). No age-dependent difference was found for heparin use. Elderly patients with STEMI received less percutaneous coronary interventions (PCI) or thrombolysis (OR, 0.955 [95% CI, 0.949-0.961]). Elderly patients with NSTEMI/UA less often underwent PCI (OR, 0.943 [95% CI, 0.937–0.949]).
Conclusions: Elderly patients across the whole spectrum of ACS were less likely to receive guideline-recommended therapies even after adequate adjustment for comorbidities. Prognosis of elderly patients with ACS may be improved by increasing adherence to guideline-recommended medical and interventional therapies.

OP-032

Physician's judgement versus a diagnostic decision rule in patients with suspected deep venous thrombosis; "in dubio abstine?"

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Background: Clinical decision rules (CDR) are frequently used in making diagnostic decisions, e.g. for patients suspected of deep venous thrombosis (DVT). However, physicians are not always convinced of the advantages of CDRs as they rely on their own judgement.
Aim and Purpose: To compare the probability of DVT presence as estimated by the general practioner (GP) versus a predicted probability by a CDR validated for primary care.
Design and Methods: 1086 primary care patients, suspected of DVT, were included. GPs estimated the probability of DVT (range 0–100%) and calculated a score on the CDR. Primary outcome was DVT (reference compression ultrasonography; CUS). Secondary outcomes were calculated differences between the CDR and the GPs estimations, i.e. discrimination (c-statistic), calibration, classification and concordance.
Results: Data of 1002 patients were eligible for analysis. DVT was observed in 136 (14%) patients. Both the CDR and the GPs had good discriminative power (c-statistic of 0.80 and 0.83 respectively). More patients however were correctly classified by the CDR in terms of guiding patient management. Concordance between the CDR and the GPs estimations was present in 34% of patients and occurred predominantly in high risk patients. GPs overestimated the risk of DVT, e.g. in patients where the GP anticipated an intermediate DVT risk (3–10%) the score on the CDR was low with an observed DVT prevalence of 0.6%.
Conclusions: Compared to GPs estimations, using a CDR is better in guiding patient management. This advantage is especially apparent when there is more doubt about the actual DVT risk, i.e. in the intermediate risk group (range 3–10%). Here, the GP can better rely on the CDR.

OP-033

Diagnostic accuracy of clinical decision rules for venous thromboembolism in elderly patients: a systematic review

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Background: In the elderly, diagnosing venous thromboembolism (VTE), deep vein thrombosis (DVT) or pulmonary embolism (PE), is difficult due to a more obscured presentation and the presence of co-morbidities. Currently there seems an undertreatment of VTE in these patients, as referral for objective testing is often considered too cumbersome. Clinical decision rules (CDRs) for improved diagnosis of DVT and PE use signs and symptoms in combination with D-dimer testing. Furthermore D-dimer tests show different diagnostic performances in elderly patients. Yet, until now, no study has evaluated the existing evidence of the diagnostic accuracy of clinical decision rules and D-dimer testing for VTE in this elderly patient group.
Methods: A systematic literature search was conducted by two researchers using Pubmed and Embase. After initial article selection, methodological quality was assessed using the Quadas criteria. Subsequently items were scored using a pre described checklist.
Results: After selection of 1488 eligible articles, 13 articles on the use of CDR for VTE in elderly were eventually included into the review: 6 articles on DVT and 7 regarding PE. Nearly all study age groups defined different age subgroups (ie. >73, and >75 years). The prevalence of VTE increased with age in all but two studies (ie. 18% (aged <65 yrs) and 31% (aged >75 yrs). The efficiency and safety of the CDRs differed dramatically between the studies (efficiency 22–42%, safety 0.1–11.4%).
Conclusions: There is some evidence on the accuracy of CDR for diagnosing VTE in elderly patients. More consensus is needed in defining (old) age into clinically relevant subgroups. Considering the large diversity, notably in safety, more prospective research is needed on the diagnostic accuracy in elderly patients.

OP-034

Cross-correlation of smoking and other factors of danger with end points of ischaemic stroke

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Introduction-Aim: Smoking, hypertension and hyperlipidemia constitute dominant factors of danger for ischemic and hemorrhagic stroke. The aim of the present study is to evaluate smoking on functional outcome of ischemic stroke (IS) and to correlate it with other factors of danger as hypertension and hyperlipidemia during hospitalization and after three months.
Material and methods: This is a prospective study. We watched patients with symptoms of IS that were hospitalized between Jan. 2007 to Feb. 2008. We recorded their neurological progress based on NIHSS (0–41). As end points we considered the appearance of new IS or death. Analysis of our data was generated by t-test and logistic regression.
Results: We watched 123 patients with symptoms of IS (62 men and 61 women) aged 77.6 ± 6.8. We noticed bad outcome (death or new IS) during hospitalization in patients with medical background of smoking (B = 2.17, p = 0.001). We also observed worsen outcome during hospitalization in patients with medical background of smoking and hypertension (B = 1.634, p = 0.004) and worsen outcome after three months in patients with medical background of smoking and hyperlipidemia (p = 0.006).
Conclusions: Smoking constitutes independent factor of prognosis for patients with symptoms of IS. Combination of smoking and hypertension appears to contribute negatively in the outcome at duration of hospitalization, while combination of smoking and hyperlipidemia appears to contribute negatively in the medium-term development of ischemic stroke.

OP-035

The complexity of heart failure

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Effectiveness of home-based interventions in heart failure.
Aims and purpose: To determine the effectiveness of a home-based interventions in heart failure (HF) patients.
Design and methods: Randomised clinical trial conducted in Spain, 283 patients admitted to the hospital with HF were randomly allocated before being discharged to a nurse-led home-based intervention or to usual care (referred to primary care). For those patients allocated to the home-based intervention an appointment was arranged every month during one year. Patients received a comprehensive intervention including education, symptom recognition and management, and assessment of their adherence to treatments as well as lifestyle issues. They also were regularly visited by a primary care physician. The primary end-point assessed at one year of follow-up was combined all cause mortality and readmissions to hospital. Quality of life was assessed using the Minnesota Living with Heart Failure scale.
Results: Primary end-point occurred in 41.7% patients in the home-based intervention group and in 54.3% in the usual care group. The hazard ratio was 0.70 (95% CI 0.55–0.99). Including important clinical variables modified the hazard ratio slightly (0.62, CI 0.50 to 0.87). Patients of the intervention group had a better quality of life at the end of the study compared with the control group (18.57 vs 31.11, p <0.001).
Conclusions: In this RCT home-based interventions in HF patients reduced mortality and readmissions, and improves quality of life. Published data on the topic of "home-based interventions" is inconsistent; from a Cochrane review was concluded that there is weak evidence that a strategy of "home based interventions" is associated with a reduction in re-admissions for HF.

OP-036

Diagnosing chest wall syndrome in primary care patients presenting with chest pain: a prospective cohort study

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Aims and purpose: Chest wall syndrome (CWS) is the leading aetiology of chest pain in a primary care setting. The aims of the study are to describe the epidemiology and clinical characteristics of CWS and to provide aids for diagnosis.
Design and Methods: We included 1212 consecutive patients with chest pain aged 35 years and older attending 74 general practitioners (GPs). GPs recorded symptoms and findings of each patient and provided follow up information. An independent interdisciplinary reference panel reviewed clinical data of every patient and decided about the aetiology of chest pain at the time of patient recruitment. Multivariable regression analysis was performed to identify clinical predictors that help to rule in or out the diagnosis of CWS.
Results: Pain originating from the chest wall was diagnosed in 46.6% of all patients. In most patients pain was localised retrosternal (52.0%) and/or on the left side (69.2%). 28.0% of CWS patients showed continuous pain and 62.9% of patients reported a pain frequency of more than one episode per day. Localized muscle tension, stinging pain and pain reproducible on palpation were associated positively with CWS. Negative associations were found for clinical vascular disease, dyspnoea, respiratory infection, need for home visit and cough.
Conclusions: This study broadens the knowledge about the diagnostic accuracy of selected signs and symptoms for CWS that will help primary care practitioners in rational diagnosis.

OP-037

Burnout among family practice residents at Strasbourg university: prevalence and students self-analysis

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Purpose: Burnout syndrome (BS) is assessed by the Maslach Burnout Inventory (MBI) including three subscales: emotional exhaustion, depersonalization and personal accomplishment. As in most publications, we defined BS as scores in the high range on the emotional exhaustion and/or on the depersonalization. Since half of the French general practitioners are suffering from BS we wonder if it originates in medical school. This study was designed to determine the prevalence of BS, its experiences and feelings among family practice residents(FPR).
Method: All FPR of Strasbourg Medical University (n = 241) were asked in October 2007 to complete the MBI. Few demographic factors were added to the survey (sex, semester of residency, marital status, children, general practitioner training). To understand origins of BS, we proposed a half directed interview to volunteers, whatever their BS status was.
Results: A total of 171 FPR (response rate 71%) completed the survey. 74 (46%) FPR fulfilled the BS criteria. A majority of these FPR [62 (38.5%)] showed high levels of depersonalization (mean score of 17, CI: 16–18) and 31(19 %) showed high levels of emotional exhaustion (mean score of 36.5, CI: 34.8–38.1). 35 (22%) also showed a low sense of personal accomplishment (mean score of 27, CI: 25.5–28.8). In this study, only the number of achieved residency semesters and a training completed in a family doctor's office could be protective factors. The main topics developed in the interviews are a lack of supervision and support in training, a gap between expectations and work reality and a conflict between relational and biomedical skills among physician's models.

Conclusion: The BS prevalence among FPR was similar to that of senior physicians. The depersonalization subscale was the highest scored for severe BS. Topics developed in interviews may clarify and thoroughly analyse family practice resident BS and will be available for the meeting.

OP-038

Understanding difficult cross-cultural clinical situations and how they impact on clinicians

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As a consequence of increased migration, cultural diversity of patients and health care providers is common in most urban regions. The resulting complexity of social, economic, linguistic, cultural, or religious issues and the diversity in concepts of health and illness often interfere with the efficient delivery of health care. The aim of this project was to understand the types of cross-cultural difficulties encountered by clinicians, the strategies they used to deal with them, and the type of assistance needed to facilitate health care delivery. This research was part of a larger project developing and evaluating a transcultural consultation intervention in a university hospital. Narratives of problematic cross-cultural clinical situation were obtained. Clinicians were asked to describe the difficulties they encountered, the perceived causes for these, the outcome of these situations and the help they wished to receive. These 24 qualitative interviews were recorded, transcribed and analyzed for emerging themes. This paper will present the types of cross-cultural difficulties identified, the role attributed to culture or cultural difference in these situations, the other clinical and institutional factors that impacted on these situations, and clinicians' expressed needs Implications for service implementation and training of health care professionals will be drawn in conclusion.

OP-039

Essential practices in palliative care for primary care

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Aim: To identify the essential practices (EsPr) in palliative care (PC) which should be provided at the primary health care (PHC) setting and applicable in all areas of the world.
Method: 1. step: An IAHPM taskforce (TF) and expert advisors in PC and PHC builds an evidence based list of EsPr in PC. The criteria include: 1. they can be principally provided in PHC settings (but may not be available in the current setting); 2. can be implemented during a brief physician/nurse visit, 3. are easy to implement/apply (if local condition would be appropriately utilized, not requiring sophisticated technology). 2. step: Health care professionals (HCP) contribute in a Delphi process (scheduled to start spring 2009). Involved HCP include PC specialists (nurses and physicians), and GPs or nurses working (fulltime or occasionally) in PC. The group is geographically balanced (developed and developing countries). The participants rate each EsPr as essential, non-essential or not sure, and provide comments. In a 2nd round, participants review peer's responses and ratings and may modify their initial response. 3. step: The TF reviews all ratings and comments, finalizes EsPr or makes refinements submitted to a next round until sufficient consensus is reached. The final list of EsPr in PC will be made available for practitioners, workers, educators and policy makers interested in the field.
Results: The list of EsPr includes: 1. Symptoms (physical, psychological, social, spiritual), 2. Family supportive care; 3. Support network and coordination of services; 4. Communication, decision making, preparation for deterioration and setting priorities; 5. Disease modifying treatments for palliation.
Conclusion: These available, affordable and appropriate EsPr in PC will hopefully guide PC and PHC to monitor the provision and practice of PC of every physician, deliver them to guarantee adequate primary care and finally to facilitate and optimize the current process in PHC settings worldwide.

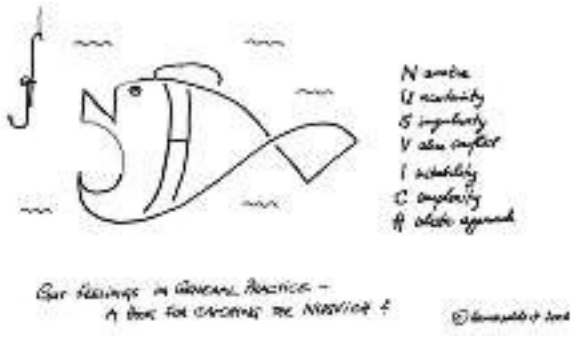
OP-040

Gut feelings in general practice – hooking the NUSVICH?

Hauswaldt J. (Hannover), Stolper E. (Maastricht)

Introduction: Uncertainty, incomplete information and unpredictability are characteristic phenomena in general practice. In this situation, general practitioners (GPs) occasionally base clinical decisions on gut feelings alone or as a starting point for analysis, even though there is little external evidence of their diagnostic and prognostic value in daily practice.
Aims: To outlay (map) existing literature and evidence about gut feelings in physicians when making clinical decisions.
Method: Systematic and content-related arrangement of results found in literature research by members of the European Expert Group on Cognitive and Interactive Processes in Diagnosis and Management in General Practice.
Results: Narrative presentation, Uncertainty, Singularity of patient and situation, Value conflict, Instability, Complexity, and practitioner's Holistic approach (mnemonic: NUSVICH) have been identified as possible key elements of the patient-doctor-encounter in primary care surrounding. To cope with these when deciding clinically on (medical) problems, or even when trying to find out together with the patient what her problem may be at all, GPs introspectively may observe gut feelings, namely a sense of alarm and a sense of reassurance. These can be related to known concepts: the Hypothetico-Deductive Model, different Knowledge Bases in clinical decision making (i.e. facts and figures, illness scripts, pattern recognition, and reflective practice), tacit knowledge, heuristics, and GP's constructivistic versus deterministic approach.
Discussion: Gut feelings seem to play an inevitable and important role in the diagnostic process of GPs, and may give orientation and impulse for action in situations of uncertainty. Systematic research into these non-rational phenomena, part of the GP's internal evidence, may contribute to better understanding and their consecutive integration into primary care teaching and practice.

Gut feelings hooking the NUSVICH



OP-041

French consensus about gut feelings in general practice

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Background: GP's sometimes base their clinical decisions on gut feelings alone, even though there is little evidence of their diagnostic and prognostic value in daily practice. Research into the significance of this phenomenon with focus groups and Delphi consensus procedure in the Netherlands provided a concept of gut feelings in general practice: a sense of alarm, a sense of reassurance and several determinants.
Research question: Which consensus on gut feelings in general practice in France can be obtained, using the Dutch results and the same methods?
Method: Translation of the 7 Dutch defining statements about gut feelings conducted as forward-backward translation. Qualitative research including a Delphi consensus procedure with a heterogeneous sample of 34 French GPs involved in university educational or research programmes, included by a randomised selection of the associated teachers' list of General practice in France.
Results: After three Delphi rounds, we found 70% or greater agreement on every of the ten proposed statements. A "sense of alarm" means that the GP gets the feeling something is wrong with the patient and he therefore needs to initiate specific management to prevent health problems. A "sense of reassurance" is defined as coherence between the patient's complaints and the doctor's clinical observations. Though the GP lacks objective facts, he feels confident, yet with caution, about the management of the patient's situation. Many similarities can be found between the Dutch and the French defining statements, with a reservation on the "sense of reassurance", which French GPs seem to feel more cautious about.
Conclusion: The "sense of alarm" and the "sense of reassurance" are well-defined concepts also in France, with many similarities between the Dutch and the French statements. This seems to indicate that gut feelings is a self contained concept.

OP-042

The EURACT Performance Agenda (EUPA)

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Aim and Purpose: The EURACT Performance Agenda (EUPA) will be the third paper in a row following the European Definition of General Practice/Family Medicine (WONCA Europe) in 2002 identifying 6 core competencies and 11 abilities every family doctor should master, and the EURACT Educational Agenda in 2005 which provided a framework

to teach the core competencies by setting learning aims and monitoring their achievement. Performance (in contrast to competence) is understood as the level of actual performance in clinical care and communication with patients in daily practice.
Design and Methods: Review of literature; discussion in small groups of EURACT Council members from 40 European countries following the chapters of the Educational Agenda; compilation of the final draft by a small group of authors.
Results: EUPA will be a general uniform basic agenda of performance elements every GP masters in daily practice, applicable and adaptable to different countries with different systems. It will deal with process and result of actual work in daily practice, not with a teaching/learning situation. Case vignettes of abilities in GPs' daily practice in every chapter will illustrate performance and its assessment. Common assessment tools will be on-site assessment by a peer and audit of medical records, making it part of CPD.
Conclusion: EUPA may encourage European GPs to initialize performance agendas adapted to their national health system to further strengthen the role of GPs in their country.

OP-043

The quality of preventive and chronic care delivered to adults in Swiss university primary care settings

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Aims and purpose: Indicators of quality of primary care have been developed and evaluated in the United States. However, we have little information about the quality of care using standardized tools in Continental Europe and in Switzerland.
Design and Methods: In a retrospective cohort study, we abstracted 500 random medical charts of patients aged 50 to 80 years followed by primary care physicians in two Swiss University primary care settings in 2005–06. Using RAND indicators of quality, we assessed the performance of 14 indicators for preventive care and 19 for chronic care of cardiovascular risk factors.
Results: The mean age of our sample was 64.6 years (SD 8.3) with 38% of women. Patients received 63% of recommended preventive care. The quality of care differed according to particular medical function. Recommended blood pressure measurement (97%) was more common than smoking cessation counseling (68%, p <0.05), breast cancer screening (43%, p <0.01) and colon cancer screening (39%, p <0.01). Recommended chronic care for cardiovascular risk factors was provided 79% of the time. Performance results were similar for hypertension, hyperlipidemia and diabetes mellitus, but lower for some specific indicators. Glycosylated hemoglobin was measured at least twice a year in 67% of diabetics, while performance rates on recommended foot and eye exams were lower (29% and 56%). In multivariate analyses, men had a higher preventive care score than women (64% vs. 56%, p <0.01), and patients less than 65 years had a higher score than those 65 years or older (64% vs. 57%, p <0.01). Chronic care for cardiovascular risk factors did not differ according to age and gender.
Conclusions: Overall, adults in Swiss University primary care settings received 63% of the recommended preventive care and 79% of chronic care for cardiovascular risk factors. The comparison of the same indicators across European countries might help identify specific needs to better target primary care education.

OP-044

Attendance in a "Medical Checkup-Cruise" (Gesundheitsschiff) in Switzerland: benefit for sick persons or self-selection of a healthy and health-conscious population?

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Aims: Health promotion and disease prevention programs are increasingly promoted by private health services in Switzerland. Initiated by a TV broadcast the "checkup-cruise" offers participants the possibility to visit 18 different medical checkup centres during a one-week Mediterranean cruise. We aimed (1) to assess demographics, health care use, lifestyle and motives for participation and (2) to determine possible differences between participants of the checkup-cruise and a representative sample of the Swiss population.
Methods: Characteristics of the participants were collected cross-sectionally by a self-administered questionnaire. Age- and sex stratified participants' characteristics were compared by chi-square test with results of the representative Swiss Health Survey (SHS) to assess differences between the study sample and the general population.
Results: 206/276 participants (74,6% response rate; 40% men) completed the questionnaire. Mean (SD) age and body mass index (BMI) for men and women were 69 (12) and 68 (10) years and 26 (4) and 26 (5) kg/m^2, respectively. Prevention was the most frequent reason for participation (40%). The majority had at least one visit with a general practitioner within the last 12 months (83%), was non-smokers (85%) and low risk drinkers (48%). Compared to the SHS population BMI, smoking rate and alcohol consumption were significantly lower whereas a doctor's visit within the last 12 months and a mammography screening in women were more frequent (14% vs 32%).
Conclusions: Considerable differences in lifestyle, health promotion and health care use exist between our study population and the SHS suggesting a self-selection of health-conscious people. Thus a potential health gain by this kind of medical prevention is at least questionable. From a public health perspective the promotion of targeted evidence-based medical prevention programs focusing on the population at risk are crucial to reduce health inequalities.

OP-045

PREVAC B: Prevention of HBV infection among migrant people

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Context: Hepatitis B prevention skills differ from one patient to another due to his serologic profile. Do doctors follow accurate strategies of prevention? The prevalences of each serologic profiles are not known among migrant people, above all if they have no social security. Final results of PREVAC B are given (partial results given in WONCA EUROPE 08 Istanbul)
Aims and Method: to assess the effectiveness of an internet-accessible expert system in helping the GP to determine the most accurate strategy of prevention, related to the serologic HBV profile of each patient, and to apply this strategy, among migrant people coming from subsaharian Africa and Asia (with or without social security), attending their GP. The prevalence of each serologic profile was measured.
Results: From 5.11.2007 to 29.2.2008, 29 GPs included 569 migrant people. 11% are HBV carriers, 36% have been protected by a contact with HBV, 28% are vaccinated, and 25% have had no contact with virus nor vaccination. A full accurate preventive information strategy could be carried out with help of the expert system, respectively among 81% of HBV carriers, 100% of vaccinated people, 89% of people protected b HBV contact, and 84% of people who had no marker. A vaccination has been started among 79% of people who required it. For people whose only marker of HBV infection was anti HBc, 68% only of accurate preventive strategy was found, this lower result can be related to a lack of accuracy in international guidelines in this situation.
Conclusion: An internet-accessible expert system is a useful tool for GPs in order to enhance strategies of prevention in HBV infection. Prevalence of contact with HBV is much higher in migrant people coming from subsaharian Africa and Asia, than in the average French population.

OP-046

A support programme for primary care leads to substantial improvements in the effectiveness of public hepatitis C campaigns

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Aims: Because of its lack of clinical signs, Hepatitis C virus (HCV) infection has remained highly underdiagnosed in the Netherlands. Therefore the Dutch Health Council has proposed a HCV-campaign aimed to inform the general public and motivate people at risk to seek medical advice. Because knowledge and awareness of HCV infection is low amongst primary care workers in the Netherlands, the implementation of a support programme for primary care complementary to a HCV campaign seems appropriate. We aim to evaluate the added value of a support programme for primary care complementary to a public HCV campaign aimed at increasing awareness and carrier identification.
Methods: In two similar regions in the Netherlands, a public HCV campaign with the before mentioned aim was organised. For the 110 general practitioners (GPs) in the intervention region additional support was provided by means of informative and educational brochures, short courses on HCV infection for general practitioners (GPs) and informative visits by a practice facilitator. In the control region a similar HCV campaign took place without any support for primary care (109 GPs).

Results: In the intervention region there was a proportional increase in anti-HCV tests of 3.02 (from an average of 57 anti-HCV tests in a similar period in previous years to 172 tests in the intervention period). In the control region there was a proportional increase of 1.36 (from an average of 86 to 118 tests). In the intervention region the increase in positive anti-HCV tests was 1.7% (95% CI – 0.2% to 3.7%) and in the control region this number decreased by 0.9% (95% CI – 3.5% to 1.7%).
Conclusions: The addition of a support programme for primary care to a public HCV campaign leads to a substantial added effect on medical consciousness in primary care and it is therefore an important tool in the improvement of diagnostic policy and the identification of unknown HCV carriers.

OP-047

The complexity of understanding health priorities in another culture: nutritional status and intestinal infection by parasites in Ethiopian children

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Aim and purpose: since the end of the last century, the infection by intestinal parasites (IP) among children has been identified as one of the possible factors involved in children malnutrition in developing countries. At the same time, it is controversial whether the administration of antiparasitic drugs in this population is systematically improving the nutritional status of children in that context. The present study is aimed to check the feasibility of a future trial on the prevalence of intestinal parasitosis in children of an urban region in north Ethiopia and its relationship with their nutritional status.
Methods: cross-sectional study on a sample of 3252 children under 6 years that had received a 400 mg dose of Albendazole in the previous 6 months. In these children we have tested the presence of intestinal parasites and Mid-Upper Arm Circumference (MUAC) as a mesure of nutritional status (red: acute malnutrition, yellow: risk of malnutrition, green: properly nourished).
Results: 54 children were tested. In 27 (50%) IP was described: 6 Enterobius, 7 Hymenolepis, 9 Giardia, 3 Ascaris, 2 Ancylostoma, 1 Strongyloides. MUAC was distributed as follows: 25 red, 23 yellow, 6 green. According to infestation by IP, the MUAC distribution was: Children with IP: 8 red,16 yellow, 3 green in children; Children without IP: 17 red, 7 yellow, 3 green. Statistical significative differences are found comparing red group vs green + yellow group.
Conclusions: we found a high prevalence of intestinal parasites infestation in our sample of moderate to severe malnourished children under six years old. Standards recommending deworming prophylaxis goals in these children should be reevaluated carefully. A larger epidemiological study is warranted to clarify relationship between malnutrition and intestinal parasitosis and to help design more efficient public health policies.

OP-048

Trends and determinants of adequate gastroprotection in patients chronically using NSAIDs

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Aim(s) and purpose: To identify determinants and trends of gastroprotection in patients chronically using NSAIDs.
Design and Methods: design: retrospective cohort study. Data source: Agis Health Database (AHD) containing annual prescription records of approximately 1.5 million patients. Patients: All patients using more than 180 Daily Defined Doses (DDD) annually, of any NSAID from 2001 to 2007. Main outcome measures: prevalence of NSAID use, adequate prescription of gastroprotective drugs (PPI, misoprostol or COX-2 inhibitor use), determinants of adequate gastroprotection.
Results: The percentage of patients chronically using NSAIDs rose from 7.3% of the total NSAIDs users in 2001 to 7.5% in 2007. The percentage of patients on NSAIDs receiving adequate gastroprotective medication in line with actual guidelines increased from 39.6% in 2001 to 69.9% in 2007. Age over 70, co-prescription of SSRI, coumarine and steroids and arthritis are the main clinical factors predicting adequate prescription.
Conclusions: The prevalence of NSAID prescription, and the risk of gastric complications is increasing steadily. Although the number of patients receiving gastroprotective medication is also increasing, over 30% of the patients at risk for GI complications are left unprotected in 2007. In order to improve protection rates in patients using NSAIDs and to decrease NSAID related hospital admissions in the future, the implementation of gastroprotection guidelines needs to be improved.

OP-049

Usefulness of the alcohol use disorders identification test in screening for problem drinkers among university students in primary care setting

Lee J.G. (Daejeon), Kim J.S. (Daejeon), Jung J.G. (Daejeon), Lee S.K. (Daejeon), Cho K.C. (Daejeon)

Background: AUDIT [Alcohol use disorders identification test] is effective in identifying problem drinking in primary care. However, there has been no research in Korea for testing its usefulness in university students whose drinking characteristic is different from adults. This study purposed to evaluate the validity of AUDIT in identifying problem drinking among Korean university students.
Method: The subjects were 235 university students who had visited the Health Service Center of Chungnam National University for primary medical service. All subjects had a diagnostic interview for the presence of at-risk drinking and alcohol use disorder. At-risk drinking was defined according to the criteria of the National Institute on Alcohol Abuse and Alcoholism. Alcohol use disorder was diagnosed by the criteria of DSM-IV TR. In case a student met the criteria for at-risk drinking or alcohol use disorder, he or she was classified into problem drinking. At the same time, a survey was conducted using three screening tools: AUDIT, CAGE, and CUGE. The Areas under ROC curve [AUROC] of the questionnaires to the results of interviews were compared.
Results: Among the subjects, 71 (30.6%) were in the state of at-risk drinking and 46 (19.6%) had alcohol use disorder, and 75 (31.9%) were classified into problem drinkers. For identification of problem drinking, AUROC (95% CI) of AUDIT was 0.970 (0.947–0.993) in men and 0.989 (0.976–1.002) in women. For CAGE, it was 0.650 (0.548–0.752) in men and 0.747 (0.630–0.864) in women. For CUGE, it was 0.689 (0.589–0.788) in men and 0.745 (0.630–0.861) in women. The optimal cut-off score of AUDIT for identifying problem drinking was 8 or higher in men and 6 or higher in women.
Conclusion: In identifying university students' problem drinking, AUDIT was most effective and the cut-off score was 8 or higher in men and 6 or higher in women.

OP-050

Effects of insight level on the sensitivity of alcoholism screening tests in patients with alcohol dependence

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Purpose: Alcoholism screening tests are commonly used in primary medical care. The present study purposed to examine how the sensitivity of alcoholism screening tests is affected by the patients' insight state.
Methods: The subjects of this study were 122 alcohol dependent patients admitted to a community-based alcohol treatment center. The positive in alcoholism screening test was defined as 20 point or higher in AUDIT [Alcohol Use Disorders Identification Test], or 3 point or higher in CAGE questionnaire. Patients' insight level was classified into poor, fair and good using the Hanil Alcohol Insight Scale. The positive rates of AUDIT and CAGE were compared according to insight level.
Results: In the 'good insight' group (n = 32), the positive rates of AUDIT and CAGE were 96.9% and 96.9% for alcohol dependence. In the 'fair insight' group (n = 55), those were 92.7% and 96.4%. However, in the 'poor insight' group (n = 35), those decreased remarkably to 62.9% and 65.7%. After adjusting the subjects' general characteristics based on the 'good insight' group, the possibility of AUDIT positive was significantly lower in the 'poor insight' group (OR 0.025, 95% CI 0.002–0.411). Also, the possibility of CAGE positive was significantly lower in the 'poor insight' group (OR 0.016, 95% CI 0.001–0.358).
Conclusions: Alcohol dependent patients with poor insight showed a high rate of false negative in alcoholism screening tests. Therefore, primary care physicians should be careful in interpreting the results of alcoholism screening tests.

OP-051

Change of drinking behavior for 1 year according to the readiness to change after group education in Korean at-risk drinkers

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Purpose: Motivation plays an important role in behavioral change. This study purposed to examine change in at-risk drinkers' behavior for a year according to their motivation state after education.
Methods: The subjects were 40 male drinkers who participated in an education program conducted through 4 sessions for reducing drinking. Before the education, all the subjects fell within the category of heavy and binge drinking according to the criteria of the National Institute on Alcohol Abuse and Alcoholism. Motivation state after the

education was assessed using the Readiness to Change Questionnaire. After 12 weeks and 1 year from the education, change in drinking behavior was compared according to the readiness to change of the patients.
Results: After 12 weeks, the number of heavy drinkers decreased to 62.5% at the precontemplation-contemplation [P-C] stage and to 12.5% at the action [A] stage. The number of binge drinkers decreased to 68.8% at P-C stage and to 20.8% at A stage. After a year, the number of heavy drinkers decreased to 62.5% at P-C stage and to 16.7% at A stage. The number of binge drinkers decreased to 68.8% at P-C stage and to 29.2% at A stage. Improvement in heavy drinking after 12 weeks and 1 year was significantly less in subjects at P-C stage than in those at A stage (after 12 weeks OR 0.096, 95% CI 0.015~0.626; after a year OR 0.149, 95% CI 0.028~0.789). Also, improvement in binge drinking after 12 weeks and 1 year was less in subjects at P-C stage than in those at A stage (after 12 weeks OR 0.147, 95% CI 0.028~0.774; after 1 year OR 0.312, 95% CI: 0.067~1.465).
Conclusions: Motivation state after education is considered an important predictor of the drinking behavior change for a year in at-risk drinkers.

OP-052

The relation between drinking pattern and obesity in Korean male

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Aim: Many recent researches have shown inconsistent results on the relation between drinking and obesity. The aim of this study was to examine the relationship between drinking pattern and obesity in Korean male.
Methods: The subjects of this study were 274 adult men who visited the health promotion center for regular health examination, from March through August, 2008. Using a self-administered questionnaire, the amount of alcohol intake at a time and the frequency of drinking of the subjects were surveyed. According to the guidelines proposed by the National Institute on Alcohol Abuse and Alcoholism, the subjects were divided into non-drinkers, moderate drinkers, and heavy drinkers based on the amount of alcohol intake per week, and binge drinking was identified based on the amount of alcohol intake per drink. According to the criteria of WHO for the Asia-Pacific Region, obesity was defined as body mass index of over 25 kg/m^2 and central obesity was defined as waist circumference of over 90 cm.
Results: After adjusting for confounding factors such as age, smoking habits, and physical activities, the rates of obesity were significantly higher in the heavy drinkers than non-drinkers (OR = 2.370, 95% CI = 1.181–4.747). In addition, the rates of obesity were significantly higher in the binge drinkers than non-binge drinkers (OR = 1.904, 95% CI = 0.998–3.632). However, neither heavy drinking nor binge drinking was related with central obesity.
Conclusions: Among adult men, heavy drinking and binge drinking were related with the rates of obesity. Alcohol drinking pattern should be included in evaluation and management of obese patients.

OP-053

GP counsel as a smoking cessation aid. Patient motivation, apprehensions and expectations against general practitioner

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Background/Aim: Many smokers are interested in quitting smoking but small part of them use effective smoking cessation aids (SCA) when trying to stop smoking. To support smokers in their quit attempts, a wide range of smoking cessation aids (SCA) is available. A healthcare professional can greatly influence a quit attempt. U.S. Department of Health and Human Services Public Health Service in its clinical practice guidelines for 2000 Treating tobacco Use and Dependence' pointed at active participation of clinicians in tobacco use treatment. The aim of this study was to find out why available SCA are used insufficiently and how family doctors should support quitting attempts.
Methods: Patients from different GP practices aged from 20 to 60 were included in the study. We collected the data with the use of 2 questionnaires: Fagerstrom Test for Nicotine Dependence (FTND), and the Patient Motivation Test. Over a 150 tobacco dependent patients (FTND score >=3) were given the motivation test. The questionnaire comprised 3 parts, questions concerning: motivation, apprehensions and expectations.
Results: Less than a half of patients declared motivation to quit smoking for the reasons which differed significantly in the different age groups. Two out of three announced the need of GP council. The most frequently given reason for quitting were underlining health problems. Almost half of failures resulted from lack of motivation and the apprehensions vary between different groups of age: gain in weight, loose of pleasure, loose of friends smokers, etc.
Conclusion: GP council is a very important part of smoking cessation process for patient who declare or not the willingness to stop smoking. The majority of failures are caused by lack of motivation, and the GP practitioner may be helpful in supporting smokers in their quit attempts.

OP-054

Metabolic syndrome prevalence in an urban primary attention centre in Barcelona

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Aims/purpose: The main objective of our study is to determine metabolic syndrome prevalence in an urban primary attention centre.
Methods/design: Descriptive transversal study of an assigned population sample in the first semester 2009 at the primary attention centre of La Pau, Barcelona. We selected 458 subjects from a stratified random sampling (age and sex) between 30 to 70 years old population. For a 23% prevalence (Ford ES, Giles WH, Dietz WH. JAMA. 2002;287:356-9) of the metabolic syndrome and the 4% precision, it is necessary a sample of 416 subjects, that we increased a 10% (458 subjects) due to possible losts. To detect the metabolic syndrome subjects we used the ATP III modified 2005 criteria. Inclusion criteria: Subjects from 30 to 70 years old. The clinical and laboratory assets were recorded from the computer data bases of our center in the last year. The missing information was collected in medical appointments. Exclusion criteria: Non Spaniards, patients with high doses of corticoids, pregnancy, puerperium, terminal diseases and exitus. Variables: Socio-demographic, anthropometric (abdominal perimeter, CMI), personal and pathologic antecedents (smoking habit, alcohol drinking, TA …) and analytics (glucose, lipids, glomerular filtrate, creatinine, uric acid).
Results: La Pau presents a high cardiovascular risk factors prevalence (21% HTA, 8.5% DM, 12.4% DLP) out of 14559 people. At present pending results. Descriptive statistical analyses will be made.
Conclusions: Thus the cardiovascular risks factors of our population have a higher prevalence compared to the others primary health centers at our working area; where we expect to have a high prevalence of metabolic syndrome in our study.

OP-055

Antibiotic effectiveness to prevent new chronic obstructive pulmonary disease (COPD) exacerbations in current medical practice

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A pharmacoepidemiological study was performed to assess the effectiveness of antibiotic to prevent new COPD exacerbations in current medical practice in France. A prospective observational cohort study of patients with COPD exacerbations was carried out by a representative sample of general practitioners (GPs) and pneumologists. Effectiveness of an antibiotic prescription was assessed by the rate of patients without new visit for COPD exacerbation within the following 3 months. Prognostic factors were investigated using the Cox proportional hazard model. 951 GPs and 89 pneumologits included 4994 patients. The mean age was 64.4 years, 61.4% were male, 35.7% current smokers, 38.7% previous smokers and 69.7% had disease symptoms for more than 5 years. Two or 3 Anthonisen criteria with purulent sputum were found in 71.8% of patients, 2 or 3 Anthonisen criteria without purulent sputum in 12.8% and less than 2 criteria in 15.4% of patients. Prescriptions were: antibiotics (91.9%), systemic corticosteroids (41.5%), mucolytics (41.0%) and beta2-agonists (30.7%). Absence of new visit for COPD exacerbations within the following 3 months concerned 63.8% of patients. The main prognostic factor for a new COPD exacerbation visit was the number of COPD exacerbations during the previous year. Antibiotics reduced the risk of a new COPD exacerbation visit (RR [95%CI] = 0.35 [0.13–0.94]) for current smokers with at least 2 Anthonisen criteria including purulent sputum but not for the other patients. Systemic corticosteroids increased the risk for current smokers with at least 2 Anthonisen criteria including purulent sputum (1.16 [1.03–1.30]) and also for other patients (1.29 [1.06–1.57]). This study performed in real-life clinical practice shows that antibiotics reduced by three-fold the risk of subsequent visit for COPD exacerbation for current smokers with at least two Anthonisen criteria including purulent sputum and that systemic corticosteroids increased this risk for all patient.

OP-056

GP and parent decision making on antibiotic treatment for children with respiratory tract infections: a European perspective

Brookes-Howell L. (Cardiff), Butler C. (Cardiff), Hood K. (Cardiff), Prout H. (Cardiff), Cooper L. (Cardiff), Verheij T. (Utrecht)

Aims and purpose: Research shows that when General Practitioners feel pressurised from parents to prescribe antibiotics for child patients, they are more likely to do so inappropriately. This presentation relates to CHAMP, a large ongoing study which aims to promote the appropriate use of antibiotics in European primary care. It focuses on decision making between GP and parent relating to antibiotic treatment for children with respiratory tract infections (RTI).
Design and Method: A qualitative study using semi-structured interviews with 15 parents in each of four networks across Europe; Cardiff, (Wales), Tromsø (Norway), Lodz (Poland) and Barcelona (Spain). The interviews were recorded, transcribed, translated (where necessary), coded using the qualitative software package NVivo8 and analysed using the Framework approach.
Results: Analysis of interviews shows that there are three phases relating to antibiotic treatment decision making for children that ultimately combine to determine actual antibiotic use; (i) parent expectations formed before the consultation (ii) combined decision making between GP and parent during the consultation and (iii) parent re-evaluations of decision following the consultation.
Conclusions: We conclude that there are differences between the four European networks in the level of GP and parent involvement across the three phases of decision making for antibiotic treatment. This European comparison on the phases of antibiotic decision making can inform educational programs, aimed at clinicians and parents, to promote appropriate antibiotic use for children in the four different countries.

OP-057

Factors influencing clinician's choice of antibiotic type for lower respiratory tract infection: a qualitative European study

Brookes-Howell L. (Cardiff), Butler C. (Cardiff), Hood K. (Cardiff), Cooper L. (Cardiff), Goossens H. (Antwerp)

Aims(s) and purpose: Research shows that that there is considerable variation in the types of antibiotic prescribed for patients with Lower Respiratory Tract Infection (LRTI) in primary care across Europe. This presentation aims to explain this variation by providing an in-depth understanding of the factors clinicians report as influencing their choice of antibiotic type.
Design and Methods: Semi-structured interviews with 81 clinicians were conducted in primary care networks in nine European countries. Interviews were audio-recorded, transcribed and translated into English for analysis. Themes were identified, organised and compared using a qualitative analytic methodology, Framework Approach.
Results: Using data extracts, we show that clinicians report that a range of factors are considered when deciding on antibiotic type for patients with LRTI. These are: 1) Clinical factors: Fixed characteristics of the individual patient (allergies, co-morbidity, current medication regimen, previous experience of antibiotic side-effects, age) and characteristics relating to current infection (infection severity, other infections in the community); 2) Clinician preference (based on previous experience and habit); 3) Patient preference (based on patients' previous experience and patient budget); 4) Antibiotic resistance within the local area; 5) Formal guidance available.
Conclusions: We conclude that clinicians draw on a whole range of factors – both clinical and non-clinical – in making a decision on antibiotic type, and balance these different influences in making their decision. We show that the weight given to the different factors differs between European networks. A deeper understanding of factors which influence clinicians' decision of antibiotic type will assist the development of strategies to enhance appropriate prescribing of antibiotic agents.

OP-058

Stemming the tide of antibiotic resistance: a trial of a theory based intervention addressing appropriate antibiotic prescribing in primary care (the STAR programme)

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Introduction: There are still considerable further gains that could be made in reducing inappropriate antibiotic prescribing, but complex interventions are required. Studies to date have generally evaluated the effect of interventions on antibiotic prescribing in a single consultation and pragmatic evaluations that assess maintenance of new skills are rare. We have developed a Social Cognitive Theory based, blended learning intervention called the STAR Educational Program. The intervention involves use of practices' own prescribing and resistance data and novel consulting strategies which aims to enhance antibiotic prescribing in primary care. The primary objective of the study is to assess whether exposing prescribers in General Practices to the STAR programme results in fewer antibiotics being dispensed to the patients in those practices over one year.
Methods: The study is a randomized controlled trial with general practice as the unit of randomization and analysis. Sixty-eight general practices across Wales were randomised in a way that balances for practice size, previous antibiotic prescribing, and proportion of GPs who signed up for the study. The study compared practices trained via the STAR programme with those not trained. Control practices were offered the intervention after the initial one year follow-up of the experimental practices was complete. The main analysis was intention to treat and compared the two groups for annual total antibiotics dispensed per 1000 practice patients within practices in the year following the intervention, using analysis of covariance with the average of the previous three years' prescribing as a covariate.
Results and Conclusions: This trial will be the first to evaluate the effectiveness of an intervention involving a blended learning programme which focuses on both clinicians' reflections on their prescribing habits and practice level data on prescribing and antimicrobial resistance, as well as an introduction to novel consulting strategies for use during consultations for common infections. This approach has the potential to improve communication between clinicians and patients, as well as reducing unnecessary antibiotic prescribing. The results of this study are currently being analysed by the team and will be complete by July.

OP-059

Polypharmacy in elderly is associated with increased falling and injury

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Purpose: to investigate correlation of polypharmacy in elderly with falling and injury.
Design-Methods: patients >65 years coming because of fall in emergency during 1 month were submitted in a questionnaire regarding demographics, past medical and fall history, and received medications.
Results: 169 subjects, 68.9% females, mean age 78.68 ± 8.4 years participated. 53.3% reported past falls (mean previous falls 1.75 ± 2.2). In 43.1% admission was required due to moderate/severe injury. 95.2% was receiving medication. Mean total number of medications (TNM) = 3.96 ± 2.5/person. Those with positive history of falling had more TNM (4.45 ± 2.6) compared to those without (3.41 ± 2.4) ($p = 0.008$). Those moderately/severely injured had more TNM (4.42 ± 2.6) compared to those mildly injured (3.62 ± 2.4) ($p = 0.044$). TNM correlated with risk for falling ($r = 0.205$, $p = 0.008$), number of previous falls ($r = 0.171$, $p = 0.027$), severity of injury ($r = 0.156$, $p = 0.044$) and socioeconomic/professional background ($r = 0.211$, $p = 0.008$). Professionals and workers reported increased TNM (4.89 ± 2.9 and 4.52 ± 2.6) compared to housewives (3.59 ± 2.3) ($p = 0.026$). Age correlated with the risk, number and severity of falls ($r = 0.257$, $p = 0.001$, $r = 0.206$, $p = 0.008$, $r = 0.206$, $p = 0.008$, respectively), but not with TNM. In linear regression model age (beta = 0.229, $p = 0.004$) and TNM (beta = 0,156, $p = 0,047$) independently correlated with risk for falling.
Conclusions: falls in the elderly coming to hospital's emergency report frequent past falling. Half require admission. Polypharmacy along with age is associated with increased falling and injury. Polypharmacy is a modifiable factor, so GPs should be alert and adopt medication-reduction treatment algorithms in the elderly.

OP-060

Drug-related problems in Norwegian nursing homes

Ruths S. (Bergen), Halvorsen K.H. (Bergen), Granås A.G. (Bergen), Viktil K.K. (Oslo)

Aims: Drug-related problems (DRPs) are prevalent in nursing home patients. The aim of this study was to implement a multidisciplinary intervention model to identify and solve DRPs in Norwegian nursing homes.
Methods: Altogether 142 patients (106 women, mean age 86.9 y) were included. Each patient's drug regimen was systematically reviewed by a pharmacist, taking the patient's individual clinical condition into account (diagnoses, weight, blood pressure, lab tests). The pharmacists identified and classified DRPs in individual patients according to a Norwegian classification system. The DRPs were subsequently presented to patients' physician and nurse(s) at case conferences, and the clinical team was invited to consider whether the DRPs should be accepted, re-classified or rejected. Relevant interventions were planned to solve the DRPs. Three weeks after the case conferences, implementation of the planned interventions was examined.

Results: The pharmacists identified 719 DRPs in 140 patients (mean per patient 5.1, SD 3.0). At case conferences 576 DRPs were acknowledged by clinical teams, 243 were rejected, and additionally 28 DRPs were identified. Finally, 504 DRPs were acknowledged (mean 3.5, SD 2.2). DRPs were most commonly classified as "Unnecessary drug" and "Monitoring required". Psychotropic drugs, analgesics and drugs prescribed to treat the alimentary tract were most commonly questioned. Of 504 planned interventions, 476 were completed within three weeks. Mean drug use per patient, and inappropriate drug use was reduced after the interventions.
Conclusions: We have been able to demonstrate that the multidisciplinary model was suitable to identify DRPs and to conduct interventions to solve them in nursing home settings. Systematic medication reviews and involvement of clinical teams should therefore be implemented on a regular basis to achieve and maintain high quality drug therapy.

OP-061

30-minute automated, oscillometric blood pressure measurement may become the new standard in measuring blood pressure in the office: a comparative study

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Introduction: We hypothesized that a mean 30 minutes, oscillometric, automated blood pressure measurement (30-min BPM) can be an office based, quick, patient friendly determination of blood pressure status and nevertheless – just like 24-hr ambulatory blood pressure measurement (ABPM)- free of observer bias and white coat effect.
Aim: To compare 30-min BPM with mean daytime ABPM as part of a research project to validate the use of 30 min BPM in daily practice.
Design and Methods: Patients referred by their GP for a 24-hr ABPM, were invited to participate in the study. 30-min BPM was determined directly prior to 24-hr ABPM with patients seated in a quiet room without any observer present. The same, validated measurement device was used for both types of measurement. Mean blood pressure of 30-min BPM and mean daytime blood pressure of 24-hr ABPM (9:00 a.m. – 9:00 p.m.) were compared using Bland-Altman analysis.
Results: In 84 patients (39.3% male, mean age 57 years) a non significant difference between 30-min BPM and daytime ABPM of –0.1 mm Hg (–2.2–2.0; SD 9.8 mm Hg) in systolic and a significant difference of 1.7 mm Hg (0.4–3.0; SD 5.9 mm Hg) in diastolic blood pressure was found. The limits of agreement –19.4 to 19.1 mm Hg for systolic and –9.7 to 13.2 mm Hg for diastolic blood pressure respectively.
Conclusions: The difference between mean 30-minute BPM and daytime ABPM was small and clinically irrelevant. The limits of agreement appear to be poor. However, previous reports of comparative and reproducibility studies with 24-hr ABPM presented similar results, most likely caused by the biological variability of blood pressure. This study demonstrates the potential of 30 min BPM to change daily practice, but data on reproducibility of 30 min BPM and a comparison with office measurements is needed to substantiate this potential.

OP-062

24-hour-ambulatory-blood pressure and Hill-Bone compliance to high blood pressure (HBS) therapy scale as a tool for assessing adherence to antihypertensive treatment in male hypertensives

Ericsson B. (Gävle)

Aim and purpose: Our hypothesis was that when a patient is not expected to have his blood pressure (BP) controlled, the adherence to medication is lower and BP higher. We examined this with 24-hour-BP recordings and a questionnaire.
Design and method: All male hypertensives, 40–60 years in the area of our clinic, in Gävle, Sweden, were included. Exclusion criterias were diabetes, peripheral artery disease, previous MI, stroke or kidney failure. Patients were randomized into two groups. The study group was summoned with phone calls to come with short notice (24–48 h). They were expressively asked not to change their adherence pattern. Examinations included office-BP, 24-hour-BP and a questionnaire with hypertension questions from HBS. The control group were examined similarly but were summoned with a letter with a few weeks notice.
Results: 15/26 patients in the study group and 21/29 in the control group had 24-hour-BP-readings that met the quality standard for the study. In total 81 patients were selected for the study and 55 turned up for examination. 24-hour-BP in the study group was 145,1/87,6 (SD 10,4/6,0) and in the control group 145,7/89,6 (SD 14,9/8,9) respectively. HBS-score were 38,1p (1,5) and 37,7p(1,5) respectively. (maximum score 40p).
Conclusions: The way of summoning the patients had no impact on the 24-hour-BP-levels nor the results of the questionnaire in this study (e.g the adherence). 24-hour-BP values are higher than recommended for both group. The high HBS-score in both groups indicates a good adherence. The small number of patients makes general conclusions difficult to make. This method could provide a new approach to assessing adherence to hypertensive medication. Further investigation is needed.

OP-063

Practice barriers to guideline-recommended cholesterol management

Bally K. (Basel), Martina B. (Basel), Halter U. (Basel), Isler R. (Basel), Tschudi P. (Basel)

Aim: Identifying practice barriers preventing implementation of guidelines for the management of dyslipidemia.
Methods: We conducted a cross sectional study on dyslipidemia management in general practitioners' offices. 20 experienced general practitioners from urban and rural areas in Northwestern Switzerland agreed to participate. In a retrospective chart review design 1000 consecutive unselected patients aged 35–80 years were included. An independent committee of 5 experienced study physicians controlled the data and assessed the reasons for not measuring plasma cholesterol and for not treating diagnosed dyslipidemia as recommended by standard guidelines.
Results: Complete data of 866 patients were studied. In 134 cases data were incomplete for an exact risk stratification. Guideline adherence was observed in 44% of all 866 cases and was not observed in 56%. In 325 of all 866 cases (37.5%) we found diagnostic non adherence only. In 86 cases (10%) only treatment non adherence was found. 75 patients (8.5%) had both diagnostic and treatment non-adherence to guidelines. Treatment non adherence was observed in 33% of those patients with a treatment indication. In multivariate analysis independent predictors for treatment non adherence were diabetes, age and lack of physical activity. The main reasons for diagnostic guideline non-adherence were relevant comorbidity (45%) and GPs' belief that the risk does not require screening (42%). The main reasons for treatment guideline non-adherence were GPs' belief that the risk does not require treatment (42%) and relevant comorbidity (38%).
Conclusions: More than half of all patients aged 35–80 years are not screened or treated according to current dyslipidemia guidelines. Reasons are to the same extent patient-related and physician-related. These reasons should be considered when programs to improve the quality of GPs' adherence to guidelines are being implemented.

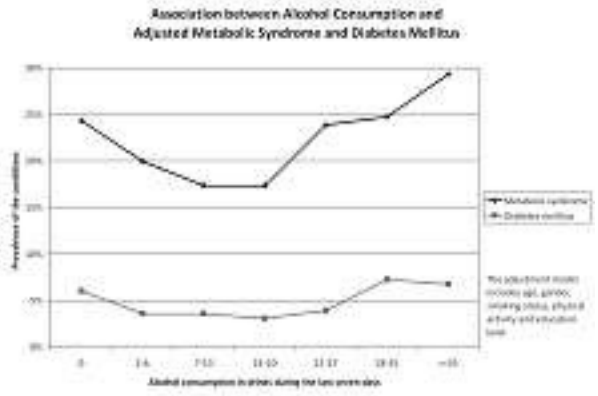
OP-064

Could moderate alcohol consumption help prevent the metabolic syndrome and diabetes mellitus?

Clerc O. (Lausanne), Nanchen D. (Lausanne), Marques-Vidal P.M. (Lausanne), Gmel G. (Lausanne), Daeppen J.B. (Lausanne), Paccaud F. (Lausanne), Mooser V. (Philadelphia), Cornuz J. (Lausanne), Waeber G. (Lausanne), Vollenweider P. (Lausanne), Rodondi N. (Lausanne)

Aim and purpose: Moderate alcohol consumption has been associated with lower risk of diabetes mellitus, but few data exist on the metabolic syndrome and on the metabolic impact of heavy drinking. The aim of our study was to investigate the complex relationship between alcohol and the metabolic syndrome and diabetes mellitus in a population-based study in Switzerland with high mean alcohol consumption.
Design and methods: In 6188 adults aged 35 to 75, alcohol consumption was categorized as 0, 1–6, 7–13, 14–20, 21–27, 28–34 and >= 35 drinks/week or as nondrinkers, moderate (1–13 drinks), high (14–34 drinks) and very high (>= 35 drinks) alcohol consumption. The metabolic syndrome was defined according to the ATP-III criteria and diabetes mellitus as fasting glycemia >= 7 mmol/l or self-reported medication. We used multivariate analysis adjusted for age, gender, smoking status, physical activity and education level to determine the prevalence of the conditions according to drinking categories.
Results: 73% (n = 4502) of the participants consumed alcohol, 16% (n = 993) were high drinkers and 2% (n = 126) very high drinkers. In multivariate analysis, alcohol consumption had a U-shaped relationship with the metabolic syndrome and diabetes mellitus. The prevalence of the metabolic syndrome significantly differed between nondrinkers (24%), moderate (19%), high (20%) and very high drinkers (29%) (P<= 0.005). The prevalence of diabetes mellitus also significantly differed between nondrinkers (6.0%), moderate (3.6%), high (3.8%) and very high drinkers (6.7%) (P<= 0.05). These relationships did not differ according to beverage types.
Conclusions: The prevalence of the metabolic syndrome and diabetes mellitus decrease with moderate alcohol consumption and increase with heavy drinking, without differences according to beverage types. Recommending to limit alcohol consumption to 1–2 drinks/day might help prevent these conditions in primary care.

Association between Alcohol Consumption and Adjusted Metabolic Syndrome and Diabetes Mellitus



OP-065

Regional model for the systematized lifestyle counseling, implementation of the lifestyle counseling process

Kuronen R. (Lahti), Valve R. (Lahti), Paatalo A. (Lahti), Hokkanen S. (Lahti)

Aims and purpose: The burden of chronic lifestyle related diseases and conditions in primary care give rise to new approaches. In the county of Päijät-Häme (200,000 inhabitants) in Finland a tele-based disease management coaching program (Terva) is investigated in secondary and tertiary prevention and a lifestyle counseling process is implemented to systematize the primary prevention. The systematic primary prevention approach is piloted in prevention of type 2 diabetes (T2D). The entire lifestyle counseling process has been defined from identification of those at high risk of T2D, to ways to deliver lifestyle counseling and to organize follow-up.
Design and methods: Implementation of the process has been carried out in close co-operation with local health care professionals in order to keep the process as simple as possible and to guarantee it's feasibility in the primary care. Roles of professionals have been defined. The high-risk patients will be screened from the primary care patients by using the Finnish diabetes risk test. Oral glucose tolerance test will be done to these patients. Default method for lifestyle counseling is a group-based structured program with six sessions. Follow-up will be arranged in group sessions and an oral glucose tolerance test will be repeated in every 1–3 years. All high-risk patients in the primary care should be identified, and 80% of them should be reached by the group-based lifestyle counseling. A crucial part of the process is data collection, making prevention visible and measurable. Systematically collected data in the electronic patient register will provide information about the functioning and effectiveness of the lifestyle counseling process.
Results and conclusions: Implementation of the lifestyle counseling process has been done successfully. Preliminary results on the functioning and of the effectiveness of the process will be presented.

OP-066

Cardiovascular risk management and statin therapy in primary health care (PHC)

Canhota C. (Carcavelos), Febra H. (Carcavelos), Libório T. (Carcavelos)

Aims: General practitioners have an increasingly important role in providing cardiovascular diseases (CVD) prevention and care. A study was done to obtain information about the assessment and treatment of CVD risk factors by GPs, in order to understand what new requirements and resources are needed to maximize the quality of care.
Methods: Part 1: cross sectional survey; an invitation letter was sent to a randomized sample of GPs; completed questionnaires were analyzed. Part 2: 20 GPs accepted to participate in a medical record review on statin treatment; descriptive analyses of the GP survey and patient's medical record data were performed; multivariate logistic regression models were used to identified GPs, practices and patients characteristics.
Results: in the part 1 study there were 214 GP participants. In the part 2 study, 241 patient records were involved. 211 of the 214 GPs claimed to use at least one clinical guideline and a very high percentage of GPs considered guidelines a great value. A CV risk factors calculator was used by 94% GPs although only 27% used it always. In the 12 months prior to statin initiation, 76% of patients had more than two CV risk factors and those were discussed with the patients by 77% of GPs. In 90%, at least one CV guideline was used to establish individual lipid therapy target. Lipid levels were tested after therapy initiation by 52% of GPs; the estimated CV risk was recorded in only 18% of cases. Moreover, registration of total cholesterol (TC) and LDL target level in medical records was poor, being 33% and 19%, respectively. In the first 12 months, up to 50% of patients did not reach the therapy targets for TC and LDL.
Conclusion: The results obtained suggest that CVD prevention in PHC can be improved through better detection of risk factors, recording them in patient´s medical records and setting simple treatment goals in cooperation with the patients.

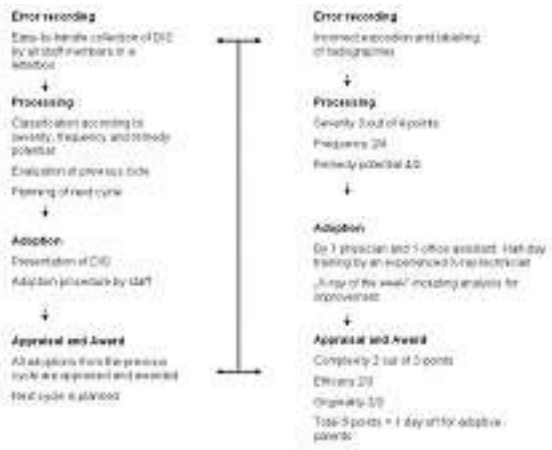
OP-067

From critical incidents to a spirited culture of handling with disturbances in the system

Wirthner A. (Bern), Battaglia M. (Bern), Ryf S. (Bern)

Objective: Finger-pointing as a method to boost quality at work is an inadequate way to deal with errors in general practice. It should be changed for a continuous process of learning with the aim to lower error rates or avoid them completely.
Methods: In general practice Bubenberg, a 40 staffed primary care practice in the city centre of Bern, Switzerland, we institutionalized a periodically recurring cycle to record Disturbances in the System (DIS). The DIS are collected in an easy-to-handle way, analyzed, arranged and can be adopted by staff members in a meeting. As most of the DIS lack an originator, they are called orphans and individual staff members or groups volunteer to adopt them, take responsibility for them and try to change them for the better. Particularly remarkable and successful adoptions and solutions are awarded a prize.
Results: All staff members know what to do with newly appearing errors at work. They are assured that detected DIS are worked-up and resolved and are not being swept under the carpet to appear again in the future. A technique to deal with errors has arisen.
Conclusion: Dealing with deficiencies has become easier. Pressure resulting from the standard of perfection has given way to a standardized collection and handling of Disturbances in the System. A new culture has arisen.

Disturbances in the System - Error Handling Cycle and Example



OP-068

The evaluation of a multidisciplinary primary care team consultation on women living in a socio-economically deprived community: a randomised controlled trial

Chan W.S. (Dublin)

Background: Psychosocial problems in socioeconomically deprived communities are not always amenable to traditional medical approaches. Mothers living in these areas are a particularly vulnerable group. A primary care team serving an area of deprivation implemented a new multi-disciplinary team consultation.
Aim: To evaluate the effectiveness of the multi-disciplinary team consultation in primary care in reducing anxiety and depression in mothers.
Method: A prospective randomised controlled trial of a multidisciplinary team consultation was conducted against normal care on mothers with psycho-social problems. 94 women were recruited from three general practices from an area of extreme socio-economic deprivation in Dublin, Ireland. Mothers randomised into the intervention group attended a multidisciplinary consultation with up to four case-specific health care professionals. Consultations addressed medical, psychological and social problems and lasted up to one hour. Conventional primary care continued to be available to the intervention families. Control group families received normal primary care services. The outcomes measured were anxiety and depression as using the Hospital Anxiety and Depression Scale (HADS), health status using SF36v2, and quality of life using the abbreviated Schedule for the Evaluation of Individual Quality of Life (SEIQoL-DW) at baseline, 6 months and 12 months.

Results: Ordered logistic regression was used to analyse the data. There was no significant difference found between intervention and control groups after 6 months and 12 months in all of the measured outcomes.
Conclusion: The new multi-disciplinary team consultation did not have any measurable impact on the mental health, general health, and quality of life of mothers after 6 and 12 months. However it may have had an impact in other ways. Other methods of primary health care delivery in socio-economically deprived communities need to be evaluated.

OP-069

Working in inetrdisciplinarity: about two models in Quebec (Canada)

Gagnon S. (Québec)

Objectives: To develop 2 models of working in interdisciplinarity in two clinical services in the province of Quebec.
Method: In a context of rarity of human ressources in Medicine and Nursing in the province of Quebec we have been obliged to find a way to respond to the needs of the patients in our 2 services: Travel Medicine clinic and Refugees health clinic in Quebec city (Canada). These two clinics are public services and are based in a local community center (CLSC) downtown Quebec city. Working comittee have been created and using their experiment in the domain professionals of this comittee have conceaved 2 models of interdisciplinarity.
Results: These 2 models are different responding to different clients ans needs. They are constantly evolving. They were conceaved to maximised the efficiency of the 2 services and were very well received by the administration of these establishments, the regional administration, the clients and the professionals of these services. One of these models is actually serving as model for other regions in the province of Quebec.
Conclusion: It is possible to redefine the role and tasks of different professional domains in a purpose of increasing the efficiency of services. To do this is asking open-minded professionals, adjustments and evaluation of practice and of quality of care.

OP-070

Complicity in complexity: promotion of interdisciplinarity in primary care needs a new setting for consultations

Jotterand S. (Aubonne)

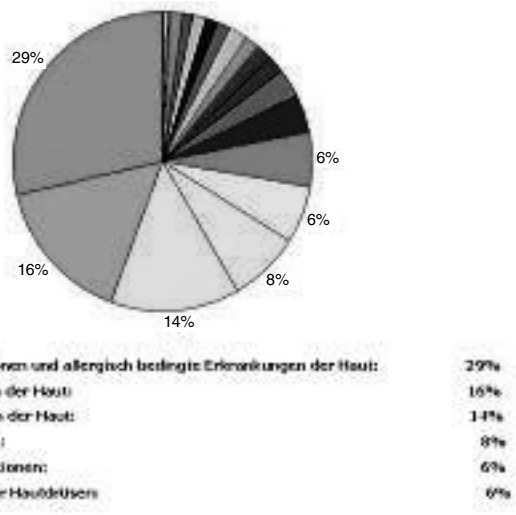
Objective: The complex therapeutic needs of the patient with diabetes met in the primary care setting mandate improved collaboration among the different health workers.
Method: On request of the physician, a nurse, specialised in diabetes care, moves to join him in his practice. They set an "all-together consultation" with the patient: they join to evaluate the medical situation, the needs and expectations of the patient, answer his questions and built-up together the follow-up (therapeutic objectives, teaching of technical skills, etc). After that, they can meet either in the beginning and/or the end of every nurse's consultation or on regular intervalls.
Results: The specialised nurses had 297 consultations. 33% were interdisciplinary with the physician at his consultation room (22% "all-together", 11% nurse and physician only). 67% were individuals with the patient and sometimes a member of his family. They happened either in the same place (8%) or the nurse's own office (35%), or the patient's residence (24%). Half of the patients answered the evaluation. 73% had an "all-together consultation". 79% of them felt strongly integrated in their follow-up. This proportion was reduced to 66% in the group without an "all togehter consultation".
Conclusion: The "all-together consultation" helps to set the interdisciplinary approach in the primary care. For the patient, it could enhance the feelling of being integrated in their follow-up. This was the ultimate goal of our project, because an active patient and the continuity of his relationship to his family doctor have major impact on the compliance of the patient for the long term.

OP-071

Value of joint general practitioner and dermatologist consultations in primary care patients

Bochsler H.P. (Wallisellen), Trueb R. (Zürich), Bochsler S.C. (Wallisellen)

Objective: To assess how joint general practitioner and dermatologist consultations in primary care patients affects quality of patient care, performance, and health care costs.
Design: Retrospective study.
Setting: General medical practice.
Patients: Walk-in patients with dermatologic problems.
Intervention: Joint bimonthly general practitioner and dermatologist consultations 1997 compared to dermatological cases seen 1991 by general practitioner independent of dermatologist.
Measurements and results: Outcome measures were: (1) number and type of diagnostic procedures and therapeutic interventions, (2) patient outcome, (3) expenses saved or incurred by joint consultations, (4) number of referrals to speciality clinic.
369 resp. 312 new dermatologic patients were reviewed in 1997 vs 1991. Demographic characteristics (age, sex) and frequencies of all dermatologic diseases were comparable. There was no significant change in number and type of diagnostic or therapeutic procedures, expenses, and patient outcome, a slight increase in medicament costs (mean per patient: 85.60 vs 70.30 CHF), and a significant decrease in number of referrals (18.9 vs 5.4%). From the standpoint of patients, skin disease management in the primary care office in the presence of the dermatologist and less referrals was rated as positive, from the standpoint of the general practitioner joint consultations were considered as continuous medical education.
Conclusions: Though joint general practitioner and dermatologist consultations did not affect significantly direct medical costs per patient, they were much appreciated by patients and physician.



OP-072

Interprofessional collaboration in a family medicine programme in Bosnia and Herzegovina

Perone N. (Geneva), Bischoff A. (Geneva), Susic A. (Dom Zdravlja Doboj), Sredic D. (Fondacija Fami), Dropic E. (Fondacija Fami)

Background: The former Yugoslavian health system was centrally planned and specialists-oriented with little emphasis on patient-centred primary care. In 1999, Ministry of Health of Bosnia-and-Herzegovina (BH) established Family Medicine (FM) as a priority, reorganizing the health care system to strengthen primary care. FM doctors should work in a patient-centred healthcare team, together with nurses being empowered and developing counselling activities and follow-up of patients with chronic diseases. The doctor and the nurse are to work in a team, sharing the same location, agenda and population of patients. This study describes the implementation of FM with regard to inter-professional collaboration in one BH area.
Methods: Review of patient records and audits in health centres (HC) of wider Doboj region between 2002 and 2008. We studied the 90 family medicine practices in 15 municipalities, after a training programme. Items reviewed included: composition of FM teams, organisation at working place, organisation of appointment system, and inter-professional training sessions.
Results: Since the start of the FM project, 73 out of 90 FM teams were formed. In all centres there were doctors and nurses who followed FM training sessions. Forty percent of these sessions were provided for both doctors and nurses in an inter-professional training approach. In most HC (13/15), conditions were created that allowed doctors and nurses working at the same location. In most HC (13/15) nurse-led patient appointment procedures were included in the FM routines.
Conclusion: One outstanding feature of the FM implementation in Doboj region was the increasing inter-professional (doctor-nurse) collaboration. The inter-professional FM training empowered the nurse to organise counselling and follow-up appointments of patients, especially those with chronic diseases. Further steps in the implementation of FM would include a formalised approach to chronic disease management teams.

OP-073

Psychotropic drug use among nursing home residents in Austria: a cross-sectional study

Mann E. (Rankweil), Köpke S. (Hamburg), Haastert B. (Neuenrade), Meyer G. (Witten)

Objectives: The use of psychotropic drugs and their adverse effects in frail elderly has been debated extensively. However, recent data from European studies show that these drugs are still frequently prescribed in nursing home residents. In Austria, prevalence data are lacking. We aimed to determine the prevalence of psychotropic drug prescription in Austrian nursing homes and to explore characteristics associated with their prescription.
Methods: Cross-sectional study and association analysis in forty-eight out of 50 nursing homes with 1844 out of a total of 2005 residents in a defined urban-rural region in Austria. Prescribed medication was retrieved from residents' charts. Psychotropic drugs were coded according to the ATC 2005. Cluster-adjusted multiple logistic regression analysis was performed to investigate institutional and residents' characteristics associated with prescription.
Results: Residents' mean age was 81; 73% of residents were female. Mean cluster-adjusted prevalence of residents with at least one psychotropic medication was 74.6% (95% confidence interval, CI, 72.0–77.2). A total of 45.9% (95% CI 42.7–49.1) had at least one prescription of an antipsychotic medication. Two third of all antipsychotic drugs were prescribed for bedtime use only. Anxiolytic medication was prescribed in 22.2% (95% CI 20.0–24.5), hypnotics in 13.3% (95% CI 11.3–15.4), and antidepressants in 36.8% (95% CI 34.1–39.6) of residents. None of the institutional characteristics and only few residents' characteristics were significantly associated with psychotropic drug prescription.
Conclusion: Psychotropic drug prescription frequency is very high in Austrian nursing homes compared to other countries. Interventions should aim at reduction and optimisation of prescriptions.

OP-074

Inability to lead an independent life and depression among geriatric patients in a general practice

Ramanayake R. (Pallewela)

Introduction: With normal ageing there is a decline in function at cellular, tissue and organ level in general. Decline in function may affect activities of daily living (ADL) leading to dependence. Study was carried out to see the relationship between inability to lead an independent life and depression.
Methodology: Descriptive cross sectional study was carried out in a general practice and all the geriatric patients who consulted the general practitioner during a period of 2 months were recruited for the study. Their ability to lead an independent life was determined by assessing ADL using a structured questionnaire. Presence or absence of depression was determined using DSM 4 criteria.
Results: 127 geriatric patients consulted during the study period. Not a single ADL was impaired in 44% of the patients while others had problems with ADLs in the following manner: walking 53%, Bathing 23%, Eating 14%, toileting 7.6%, dressing 4.3%. Three or more activities were impaired in 12% of the study sample. Fifty seven percent of the patients having 3 or more ADL impairment were found to have depression.
Conclusion: Statistically significant relationship was found between inability to lead an independent life and depression. General practitioners should look out for depression when geriatric patients have impairment of ADL and consider ADL when they are found to have depression.

OP-075

Screening for cognitive impairments in primary health care using the 6 item cognitive impairment test: a collaborative study between Italy and Greece

Lygidakis C. (Bologna), Marzo C. (Bologna), Argyriadou S. (Chrisoupolis), Lygera A. (Alexandroupolis), Tritto G. (Bari), Fabbri F. (Potenza), Carnesalli F. (Milano), Calderino P.M. (Crocetta Del Montello), Vitas A. (Xanthi), Papatheodosiou L. (Alexandroupolis)

Aims: To assess the use of the 6 Item Cognitive Impairment Test (6CIT) compared to the Mini Mental State Examination (MMSE) in Italy and Greece as part of the cognitive impairments screening, and to evaluate the possible correlations with the Activities of Daily Living (ADL).
Design and Methods: During the last trimester of 2008, 84 patients in Italy and 128 in Greece, aged 65 years or over, were randomly selected from those accessing Primary Care practices (mean age 78.26 and 76.91 respectively). The MMSE and 6CIT were used to assess participants' cognitive capacity. The ADL was also carried-out.
Results: Compared to MMSE with a 23/24 cutoff, the 6CIT at the 7/8 cutoff presented a sensitivity of 65.22% and a specificity of 61.67% in Italy, versus 85.71% and 54.65% respectively in Greece. Setting a 9/10 cutoff, resulted in increased specificity (78.33% for Italy, 70.93% for Greece) influencing negatively sensitivity (43.48%, 83,33% respectively). In Greece, 6CIT score was significantly correlated with age (r = 0.43) educational level (r = –0.51), MMSE score (r = –0.74) and ADL score (r = 0.48; all ps <0.001). In Italy, 6CIT was correlated less strongly with educational level (r = –0.26, p = 0.019) and MMSE (r = –0.50, p <0.001). Remarkably better ADL scores (U = 1924.00, r = –0.55, p <0.001) and individual economic levels (U = 628.50, r = –0.77, p <0.001) were noticed for Italy. A significant relationship between ADL scores and economic levels of all patients was also observed (r = –0.39, p <0.001). ADL scores were significantly worse in Greek patients with MMSE <24 (U = 499.00, r = –0.62, p <0.001) or 6CIT <8 (U = 1333.50, r = –0.29, p = 0.001), albeit the smaller effect size of the latter. Italian patients with MMSE <24 or 6-CIT <8 did not differ in ADL scores.
Conclusions: Whereas not equivalent to the MMSE, the 6CIT seems to be a notable tool for GPs. Demographic differences and partial correlation with ADL may advocate future studies on focused groups.

OP-076

Comparing depressive mood and sleep disturbances between Greeks and immigrants

Androutsos O. (Piraeus), Lysikatou A. (Piraeus), Athanasopoulos D. (Piraeus), Garopoulou E. (Kalymnos), Helioti E. (Piraeus), Panagopoulos P. (Piraeus)

Aims and purpose: To assess the ratio of immigrant women visiting gynecological/maternity clinics and furthermore to examine their sleep quality and depressive mood in comparison with Greek women.
Design and methods: General practitioners interviewed all women visiting a Greek public clinic as outpatients or being inpatients for two constant weeks. Depressive symptoms were evaluated with the Centre for Epidemiologic Studies Depression (CES-D) scale and sleep with the Athens Insomnia Scale (AIS). All participants were asked about their basic demographics, medical history and medication. SPSS was used for statistical analysis.
Results: From a total of 60 women examined with a mean age of 32 years, 53.3% were Greeks and 46.7% immigrants. 53.3% were outpatients and 46.7% inpatients. Moreover, 26.7% were pregnant, 36.7% puerperal and 15% menopause. Mean CES-D and AIS scores were for Greeks 16.61 and 7.84 respectively. For immigrants they were 11.32 and 6.00 respectively. The difference in depressive mood questionnaire scores was statistically important (p <.05). In contrast with this finding, immigrants had greater scores when asked if people are friendly with them (CES-D question 15, p <.05). Inpatients were more depressed (p <.05) and had more disrupted sleep (p <.05) than outpatients, as expected.
Conclusions: Almost half of the patients treated in Greek public gynecological/maternity clinics are immigrants. Surprisingly Greek women seem to be more depressed but we explain this finding with the fact that Greek women in our specimen were older (mean age 36, p <.05), with a greater percentage of menopause (p <.05), greater percentage of inpatients (p >.05) and 6.5% had a history of Major Depressive Disorder in contrast of 0% of the immigrants.

OP-077

Help-seeking behaviour of older women with urinary incontinence

Visser E. (Groningen), de Bock T. (Groningen), Meijerink M. (Groningen), Dekker J. (Groningen)

Aims and purpose: Urinary incontinence is a very common health problem among older women. Only a minority of them looks for help from their general practitioner, so there is an underuse of effective treatment options. We were interested if women who look for help differ from those who do not, but who do react if they are actively approached.
Design and methods: This is a cross-sectional survey of women aged 55 years and older with urinary incontinence, all participating in the URINO-project. The URINO-project is a cluster randomized trial, regarding the cost-effectiveness of active detection of incontinent women of 55 years and older in general practice, after which protocolized diagnosis and evidence-based treatment follows, as compared to usual care. This project also offers the possibility to study the help-seeking behaviour in urinary incontinence. The registration system of the general practitioner was searched for co-morbidity, consultation behaviour and medication use. The women who are known by their general practitioner with urinary incontinence were compared to those who are not known by using the student's t-test.
Results: Results of a pilot study in 3 general practices, including 55 participants, show that the average age of the group who is known by their general practitioner with urinary incontinence is higher (p <0.01). This group has more often contact with the general practitioners (p = 0.04), has worser symptoms of urinary incontinence (p <0.01) and uses more medication (p = 0.04). At the WONCA

congress, the multi-variate analyses of the participants (n = 225) of the URINO-project in 9 general practices will be presented.
Conclusions: The information from this study may give direction to an answer on the question which older women in general practice suffer from 'hidden' urinary incontinence and could be actively approached.

OP-078

ANA-testing ordered by general practitioners: experience with a standardized test algorithm

Walter P. (Olten), Voegeli K. (Olten), Rothen J.P. (Basel)

Aims and Purpose: Testing for antinuclear antibodies (ANA) by indirect immunofluorescence (IIF) is regularly ordered by general practitioners (GP) to screen for antibodies associated with systemic autoimmune diseases. We introduced a laboratory algorithm including standardized result commentary. The present study investigated GPs adherence to this algorithm and the obtained test results.
Design and Methods: 1316 consecutive ANA-testing orders were processed according to a predefined laboratory algorithm. The algorithm included standardized recommendations for further test procedure which were based on observed fluorescence patterns and titre levels by IIF. ANA-testing was done on HEp2 cells (Euroimmun) with anti-human-IgG conjugate. Follow-up tests aimed at the identification of auto antibody specificity were done on dot blot (Alphadia) and ELISA (Phadia) assays.
Results: We recorded 432 (32.9%) reactive results with fluorescence at 1:80 dilution. 110 of these showed titre levels >= 320, thus indicating the presence of clinically relevant auto antibodies. In 42 of these 110 ANA-positive samples, the recommended follow-up testing was indeed ordered by GPs and resulted in the successful identification of >= 1 antibody specificity in 20 samples. Detection of specific auto antibodies was more frequent in samples with high ANA-titre. No follow-up test was ordered in 60 cases and another 8 samples experienced irrational follow-up testing.
Conclusion: GPs show good skills in preselecting patients for ANA-testing. In the investigated population only 11.9 patients needed to be tested to find one positive result. Underlying antibodies were identified in 48% of the samples where recommendations for follow-up testing were adhered to by the GPs. This opportunity was missed for 61% of the ANA-positive samples due to neglected or irrational follow-up testing. Reflex-test orders to avoid incompletely tested samples could be useful to optimize the utilization of ANA-testing by GPs.

Fig. 1: Titre level distribution ANA IF (n=1316)

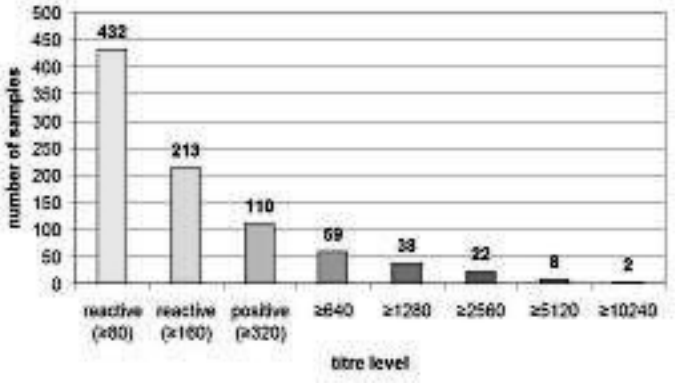
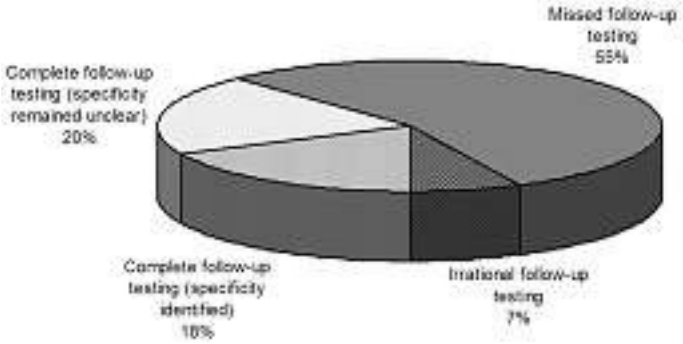


Fig. 2: Follow-up testing ordered in samples with ANA-titre ≥320



OP-079

Functional somatic symptoms prevalence in an Italian general practice

Alice S. (Genova), Forfori P. (Genova), Botto M. (Genova)

Objective: to investigate the current prevalence of somatization in an italian general practice, comparing it among italians and south american immigrants.
Method: we enrolled 100 patients (mean age 37ys), divided into equal number of italians and immigrants from South America and between men and women, with no cognitive problems, in good general conditions and aged 18 or over, who went for a visit to a Group General Practice in Genoa -Cornigliano (lower socioeconomic suburban area) in 2008. A reliable and validated self-report questionnaire, the Brief Symptom Inventory (BSI-21) was given them. Patients scoring 14 or more on the BSI-21 were considered at risk for somatization.
Results: The overall prevalence of reported somatic sensations was 27%; 62.9% (17/27) of the somatizers were women; italian somatizers were 11 (22%), including 7 women (63.6%); the prevalence rate of patients at risk for somatization among the immigrants group was 32%, the women were 10 (62.5%); the frequency hierarchy of endorsed items was similar in both groups.
Conclusions: South Americans patients tend to somatize more than italians; women from both groups demonstrated a higher prevalence of reported somatic sensations; the frequency hierarchy of endorsed items was similar in both groups.

OP-080

From GP practice to RCT research: treating the complexity of ADHD with the individuality of homeopathic remedies

Von Ammon K. (Bern), Frei H. (Laupen Be), Sauter U. (Biel), Everts R. (Bern), Walter D. (Bern), Kaufmann F. (Bern), Steinlin M. (Bern), Hsu Schmitz S.F. (Bern), Thurneysen A. (Bern), Frei-Erb M. (Bern)

Aim: To conduct a RCT in general practice (GP) and to answer the following questions: (i) Is homeopathic treatment effective in children with ADHD, (II) Is there an efficacy of homeopathic remedies, (III) Is homeopathic therapy in children with ADHD economical, and (IV) Is the clinical effectiveness stable over 5 years?
Method: A pilot observational study combined conventional (CON) research methods with homeopathic (HOM) requirements. Afterwards, a controlled randomized double-blind trial (RCT), was included in a prospective observational study of individual prescriptions according to the law of similars with single remedies, set-up of individual reactions, and following prescriptions, in treating children with attention deficit hyperactivity disorder with or without hyperactivity (ADHD) over 5 years.
Results: 83 children aged 6–16 years, had a mean Conners Global Index (CGI) of 19 (range 14–25). After the screening phase, 62 children (CGI 9, 7–10) entered, and 58 finished the crossover trial. 18, and 60 months later, CGI values (n = 53, 60) were 7 (5–9), and 7 (2–19), respectively. Individualized homeopathic therapy comprises remedies with a specific efficacy, is clinically and neuropsychologically effective, and is economically a valuable option compared to low dose stimulants.
Discussion: Factors for success were: appropriate study design combining COM and HON requirements: (CON) randomisation, stratification and blinding after successful therapy: willingness to participate, compliance, low drop-out rate, and (HOM) optimized repertorization method using specific questionnaire, perception symptoms, and an operationalized materia medica comparison (polar symptoms).
Conclusion: Out of a general practitioner's service, according to rigid scientific criteria, a RCT with individual prescriptions in the complex disease of ADHD was successfully implemented, conducted, and published in collaboration with university clinics and institutes.

OP-081

The development of normal-hearing children, raised by hearing impaired parents: a case report

Sawicka J. (Krzepice), Matyjaszczyk M. (Lodz)

Background/aim: The development of hearing children who are brought up by deaf parents constitutes a very interesting problem in medicine. We wanted to show and recognize how surroundings and parents care have an impact on psychological development. The aim of the article is to notice the central role of home and family in the process of learning words.
Methods: With the use of short films, we wanted to present two aspect of this situation. On the one hand two children (3 and 7 years old) growing normal like other healthy children and on the other hand one children (2.5 years old) with many problems connected with language. As far as the 2.5 years old girl is concerned, her language consisted of only single words, no connected in sentences.

Results: The films emphasized the link between children's early family experience and their later intellectual growth. We wanted to show that deaf parents could bring up healthy children who have no problem with hearing. Children's interactions with other persons in their families, and parents' language are very important in the abovementioned process. We observed the relation between the lack of mothers speaking to their children and poor progress of language skills among her children. We noticed as well the relation between the number of people speaking to a child and the number of vocabulary.
Conclusion: The study showed that the linguistic environment is the most important factor to influence vocabulary development. The quantity and amount of words, which a child hears, is subconsciously learned and added to child's vocabulary. Moreover, the study emphasized that the amount of time spent with hearing adults during the preschool years has a huge impact on correct development of hearing. The study proved that children of deaf parents need the special care, without it the development is disturbed so the proper therapy is the best solution for them.

OP-082

Migrant mental health: a joint programme in Geneva hospitals

Durieux-Paillard S. (Genève)

The rate of foreigners in the Geneva district is especially high: 40% of a 400'000 inhabitants area. However, it remains an underestimation as undocumented migrants, asylum seekers and inmates are not included in official statistics. If migration has been considered as a social springboard during the first half of the XXth century, nowadays it often represents a risk factor for mental health disorders: major depression, schizophrenia, post traumatic stress disorders. Linguistic difficulties, cultural differences and poverty represent documented barriers to access to care. Stigmatization attached to psychiatry constitutes another important constraint. It often impedes consultation in mental health facilities and limits early access to specific care. Because of a better cultural acceptability, psychiatric disorders among migrants may be expressed through somatic symptoms predominantly. Therefore, primary care physicians are often their first medical contact. This paradox is present in our hospital. On one hand, in the Migrant Health Center an ambulatory facility of our primary care department, the resident physicians who have cultural skills but little psychiatric experience have to treat patients with important psychiatric co-morbidities. On the other hand, in the psychiatric outpatient service, young residents with little cultural competences have to deal with migrant patients presenting with severe and complex mental disorders. The aim of this pilot program, developed jointly by the departments of psychiatry and primary care of the Geneva University Hospitals, is to provide integrated, holistic health care for migrant patients from diverse ethno-cultural backgrounds. The focus is on posttraumatic and depressive symptoms that are frequently encountered among asylum seekers and undocumented migrants. The objective of this presentation is to describe the elaboration and first results of this innovative program.

OP-083

Primary care, mental health services and fibromyalgia. How to improve psychiatric comorbidity?

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Equip Atenció Primària Dreta Eixample, Barcelona (Spain)
Centre Salut Mental Dreta Eixample, Barcelona (Spain)

Aims and purpose: Fibromyalgia is a chronic and invalidating disease that involves high comorbidity. It requires a multidisciplinary and all-round approach. The aim of our working group, made up of members of Primary Health Care Center and Mental Health Services, is to work together for the prevention of psychiatric comorbidity associated to fibromyalgia and also, to promote healthy life-style habits and mental health care.
Description: Inclusion criteria for group therapy were: recent (<2 years) diagnosed fibromyalgia (American College of Rheumatology Criteria 1990), age >18 years-old, positive attitude and work-in-group capacity. Family doctors recruit first patient's selection and after refer them to Mental Health Services, to be interviewed by psychologist and nurse and include them in the therapy group. Therapy groups' work involve 1 session with a family doctor and a psychiatrist to raise fibromyalgia and comorbidity, 2 sessions with a primary care nurse for general health education and 5–7 sessions with psychologist and mental health care nurse to work on associated psychopathology (cognitive-behavioral therapy, relaxation techniques).
Conclusions: Primary Health Care and Mental Health Services have worked together in a multidisciplinary working group to reach a consensus and develop a therapeutic plan for prevention and treatment of comorbidity and to improve the quality of life in fibromyalgia's patients.

OP-084

High prescription rate of ATD drugs in France: GP's motives

Mercier A. (Rouen), Aubin-Auger I. (Paris), Coblentz L. (Paris)

Background: Antidepressants (ATD) drugs are very commonly prescribed in all industrialized countries. Consumption in France is higher than in other European countries. The reasons for this higher prescription rate are still unknown. In this study we explore the GPs attitudes on prescribing ATD in France Research question: Understanding either contextual and diagnostic reasons to prescribe ATD among French GPs.
Method: Qualitative data about reasons of ATD use were collected through GP focus groups. This sensitive topic was also completed by in depth interviews, to be sure not to miss any essential information, and to explore the points which remained unclear. The main points of the topic guide insisted first on social, family, or personal situations and patients' requests. Secondly, it focused on possible "non psychiatric" diagnoses. The analysis was made with a phenomenological approach and content analysis, using QSR Nvivo 8.0 Software.
Results: GP's prescriptions were mainly influenced by social and professional conditions of their patients. They also used ATD as a "diagnostic test" when dealing with unspecified symptoms, but only when they were associated with mental health problems. They commonly used ATD for "non psychiatric" diseases, such as migraine, colopathy, pain conditions, sexual problems, but those conditions were more or less combined with mental health problems.
Conclusions: According to the GPs some prescriptions seem to be justified out of official guidelines.

OP-085

Complex adaptive chronic care

Martin C. (Dublin), Sturmberg J. (Melbourne)

Aim(s) and Purpose: To develop an operational chronic adaptive care framework for primary care that incorporates the Chronic Care Model with Complexity Science.
Methods: We conducted a narrative literature review on the Chronic Care Model and Complexity Science and Theory principles. Key themes were identified and categorised into an operational framework for Complex Adaptive Chronic Care. The operational framework was first tested against key articles in the literature followed by a practice audit in the clinical setting of everyday general practice and out of hours care.
Findings: Chronic illness care benefits from comprehensive and multi-faceted health service delivery. Chronic care is not static, but a dynamic progression accross different phases of care and states of health, which can be described as stable, complicated but stable, complex and on the edge of chaos. Discernible phases or patterns can be identified along the disease trajectory and varying illness and health states. Using the Cynefin framework these can be viewed as simple, complicated, complex and chaotic phases. Different phases of chronic illness require specific care approaches, dynamics and infrastructure. Chronic care needs to adapt to individuals and their ways of making sense of their illness and challenges as they journey through the varied and varying landscapes of internal and external changes, associated with the changing patterns of their disease.
Conclusions: Complex adaptive chronic care provides an operational and clinical framework to improve clinical and organisational models of chronic care delivery. Identifying when people move into the complex and chaotic phases of their chronic disease and illness will maximise the benefits of individualised care planning to meet the challenges of changing needs.

OP-086

Health – a complex construct

Sturmberg J. (Wamberal), Martin C. (Dublin), Moes M. (Grand Valley)

Setting the Scene: Looking at the primary health care literature one has to conclude that disease and health are largely elusive ideas. Disease has been described as *a physiological or psychological dysfunction*, and *a biological dysfunction* [based on] *well-known pathological or pathophysiological processes or a well-known etiology*. Besides, disease is continually being redefined by lowering thresholds of normality "generating" more patients. Health definitions are no more precise – health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity stands in stark contrast to Illich's dynamic description: The ability to adapt to changing environments, to growing up and to ageing, to healing when damaged, to suffering and to the peaceful expectation of death.
A Complexity based Definition: The historical, philosophical and scientific literature all point to health and disease resulting from the interrelated actions within the whole person and his environment. Describing such interrelated actions is the scope of complexity sciences. In a complex system interactions between constituent

components are nonlinear, i.e. cause and effect are neither separate entities nor are they proportional to each other, resulting in emergent outcomes. We suggest that the various components of health – biological, emotional, social and sense making – interact in a nonlinear fashion and that health can be described through a complex adaptive somato-psycho-socio-semiotic model. Metaphorically speaking, health is achieved when the individual perceives the dynamic interactions between all domains to be in balance. As a consequence a complex adaptive somato-psycho-socio-semiotic model views health as a personal and experiential construct, only the person herself can determine when the various components are in balance. This may not equate to the physician's perception of balance and may be far from *absence of disease and infirmity*.

OP-087

Burn out and engagement in general practitioners

Mourelle Varela R. (Barcelona), Menendez J. (Barc Elona), Molina Guasch C. (Badalona), Pereira M.V. (El Masnou), Borras Calvo A. (Bilbao), Fernandez Gonzalez M. (Barcelona)

Objectives: To determine the prevalence of burnout and engagement in primary care staff member (AP) and explore its relationship with personal and work factors.
Design: Observational, transversal and descriptive.
Participants and Setting: 36 General practitioners, 6 primary care centers in public ownership (ICS) at Santa Coloma de Gramanet, urban low-middle class in the province of Barcelona.
Measurements: Self-administered anonymous questionnaire was structured in three parts: sociodemographic data / labor, Maslach Burnout Inventory (MBI-HSS) and Utrecht Work Engagement Scale (UWES).
Main results: Response rate of 53%, 66% women, mean age of 41.7 years. 53.12% were interns, 13.5 years wokking on average, 36.06 patients seen/day and 37.86 worked hours per week. Burnout affected 69.4% of physicians, 8.3% very high level (all men). Engagement, affected 40%, 11.4% high level. Good correlation between subscales (EC, DP, PR and VI, DE, AB) and burnout / engagement respectively. Lower job stability (34.37% property). Low job satisfaction, 22% of respondents had considered leaving their jobs. No significant differences about prevalence of burnout / engagement depending sociodemographic characteristics. Statistically significant association between burnout and the number of patients seen per day, having thought out his work, number of hours worked and afternoon shift. No association between engagement and employment variables.
Conclusions: There is prevalence of average levels of burnout and engagement that can be linked to modifiable factors such as number of patients visited and number of hours of practice per week.

OP-088

Complex systems and human complexity

Strand R. (Bergen), Rørtveit G. (Bergen), Schei E. (Bergen)

Complex systems theory is increasingly introduced into medical research. For instance, concepts such as 'agents' and 'attractors' are now used as metaphors in medical practice. In a philosophical analysis, we introduce the concept of human complexity to denote certain ubiquitous features of humans as persons and patients. We then compare human complexity with the notion of complex adaptive systems (CAS). CAS are characterized by the emergence of certain higher-order phenomena in features of rule-governed non-linear systems. Human complexity is the result of higher mental capacities and human culture. Failure to understand it in such terms may result in medical failure or medical 'success' in which the wrong problem is solved. Accordingly, caution is called for as uncritical use of CAS and other notions from complex systems theory may actually reduce medical sensitivity to complexity.

OP-089

Prevalence of engagement in general practitioners in Catalonia

Molina Guasch C. (Barcelona)

Objectives: Determine prevalence of engagement in the primary care staff members, and analyze its relationship with personal and work factors.
Material and Methods: Design: Observational, transversal and descriptive. Participants and Settings. All general practitioners of the 6 primary care centers in public health service (ICS) at Santa Coloma de Gramanet, urban lower middle class city in the province of Barcelona. Measurements: Self-administered anonymous questionnaire structured in two parts: sociodemographic data and labor, and Utrecht Work Engagement Scale (UWES) measurement with three subscales (vigor, dedication and absorption).
Main results: First approach in spain to know prevalence of Engagement (theoretically opposed to Burnout) in primary care general practitioners. Response rate of 51.47%, 54.3% women, average age 41.7 years. 53.12% were interns, average professional life 13.5 years, patients seen 36.06 per day, and 37.86 hours per week worked. High levels of engagement on 40% of general practitioners, 11.4% very hight levels (high three variables). There was found moderate levels of Vigor, Dedication and Absorption. Low job satisfaction, 22% of respondents had considered leaving their jobs. No significant differences in prevalence of engagement about sociodemographic characteristic.

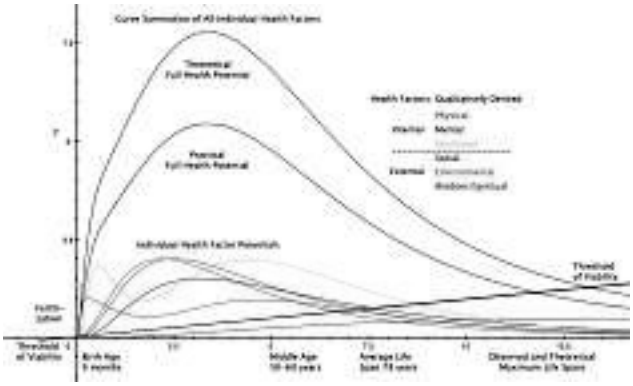
OP-090

A new definition of health derived from chaos and complex systems

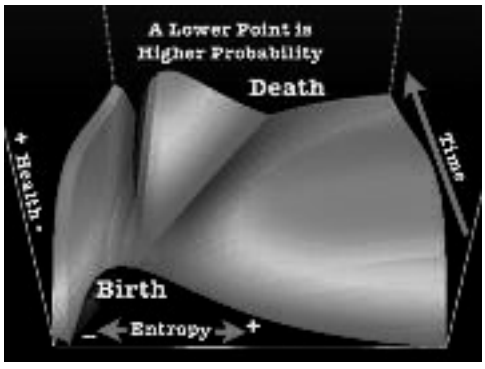
Topolski S. (Shelburne Falls)

Millions of health care professionals work to preserve and maintain health, yet what is health? Health is an extremely complex concept which remains difficult to define, measure and improve. The health profession`s efforts are hindered by a poor understanding of the core principle of health itself. Chaos and complexity theories can enlighten us with clear and robust qualitative-quantitative methods. General measures of individual growth and population health are examined through fractal concepts and log-normal distribution curves. Various basic physics principles and more advanced entropy/complexity curves provide a three dimensional surface for an individual`s health potential. Health then becomes the trajectory across a three dimensional potential space. We posit that the fractal character of the surface changes over a lifetime. The new definition of health advances the biopsychosocial metaphor. It better describes behaviors of health at different stages of life. It provides new insights and suggests new predictions which one can make about human health and more specifically how it changes over a lifetime. Chaos and complexity theory are fundamental to this revolutionary new understanding of health to advance the quality of health care.

Redefined Health Trajectory



Health Basin of Attraction



OP-091

Ruling out coronary heart disease in general practice: development and validation of a clinical prediction rule

Bösner S. (Marburg), Becker A. (Marburg), Gencer B. (Lausanne), Vaucher P. (Lausanne), Herzig L. (Lausanne), Keller H. (Marburg), Sönnichsen A. (Salzburg), Abu Hani M. (Marburg), Haasenritter J. (Marburg), Baum E. (Marburg), Donner-Banzhoff N. (Marburg)

Aims and purpose: Chest pain can be caused by a wide range of conditions with life threatening cardiac disease being of the greatest concern to doctors and patients. GPs face the challenge to identify serious cardiac disease reliably mainly relying on the diagnostic accuracy of signs and symptoms for Coronary Heart Disease (CHD) diagnosis. Prediction scores have been mainly developed for CHD in

emergency settings. The aim of the study was to develop a simple prediction score helping the GP to rule out CHD in patients presenting with chest pain in a primary care setting.
Design and Methods: A cross-sectional diagnostic study with delayed-type reference standard was conducted in 74 GP practices in Germany with 1249 patients consecutively presenting with chest pains. GPs recorded symptoms and findings of each patient on a report form. Patients and GPs were contacted at 6 week and 6 month intervals. Data on chest complaints, investigations, hospitalisation and medication were reviewed by an independent reference panel, CHD being the reference condition. Adjusted Odds Ratios of relevant predictors were used to develop a prediction rule. Bootstrapping was used for internal validation of the resulting score. An external cross validation was performed with data derived from another prospective study that was conducted in a similar setting.
Results: The CHD Score was derived from the following variables: age, gender, known clinical vascular disease, pain increases with exertion, absence of tenderness at palpation and patient assumes cardiac origin of pain. The area under the ROC curve was 0.87 (95% CI 0.84–0.91). Internal validity was confirmed by bootstrapping. External validation results will be presented at the WONCA congress.
Conclusions: This score based only on clinical information can help the GP to rule our CHD in patients presenting with chest pain.

OP-092

Validation of a clinical prediction score for ruling out coronary heart disease in primary care patients with chest pain

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Background: A patient's chest pain raises concern for the possibility of coronary heart disease (CHD). An easy to use clinical prediction rule has been derived from the TOPIC study in Lausanne. Our objective is to validate this clinical score for ruling out CHD in primary care patients with chest pain.
Methods: This secondary analysis used data collected from a one-year follow-up cohort study attending 76 GPs in Germany. Patients attending their GP with chest pain were questioned on their age, gender, duration of chest pain (1–60 min), sternal pain location, pain increases with exertion, absence of tenderness point at palpation, cardiovascular risks factors, and personal history of cardiovascular disease. Area under the curve (ROC), sensitivity and specificity of the Lausanne CHD score were calculated for patients with full data.
Results: 1190 patients were included. Full data was available for 509 patients (42.8%). Missing data was not related to having CHD ($p = 0.397$) or having a cardiovascular risk factor ($p = 0.275$).
76 (14.9%) were diagnosed with a CHD. Prevalence of CHD were respectively of 68/344 (19.8%), 2/62 (3.2%), 6/103 (5.8%) in the high, intermediate and low risk category. ROC was of 72.9 (CI95% 66.8; 78.9). Ruling out patients with low risk has a sensitivity of 92.1% (CI95% 83.0; 96.7) and a specificity of 22.4% (CI95% 18.6%; 26.7%).
Conclusion: The Lausanne CHD score shows reasonably good sensitivity and can be used to rule out coronary events in patients with chest pain. Patients at risk of CHD for other rarer reasons should nevertheless also be investigated.

OP-093

The STEP study: the standing measurement of blood pressure in the elderly in a primary care practice; a standardized approach

Ingram C. (Mankato), Beske S. (Mankato), Graves J. (Rochester)

Objectives: The objective of this study is to implement a standardized approach to measuring standing blood pressure to identify orthostatic hypotensive elderly. Design: Cross sectional, retrospective. Setting: Immanuel St. Josephs-MHS NorthRidge Family Medicine Clinic. Participants: Patients >= 65.
Methods: All patients >= 65 years old received a seated blood pressure and 3 consecutive standing blood pressures with pulse at 0, 1 and 3 minutes. Fall risk was completed. Patients with an orthostatic blood pressure change were flagged with a questioner for the provider and their charts reviewed. Blood pressure measurement technique in all nursing staff was validated and zero preference evaluated. A time cycle study has been completed in patients receiving standard and orthostatic measurements.
Results: During a month long pilot 274 patients were included. Ninety-three (33%) were unable to undergo a standing blood pressure. Average age in those unable to stand was 77 (65–97) compared with 75 (65–94) in those able to stand. The remaining 181 patients were evaluated. Orthostatic hypotension was identified in 9.4% of patients. All were a new diagnosis to the clinician and impacted care. Twelve STEP Study validated nurses roomed these patients and had a zero preference of 31% (range 15–50%). Average rooming time with standard care was 11 minutes and 16 minutes during the study. The STEP Study will be applied to the Mayo Health System Practice Based Research Network in the last quarter of 2008 through 2009 pending funding.
Conclusion: A standardized approach to measuring elderly patients blood pressure standing is feasible in an ambulatory clinic and does influence care.
This project is funded by the Mayo Clinic CTSA under NIH/NCRR grant number UL1 RR024150.

OP-094

Diagnostic value of palpation of the apex beat in detecting or excluding left ventricular hypertrophy in patients with hypertension

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Left ventricular hypertrophy (LVH) is the first detectable target-organ damage caused by hypertension.
Aim: What is the diagnostic value of palpation of the apex beat in detecting or excluding LVH in patients with hypertension?
Methods: Patients with hypertension from two primary care practices in the Netherlands were eligible, and after informed consent underwent hand-held echocardiographic measurements to assess left ventricular mass. In women, LVH was considered present when the LV mass/Body square area >88 gram/m^2, and classified moderate-severe when >101 gram/m^2. In men LVH was considered present when LV mass/BSA was >103 gram/m^2, and moderate-severe when >117 gram/m^2; cut-points according to the criteria of the American Society of Echocardiography. The apex beat was assessed with the patient in decubital and left lateral position, and. classified as abnormal when located outside the mid-clavicular line (in decubital position) or when broadened or sustained (in left lateral position). An impalpable apex beat was classified as a 'normal apex beat'.
Results: In total, 199 patients with hypertension were included. In 36 (18%) LVH was detected. Those with LVH were older (74.2 vs. 69.1 years), more often male (64 vs. 42%), had a longer duration of hypertension (16.1 vs. 10.4 years), and higher systolic blood pressures (156.3 vs. 147.5 mm Hg) than those without LVH. The positive predictive value of the apex beat in left lateral position was 8/22 (36%), the negative predictive value 149/177 (84%), sensitivity 8/36 (22%) and specificity 28/36 (91%). For detection or exclusion of moderate-severe LVH, the positive predictive value was 5/22 (23%) and the negative predictive value 170/177 (96%).
Conclusions: Palpation of the apex beat in patients with hypertension is especially useful to exclude moderate-severe left ventricular hypertrophy.

OP-095

Competencies of Polish primary care physicians in tests ordering for patients with elevated blood pressure

Tomasik T. (Krakow), Windak A. (Krakow), Gryglewska B. (Krakow), Grodzicki T. (Krakow)

Aims and purpose: The aim of this study is to assess the decisions on diagnostic procedures which would be taken by general practitioners to patients with elevated blood pressure.
Design and Methods: Eight case vignettes, presenting patients with high blood pressure were developed. The cases differed with regard to three variables: (1) the level of blood pressure, (2) the presence of other risk factors of cardiovascular disease and (3) the presence of diabetes mellitus. A stratified, random sample of all Polish PHC physicians was chosen to participate in the study.
Results: Polish primary care doctors would order 47.5% of all additional examinations, which should be ordered according to ESH/ESC guidelines. The biggest percentage of appropriately ordered examinations was found in cases with grade 2 hypertension and without diabetes. Panel of serum lipid was the most frequently ordered test (658 times). Patients with grade 2 hypertension had significantly more examinations ordered than patients with high normal blood pressure (41.2% versus 54.2%; $p = 0.00$). Older physicians ordered significantly less expected examinations (44.4%) in comparison with younger ones (52.0%; $p = 0.02$). Physicians working in public institutions planed more additional examination (52.5%) than those working in private setting (46.3%; $p = 0.03$). Family physicians when compared with other primary care doctors would order more additional examinations recommended by ESH/ESC guidelines (51.1% versus 44.4%; $p = 0.01$).
Conclusion: Competence of Polish PHC physicians in the field of test ordering for patients with elevated blood pressure is far from the recommendations given by international guidelines. Coexistence of diabetes mellitus causes particular problems. The gap between actual and desired competence is especially wide in case of older physicians with longer professional experience, practicing in small and private settings.

OP-096

ESCAPE ancillary blood pressure study end-digit preference in a cluster randomised trial in general practice

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Background: When measuring blood pressure (BP), end-digit preference (EDP) is a widespread phenomenon with major consequences on GPs decisions and patient's morbidity. Using an electronic device has proved to dramatically decrease this phenomenon. In the ESCAPE trial, the 1833 hypertensive patients had all clinical and biological characteristics comparable at baseline except for systolic (SBP) and diastolic (DBP) blood pressure: p <0.0001.
Question: Is the difference in BP between the two groups at baseline due to a lowering of EDP in the intervention group (IG) working with an electronic device, while 75% of the GPs in the control group (CG) were using a conventional device?
Method: Comparison with a linear model with mix effect of the mean values of SBP and DBP in the IG, the CG and the electronic control group (ECG). Comparison (Chi2 test) of the EDP rate in the IG, the CG and evaluation of its impact on the mean values of SBP and DBP with a linear model with mix effect. Comparison (Chi2 test) of the number of GPs practising EDP in the 3 groups.
Results: Mean BP values were 146/84 mm Hg in the IG, 138/81 in the CG and 143/82 in the ECG. Upon 7258 measurements, EDP at zero for SBP was 64.1% in the GT, 16.6% in the GI and 35.1% in the ECG (p <0.05). For DBP, EDB at zero was 65.5%, 16.7% and 39.8% respectively (p <0.05). Impact of EDP reduces the difference for SBP at baseline between IG and CG from 7 to 3.5 mm Hg (p <0.02) and for DBP from 3 to 1.7 mm Hg (ns). 29.6% of GPs practice EDP in the IG, 65.6% in the ECG and 93.5% in the CG using a conventional device (p <0.05).
Conclusion: GPs practice EDP even with an electronic devic.

OP-097

Courses for GPs with special qualities: a chance for general practice, a challenge for the GP?

Van der Jagt L. (Utrecht)

Aim and purpose: The Dutch College of General Practitioners, together with different Universities, organises courses (two years, one day a week) meant for experienced GP's who want to extend their capacity in a certain field. These 'GP's with special interests' (so called 'Gypsies') possess specific qualities, capabilities and skills on a specific field of general practice, for example diabetes. They play a role as counsellor, teacher/trainer and help managing quality projects, specially in their own geographical regions. In this way they contribute to the development of quality improvement e.g. by transferring actual, innovative and evidence based developments to the practice. At this moment there are ten (finished or ongoing) courses for GP's with special capabilities. They are united in expert groups, related to the various specific field.
Design and methods: In the presentation the following items will be presented: – Which are the surplus values, possibilities and problems of introducing these new professionals to current primary care? – How can the 'gypsy' contribute to quality management of his colleagues, and which are the necessary conditions? – How can the 'gypsy' be an allround GP while offering his special qualities to patient care and to the profession? – Is there a need for introduction of these professionals and courses in the countries of the participants?
Results: The participants have taken notice of the introduction and development of the GP with special capabilities.
Conclusions: The participants have pointed out the amount of surplus value of the 'gypsy' for their daily practice and for the development of the profession in their own situation and country.

OP-098

Listen to the music! Innovative method for teaching medical students: a humanistic approach of doctoring

Roncoletta A. (São Paulo), Janaudis M.A. (São Paulo), Blasco P.G. (São Paulo), De Benedetto M.A.C. (São Paulo), Moreto G. (São Paulo)

Purpose: The complex and current medical practice is challenged by a highly technical and rapidly changing environment which requires the professional to incorporate new technology while maintaining a caring humanistic approach with patients. However, such a balance dares students to maintain it and requires educators' help to be successful. Music is a universal language which is easily assimilated by young students. Teaching through arts is a common resource in medical education which provides insights into patients' experience and into the social, cultural, and historical context of medical practice as well. This study suggests that music can also be a tool to engage the interest of learners and facilitate discussion and reflection of important humanistic issues.
Design and methods: A qualitative approach was used with a group of fourteen medical students from Jundiai Medical School in São Paulo, Brazil. Themes were presented to the group and then illustrated playing relevant songs related to the main topics. An interactive discussion happened following the songs. Finally students wrote about the experience, data were collected and assembled based on the students' writing and observation of the group discussion.
Results: Teaching with songs influences quickly and directly students' affective domain and emotions. Exposure to music leads students to be reflective and emotionally open, which in turn helps to promote empathic attitudes, enrich professional values, and develops students as well-rounded human beings.
Conclusion: Music has several characteristics that facilitates humanistic training in medicine with the potential for enhancing caring and compassion in students. Medical educators can implement this innovative tool for teaching and to promote medical humanism.

OP-099

Developing a training of trainers programme in familiy medicine in Bosnia and Herzegovina

Bilic V. (Sarajevo), Nikolic R. (Doboj), Jacot V. (Geneva), Perone N. (Geneva), Fisekovic E. (Sarajevo)

Background: Family Medicine plays a central role in the reform the healthcare system in Bosnia and Hercegovina. Training of trainers (TOT) is a component of the Family Medicine (FAMI) Project. It is a practical and interactive basis course for training, facilitation and supervision.
Aim and methods: To show the development of TOT courses over 8 years in selected areas of BiH, and how competencies and responsibilities were handed over from foreign to local experts. The teaching methodology in TOT is based on adult learning principles. TOT trainers were selected among previously trained and motivated TOT participants who were willing to become trainers. The process was closely monitored during and after each session.
Results: In 2000 and 2001 there were no local trainers, and 6 Swiss trainers. In 2002, 2 local and 4 Swiss trainers delivered the course; in 2003, 8 and 6 respectively; in 2004 16 and 2; in 2005 and 2006, 16 and 1. From 2007, all trainers were local ones. TOT topics included communication skills, motivation, supervision vs. controlling, feedback techniques, learning styles, problem solving skills, group dynamics, managing conflicts, diagnosis and prevention of burnout. The transfer of competencies through practical collaborative work on contents, methodology and organisational issues increased the local team autonomy. In the 8 years, 275 health professionals completed the TOT course.
Conclusion: Today, 10 local trainers have the competencies to develop an entire TOT course. In the current health sector reform, and especially in family medicine, this has a potential for Continuing Professional Development that consists of both learning and teaching components.

OP-100

Having fun with role plays – an effective tool for teaching communication skills

Koppe H. (Lennox Head)

Teaching effective communication skills is an integral part of training for family medicine. Role plays can assist with this process. However, many trainees and some trainers are uncomfortable with this teaching method. This presentation will outline effective role play techniques developed and used by the medical education team at North Coast GP Training in Australia. These techniques include "replay", "fast forward", "role reversal", "hidden thoughts", "good cop, bad cop", "the truth game" and other fun activities. The paper will present an outline of these activities, how can are used, as well as the theoretical basis for these techniques. Participants will leave the session with new skills which they will readily be able to integrate into their teaching practice. Most importantly, the presentation is designed to bring joy into the teaching life of the participants.

OP-101

Biological vs. biopsychosocial modelling to teach students to do patient interviews

Spiegel W. (Vienna), Yaman H. (Antalya), Parhar G. (Vancouver)

Holistic modelling is a core competence in GP/FM (European Definition of GP/FM). It includes the ".. ability to use a bio-psycho-social model taking into account cultural and existential dimensions. The position of the biopsychosocial model (BPSM) was spelt out most clearly by G. Engel (1977). For GP/FM the approach to an integration of behavioral science and clinical medicine has been introduced in the early 70ties by I.R.McWhinney (1972). The theoretical context of the

latter is a holistic understanding of the illness (not disease) as a biopsychosocial process which gives equal importance to biological, psychological and social determinants for pathogeneses, diagnoses and therapy. The "EURACT Educational Agenda", which focuses on how to teach and assess the core competencies of GP/FM (www.euract.org), suggests the "simulated patient" as specific the learning methods for holistic modelling. However, the BPSM has repeatedly been said to merely constitute a theoretical framework which offers little help in patient care. Learning objective: understand that interview outcomes depend on the interview style; to apply the BPSM. Educational intervention: At the University of British Columbia one of us (G.P.) and his colleagues have successfully introduced a new approach to teach their students the practical application of the BPSM using "actors patients". Actor patients' answers to students' questions are based on scripts modelled to real patients. Students do the interview using their interview skills which are mainly based on the biological model. Then there is a seminary on how to apply the BPSM. Then students interview their patients again – this time using the newly learned strategies to enlighten the patient's psychosocial context. Conclusion: Students learn that – as in "real world" medicine – the interview outcome (diagnostic construct; measures to be taken, etc.) varies considerably depending on the interview-style and model used.

OP-102

Problem based learning and tutoring in family medicine education

Karatas I. (Yozgat), Karaoglu N. (Konya)

Aim: The General Medical Council, in its document 'Good Medical Practice', advises all doctors to contribute to teaching and those doctors involved in teaching to adopt the skills, attitudes and practices of a good teacher. In-deed, the word doctor comes from the Latin word 'docere' which means 'to teach'. 'What makes a good clinical teacher in medicine?' The aim of this oral presentation is then to present problem based learning (PBL) as a strategy for family medicine educators to answer the stated question with the challenges and best practices of associated tutoring.
Materieals/methods: Using an extensive literature review on, the history and the significance of PBL in family medicine education, effective factors in tutoring will be presented.
Results: Medical education is emphasizing integrated teaching together with PBL, community-based learning and student-centered learning. The emergence of learner-centered approaches in medical education's partly in response to the tremendous growth of knowledge in medicine. PBL as an active learning strategy enables the learners to develop critical thinking skills in response to challenges based on clinical case scenarios. It's the responsibility of the PBL tutor to facilitate this process of active learning and foster the habits of continuing education. A tutor may be described as a teacher instructing specific educational subjects and skills one-on-one. We believe this to be the most important part in family medicine education. However, chancing the teaching style, adapting the role of tutoring and knowing the strategies of facilitating the learners are the challenges of tutoring.
Conclusion: The roles of the teacher in family medicine are determined as learning facilitators, assessors of student aptitude, curriculum planners and resource developers. All of these are also components of effective PBL tutoring.

OP-103

Chronic illness care and learning in primary care teams

Lanham H. (Austin), Jordan M. (Austin), Noel P. (San Antonio), Arar N. (San Antonio)

Aims and Purpose: Efforts to improve chronic illness care in primary care settings have been hindered by an over-reliance on knowledge and actions of individuals and under-recognition of the crucial role of teams as a complex adaptive system: individuals who learn, inter-relate, self-organize, and co-evolve with their environments, creating uncertainty. Individuals cope with uncertainty by forming relationships that promote learning. We examine the relationship between learning in primary care teams and chronic illness care.
Design and Methods: A survey of clinicians and staff in primary care clinics containing the Assessment of Chronic Illness Care (ACIC) survey and a learning survey. The ACIC measures components associated with quality and outcomes of care. The 22 question learning survey was developed by our team to measure learning within small health care teams. Examples of questions include: "I learn how to do things in this clinic by sharing knowledge with team members," and "I learn a lot about how to do my job by talking with other people in this clinic."
Results: 142 surveys have been collected in 22 clinics. Final results will be presented at the meeting. The learning score was significantly associated with the total ACIC score ($r = 0.43$, $p < .001$) and with all 6 components of the CCM especially organizational support and delivery system design. A principal component factor analysis revealed no overlap between learning items and ACIC items.
Conclusions: Primary care teams with high levels of team learning are more likely to deliver care consistent with the CCM. This may reflect the ability of a team to learn and adapt to patient needs leading to higher CCM scores. From a CAS perspective, emphasizing team-level construction of meaning within a local context may help primary care teams cope with uncertainty as they strive to meet the needs of the patients with chronic illnesses.

OP-104

Reliability and validity of a Thai version of assessment of chronic illness care (ACIC)

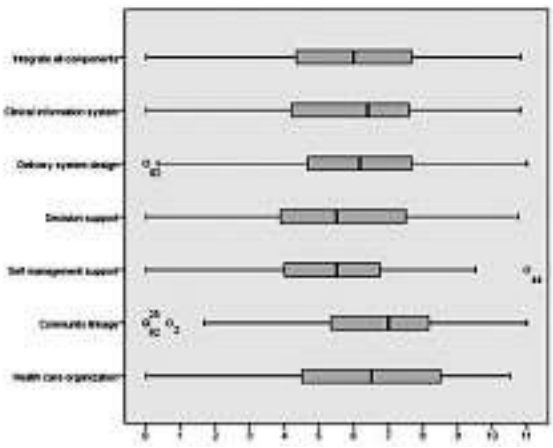
Patama G. (Chiang Mai), Apinun A. (Chiang Mai), Yaowapa S. (Chiang Mai), Worapot S. (Chiang Mai), Siam C. (Chiang Mai), Dusida T. (Lumpang), Pokin S. (Lumphun)

Background: The Assessment Chronic Illness Care (ACIC), developed in the United States, is a quality-improvement tool used help organization evaluate the strengths and weaknesses of their delivery of care for chronic illness in six areas: community linkages, self management support, decision support, delivery system design, information systems, and organization of care. These areas of care are influenced by the Chronic Care Model. The questionnaire scale ranges from 0–11.
Objective: To translate and validate a Thai language version of the ACIC as a practical tool to measure the quality of chronic illness care in Thailand.
Material and Method: Cross-sectional study: the content validity was examined by public health experts. The original ACIC was translated into Thai with permission from The MacColl Institute for Healthcare Innovation. The translation process followed the World Health Organization (WHO) process of translation and adaptation of instruments, including forward translation, expert panel and synthesis of the translation, back translation, pre-testing and cognitive interviewing. The pre-testing was done by distributing the questionnaire to a sample of 12 organizations with cognitive interviewing, followed by revision and finalization of the questionnaire. The reliability and validity of the translated version was then examined by distributing the questionnaire to 172 organizations (84 district hospitals, 88 community health center primary care units within the upper northern part of Thailand) focusing on care of cerebrovascular disease.
Results: The response rate was approximately 70 percent. The results of the current study showed that the Thai version of ACIC achieved good levels of reliability and validity, with the range of Cronbach's alpha coefficients being 0.846–0.972 in each dimension of ACIC.
Conclusion: The Thai translation of the ACIC can be used as a reliable self-assessment instrument to evaluate the quality of chronic care in Thailand.

Table 3: Internal Reliability of ACIC's Thai Version

Made of item	Number of items	Inter-item Reliability Cronbach's Alpha	
		Cognitive Interview (N=12)	Mailed Questionnaires (N=120)
Health care organization	4	0.972	0.915
Community linkage and policies	3	0.846	0.856
Self management support	4	0.889	0.876
Decision support	4	0.889	0.864
Delivery system design	6	0.878	0.911
Clinical information system	5	0.921	0.905
Component integration	6	0.912	0.929

Figure 1: Median and Range of ACIC Scores of Overall



OP-105

New approach to primary care in Tuscany region Italy

Salvadori P. (Empoli), Leto A. (Florence), Scopetani E. (Florence), Simonti C. (Florence)

New approach to primary care in Tuscany Region Italy.
Aim: to demonstrate the new organization of primary care in Tuscany Region produces better healthcare and reduces costs.
Design: Tuscany region has developed a project to care for patients with chronic diseases through the chronic care model of Professor Wagner. Our region has a population of 3.2 million inhabitants. About 410,000 of them will be cared for through 41 structured units. Each of these units will be generally formed by 8 general practitioners, 4 nurses, 3 administrative personnel, 1 social worker, 1 family assistant. Our past experience has shown that such structures can reduce some parameters of management costs such as hospital bed admissions, pharmaceutical and specialist costs and increase the customers' satisfaction. We used t student and P for the statistical analysis.
Results: we compared the parameters of these frameworks with the other general practitioners who were working outside of these structures. In some of these frameworks, we had a decrease of hospital bed admissions (–5%) (P <0.05), pharmaceutical (–4%) and specialist (–1%) costs and an increase of patients satisfaction (+30%) (P <0.05).
Conclusions: Due to the positive results obtained in some of these structures, we have decided to extend and adjust these activities to the 41 units described in our design.

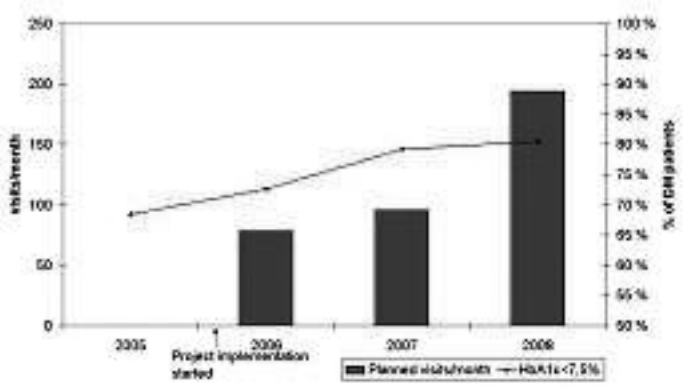
OP-106

Self-care management and planned multiprofessional care improve quality of care of chronic conditions

Saarelma O. (Espoo), Leppäkoski A.M. (Espoo), Lehtovuori T. (Espoo), Jaakkola A. (Espoo), Heinänen T. (Espoo)

Aims and purpose: To improve quality of the care of patients with chronic conditions (diabetes, asthma, blood pressure, arterial diseases) by supporting self management, redesign of care delivery system and use of joint electronic information system and decision support.
Design and Methods: The city of Espoo has 230 000 inhabitants, about 50% of whom use municipal medical care services. The care of patients with chronic conditions was reorganized using Edward Wagner's Chronic Care Model with emphasis on self management, team work and division of tasks between GPs and nurses, planned use of joint information system and electronic decision support. New working model was implemented in the whole city using joint workshops of GPs and nurses. Outcomes are followed by normal process and outcome measures (numbers of planned follow-up visits, HbA1c-levels), which also provide with basis for incentives.
Results: After beginning of implementation in 2006 the percentage of diabetics with HbA1c levels <7.5% has increased from the initial 68.5% in 2005 up to 80,6% in 2008. The number of planned structured follow-up visits of patient with one or several chronic conditions increased from 79 per month in 2006 to 300 per month in 2008. According to a survey for practitioners, 77% reported that the new model has been helpful in their work.
Conclusions: A systematic development of care of patients with chronic conditions is possible using Edward Wagner's Chronic Care Model. The implementation of the new model is feasible in a large medical care delivery organisation and it gives positive results even in short term.

Structured visits of DM patients/month and % of patients with HbA1c< 7,5%



OP-107

Complexity theory in organisational change as context and conceptual foundation for quality improvement in chronic disease care in general practice

Booth B. (Sydney)

Aims and purpose: The purpose of this study is to explore the theory that must underpin awareness that quality improvement involves change, particularly when seeking to improve the increasing burden of chronic illness care, where best practice models demand organisational change at global and local levels. It aims to examine the development of knowledge about organisational change, and to explore the contribution of the new complexity sciences to this understanding.
Design and methods: Health and business databases were searched for literature on organisational behaviour and change, with particular focus on complexity science. The results were reviewed to explore current understanding of organisational change and its empirical evidence base, and to identify key elements of complexity science that may provide new insights into organisational behaviour.
Results: There are many theories and approaches for managing change in organisations, often supported by little empirical evidence. Different images lie beneath key theories (for example, organisations as machines or organisms or cultures) and are based on world views derived from natural and social sciences, where new complexity sciences have recently evolved. Important elements of complexity include non-linear dynamics, networks of agents and relationships, co-evolution, edge-of-chaos, emergence and self-organisation. Complexity science appears in business literature as fad, as a new metaphor to enrich understanding, or more rarely as a source of analogy to challenge current management approaches.
Conclusions: Complexity sciences have added significant understanding in natural and social sciences and increasingly are seen to resonate with experience of organisational behaviour. While use as an image of organisation can enrich our understanding, important elements of complexity science offer challenging implications for organisational change and quality improvement efforts.

OP-108

How we understand organisational change in general practice for improved chronic disease care: are we dealing with an orderly machine or a complex and unpredictable system?

Booth B. (Sydney), Harris M. (Sydney), Zwar N. (Sydney)

Aims and purpose: This study explores the phenomenon of organisational change for improved chronic disease care in Australian general practice through two different lenses. The image of "organisation as machine" underpins many quality improvement methods in health care, but analogies from complexity science in organisational change literature offer new and challenging insights.
Design and Methods: Case study design was chosen to explore organisational change in its real-life context. A practice was purposively selected based on its reputation as innovator and quality leader. Data collection included direct observations, interviews and document review. Pattern matching logic was used to compare the nature of organisational change observed in the case with that predicted by the two different images of organisation.
Results: More than a decade ago, the practice was an early adopter of clinical audit and the principal doctors were highly motivated to improve their diabetes care. Their chronic illness care is now used as a model for other practices. However, change was difficult to achieve and neither orderly nor according to formal plan. A practice nurse and a business manager were catalysts for change, but both came to the practice by chance through personal relationships. Funding programs provided support but alone were insufficient to achieve change. Change was turbulent at times.
Conclusions: The practice initially used quality improvement methods based on a mechanistic view of organisation and performance, but the actual process of change resonated more with the understanding of change and transformation provided by new complexity sciences. It was less organised, took longer, and followed fewer predictable and measurable processes. This understanding provides radical challenges to how we plan and fund quality improvement activities in general practice.

OP-109

Transitions between care settings at end of life in the Netherlands: results from a nationwide study

Abarshi E. (Amsterdam), Echteld M. (Amsterdam), van den Block L. (Brussels), Donker G. (Utrecht), Deliens L. (Amsterdam), Onwuteaka-Philipsen B. (Amsterdam)

Background: Transitions between care settings at the end of life could hinder continuity of care for the terminally ill, suggesting a low quality of end-of-life care.
Objective: To examine the nature and prevalence of care setting transitions in the last 3 months of life in the Netherlands, and to identify potential characteristics associated with them.
Methods: Between January 2005 and December 2006, we performed a mortality follow-back study on all non-sudden deaths for patients aged >= 1 year. Data were collected via the Dutch Sentinel Network General Practitioners (GPs), an existing health surveillance network representative of all GPs in the Netherlands. A care setting transition was defined as a change in setting of care.Results. During the 2-year period we studied 690 patients whose deaths were "expected and non-sudden." In the last 3 months of life, 43 distinct care trajectories and 709 transitions were identified (involving a hospital 2 / 3 of times). The most frequent trajectory was home-hospital (48%). Forty-six percent experienced >= 1 transition in their last month of life. Being male, multi-morbidity, and absent GP-awareness of a patient's preferred place of death were associated with having a transition in the last 30 days; whereas being <= 85 years, having an infection and absent palliative-centred treatment goal were associated with terminal hospitalisation for >= 7 days.
Conclusion: Although majority of non-sudden deaths occur at home, transitions to hospitals are relatively frequent. To minimize unnecessary or unwanted transitions, timely recognition of the palliative phase of dying is important.

OP-110

GP awareness of preferred place of death and correlates of dying in a preferred place: a nationwide mortality follow-back study in the Netherlands

Abarshi E. (Amsterdam), Onwuteaka-Philipsen B. (Amsterdam), Donker G. (Utrecht), Echteld M. (Amsterdam), van den Block L. (Brussels), Deliens L. (Amsterdam)

Background: To improve the quality of end-of-life care, general practitioner (GP) awareness of where their patients prefer to die is important.
Objective: To examine GP awareness of patients' preferred place of death (POD), associated patient and care-related characteristics, and the congruence between preferred and actual POD in The Netherlands.
Methods: A mortality follow-back study was conducted between January 2005 and December 2006. Standardized registration forms were used to collect data on all non-sudden deaths (n = 637) via the Dutch Sentinel Network, a nationally representative network of general practices.
Results: Forty-six percent of patients had GPs who were not aware of their preferred POD. Of those whose GPs were aware, 88% had preferred to die in a private or care home, 10% in a hospice or palliative care unit and 2% in a hospital. GPs were informed by the patients themselves in 84% of cases. Having financial status 'above average', a life-prolongation or palliative care goal, and using specialist palliative care services were associated with higher GP-awareness odds. Four-fifth of patients with known preferred POD died there.
Conclusion: There is a potential for improving GP awareness of patients' preferred POD. Such awareness is enhanced when palliation is an active part of end-of-life care. The hospital is the POD least preferred by dying patients.

OP-111

Health care for general practitioners: an established model

Rochfort A. (Dublin)

Aims: General Practitioners (GPs), like patients, may experience acute or chronic illness. Medical training teaches doctors to manage illness in others; with little education on identification and managing illness in ourselves. Internationally, most services and supports for doctors focus on substance misuse problems and psychiatric disorders. Generalist based services focussing on the specific health needs of doctors, especially primary healthcare, are rare.
Design and Methods: A postal survey (n = 495) involving a needs assessment questionnaire, extensive consultation with experienced doctors and literature reviews helped to formulate the scope of services required to meet the needs of doctors as patients and to support doctors and other health professionals who treat doctors.
Results: We analysed the perceived health needs of GPs and confirmed their support for setting up a confidential healthcare service specifically for general practitioners and their families. The service structure includes two sections (a) a confidential health service provided by independent established doctors (GPs, psychiatrists and occupational physicians) and psychological therapists; (b) an education and information service responding to individual telephone & email queries, plus group-based educational activities for GPs, GPs in training and medical students. Both sections are utilised and feedback has been positive and constructive. The service continues to evolve.
Conclusions: Our findings show that GPs need customised structured healthcare for their own personal use. They also benefit from specific education and advice in managing their own personal health problems and those of colleagues in a way that is confidential and ethical. Promoting better health and healthcare for GP scan support them as they provide quality healthcare for their patients over many years while dealing with complexity and uncertainty.

OP-112

Attitudes to cervical and breast cancer screening: the views of patients. EUROPREVIEW patient study

Sghedoni D. (Italy)

Aims and purpose: To assess patients' beliefs and attitudes regarding screening for cervical and breast cancer.
Design and methods: International survey. At least 10 practices (clusters) were randomly selected from each of the 22 participating countries (stratum). 40 patients from each practice were included in the study – randomly selected on different days during 2008. The study questionnaire was translated into the original language of each country using a method of translation and back-translation. The questionnaire was self-administered with the supervision of an investigator. Data was recorded in a custom designed database using a code-protected webpage (www.europrevstudy.net) in order to assure data confidentiality.
Results: To date, 4895 questionnaires have been recorded, 51.71% (95%CI 49.34–54.08) women. Mean age (SD) was 50.39 (95%CI 49.82–50.95) years, 76.09% of patients were married and 58.85% were employed. 85.9% and 83.6% of women respectively answered that having a cervical smear test or a mammogram was important or very important. 79.57% and 74.54% of women respectively thought that the most appropriate frequency to screen for cervical and breast cancer was every year or every two years. 77.34% and 48.9% of women respectively had had a cervical smear test in the last 3 years and a mammogram in the last 2 years.
Conclusions: Most women are aware of the importance of screening for cervical and breast cancer although they think the screening should be performed with higher frequency than recommended by guidelines, especially in the case of cervical cancer. Although women think it is important to have mammograms every year or every two years, less than half of them have had a mammogram in the last 2 years, and 30.5% have never had one.

OP-113

Use of the morning-after pill among secondary schools students

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Aims and purpose: To determine the frequency of secondary schools women who had used postcoital hormonal contraception and determining predictive factors related to this phenomenon. Design and Methods: a randomized sample of students belonging to the three secondary public schools of Torre Pacheco downtown (South East of Spain) (n = 395) was included in the study. Data on emergency contraceptive use (dependent variable), sexual habits, believes an attitudes to sexual relationships, and sociodemographics characteristics were gathered by means of a self-administered questionnaire at School. Logistic regression performed as an enter model was used to estimate adjusted odds ratio by all the significant variables identified in the univariant analysis.
Results: Response rate was 97.9%. Approximately 1/5 of secondary schools students have had sexual intercourses. The likelihood was higher for boys (OR = 2.1; 95% CI: 1.2–3.6), teenagers with boyfriend/girlfriend (OR = 5.1; 95% CI: 3.0–8.3), Latinos versus Spaniards (OR = 2.9; 95% CI: 1.3–6.6) and older teenagers (OR per one year increased = 1,6; 95% CI: 1.3–2,1). In contrast was lower for Moroccans versus Spaniards (OR = 0.36; 95% CI: 0.14–0.92). Average age for the first sexual intercourse was similar for girls and boys (14,8 years; 95% CI: 14,6–15,1) and there were not differences among natives and Latinos or Moroccans immigrants' sons. One third of teenagers had any time sexual intercourse without using a condom and this was more frequent among boys (OR = 2.33 95% CI: 1.1–5.2). One fourth of girls with sexual intercourse experience declared that they had ever used emergency postcoital contraception. This

phenomenon was remarkably associated with previous consumption of alcohol or illegal drugs (OR = 3.5; 95% CI: 1.2–10.8).
Conclusions: Used of postcoital contraception is relatively high among teenagers in Spain. The main reason for needing this method is previous consumption of legal or illegal drugs.

OP-114

Health care and other threats against subjective health

Meland E. (Bergen), Breidablik H.J. (Førde), Lydersen S. (Trondheim)

Background: The suspicion that health care might jeopardise subjective health was first worded in the late 80-ies by Arthur Barsky. Self-rated health (SRH) is an important single-item subjective health variable. It is a predictor for later mortality, morbidity and health service attendance. Therefore, it is important to examine the factors that might deteriorate or improve SRH.
Methods: Analyses were based on 4-year longitudinal data from the Young-HUNT studies in Norway among adolescents aged 13–19 years. A total of 2800 students (81%) participated in the follow-up study, and 2399 of these were eligible for data analysis. Cross-tables for SRH at the start of the study (between 1995 and 1997) and 4 years later were used to estimate the stability over the period. Ordinal logistic regression analyses of SRH during 2000-01 were carried out, controlling for initial SRH, independent variables at the start of the study and changes in the same independent variables over 4 years as covariates.
Results: In 59% of the respondents, SRH remained unchanged through the 4-year observation period during adolescence. The self-assessed general well-being, health behaviour variables, being disabled in any way, and body dissatisfaction at the start of the study and the change of these predictors influenced SRH significantly during the 4-year observation. Adolescents with more health service contacts at the start of the study, or who increased their attendance rate during the 4 years, report deterioration of SRH.
Conclusion: SRH is a relatively stable construct, and deteriorates consistently with a lack of general well-being, disability, health-compromising behaviour and healthcare attendance. Barsky's health paradox hypothesis has empirical support.

OP-115

Anxiety and depression in family practice patients with co-morbidities

Ivetic V. (Spodnji Duplek), Klemenc-Ketis Z. (Topolscica), Novak-Glavac D. (Ljubljana), Kersnik J. (Kranjska Gora)

Aims and purpose: The aim of this study was to establish how often depression and anxiety are encountered by family practitioners and especially determine those risk groups where both disorders occur more often.
Design and methods: A total of 800 patients of both sexes, aged 18 to 90, were included in the sample. They were asked to fill out an anonymous Zung self-rating form, which besides anxiety and depression question included questions regarding age, sex, marital status, education, employment, as well as the presence of chronic pain and chronic somatic disease.
Results: 712 forms were returned (response rate 89%)). Analysis showed that 16.2% of general practice visitors have depressive disorders, while 11.4% have anxiety disorders. Women are twice as likely to develop depressive disorders, while anxiety is present in 13.2% women and 8.0% of men. Loss of spouse or partner, social hardship (poverty, unemployment) and low level of education increase the risk for the development of a mental disorder. Chronic pain increases the prevalence of anxiety and depression, with only 2.8% of patients without chronic pain having anxiety disorders, while 26.8% of subjects who rated their pain as 8 or more had anxiety disorders.
Conclusions: Patients with chronic somatic illnesses have twice the risk to develop depressive disorders, especially those with a pronounced debilitating, repeating, advancing and life-threatening somatic illness (myocardial infarction, stroke, cancer, rheumatic disease).

OP-116

The accuracy of the patient health questionnaire-9 to detect and measure severity of depression in high risk groups in primary care

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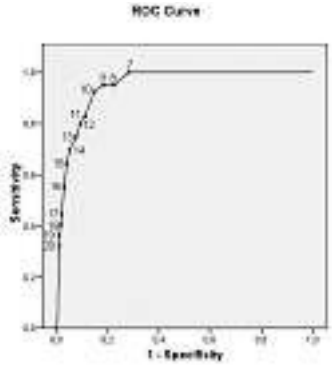
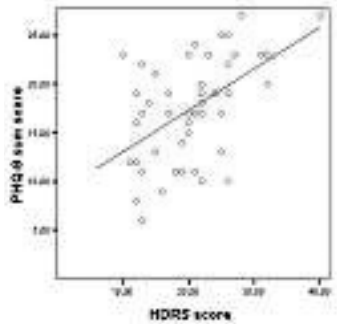
Purpose: In general practice only half of the patients with depressive disorder are detected by their family physician. Screening in high-risk groups might reduce this hidden morbidity. This study aims to determine the accuracy of the mood module of the Patient Health Questionnaire (PHQ-9) in (1) screening, (2) diagnosing and (3) measuring severity of depressive disorder in high-risk groups for depressive disorder in family practice.
Methods: We compared the performance of the PHQ-9 to the SCID I interview as reference standard. Three high risk groups of patients were selected from the practices of 23 family physicians: 1) frequent attenders, 2) patients with mental health problems, 3) patients with unexplained complaints. Patients completed the PHQ-9. Next, patients at risk for depression (based on the PHQ-scores) and a random sample of 20% of patients not at risk were selected for a second PHQ-9 and the reference standard (SCID I). We assessed the adequacy of the PHQ-9 as a severity measurement by comparing the summary scores of the PHQ-9 with the score of the Hamilton Depression Rating Scale (HDRS-17).
Results: Of 440 patients the PHQ-9 and SCID-I were analysed. Test characteristics for screening: sensitivity 0.93 and specificity 0.85 and for diagnosing: 0.68 respectively 0.95. The positive likelihood ratio for diagnosing was 14.2. The HDRS-17 was administered in 49 patients with depressive disorder. The Pearson correlation coefficient of the PHQ-9 to the HDRS-17 was r = .52 (p <0.01).
Conclusion: The PHQ-9 performs well as a screening instrument, but for diagnosing depressive disorder a formal diagnostic process following the PHQ-9 remains imperative. For measuring severity the PHQ-9 does not seem adequate.

ROC-curve of PHQ-9 with different cut off values



Scatterplot of the PHQ-9 related to the HDRS severity score



OP-117

Two or three screening questions for depression; does it work for patients with a physical complaint we follow-up in primary care?

Lombardo P. (Lausanne), Bischoff T. (Lausanne), Burnand B. (Lausanne), Favrat B. (Lausanne), Jaunin-Stalder N. (Lausanne), Mühlemann N. (Lausanne), Haftgoli N. (Lausanne), Vaucher P. (Lausanne), Verdon F. (Lausanne), Herzig L. (Lausanne)

Background: Detecting mental disorders is an important challenge in primary care. Depression can be screened by two validated questions. They are easier to use in primary care than the DSM-IV criteria. A third question (the "help" question) has recently been proposed and showed improved specificity without decreasing the sensitivity. Two or three screening questions have not yet been validated during follow-up.
Objectives: Validate the two screening questions for depression in a cohort of primary care patients with a physical complaint and validate the help question at one year follow-up.
Methods: This cohort study (SODA Study) conducted by 24 general practitioners (GPs) in Western Switzerland included patients over 18 yrs with at least one physical complaint. Depression was identified using the full PHQ, the self administrated PRIME-MD (DSM-IV diagnosis criteria) at baseline and at one year. GPs were asked to

screen patients for depression by the two screening question at baseline and with the three screening question at one year (including the "help" question.
Results: Among 937 included patients 835 (89.1%) were follow up at one year: Patients followed-up at one year showed a similar sensitivity (91.3%: CI95% 81.4;99.4) and specificity (65.0%: CI95% 61.2; 68.7) of the two screening question than at baseline (98.2% and 54.6%, respectively). Positive likelihood ratio was of 2.61 and negative likelihood ratio 0.13. Adding the "help" question decreased the sensitivity (59.4%) but improved the specificity (88.2%).
Conclusion: Depression can be detected in primary care patients with a physical complaint by the two screening questions. In our cohort the help question decreased the sensitivity but improved the specificity. The two screening questions are not only valid for initial screening, but also detect depression during follow-up.

OP-118

Psychosocial stressors and depression at one year in primary care patients with a physical complaint: a cohort study

Vaucher P. (Lausanne), Bischoff T. (Lausanne), Burnand B. (Lausanne), Favrat B. (Lausanne), Haftgoli N. (Lausanne), Jaunin-Stalder N. (Lausanne), Lombardo P. (Lausanne), Mühlemann N. (Lausanne), Verdon F. (Lausanne), Herzig L. (Lausanne)

Background: The role of psychosocial stressors in the occurrence of major depression is not well documented in primary care.
Objective: Estimate the strength of the association between psychosocial stressors and the presence of major depression one year later.
Methods: This cohort study (The SODA Study), conducted by 24 general practitioners in Western Switzerland, included non-depressed primary care patients with a physical complaint. Exposure to psychosocial stressors at baseline was assed using the Self Administrated PRIME-MD questionnaire (full PHQ). Stressors are defined as been bothered "a lot" by problems related to: health, body perception, sexual life, relationship with partner, stress at home or at work, financial situation, absence of support, bad recent or past events. Major depressive syndrome (DSM-IV) was identified at baseline and at one year follow-up also using the full PHQ. Odds of having major depression after one year of follow-up in patients exposed to no stressors (reference group), to one, two or three or more stressors at one year was adjusted for age, gender, perceived health, minor depression, anxiety, and multiple somatoform disorders (MSD; >2 symptoms) measured at baseline.
Results: Between November 2004 and July 2005, 918 patients were investigated at baseline. 116 were excluded for major depression. 635/802 non-depressive patients were follow-up at one year. Patients lost to follow-up were similar to those included except for age. 33/635 (5.2%) new cases of depression were observed at one year. Adjusting for confounders, odds of being depressed was 2.1 (CI95% 1.5;3.0) more important for every exposure to an additional stress factor (one, two, three or more vs. none).
Discussion: Primary care patients with a physical complaint exposed to psychosocial stressors are more at risk of developing depression at one year than patients with a lower level of, or no, stressors.

OP-119

Not all patients tell the doctor about their anxiousness of myocardial infarction

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Background: Patients with chest pain often see the family physician, convinced having a cardiac illness. Identification of anxiousness is necessary for a comprehensive assessment. The patient's estimation of his risk of myocardial infarction can be an indicator of his anxiousness. Therefore, we correlated the patient's risk estimation with his anxiousness. Additionally, we tested the risk estimation of patients with a high score of anxiousness, compared with those who claim to be anxious.
Methods: 143 patients in 14 Swiss general practices in St. Gallen, Appenzell, Zurich, Basel and Waadt estimated their own risk of myocardial infarction. Afterwards, the patients have been told their calculated risk. The extent of overestimation was compared with the score of anxiousness. The procedure was repeated 6 months later.
Results: The extent of risk overestimation correlates with the score of anxiousness. Patients, who claimed to be anxious overestimated their risk by 14.3% compared with patients, who said not to be anxious ($p = 0.001$). Patients overestimated their own risk by 30% on average. 35% of the patients, who claimed not to be anxious, had a high score of anxiousness. The extent of anxiousness was unchanged 6 months later. The decrease of overestimation of the risk was 7%.
Conclusion: The prevalence of anxiousness is high among patients in family practice. The high extent of risk overestimation is not surprising, because many patients with a high score of anxiousness claimed not to be anxious. The decrease of overestimation of the risk within 6 months is statistically significant, but marginal. This is because emotions influence the estimation of the risk more than knowledge of the previously calculated risk. The family physician has to take into account that patient's self estimation of the risk of myocardial infarction shows a better correlation to anxiousness than what they say about their anxiousness.

OP-120

Opening the black box: patient's priorities and doctor's interventions following a geriatric assessment in general practice

Theile G. (Hanover), Mueller C. (Hanover)

Aims: Geriatric assessments have been routinely used in clinical geriatrics for decades. In contrast, the benefit of such a systematic examination of elderly patients in general practice setting has not yet been proved. The purpose of this study is to identify patients' priorities concerning health problems uncovered through a geriatric assessment and to keep track of the consequent interventions.
Design and Methods: In this observational study 440 Patients aged 72 years and over are dynamically recruited in 44 general practices in Hanover and region. All patients are assessed by a study nurse in the practice. We use the STEP-instrument that has been developed in a European concerted project. Patients are asked to give a severity rating of every disclosed health problem at the time of the assessment and three months later. Doctors are asked to independently evaluate the relevance of these problems to them. Additionally, all interventions deriving from the assessment are documented. Longitudinal data analysis is expected to show if there is any benefit of interventions following an assessment concerning patients subjective health needs.
Results: In September we will be able to present first results of the descriptive statistics conducted within an interim analysis. These will disclose health problems which are usually important to patients on the one hand and those which are tackled by the doctors on the other hand. Furthermore, the data will reveal the quantity and the nature of interventions following an assessment related to the health problems.
Conclusions: We assume that patients give higher severity rates to functional and social health problems than doctors. Nevertheless interventions on physical problems and diseases are expected to outnumber interventions on other problem areas.

P-121

Heartwatch: 3.5 year follow up of a secondary prevention programme in primary care in Ireland

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Aim and purpose: Heartwatch is a secondary prevention programme of coronary heart disease (CHD) in primary care in Ireland. The aim was to examine the effect of the Heartwatch programme on cardiovascular risk factors and treatments of patients with 3.5 years follow up.
Design & Methods: Prospective cohort study of patients with established CHD. Participating GPs recruited12,358 patients with established CHD (previous myocardial infarction, coronary intervention or coronary artery bypass surgery). Comparison of changes in risk factors and treatments at 1, 2, 3 and 3.5-year follow up from baseline were made using paired t test for continuous and McNemar's test for categorical data.
Results: Statistically significant changes in systolic blood pressure, diastolic blood pressure, total and LDL cholesterol and smoking status were seen at 1, 2, 3 and 3.5 years ($p < 0.0001$). Significantly greater proportions of patients were within the exercise target of >= 210 mins/week at each year of follow up. Changes in BMI were small but significant. There was no significant improvement in waist circumference. Increases in prescribing of statins and anti hypertensive medication was seen throughout follow up.
Conclusions: The Heartwatch programme has demonstrated significant sustained improvements in the major risk factors, particularly smoking, blood pressure and cholesterol, and treatments for CHD. Improvement in the area of weight reduction is proving a greater challenge.

OP-122

The post prandial glucose of diabetic patients as an independent factor of prognosis in strokes

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Aim: The hyperglycaemia is considered as a independent factor of prognosis of strokes and is related with increased mortality and morbility. With the present study we related the National Institutes of Heath Stroke Scale (Score 1–44) of those patients, with deferent levels of hyperglycaemia during hospitalisation and also with the previus glycaemic control.
Design and method: We studied 52 diabetic patients, (32 males and 20 females), with medium age 75.6 ± 6 (SD) years with stroke. In their neurological evaluation, (beginning – end of hospitalization, 3-months after hospitalization), we used the National Institutes of Health Stroke Scale (Score 1–41). We measured HbA1c and blood glucose the first day of hospitalisation and also the medium fasting and postprandial glucose and the medium peaks of blood glucose during hospitalization. For the analysis of our data we used t-test and logistic regression.
Results: The clinical improvement was only negatively related with the levels of postprandial glucose, (B = –0.135, p = 0.029). The improvement in the first three months after hospitalisation was also negatively related only with the levels of post prandial glucose, (B = 0.049, p <0.001). The patients that present improvement during hospitalisation did not show worsening after three months. The 39%, (9/23), of the patients that did not present improvement during hospitalization were improved after three months. This improvement was related with the levels of HbA1c, (B = –1.769, p = 0.04), with the glycaemia in the first day of hospitalisation, (B = –0.057, p = 0.029), and with the peak glycaemia, (B = –0.090, p = 0.063).
Conclusions: The good control of postprandial blood glucose during hospitalisation of patients with stroke seem to have a beneficial influence in the early and long term prognosis of those patients. Also the previous control of diabetes in primary care units was related with the long term prognosis of strokes.

OP-123

Cardiovascular health-check in Dutch general practice: opportunities and threats

Drenthen T. (Utrecht), Dijkstra R. (Utrecht), Goudswaard L. (Utrecht)

Aim: Patients increasingly demand health checks, and they are offered by different care providers and health institutions. However, these preventive health checks are mostly based on non proven strategies. In order to enable primary care to deal with this complex preventive task, The Dutch College of GPs and the National Association of GPs, together with three national health foundations (on diabetes, heart and renal disease) developed an evidence-based guideline on this topic. The first step is a screening questionnaire, which leads to a selection of patients into low, medium or high risk for cardiovascular and renal disease. Next, the low and medium risk group receive tailored patient information and lifestyle advice; the high-risk group gets the advice to attend the GP for a 'preventive consultation'. From May until December 2009 the prototype of the guideline will be implemented and evaluated in 16 general practices. Aims of this presentation are to present the content of the guideline, the preliminary results and experiences with the implementation in daily practice, and to exchange with the participants on the feasibility and effectiveness of preventive health checks in general practice. Content of the presentation: Brief introduction on preventive health checks;Presentation on the content of the guideline and of thepreliminary results of the pilot study.
Conclusion: General practitioners areable to carry out a preventive health check on cardiovasculair disease, diabetes and renal disease.

OP-124

Screening of peripheral arterial disease – an evidence-based review for primary care

Neves A.L. (Porto)

Introduction: Peripheral arterial disease (PAD) has a great impact in Primary Care practice – due to its high morbidity and mortality, but also to its importance as a marker of the presence of atherosclerosis in other vascular territories. The early diagnosis is fundamental because it allows the early implementation of an adequate treatment, and also because it predicts the probability of occurrence of other cardiovascular events. The aim of this work consists in the revision of the scientific evidence about the screening of PAD, namely the definition of the most adequate instrument of diagnosis and the target-population were it shall be used.
Methods: A systematic review has been performed in the medical databases MedLine/Pubmed, Cochrane Library, National Guideline Clearinghouse, Clinical Knowledge Summaries e evidence-based medicine sites, between 2000 e 2008, using the Mesh keywords "peripheral arterial disease", "screening" and "primary care". The inclusion criteria were the availability of the article and its relevance for the aim of the study. There have been included 4 randomized controlled trials, 3 systematic reviews and 3 clinical guidelines.
Results: Several clinical trials refer the ankle-brachial index (ABI) as a sensitive method of detection of PAD, in selected patients. Its use is recommended in: a) patients who refer pain provoked by exercise; b) patients aged between 50–69 years old, who have at least one cardiovascular risk factor and c) patients older than 70 years old (SORT B). In symptomatic patients whose ABI is normal, a new ITB measurement shall be performed after exercise (SORT A). Imagiological evaluation is not routinely recommended (SORT A).
Conclusions: According to the literature, screening of PAD is recommended in selected patients (SORT B). The ABI is an easy, non-invasive and economic technique, that is actually referred as the gold standard in the screening of PAD in the primary care setting.

OP-125

Prevalence of peripheral arterial disease in subjects with a moderate CVD risk, with no overt vascular diseases nor diabetes mellitus. The PANDORA survey – Belgium

Wautrecht J.C. (Brussels), Thoeng J. (Turnhout), Guillaume M. (Charleroi), Matthys A. (Brussels)

Background: Lower extremity peripheral arterial disease (PAD) is associated with high risk of fatal and nonfatal CVD complications, even in patients lacking symptoms. ACC-AHA Guidelines recommend that asymptomatic PAD patients should be identified by measurement of Ankle-Brachial Index (ABI). PAD remains under-recognised and detection of ABI is under-used in clinical practice.
Objectives: Primary objective was to assess the prevalence of lower extremity PAD through ABI measurement in subjects at moderate CVD risk, with no overt vascular diseases nor diabetes mellitus. Secondary objectives included assessing the prevalence and treatment of CVD risk factors, and characteristics of subjects and physicians determinants for PAD under-diagnosis. Methods. PANDORA Belgium is part of a non-interventional study conducted in 6 European countries. Selection of GPs was based on ABI measurement training according to ACC/AHA guidelines.
Results: 119 general practitioners (GPs) in Belgium recruited 1510 evaluable patients. The mean prevalence of asymptomatic PAD, defined as ABI =< 0.90, was 7% in Belgium, lowest prevalence found in the 6 countries (average 18%). Hypertension was present in 70%, 7% being untreated. Age, BMI, LDL, females, hypertension, treated dyslipidemia and smoking behaviour were found to be statistically significantly associated with asymptomatic PAD. 32% of the Belgian patients were treated with statins and those had a borderline non-significant 44% lower risk of asymptomatic PAD compared with patients not on statins (OR 0.56; 95%CI 0.30–1.05; p = 0.07).
Conclusions: Asymptomatic PAD in subjects without CVD but at moderate risk was less prevalent in Belgium than in the other countries, but was still significantly correlated with classical CVD risk factors, especially smoking, hypertension, lipid profile and age. It could be advisable to identify patients with such risk factors with an ABI measurement and treat them accordingly as high risk individuals.

OP-126

Prevalence of peripheral arterial disease in general population: final results of PERART study (phase I)

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Aims: Find out the prevalence of peripheral arterial disease(PAD) in general population.
Design & Methods: 28 Primary Health Centres of Barcelona and the area Barcelona metropolitan. Subjects: Random sample 3786 people of age >50 y, assigned to the Health Centres studied. Methods: Phase I: Descriptive, transversal cross-over study. Random simple sampling. Diagnosis criteria of PAD: ankle/arm index(AAI) <0.90, determined by portable Doppler (8 Mhz probe) performed by previously trained staff (primary variable).Secondary variables: gender, age, vascular risk factors, total Cholesterol, LDL-Cholesterol, HDL-Cholesterol, triglyceride and glycaemia. Phase II: morbid mortality associated to PAD.
Data analysis: Stata 9 statistical package/database (Acces). Quantitative variables will be compared with the Student's t test and analysis of variance (ANOVA) will be performed, using the

corresponding non parametric tests. Qualitative variables comparisons will be determined using the Chi squared test.
Results: 3786 studied subjects (53.9% women; middle age 64.86 (49-97). PAD prevalence 286, 7.6% (IC95%), 11.1% in men5.5.% in women, p <0.0005). Arterial calcification prevalence (AAI >1.4) 6.2%. PAD under diagnosis 81%. PAD prevalence is higher in current smokers (11.9%), than in former smokers (11.3%) or in never smokers (5.3%), p <0.0005. Vascular risk factors: 46.9% Hypertension, 48.3% de hyperlipidemia, 16.3% diabetes, BMI >30% 37.5%, abdominal obesity 58.4% and 7.3% smokers Vascular previous events:11%; stroke (2.6%), TIA (2.,3%), angina (4.6%) and myocardial infarction(3.7%). Atrial fibrillation 2.4% and LVH 3%.
Conclusions: Although PAD prevalence in our area is not higher than other Studies, we have a high level of under diagnosis of PAD. AAI is a simple test that can enable us to detect PAD in our patients, Knowledge of PAD prevalence in our population can let us optimize care resources available.

OP-127

Are the concepts of childhood fever different in German and Turkish mothers? Results of a qualitative study

Langer T. (Witten), Pfeifer M. (Witten), Schnepp W. (Witten), Ipsiroglu O. (Vancouver), Wilm S. (Witten)

Aim and Purpose: Cultural factors often play an important role in the way patients behave when they are ill. We studied the concepts of childhood fever in German and Turkish mothers living in Germany to gain a deeper understanding of their perception of fever, fears connected to it, strategies to treat it and factors leading to the use of professional services.
Design and Methods: We recruited 20 Turkish and German mothers following theoretical sampling criteria and interviewed them about their experience of childhood fever, their mother role, family context and life in Germany and Turkey, respectively. The questionnaire has been developed in a multidisciplinary group and tested in pilot-interviews. The mothers were interviewed in their homes by German and Turkish native speakers in the language they preferred. The verbatim transcripts are being analysed in a group that comprises multiple professions, German and Turkish cultural background and both sexes. We use a Grounded Theory methodology approach (Strauss & Corbin) for analysis.
Results: The core of all mothers' experiences is the concern for the child's wellbeing. German mothers show a stronger orientation towards metric values whereas some Turkish mothers rely more on their sensual perception. Higher educated mothers consider fever rather as sign of a "well-functioning" body whereas mothers with lower education consider it more as a "threat". An important finding is the role of the familiarly context as support for the mother or source of conflicts, respectively.
Conclusion: The mothers' accounts are consistent considering their individual perspective and circumstances. The cultural background is interrelated with educational status, economic situation and familiarly context and can hardly be isolated as an independent factor. From a clinical perspective it is therefore important to avoid cultural stereotyping and promote an individualistic approach to all patients.

OP-128

Quality of life in the elderly patients with hearing loss

Franco A. (Barcelona), Navarrete P. (Barcelona), Caballero M. (Barcelona)

Aim and purpose: Is a prospective study in which we study level in quality of life in patients with hearing loss studying, according to the cause that determines the loss and the period of evolution.
Design and methods: We choose sample of 150 older than 65 years randomly. They are all made an audiometry. We separate two groups: one with with normal hearing and another one with a disturbance. We observe the healthy group perform a test of quality of life validated and audiometry every six months at the reference hospital. The group presented alterations were made and appropriate treatment and is assessed by a validated test of quality of life. The variables we study are: 1. gender; 2. age; 3. othorhinolaryngologyc antecedents; 4. audiometry; 5. level of quality of life. The statistical analysis will be realized by SPSS.
Results: In this time we attended a total of 2419 patients with any problem related with hearing loss between 65 and 99 years old. Work in progress.
Conclusions: Patients with hearing loss have a better quality of life when we correct it. Healthy patients of the observational group, which detect early hearing loss and early intervention was performed, no significant changes to their quality of life. Detection and treatment of hearing loss occurs in the stability of quality of life.

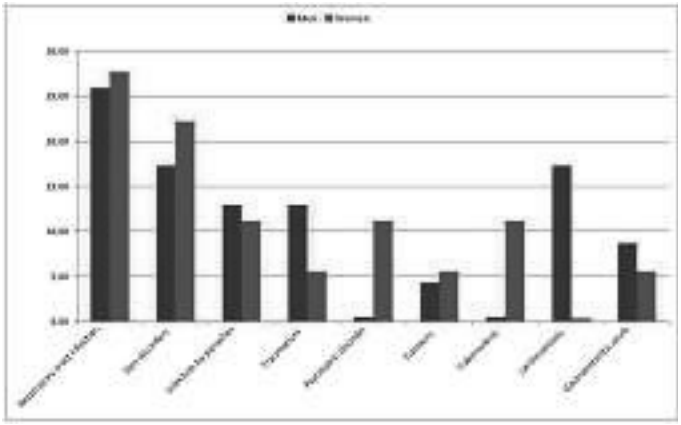
OP-129

Analysis of diseases in Cuzco

Barquero E. (Barcelona), Reig P. (Barcelona), Sans M. (Barcelona), Peguero E. (Barcelona), Moliner C. (Barcelona), Gardeñes L. (Barcelona), Parellada N. (Barcelona), Herrera A. (Barcelona)

Aims: Describe the most common diseases in a primary care practice in Cuzco, Peru during an external rotation of third-year GP (General Practitioner) training performed in August 2007. Summarize the treatments used and the prevalence of alternative medicine.
Design and methods: A descriptive study of rural population who consulted the emergency service for primary care in a city of 300,000 inhabitants located 4000 meters above sea level. Sample size: 41 patients. Information collected for each patient (8 items): date of assistance, personal details, distance to practice (in hours), reason for consultation, previous treatment (conventional or alternative medicine), evolution and post treatment. Inclusion criteria were patients who consulted the emergency service during August 2007.
Statistical analysis: data mining was performed with SPSS using univariate descriptive statistics and bivariate statistical test Chi-square.
Results: 49% out of 41 patients were male and 51% female. 29.3% were under 18 years. No patient over 67 years old was consulted. 53.7% of the population took longer than 5 hours to reach the practice. Most frequent reasons for consultation were abdominal pain (14.6%), skin lesions (14.6%), cough (12.2%), and diarrhea (9.8%). Diagnosis: 19.6% of respiratory tract infections, 17.1% skin disorders, 12.2% infection by parasites. Alternative medicine was used on the 17.1% of the cases and "mate" was the most prevalent (12.1%). Conventional medical treatment guidelines were anti-parasites (22%) and analgesics (26.8%).
Conclusions: Infections and parasites were the most frequent pathologies diagnosed in this young population. The practice was not easily accessible at all which made the treatment and the evolution control of the patients difficult. Pathologies are highly dependent on poor nutrition and high-altitudes related problems such as skin lesions. Contrary to the earlier belief, alternative medicine was not widely used.

Picture analysis diseases Cuzco



OP-130

Prognostic factors in joint complaints in the eldery

Damen J. (Rotterdam), Koes B. (Rotterdam), Pols H. (Rotterdam), Bierma-Zeinstra S. (Rotterdam)

Background: Joint complaints are common in the elderly, in the elderly the underlying disease is mostly osteoarthritis. There is little evidence concerning the long-term course of these joint complaints.
Objectives: We report long-term follow up of joint complaints in the elderly and assess the association of radiological and clinical characteristics with long term joint complaints.
Methods: In the Rotterdam study a prospective open cohort of 7983 participants of 55 years and older, partcipants were selected which had joint complaints in the hip, knee or hand joint. With logistic regression we assessed whether characteristics were univariately associated with long term pain. Studied determinants are: radiological OA Kellgren&Lawrence score >= 2, gender, age, body mass index (BMI), disability score's, morning stiffness, family history of osteoarthritis and medical consumption. Predictive values were also calculated.
Results: Joint complaints in the hip were reported by 12%, hand complaints by 16% and knee complaints by 18%. At follow up, 56% of the hip group reported joint complaints, 34% of the hand group, and 71% of the knee group. In all three joint groups, radiological present OA OR 2.2–3.1 was associated with long term joint complaints. As where morning stiffness OR 1.3–1.5 and disability indexes OR 1.4–2.3. Specialist consultation was associated with joint complaints in the hip OR 2.08. Age OR1.02, BMI OR 1.06, and usage of painkillers in the

last five years for joint complaints OR 1.82 were all associated with long term knee joint complaints.
Conclusions: This is one first studies in which the course of pain is studied. Our study emphasizes the massive and the long-term burden of joint complaints in the elderly. We have established characteristics associated with long term joint complaints. These findings are helpful to give primary care patients a prognosis of their complaints and to assess whether additional radiologic assessment is useful.

OP-131

Prevalence of Eosinophilia & Wuchereria bancrofti filariasis in Qatar

Kumar S. (Doha)

Introduction: Qatar has nearly 1.5 million population with high net migration rate (15.5 migrant/1,000 population). Foreign workers make up more than two-third of population. Most of the mare from South Asia, Egypt, Palestine, Jordan and Iran. Indians account for around 325,000 of population. Given the high migration rate, Qatar may experience epidemiological pattern transition. Among epidemiological pattern to be considered is eosinophilia, particularly those related to bancroftian filariasis.
Methodology: Survey on prevalence of eosinophilia & W bancroftian filariasis performed in 3 medical centers in Qatar. Laboratory data analysis of 1733 patients from South Eat Asia countries (India, Bangladesh, Pakistan, Sri Lanka, Philippine) were randomly retrieved from electronic data of patients, for 3 month period of visit during 2008. Data was analyzed by using statistical analysis.
Result: Of the data available 19.67% were found to have high eosinophil level, of those with high eosinophilia level, only were checked for blood smear. And from those checked with blood smear only 1 sample resulted in microfilaraemia for W. bancrofti. So survey revels that the prevalence of eosinophilia was 19.67% & prevalence of Wuchereria bancrofti was 0.29%.
Discussion: The prevalence of filariasis among South Asian workers in Qatar was far lower than those found in South Asian countries. There are some reasons for this. 1). Filariasis is arthropod – born disease. Since vector is not widely found in Qatar, the disease is not prevalent. 2). Most of the patients were not followed with blood smear examination, this make difficulty in establishing the definitive diagnosis in W bancrofti, given the fact that most patients with bancrofti filariais were asymptomatic. 3) Further serological test for filarial antigenaemia – TropBio ELISA test or the Binax ICT test was not done due to non availability (could be done for conformation)

OP-132

Infectious mononucleosis syndrome and its causes

Canak M. (Sabac), Mihailovic S. (Sabac), Boskovic L. (Sabac), Vujkovic B. (Sabac)

Introduction: Clinical picture of infectious mononucleosis is also characteristic of other pathological states. Therefore, it is referred to as a syndrome rather than a disease. The symptoms include lymphadenopathy, sore throat, splenomegaly, hepatomegaly, fever, haematological characteristics, and some other organ disorders.
Aim: The aim of this paper is to determine the frequency of individual causes of infection in the patients from our local medical centre.
Method: Retrospective analysis of medical documentation.
Results: In the last year, 52 patients with the symptoms of mononucleosis were admitted. The majority of them (82.7%) were under 25 years of age. Serological tests were conducted in all cases to determine potential causes of infection. Among these anti-EBV VCA IgM antibodies and anti-CMV IgM antibodies were detected using ELISA test; SVC was used to detect adenovirus. Paired serum samples were taken at the beginning of the second and in the third week of the disease. Only those samples with diagnostic seroconversion were considered positive. The causes of the disease were EBV in 44.2% of the cases, adenovirus in 13.5%, CMV in 15.4%, Toxoplasma gondii in 19.2%, while 7.7% remained undetermined.
Conclusion: A variety of causes and multitude of clinical manifestations, rare cases of complications and shorter or longer absences from school and work are some of the reasons why it is worthwhile conducting etiological differentiation of the patients suffering from infectious mononucleosis.

OP-133

Teaching medical students about chronic disease management through case study

Kljakovic M. (Canberra)

Aims(s) and purpose: To assist medical students experience and understand the complexity of management of patients with chronic diseases and the need for a team approach to care.
Design and Methods: The Australian National University Medical School GP teaching program requires that medical students undertake a chronic disease case study. They must identify a patient in their general practice who has a chronic disease, interview them and another household member, perform a medication review and visit a community service that the patient uses.
Results: The Chronic Disease assignment assists medical students to learn about the management of chronic illness in primary care; to explore the patient's perspective of their chronic illness and how it impacts on their life and family. They also learn the roles of the doctor, the practice nurse, allied health professionals, and other community organizations and gain a better understanding of the concept of Primary Health Care.
Conclusions: Chronic disease patients are common in general practice and medical students need to understand the complexities of their care. This assignment provides that experience.

OP-134

A course for history taking in the elderly patients in primary care in Samsun – Turkey

Dikici M.F. (Samsun)

Aim: Number of elderly patients in primary care is growing and dealing with them needs some skills. We have organized a course for history taking in the elderly for the third year students of Samsun Ondokuzmayis University, School of Medicine as a part of clinical skills education in the Department of Family Medicine since 2005. We aimed to present our teaching experience about history taking in the elderly.
Methods: That half-day course consists of a brain storming session, presentation, discussion, small-group teaching. Each student was provided with a checklist prepared according to the steps in history taking in the elderly. The small group teaching portion involves old patient scenarios conducted with the Standardized Patients (SP) in the mirror rooms. While a student has been taking history from the patient, the other students have watched him/her. By watching the records of his/her own interview, the student is provided on-time feed-back. Later, the other students and coach have provided feed-back after the interview. SPs acting elderly are the artists of the theater club of the university. A four station Objective Structured Clinical Examination (OSCE) has been taken for the students three months after the course, this year OSCE has not been taken yet. Each year approximately 180 students have taken that course. After the sessions, feed-backs have been taken with a questionnaire in Likert Scale and open ended area.
Results: Most of the students have found the course useful, scores are generally high. Regarding OSCE in 10 points, mean score was 7.67 ± 1.18 (5–10).
Conclusion: Dealing with an SP provides a better opportunity for the students to rehearse. We received positive feed-back regarding using SPs. Such courses for medical students are resource intensive, but are most likely necessary, if changes to communication behaviors are to be made.

OP-135

Tolerance of uncertainty in medicine among 5th year medical students

Nevalainen M. (Helsinki), Kuikka L. (Helsinki), Sjöberg L. (Helsinki), Salokekkilä P. (Helsinki), Torppa M. (Helsinki), Varonen H. (Helsinki), Eriksson J. (Helsinki), Pitkälä K. (Helsinki)

Aims: To assess the 5th year medical students' attitudes towards facing uncertainty as a doctor and its relationship to fear of making mistakes.
Design and Methods: A survey was performed among the 5th year medical students prior to their main course in General Practice in the Medical school at the University of Helsinki. Demographic variables and students' experiences of working as a doctor were inquired about. Their views about their tolerance of uncertainty in doctor's work, their fears of making mistakes and their views about a GP's work were asked about in the questionnaire.
Results: During the year 2008 165/190 medical students responded. Mean age of respondents was 25.5y, 65% were females. Their average experience as a doctor was 2.5 months. Of students, 24% judged that they had difficulties tolerating uncertainty, when making medical decisions. Of female students, 30% tolerated poorly uncertainty whereas the respective figure among males was 12% ($p = 0.002$). Those who tolerated uncertainty more poorly were also more often afraid of making mistakes (100% vs. 86%, $p < 0.001$). This group also considered the work of a GP more often than the others as too difficult and challenging (43% vs. 21%, $P = 0.004$). This group of students were somewhat younger than those tolerating uncertainty well ($p = 0.005$) and they had been working for a shorter period of time as a substitute doctor.
Conclusions: Those students who evaluated that they tolerated poorly uncertainty in medicine were also more prone to be afraid of making mistakes and considering the GP's work to be too challenging.

OP-136

Promoting family medicine among medical students in Brazil

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Propose: Brazilian's Schools have not obtained yet good outcomes in preparing young doctors for primary care. The academic set is somehow aside from the real world of family doctors and new strategies are needed for increasing students' interest. This project leaded by SOBRAMFA aims to expose medical students to the core values of family medicine using the "teaching while practicing" paradigm in which they learn to deal with the complexity that surrounds patients and families.
Methods: We develop those undergraduate programs Medical students are exposed to the discipline's values and practice, mainly in an elective clerkship: the Mini-Fellowship in Family Medicine (MF2 Program). Students experience Family Medicine by seeing patients under supervision in the range of practice settings. The Annual Academic International Family Medicine Meeting: Valuable environment for learning and enthusiastic people from many Brazilian medical schools and abroad exchange experiences. Monthly Meetings of the Family Medicine Committee in the Sao Paulo Medical Association a set where students and senior doctor share experiences. Humanities can be used as a way of developing the learners' core values and critical thinking skills. Humanities education, sessions using movie scenes and passages from opera as useful resources for evoking attitudes about daily behavior and values and stimulating self examination and disclosure of emotional responses.
Results: So far, over 3000 students from 30 different Brazilian medical schools have completed these programs. We expect in this workshop an interactive discussion with the audience about new paths to approach the complexity science in the medical schools.
Conclusion: Programs to promote to medical student interest Family Medicine's core values are useful for medical education, since they learn about dealing with complexity: understanding patients' environment and making the difference in their lives.

OP-137

Choosing for general practice is: sexy or not?

Peremans L. (Antwerp), Bastiaens H. (Antwerp), Remmen R. (Antwerp), Duchesnes C. (Liège), Ryssaert L. (Gent), Symons L. (Antwerp), van Royen P. (Antwerp)

Aims and purpose: Several reasons limit the attractiveness of General Practice. Intrinsic factors encompass gender, age, personality and personal preferences. Extrinsic factors include working conditions financing, mentors, stress. What are the reasons for choosing or not a career as general practitioner?
Methods: A qualitative study explored 40 interviews with 7th year medical students and was completed by a quantitative survey among all 7th year students at Belgian universities (= 768) to triangulate the results (response rate = 62.9%).
Results: About one third of students (141/483) wanted to become a GP, when starting medical education. The main reason was to help people. Non-GP students perceive the GP profession as having difficult working conditions, few intellectual challenges and a lot of routine tasks. All students perceive general practice as having less status, with a lower remuneration. In the perception of the profession of GP the strongest relationship (effect size = 0,400) can be found on the aspect of 'General Practice is a solitary profession' and specialty choice. GP oriented students do not seem to experience the profession as solitary (OR = 0.429 (95% CI [0,225–0,818]).Other aspects are variety of patients, possibilities to study in 'sub domains' and opportunities to do scientific research. Many students have few contacts and too late in the curriculum with general practice. Moreover, the negative perception of the GP specialty is influenced by negative values transmitted by the faculty and sometimes even by GP teachers. High quality clerkships are essential for students to choose for GP specialty.
Conclusion: The selection of students should target GP oriented students. Students should have early in the curriculum high quality and attractive lectures on general practice. GP clerkships in various primary care settings to reflect the wide scope of GP daily activities should be mandatory for all medical students.

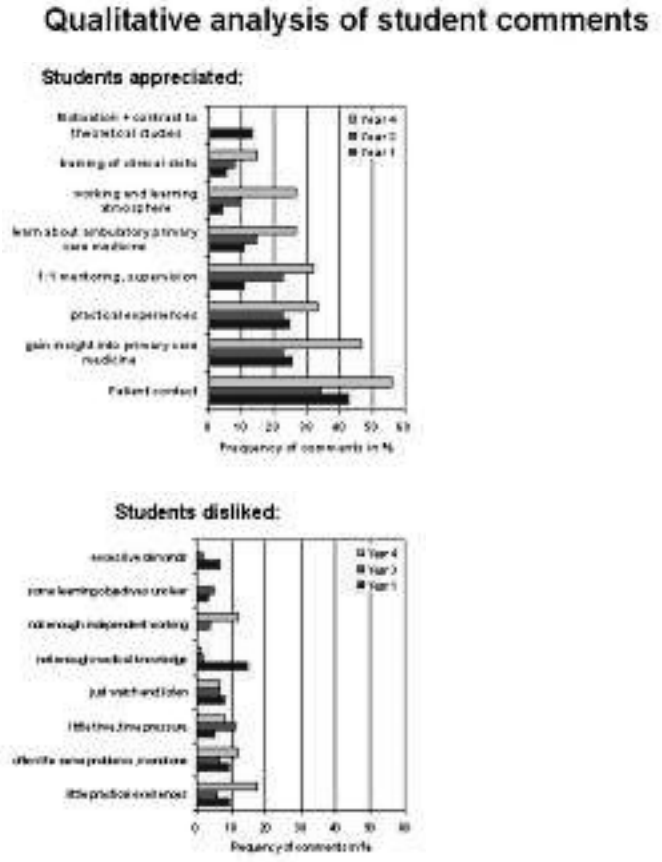
OP-138

How did medical students and their supervisors evaluate clerkships in ambulatory primary care?

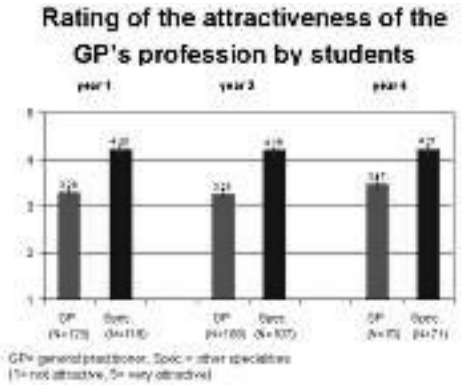
Trachsel S. (Berne), Schaufelberger M. (Berne), Feller S. (Berne), Guttormsen S. (Berne)

Aims and Purpose: The purpose of this study was to conduct a formative evaluation of new clerkships in ambulatory primary care for undergraduate medical students. In the first year of the implementation, 1st and 3rd year students completed eight half days in a general practitioners' (GP) office, 4th year students completed a three-week block. The objectives were to: – evaluate the feasibility of integrating students in the GP's work, – analyse the quality of teaching, – capture the benefits of early patient contacts and – study the attitude of students towards being a GP.
Design and Methods: Students filled in a baseline questionnaire addressing attitudes to medical career possibilities before they entered the programme (pre-test). Students and GPs filled in a second questionnaire one year after implementation of the clerkships (post-test). Quantitative and qualitative data were analysed.
Results: Students and GPs were highly satisfied with the new programme. The integration of students in the new learning environment of the GPs' offices was overall successful. Students appreciated patient contacts, the practical experiences in the field of primary care and the one to one mentoring. The rating of the attractiveness of the GPs' profession by students did not change in the short time of programme implementation. The GP's profession was rated significantly lower than other medical specialities. The students identified positive aspects but also several barriers for the choice of GP's profession.
Conclusions: The implementation of the programme is regarded as an improvement of the quality of medical education by students. It is valued by the GPs as an enrichment of professional life. Important aspects that led to the acceptance of the programme were identified. In the long-term, the influence of the continuous learning experiences of students in the field of primary care on their professional development will be followed up.

Students comments



Rating of attractivness of GP's profession by students



OP-139

The use of a multilingual poster as communication aid to address language barriers in general practice. Evaluation of a pilot project in county Galway, Ireland

Pieper H.O. (Galway), MacFarlane A. (Galway), Fhoghlu G.N. (Galway), Mulqueen J. (Galway), Kelly M. (Galway)

Aims and purpose: Language differences between patients with limited English proficiency (LEP) and their GPs are a serious barrier to health care access. Little is known about communication aids to address this. Our attention to the use of multilingual posters in healthcare settings in Spain was raised at a WONCA conference in 2006. We developed this poster further and adapted it to the Irish context. The purpose of this study is to describe the evaluation of a pilot project.
Methods and Design: The multilingual poster was distributed to 131 GPs in County Galway in April 2008. Recipients were sent a short evaluation questionnaire, generated by the research team, in July, and a reminder in August. Participants were asked if they had displayed the poster in their surgery, and to rate 12 categories describing the applicability on a rating scale from 1 (not good) to 5 (very good) and their preference of alternative formats, such as poster, booklet or a combination of both. An open-ended question was included allowing respondents to make additional comments. Data were analyzed using SPSS.
Results: Response rate was 60/131 (46%). 43 GPs (72%) had displayed the poster in their surgeries. The median value for the category 'overall idea' was 5. The median value for 'relevance to practice', 'choice of languages', 'content', 'clarity', 'ease of use', 'design', 'useful tool to overcome minor language barrier', 'facilitates communication with patients with LEP' and 'size' was 4. The median value for 'appears to contribute to making patients feel welcome in surgery' was 3. 20 GPs preferred a 'Poster', 16 GPs a 'Booklet' and 15 GPs 'Poster and booklet'.
Discussion: The multilingual poster was very well received by the majority of GPs who participated in the survey. In light of its positive evaluation the poster was distributed nationally in December 2008.

OP-140

Increasing patient visit time: lessons from a suburban community-based practice

Pine D. (St. Louis Park)

Family physician satisfaction is critical because of the shortage of primary care clinicians in the USA. My experience over the past 14 years is that patient and physician satisfaction is related to patient visit time. I am a practicing family physician in a suburb in the same practice for 34 years. The office is part of a large multi-specialty medical practice. In 1994 I changed my practice and began to schedule longer visits for patients needing more time. Visits can be from 15 to 60 minutes depending on the problems to be addressed. This was a risky new strategy, and a number of strategies were instituted to support this change and cushion the expected decline in compensation. I instituted visit planning before the visit, and routinely conduct a discussion about the agenda at the start of each visit. The new approach includes extensive use of support staff and speech recognition software. It has been critical to limit the number of new patients because the patients with complex problems are seeking physicians who are willing to allow longer visits. As expected the visits are now more comprehensive and patient satisfaction is improved. Two case histories of multi-problem patients are discussed. My relationship with patients and my overall satisfaction with my practice are greatly improved. My income from medical practice (compared to family physicians in the same institution) has declined slightly. Recent new laws that promote charging for care coordination may facilitate higher charges.

OP-141

Reduction of missed appointments at a primary care clinic: a randomised controlled study

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Background: Missed appointments are known to interfere with appropriate care of acute and chronic health conditions and to misspend medical and administrative resources. The aim of our study was to test the effectiveness of an intervention reminding patients of their upcoming appointment.
Method: We conducted a randomised controlled study in a primary care clinic at the Geneva University Hospitals. During 3 months, all patients booked in the clinic were randomly assigned to either receive a reminder 48 hrs prior to the appointment or were submitted to routine booking. The reminder consisted of the following sequential intervention: 1. phone call reminder; 2. if no available phone number or response: a SMS reminder; 3. if no available cell phone number: a postal reminder.
Results: 2123 patients were included: 1052 in the intervention group, 1071 in the control group. The intervention reduced the rate of missed appointments in a statistically significant way (7.8% vs 11.4%, $p < 0.005$) and allowed to rebook 54 additional appointments. Thus it proved cost-effective by providing a total benefit of 1200.– EUR (after deduction of the additional secretary's salary). A satisfaction survey conducted on a sample of patients showed that 93% patients were not bothered by the reminder and 78% considered it to be useful. A multivariate analysis linked missed appointments to the following characteristics: younger age (OR per additional decade 0.82; CI 0.71–0.94), male gender (OR 1.72; CI 1.18-2.50), follow-up >1 year (OR 2.2; CI: 1.15–4.2), being an asylum seeker (OR 2.73: CI 1.22–6.09) and substance abuse (2.09, CI 1.21–3.61).
Conclusion: A practical reminder system increased patient attendance and allowed to reallocate 28% of cancelled appointments for new consultations. A focused intervention based on specific patient characteristics could further increase the effectiveness of this reminder.

OP-142

Accessibility by phone of general practice; ways to work on improvement

Spelberg B. (Utrecht), van den Broek S. (Utrecht)

Patient satisfaction research in the Dutch population shows that the majority of patients are satisfied with the quality of their general practitioner on the whole. However if you ask them to name fields of improvement, most of patients will mention the accessibility by phone of the doctor's practice. Recent research in the Dutch population by the Dutch Ministry of Health has shown that in 25–40% the accessibility of the practice is unsatisfactory. The Dutch College of General Practitioners developed a Guideline on Accessibility by Phone. A special postgraduate education course helps the general practioner to determine different ways and means to improve the accessibility. This oral presentation gives the participants insight in the Dutch Guideline on Accessibilty by Phone and how educational program helps the individual general practitioners to implement the guideline in their own practice.
Bas Spelberg, Dutch College of General Practitioners

OP-143

The theoretical process of the web triangulation concept: a grounded theory analysis of the internet-based physician-patient relationship

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Background: an increasing number of patients use the Internet search for health information.
Objective: this study aimed to advance the understanding and to describe the distinctive characteristics of the impact of an Internet search on the patient-practitioner relationship, from physician's perspectives.
Method: 17 face to face interviews were conducted with General practitioners (GPs). The data were analysed using a qualitative method: the Glaserian approach of the grounded theory.
Results: a core category, the Web Triangulation, was discovered, conceptualized and integrated into a theoretical process, which explains its causes, contexts, consequences, covariance and conditions. The Direct Web Triangulation conceptualizes the relation that rises between the physician and his patient when an Internet search is conducted during the encounter. The Indirect Web Triangulation conceptualizes the relation that rises between the physician and his patient when the patient introduces Internet-based health information, the physician not being connected to the Internet. This new kind of relationship presents some distinctive characteristics compared with the traditional clinical encounter: the acceptance, implication, understanding by the patient of the way the GP works is higher, enhancing shared decision-making; GPs are mentioning a new interpretative role; the quality and volume of this dialogue's flow is higher compared to a traditional encounter. Some GPs are using the Web Triangulation to enhance the confidence of the patient in their way of practicing, being able to introduce a "superior authority". This new relationship was identified as a performance factor.
Conclusion: GPs have to be aware of the Web Triangulation concept, in order to enhance their skills to manage some patients, particularly "proconsumers", and to train for the inherent possibility of optimisation of the performance factor offered by the Web Triangulation concept.

OP-144

Is this family practice youth-friendly? Validation of a research tool to assess youth-friendliness in primary care

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Aim: WHO has called for the wider development of youth-friendly primary care practices, characterized by the principles of availability, accessibility, acceptability, appropriateness and equity. Research in this area is hampered by the lack of adequate tools to measure the extent to which practices have youth-friendly characteristics. The aim of this project was to develop and validate health-provider and adolescent patient questionnaires to provide a quantitative assessment of the youth-friendliness of family medicine practices in Bosnia & Herzegovina (B&H).
Method: An international group of experts modified the existing qualitative instrument developed by WHO, defining new questions adapted for primary care. Questions with the highest face validity were retained, translated into the language of B&H by two independent translators, then back translated into English by a third translator for quality control. Pre-tests of the questionnaires were run with adolescent patients and health care providers of a family practice in B&H, and the questionnaires amended according to their feedback. The stability and construct validation were then conducted in 6 different health care services. Independent trained nurses conducted face-to-face interviews with 60 young people and 20 health care providers, ensuring confidentiality and obtaining their informed consent. Statistical data was collected and the services were ranked by external observers.
Results: A 100-item tool which young people aged 15 to 24, as well as a 150-item instrument which family medicine doctors and nurses can complete in approximately 25 minutes to assess the extent to which a family practice is accessible, adequate, acceptable, appropriate and equitable for young people.
Conclusion: This instrument will be used in a randomized trial of the development of youth friendly health services in B&H. Validations in English and French are already planned for wider use of this tool in the future.

OP-145

Hypertensive crisis in primary care

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GPs are often confronted with patients with acute severely elevated blood pressure values. Many of these patients are managed without hospital admission. Exact primary care data on hypertensive crisis are missing, particularly data on symptomless severe hypertension. We collected data prospectively and directly from GP practices. We report on the 113 first unselected GP patients with office BP >180 systolic or 110 mm Hg diastolic. We protocolled their personal, diagnostic and treatment data at baseline and during 3 month follow-up. At baseline, they were categorized in three groups, emergency, urgency and symptomless severe BP elevation. Median baseline systolic BP was 198 (145–255) mm Hg. Median age was 73 (21–98) years, 43 were male and 70 (62%) female. 41.5% did not need acute drug treatment, 55% received correct drug treatment, and 3.5% had too rapidly acting drugs (sublingual nitroglycerine or nifedipine 10 mg caps). As many as 75 patients (66%) had symptomless BP severe elevation, 10 (9%) had emercency and 28 (25%) urgency hypertensive crisis. In a subanalysis of 75 patients, those with emergency crisis were more likely to have diabetes mellitus, obesity and CHD than patients with urgency and symptomless severe BP elevation, but differences were still not significant. Smoking status, drug adherence, physical activity were not different between the 3 categories. 7 patients (6 emergency, 1 urgency) were hospitalized, the remaining 106 were treated safely in the GP office. 6 of 74 follow up patients (8%) had cardiovascular events within 3 months. In conclusion, many patients with BP values that fulfill the criteria of hypertensive crisis have symptomless BP elevation with safe outpatient management and good outcome.

OP-146

The hypertension cohort Hc.cH: results of 2-year follow-up. Comparison of office, home and 24-hour ambulatory blood pressure measurement.

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Background and Methods: In GP practice the prevalence of arterial hypertension is about 50%. Office blood pressure measurement (OBPM) is the standard method. In addition, home blood pressure (HBPM) measurement is established. The new European hypertension guidelines now recommend wider use of 24-hour ambulatory blood pressure measurement (ABPM). We report the OBPM, HBPM and ABPM values obtained by 40 GPs in 463 hypertensive patients of our GP hypertension cohort at baseline and of 211 and 101 hypertensives after one- and two-year follow-up.
Results: All 463 patients are 63 years old, 57% male, 18% diabetics, 17% smokers and 10% with history of CHD. Mean blood pressure in hypertensives without diabetes mellitus (n = 379) in OBPM, HBPM and ABPM is 148 ± 17/87 ± 11, 138 ± 17/84 ± 11, and 140 ± 16/85 ± 11 mm Hg, respectively. After one year follow-up, values are 140 ± 16/84 ± 10, 132 ± 10/79 ± 9 and 136 ± 21/80 ± 10 mm Hg. In diabetic hypertensives (n = 83) baseline OBPM, HBPM and ABPM mean BP values are 152 ± 20/84 ± 12, 140 ± 15/77 ± 9 and 137 ± 15/81 ± 13 mmHg, and decrease to 145 ± 18/82 ± 14, 128 ± 9/80 ± 6 and 133/81 mm Hg after one year. OBPM values at 2-year follow-up are 141 ± 16/83 ± 10 in non-diabetics, and 139 ± 5/80 ± 11 in diabetic hypertensives. For HBP, ABP follow-up calculations there are not enough values.
Conclusion: In our GP patients with hypertension BP values are about 4 to 8 mmHg lower after one year (independent from treatment status at baseline) compared to baseline, suggesting a positive influence by special attention to patients and their data. HBPM and ABPM are similar and are consistently and significantly lower than OBPM values. Systolic BP control in diabetic and non-diabetic hypertensive patients is suboptimal, in line with evidence from other larger European populations. Our data still have to be interpreted with caution since the number is small, and due to a possible though little selection bias.

OP-147

Long-term effect of betablockers on all-cause mortality in patients with diabetes mellitus: a non-experimental study

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Renin-Angiotensin System blockers seem to be the preferred drugs to reduce cardiovascular mortality in patients with diabetes mellitus.
Aim: To assess the effect of ⊠-blockers on all-cause mortality in patients with diabetes.
Methods: Data were obtained from the computerised medical records of 23 general practices in the Netherlands, with information about diagnoses, drug prescriptions, and comorbidities. We analysed patients aged >= 45 years, with a diagnosis of diabetes during the period 1996 to 2006. With multivariable Cox regression analysis we calculated adjusted hazard ratios (HRs) of all-cause mortality of β-blockers, after adjustment for age, gender, ischaemic heart disease, atrial fibrillation, heart failure, stroke, peripheral arterial disease, hypertension, smoking, and use of other cardiovascular drugs.
Results: In total, 2670 patients with a diagnosis of diabetes were included, with a mean follow-up period of 8.8 years. In total, 639 (23.9%) patients died. The mean age was 64.2 (SD 11.1) years. In total, 35.6% of the patients used cardio-selective and 10.2% non-selective β-blockers. Use of ACE-I and ARB was 45.4% and 12.1% respectively, while 22.7% used calcium channel blockers, 33.4% statins, and 17.9% aspirin. The adjusted HR of cardio-selective and non-selective β-blockers on mortality was 0.78 (95%CI 0.64–0.95) and 0.77 (0.59–1.01) respectively. The adjusted HR for ACE-I, ARBs, statins, aspirin, and calcium channel blockers were 1.02 (0.85–1.22), 0.69 (0.52–0.93), 0.64 (0.51–0.80), 0.59 (0.48–0.74), and 0.81 (0.66–0.99), respectively.
Conclusions: β-blockers seem to reduce all-cause mortality in patients with diabetes, after correction for multiple covariates. ARBs, statins, aspirin, and also calcium channel blockers do the same. However, ACE-inhibitors not. In our observational study residual confounding cannot be fully excluded and RCTs are needed to validate our findings.

OP-148

When it comes to diabetes, do we speak the same language?

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Objective: To asses the follow up of the immigrant population in the following years of diabetes mellitus (DM) debut.
Design and Method: Retrospective observational study.
Ambit: Center of Primary Care (CPC) in an urban area (Barcelona, Spain)
After the intervention of a cultural mediator we evaluated the adherence to the follow-up visits by nurses and family doctors according to the DM's protocol developed in CPC. We also evaluated the good control of DM and the presence of complications through reviewing the clinical history of 37 immigrants patients who developed DM two years early assessing the results from blood tests, hypertension and detections of micro- and macrovascular complications.

Results: 91.8% continues assigned to the CPC; 60% do not come to the follow-up visits mainly those coming from south-east Asia. Only 25% went to the ophthalmologist for the detection of retinopathy. Nearly 50% of those who come to the visits have dyslipemia and hypertension.
Conclusion: The immigrant diabetics mainly from south-east Asia don't carry out the recommended follow-ups due to low awareness of the disease. We believe this is due to culturals factors rather than because of the language barrier, given the interventions of a cultural mediator. This results in a worse control with less possibility of diagnosis of DM's complications. Prevalence of complications is similar in immigrant patients who do a proper follow-up in comparison to the native populations.

OP-149

Do we take care over our type 2 diabetes mellitus patient's medical records? Outcomes of the first audit-impact study stage: baseline patients status and quality of care level

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Several French studies showed a lack of quality concerning the type 2 diabetes mellitus (T2DM) follow-up management in primary care. The complete Audit-Impact study aims to appraise the efficiency of a quality of care improvement program. The first step of the study, presented here, evaluates the baseline quality of care level and the status of T2DM patients followed in primary care. Ninety general practitioners (GP) were randomized in a control or an intervention group. At the first step, a trainee assessed 15 T2DM patients' status and compared the follow-up quality with the recommendations. 622 patients were included (mean age 65.1 ± 11.7 y; men 52.3%). History and risk factors were completely filled out in only 30% of the patient charts. Feet examination was performed in appropriate time-limits among only 13% of the patients, electrocardiogram among 46%, urine albumin among 50%, lipoproteins among 62%. HBA1c was measured in the last 4 months in 59% of the patients. Among the available data, the recommended medical targets were not reached by 66% of the population for HBAC1, 44% for systolic blood pressure, 52% for LDLc, 12% for tobacco and 83% for BMI. On average, three targets remained to be reached by each patient without significant difference between genders or between intervention and control groups. Like other studies, the first step of "Audit-impact" highlights a lack of quality in filling out the T2DM patient charts and in the follow-up management especially for feet, heart and ophthalmologic examinations usually not performed in the appropriate time-limits.

OP-150

Problems connected with the acceptance of diabetes by children and teenagers

Sawicka J. (Lodz), Matyjaszczyk M. (Lodz)

Background: Diabetes mellitus (DM) is one of the major threats to human health in the 21st century. It should be noted that children require specific methods of care due to their needs and characteristics of their age. The purpose of this study was to investigate possible obstacles in the treatment of children and teenagers with DM. The aim was to find out the major problems concerning the treatment of young patients and to observe why and when they appear.
Methods: Twenty diabetic children aged from 5 to 20 years were questioned. The open-question questionnaire was used. The patients were asked about their major problem connected with the acceptance of diabetes "their knowledge on the treatment of this disease" and their acceptance among their classmates. Additionally, the similar questionnaire was conducted among their parents.
Results: The study revealed that the main causes of the lack of acceptance of diabetes among children were the mistakes connected with insulin injections. Medical nutrition therapy plays a major role in the management of diabetes. Nevertheless, it is often one of the most difficult aspects of treatment. The interview demonstrated that parental involvement concerning diabetes is necessary in the childhood of their children. However after that period, children want to provide themselves their own diabetes management. The study showed that those children who took part in the seminars for diabetic patients, had less problems. Those children tried to live like their healthy friends.
Conclusions: The study showed that the multiple-dose insulin therapy used from the very beginning of diabetes, and an appropriate self-control alongside psycho-social support may limit the problem of difficulties in the acceptance of the disease. Moreover, the study proved that an appropriate education of a diabetic patient and his family, diabetic care and a close contact with support group may help with the acceptance of the disease.

OP-151

E-mail consultation in a Portuguese GP's clinical practice

Alexandra D. (Leiria), Navarro P. (Leiria)

Purpose: The GP is, by definition, accessible. Improving that accessibility is knowingly important. The new information technologies are a reality. In this context, e-mail communication has been widely diffused. If used properly, it may facilitate doctor-patient interaction, improve access to healthcare, save time and possibly reduce health costs. However, we still need to tackle some clinical, financial, legal and ethical issues of this kind of communication. The authors wish to share how e-mail has been used in their clinical practice and discuss the possibility of its generalized use in General Practice, particularly in Portugal.
Aims: – To determine the percentage of e-mail contacts during one year; – To identify the motives for e-mail consultation during one year.
Design and Methods: This is a cross-sectional study using electronic medical records and e-mail inbox as data sources. All consultations from March 1st 2007 to February 29th 2008 (twelve months) made by a GP from a Portuguese urban area were surveyed and divided into 3 groups: in-person visits, indirect contacts and e-mail consultations.
Results: During the period of study, there was a total of 4871 contacts. In-person visits accounted for 3894 (80%), 801 (16%) were indirect contacts and 176 (4%) were e-mail consultations. The motives for e-mail contact were: clinical queries (56%), bureaucratic issues (24%), discussion of medical exams (15%) and feedback from secondary health care consultations (5%).
Discussion: E-mail consultations represented a relevant part of this GP's clinical practice. However, to measure its true significance we need also consider phone consultations (not done in this study). Finding a way to correctly register and value this type of contact is of importance. Future research should include a national survey of e-mail use in clinical practice in Portugal and a satisfaction inquiry of both patients and doctors.

OP-152

Blogs: the most useful technologies for sharing information and communication for GP

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Aims and purpose: The important growing of the new technologies in the health spanish environment must be analyze by a professional view. The easy access and the ilimitated potential functions of this keywork force us to know it and use it for share information with our colleagues and patients.
Methods: Through a systematic review we will analyze the variability of e-health tools to find the most useful and easiest. Also, we collect the opinions from the GPs and quantify the populars one with a brief questionnary.
Results: We have identified many keywords in the e-health world, used by professionals and the whole population. But we must point out the important use of webs to make us reflect to the daily medical news or just for share experience of clinical cases. In this presentation, a scientific journalist bring us the possibility of realize that everybody can use the multimedia Tools, doing an example in a real time.
Conclusions: New technologies are the present, not the future of the communication in the health environment and we have to improve our knowledge to understand the new ways of being update, and able to limits this whole field depending of the users.

OP-153

Project general practice on the web

Sartori M. (Vicenza), Visentin G. (Dueville)

Aims and purpose: Very few GP's web sites are in Italy, and only a small number of them contain patients oriented health information. Patients' information provided by GP's web sites are often without indication of author, last update and sources. A dynamic website has been designed in order to offer a meeting point for GP webmasters and a free database to collect and share downloadable validated papers. The aim is to promote the development of scientific approach for web-health education in general medicine.
Design and Methods: 1. A Research for Italian GP's web has been performed to analyze the use of the web to provide heath information in general medicine. 2. A dynamic website, with an online forum for GP webmaster and a free database to collect files has been published on the net. 3. Specific criteria has been established for the information sheets in the database: general practice oriented, evidence based, easy to understand and easy to download. 4. A scientific committee has been created to validate the collected topics. 5. Every topic has been proposed by a GP, discussed within the forum, and analyzed by the scientific committee.

Results: A community of GP interested in internet communication with patients has been created. Some topics have already been discussed and validated: low back pain paper has been adopted after a focus group with users. Questionnaire CAGE is now on the web page with the aim to reach patients who have problem to discuss with the doctor about their addiction. Dietetic advice against hypercholesterolemia has been discussed and published with an improvement of the reference and authorship, and with a better graphic layout.
Conclusions: Patients use of internet as a provider of health information is a documented and growing behavior. A web site, run by one's own GP, and validated by a medical community could be a proper answer to patients future needs.

OP-154

Harnessing the internet – the new Vasco da Gama Movement website

O'Ciardha D. (Dublin)

Aims and purpose: The internet is rapidly becoming one of the most powerful tools at our disposal. It has become a global access point for information, communication and innovation. The speciality of GP/FM is like all other specialities with both patients and clinicians alike using the internet as an important resource. The internet can facilitate communication, exchange and research within an organization. The Vasco da Gama Movement, through the Image Theme Group has developed a new website, hoping to capitalize on this potential. The goal of this workshop is to explore the current functionality of the website and review its capacity for communication, exchange and research, to consider possible future developments and, lastly, to offer suggestions or solutions for other projects or organizations based on our endeavors.
Methods: A presentation will be made on the process of designing, commissioning and building the website. The audiencewill then receive an live demonstration on how to navigate the website and use its various functions. (appropriate internet facilities required i.e. allowing live access to the www.vdgm.eu website)
Learning objectives: The participants will learn about all the stages in the commissioning of a website and its potential for future developments.
Conclusion: This presentation will demonstrate how to harness the power of the internet for the development of the Speciality of GP/FM.

OP-155

The patient journey record for complex care

Martin C. (Dublin), Smith K. (Dublin), Ellaway R. (Sudbury), Topps D. (Sudbury), Biswas R. (Bophal), Sturmberg J. (Melbourne)

Aim(s) and Purpose: To enable patients with chronic disease to generate a personal record of their illness to empower them and their primary care team to utilise the knowledge needed to improve personal health care and quality of life particularly at times of complex need, when they are most vulnerable.
Background: Chronicity implies an ongoing individual asynchronous and heterogeneous journey through health, disease, illness and ongoing care. This journey comprises simple, complicated, complex and chaotic phases according to the nature, dynamics and meaning ascribed to the illness. Flexible, adaptive and above all useful IT interventions in chronic care need to empower patients, caregivers and clinicians at the point of care, especially during the complex and chaotic stages. Health systems currently focus on the stable phases of chronic disease, which are most amenable to simple protocols. The PaJR needs to amalgamate personal narratives, messages to and from caregivers, community nurses, pharmacists, GPs, specialists, and other health workers. An intelligent system based on sense making by humans assisted by intelligent agents utilising advanced pattern processing and reasoning systems that continuously review and analyse the patient journey to specifically identify shifts towards complex and chaotic stages of illness in order to improve care management.
Conclusion: The PaJR system will enable the development of systems driven by user experiences to directly shape an individual's journey through phases of stable, unstable and complex disease and illness. This will assist GPs and the Primary Care Teams to conduct 'sustained consultations' that help manage complex care needs in an individualised patient-centred manner.

OP-156

Using case mix to improve equity and the delivery of primary care

Kinder Siemens K. (Serrig)

The aim of this presentation is to provide an insight into how a better understanding of the morbidity profile of a population can reduce the uncertainty associated with the delivery of primary health care. The advantages that case mix offers toward more efficient management of patient care are not restricted to the hospital setting. As has been demonstrated in both public and private healthcare systems around the globe, case mix applications contribute to improved delivery in the integrated health care system. Numerous studies worldwide, show that populations do vary in their need for health care resources and can be successfully compared across regions, clinics, and practices, to assess the disease burden and the future health care resource needs of the population. As populations age, the burden of chronic illness increases. As Prof. Barbara Starfield has shown, most patients have multiple diseases which complicate a single care path approach. Identifying the patients most in need of care management intervention and recognizing their morbidity profile will ensure more appropriate programs. Case-mix helps reduce the uncertainty of which patients to intervene with care management programs. Intervention assessment may be biased if the patient's complete health status isn't taken into consideration. Similarly, assessing the performance of providers requires adjustment for the disease burden presented by their patient load. Examples of case-mix applications will demonstrate the results of studies from several countries, including Spain, Sweden, Malaysia, Lithuania, the UK and the US. The common challenges faced, including data quality, obtaining cost measures, and provider acceptance, will also be discussed. The presentation will conclude with a discussion of the future of case-mix and the potential impact on the delivery of primary care.

OP-157

General medicine at a regional hospital

Lemann D. (Langnau)

Many patients whose general condition requires hospitalisation do not need specialized investigations and treatments. They do need, however, comprehensive evaluation, dedicated care and individually tailored therapies. The Emmental Regional Hospital in Switzerland, in a pilot project running for 12 years, has set up a 12-bed Department of General and Complementary Medicine, which is run by 3 general practitioners. A decade after its inauguration, this service is identified by the State of Berne as a project promising both a medical and an economic perspective. In collaboration with the University of Berne (thus integrating teaching and research) the project is presently being upgraded to a regional centre of competence for General and Complementary Medicine. The pathway to a project like this is a complex undertaking and plastered by many uncertainties, yet, in view of a particular high patient satisfaction, very awarding and a special challenge for general practitioners returning to the hospital after years in private practice.

OP-158

The use of a sentinel-network for surveillance of seasonal influenza in Switzerland

Schabel M. (Bern), Eckert T. (Bern), Birrer A. (Bern), Working Group Swiss Sentinel

Aim: Sentinel surveillance systems are useful in complementing more comprehensive or mandatory systems, especially for frequent diseases. They are used in 11 European countries for the surveillance of specific vaccine preventable diseases. Surveillance of seasonal influenza poses a number of challenges, such as diagnostic difficulties and high case numbers during epidemics.
Methods: The Swiss Sentinel Surveillance Network (SSSN) was established in 1986 as a cooperative project of the Federal Office of Public Health, participating physicians and academic partners to assure surveillance, early warning and epidemiological data collection. Influenza-like illness (ILI) was included from the beginning. The system is also open to non-infectious themes. A convenience sample of 150–250 general practitioners, internists and paediatricians in private practices voluntarily report weekly morbidity data, based on case definitions and reporting criteria, partially complemented by laboratory confirmations. Weekly total number of consultations is used as denominator to calculate incidence rates. A case definition for ILI is used and a subset of practitioners sends throat swabs to the National Centre for Influenza (NCI) in Geneva for virus detection and identification of strains.
Results: During the season 2007/08 4670 ILI cases were reported and 922 throat swaps analysed, 351 tested positive. The epidemic occurred during weeks 1–11 2008 with a peak in week 3.
Conclusions: The SSSN has proved successful in delivering timely routine information on onset, ending and size of seasonal influenza epidemics as well as on circulating viruses. This information is used to inform health workers, authorities and the public, facilitate diagnosis of influenza for practitioners, develop vaccine recommendations, calculate provision of vaccine supplies, arrange personnel capacities, contribute to the European Influenza Surveillance Scheme (EISS), and to provide essential data in case of an influenza pandemic.

OP-159

Surveillance of antibiotic prescription in the outpatient setting using the national Sentinel network

Mühlemann K. (Bern), Schabel M. (Bern), Birrer A. (Bern), Suter H. (Lyss), Lehmann T. (Muralto)

Aims and purpose: Reduction of antibiotic consumption is a corner stone of antibiotic resistance control. In Switzerland, antibiotic consumption and resistance prevalence in the outpatient setting are low compared to other European countries, but resistance trends are increasing. In this survey antibiotic consumption in the Swiss ambulatory setting was assessed to serve as a baseline for interventions.
Methods: During the years 2006 and 2007, 180 practitioner (54% generalists, 20% internists, 26% paediatricians) participating in the Swiss Sentinel Network reported on a weekly base the number of antibiotic prescriptions, the indication for prescription, the choice of antibiotic, and patients' attitude towards antibiotic treatment.
Results: The most frequent indications for antibiotic prescriptions were respiratory tract infections (65%), followed by urinary tract infections (17%) and skin-/soft tissue infections (11%). Penicillins was the most frequently (40%) prescribed antibiotic group followed by macrolides (20%), and chinolons (16%). However, whilst for treatment of pharyngitis and otitis media the first line substance was a penicillin, the most frequent choice for treatment of other respiratory tract infections was a macrolide (which is against European and Swiss recommendations). Acute uncomplicated cystitis was treated with a chinolone in 63%. Generalists and paediatricians differed significantly for the indications for antibiotic prescriptions in infant patients.
Conclusions: Surveillance of antibiotic prescriptions in the Sentinel Network provides a valuable base for an intervention study with the aim to control antibiotic consumption.

OP-160

Approach to major depression in old people in a primary care setting

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Aim(s) and purpose: The difficulty in identifying and distinguishing Major Depressive Disorder (MDD) in primary care is well known. The main objective of this study is to determine the frequency of MDD in persons aged 65 years and older using the Detection of Depression in the Elderly Scale (DDES). A second objective is to determine the convergent validity of the DDES with the Geriatric Depression Scale (GDS).
Design and Methods: Cross-sectional, observational study in 1,387 subjects aged 65 years and older. The variables considered were: affective state (GDS and DDES), physical and cognitive functional state, health problems and socio-demographic data. Setting: The city of Albacete in southeast Spain.
Results: Using the DDES we identified MDD in 50 subjects (4.3%). There was a moderate correlation ($r = 0.570$; $p < 0.001$) between the DDES and the GDS scores ($p < 0.001$). According to logistic regression analysis, the variables associated with a probable MDD (DDES +) were: dependence in activities of daily living (OR: 3.3), female gender (OR: 2.3), marital status single/widowed/divorced (OR: 2.0) and the presence of 4 of more health problems (OR: 2.1).
Conclusions: Using the DDES scale we found a 4.3% prevalence of MDD in a representative samples of older adults. Compared to the most commonly used scale, the GDS, the DDES may be considered as a more sensitive screening tool for the identification of MDD in primary care.

OP-161

Measuring morbidity from herpes zoster in a primary care population in Crete, Greece

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Introduction: Herpes zoster (HZ, shingles) is a common disease with a reported incidence varying from 2.2 to 3.4/1000 patients per year. Although nearly all HZ and PHN patients are diagnosed and treated by a general practitioner, few studies have examined the actual incidence and risk indicators in a primary care setting.
Purpose: A two-year prospective study is currently in progress, having officially started on 22 November 2007. The study aims to create a herpes-based morbidity data base in rural Crete as well as to determine the incidence of HZ and PHN in a primary care population, in Crete, Greece, and to identify risk indicators for PHN. The study reports on the study design and the first results as well as on the experience gained.
Methods: A Practice-Based Research Network, operating at primary care level, supported the study implementation. A total of 14 rural practices with an overall patient population of approximately 43000 were involved in the study. A computerized medical record system was used to facilitate data collection through on-line registration of patient contacts. Four separate questionnaires were completed during the first contact, assessing several personal and disease-related characteristics. These included two scales measuring the severity of pain and the level of anxiety (BPI: Brief Pain Inventory; SAST: Short Anxiety Screening Test). Follow-up data were collected during telephone interviews conducted at 1, 3, 6, and 12 months after the initial assessment.
Results: According to preliminary results, a total of 42 patients met the entry criteria were recruited, including 30 patients who experienced acute clinical HZ and 12 patients who were classified as having PHN.
Conclusion: This large prospective study is expected to identify predictors of PHN, thus, potentially aiding physicians to identify, closely monitor and implement preventive strategies to high-risk HZ patients.

OP-162

Osteoporosis, vitamin D and women: an approach from primary care

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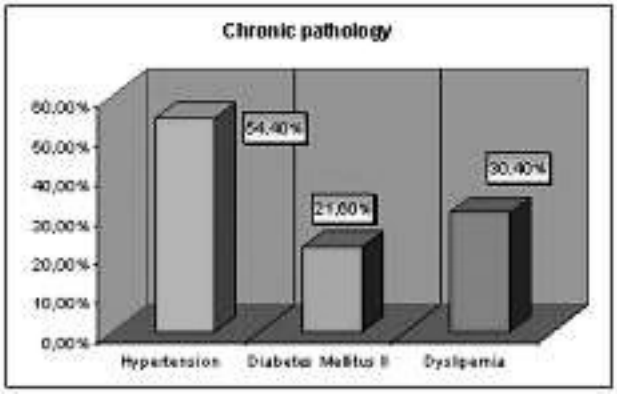
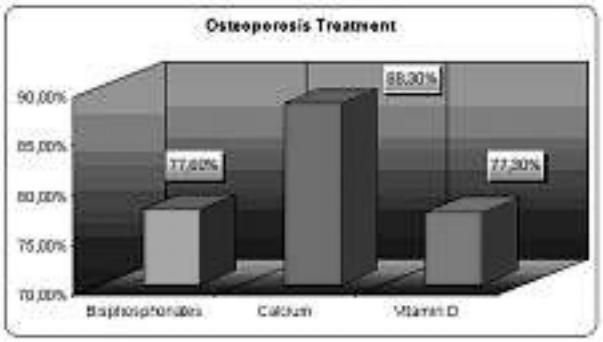
Introduction: Osteoporosis and Vitamin D deficit constitute an increasing public health problem in our area. The increase in life expectancy, a poor diet in vitamins and chronic pathology, causes more incidence of osteoporosis that lead to more disability with worsening quality of life.
Purpose: – Describe osteoporotic population of our area. – Describe situation regarding vitamin D in this patients.
Materials and methods: 1. Design: Cross-sectional study. 2. Site: CAP Terrassa Est, 24.716 patients. 3. Inclusion criteria: women >50 years diagnosed of osteoporosis by WHO or osteoporotic fracture. 4. Exclusion criteria: Men, women <= 50, neoplasia, anexectomies, home-care, secondary osteoporosis. 5. Intervention: age, BMI, chronic disease, levels of vitamin D, vitamin D intake by questionnaire, sun exposure, drugs, T-score. 6. Statistical analysis: SPSS 15.0.
Results: N = 125 patients. Age 68.2 years (±8.9 s.d.), BMI 29.05 (±3.51 s.d.). All Spanish. Comorbidity: 68 hypertensive (54.4%), 27 type II diabetics (21.6%), 38 dyslipemia (30.4%), 4 smokers (3.2%) and no alcohol. T-Score lumbar is -2.09 (±1.41) and femoral –1.9 (±0.82 s.d.). Osteoporosis treatment bases on bisphosphonates (77.6%), complementation of calcium (88.3%) and cholecalciferol (77.3%). 35 patiens were asked about food intake and solar exposure. The average daily sun exposure is 1,5 hours per day (±0.8 s.d.) with an intake of vitamin D of 29.4?gr per week (±11.4 s.d.). Blood vitamin D is 36.8ng/ml (±15.83 s.d.) (all blood analysis at winter).
Conclusions: We are faced with an osteoporotic population, Spanish, elderly, overweight and with polipathology associated. Despite a clearly deficient intake of vitamin D and a short exposure to sunlight, Vitamin D levels in blood are normal range, with osteopenic bone densitometry. The fact that most patients are treated with bisphosphonates, calcium and vitamin D, and blood analysis were determined after summer (maximum sun exposure) might be behind these findings.

CHRONIC PATOLOGY



OSTEOPOROSIS TREATMENT



OP-163

The gold standard for primary care mental health: a quality indicator for empathic relationships between individuals and within complex organisations

Downes T. (Llangollen)

Holistic healthcare is more than just the alignment of existing services and the evidence based treatment of disease; holistic care is also about empathic relationships. Empathic relationships are the key to mental health and there is no health without mental health. The gold standard for the quality of treatment for disease and for complicated systems is the randomised controlled trial. An equivalent gold standard for empathic relationships and for complex systems such as primary healthcare is currently being developed by the Wales Mental Health in Primary Care Network. This is the Gold Standard for Primary Care Mental Health. The aim of the presentation is to explore this Gold Standard, which is a measure of the quality of relationships between individuals and within complex organisations. The presentation will explore complicated and complex systems in the context of randomised controlled trials and empathic relationships. An overview of the complexity model that underpins the Gold Standard for Primary Care Mental Health will illustrate how the use of metaphor can open up new thinking to allow knowledge and understanding to emerge. The learning objectives of the presentation are to better understand: The differences between complicated and complex health systems; The importance of empathic relationships to the health of individuals and organisations; How the quality of relationships can be guided through the use of the simple rules inherent in complexsystems. The Gold Standard for Primary Care Mental Health will help participants gauge the quality of relationships in their own service or organisation.

OP-164

SEGUDIAB: program for improvement of diabetics' safety in primary care

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Objective: The objective is to analyze the effectiveness of the implementation of an educational intervention on health professionals to improve the safety of the diabetic patients.
Methods: Clusterstrial entirely in primary care, about 10 basic health areas (BHA) with a random distribution of educational intervention to the professionals (5 intervention/5 control). The BHA were randomised by geographic location (urban, semi urban and rural) and according to socio-economic level. The intervention was based on a system of adult education be carried out on all professionals (doctors and nurses), short (6 hours) but with periodic reminders. The effect of this intervention was assessed using a validated questionnaire of attitudes and motivations (DAS-3). The control group continued their usual practice.Will be evaluated on an individual basis to patients from 45 to 75 years with a diagnosis of Diabetes Mellitus Type 1 (DM1) or DM2, according to the computerized clinical history, excluding patients with severe end-stage disease and controlled exclusively by another specialist. We monitorized parameters of diabetes control with the informatic system for Primary Care.
Results: The whole group includes about 75,000 users in each group (intervention and control), with 2903 diabetics in the intervention group and 3146 in the control group. There are no significant differences between control and intervention group. After 6-months, there was a statistically significant overall improvement in scores of DAS-3 questionnaire, LDL-cholesterol, tobacco control, eye fundus control and EKG control in the intervention group.At the moment, there was not difference between another parameters (A1c, blood pressure, body mass index) because we think it's not enough time to detect the changes.
Conclusions: This program is useful to improve attitudes toward diabetes and some safety control parameters.

OP-165

Survey about exercise prescription by primary care providers in Murcia

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Objetives: To determine the characteristics of exercise prescription by primary care providers in the Region of Murcia: 110 providers: 57 physicians and 53 nurses.
Material and methods: Transversal, descriptive study utilizing a validated questionnaire. The intentional sample was taken from primary care providers. The questionnaire had the following sub-headings: Prescription to patients with cardiovascular risk factors, metabolic syndrome, exercise duration, follow-up, intensity, and evaluation of degree of knowledge. The data were tabulated according to the provider's graduation year to evaluate formational differences.
Results: More than 70% of patients receive exercise prescription: 52.3% of nurses recommended exercise to patients with high cardiovascular risk factors, compared to 53.8% of physicians, $p > 0.5$. Exercise duration was specified by 36.4% of physicians and 66.7% of nurses, $p < 0.04$. Heart rate monitoring by the patient was indicated by 4.5% of physicians and 8.9% of nurses, $p < 0.04$. Exercise was recommended to patients with metabolic syndrome by 69.2% of physicians and 59.5% of nurses, $p > 0.5$. Fulfillment was monitored during office visits by 77.8% of nurses and during appointments by 56.1% of physicians. 48.9% of nurses considered their knowledge "adequate" or "very adequate" compared to 33.3% of physicians; on the other hand, 56.6% of physicians considered their formation "insufficient" or "very insufficient" compared to 50.1% of nurses.
Conclusions: Both the quality and quantity of exercise prescription have room for improvement. Adherence is monitored during appointments. Half of these professionals considered their formation to be insufficient. Differences in responses were not determined by graduation year.

OP-166

Radiologic risk evaluation through electronic patient record database in general practice as decisional support to X-ray examination justification

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Background: In the last decades patient exposition to the ionizing radiations for diagnostic examinations is increased in a great deal. Not always the prescriptions comply with the principle of "justification", which impose to take into account the real utility and not replaceability of the examination. Databases of family doctors usually record prescriptions of all radiological examinations of their patient, when not admitted in hospital, and might allow to estimate radiological risk for each patient.
Aim: To show, through analysis of the data extracted from a database commonly used by Italian general practitioners, if it is possible to measure patient exposition to ionizing radiations in the previous 5 years in order to alert doctor when it reaches an dangerous level.
Design and methods: 150 patients of an Italian practice are random extracted from the database. Patients are from both sexes, from 15 to 64 years old, not exposed in the last 5 years to radiotherapy or admitted in hospital. All radiological examinations performed in the last 5 years are recorded in a special form, which has been created for computing in milliSiviert (mSv) the cumulative radiologic risk.
Results: The calculated cumulative risk of the 150 patients shows a very different condition which can help doctors in applying the principle of justification for X-ray examinations, highlighting its value in the first page of EMR patient file.
Conclusion: Family doctor's database might easily automatically compute radiological risk for each patient and alert doctor when an x-Ray examination is being prescribed, giving him a crucial decisional support for its justification.

OP-167

Screening – changing minds through a cooperative workshop

Huber F. (Zürich)

The participants of a workshop about screening recommendations at the congress for General Practitioners 2008 in Zürich were asked at the beginning and end, which screening tests they would recommend to their patients. In this workshop we discussed the evidence based benefits and risks of each screening test. There are actually no official screening recommendations in Switzerland. The workshop's intention was to convince the participants about the following results: Coloskopy: after the age of 50 with repetition every 10 years yields a benefit. Chest X-Ray for smokers: provide no advantage. Osteodensitometrie for women over 65 y: recommended by

international guidelines despite the limited benefit of treatment to prevent hip fractures (NNT 91 over 5 years). Mammography 50–70 y: regular mammography gives a small benefit but not for the entire survival time.PSA for men between 50 and 70 y:no recommendation is currently possible. After this discussion we asked the participants at to answer the same questions again: Coloskopy: The supporters almost doubled from 33% to 59% Chest X-Ray for smokers: there was a clear reduction of supporters from 47% to 24% Osteodensitometrie for women older 65 y: no significant change in recommendations. Mammography 50–70 y: the percentage of proponents slightly fall from 47% to 29%. PSA for men between 50 and 70 y: we found a major reduction in recommendations from 41% to 18% with a doubling of the undecided participants.
Discussion: The participants of the workshop changed their minds about screening recommendations significantly throughout the process of an evidence based discussion. PSA-testing and Mammography have to be determined by the patient with the help of well-balanced information material. The participants got the leaflet of MediXas examples. Workshops about the benefits of screening methods with active cooperation from participants helps getting closer to evidence based recommendations.

OP-168

Promotion of adolescent sexual health in primary care: a survey in Finnish health centers

Kosunen E. (Tampere), Sannisto T. (Tampere)

Aim of the study: Increasing interest in adolescents' sexual and reproductive health (SRH) has emerged in Europe over recent years. In Finland, adolescents' SRH is generally good and teenage pregnancy and abortion rates are low. Nonetheless, abortion and chlamydia infection rates are higher than at lowest in the 1990s, raising a concern whether service provision is adequate. Aim of this study was to describe adolescent SRH services in primary care, focusing especially on services for contraceptive counseling.
Design and Methods: Service provision, accessibility and practices were surveyed in all 63 health center organizations (HCOs) in Pirkanmaa Hospital District in Western Finland via separate e-mailed online questionnaires to chief physicians (n = 49, response rate 78%), directors of nursing (58, 92%), physicians (49, 78%) and nurses (62, 98%).
Results: Contraceptive counseling services were provided in family planning (FP), maternity or outpatient clinics, but dedicated youth clinics existed in only three HCOs. The average waiting time for contraceptive consultation was 4.8 days to a nurse and 12.5 days to a physician. Nurses reserved a longer consultation time than usual to young clients in 32 (51%) HCOs. In 15 HCOs physicians applied a minimum age for prescribing combined hormonal contraception, and a pelvic examination was often performed before prescription at the first visit. Supply of contraceptives free of charge was mostly limited to the first months. On-site instructions for chlamydia screening existed in 11 HCOs. School nurses shared knowledge and helped in contacting FP clinic, but initiation of contraceptive pills was seldom possible at school. School nurses participated actively in sexuality education in schools.
Conclusions: Adolescent SRH services were generally available in the HCOs, but services tailored for adolescents were rare. Access to SRH services could be improved by widening nurses' task profiles.

OP-169

An observation tool for improving learner-centered teaching strategies in primary care settings

Sommer J. (Geneva), Junod-Perron N. (Geneva), Clavet D. (Sherbrooke)

It is difficult for clinical teachers to take into account the learners' needs and objectives while trying to solve the patient's problem in a time-limited working context. We developed an observation tool to evaluate the teacher's teaching strategies and to give a constructive feed-back allowing him to improve.
Aims: – to develop a practical observation-tool in shape of an evaluation-grid including the useful steps of a teaching session; – to evaluate the inter-observer reliability of the grid.
Methods: On behalf of the literature we developed an evaluation-grid containing the different learner-centered teaching strategies clarifying the learners' needs, the learning objectives and the medical reasoning of the learner; – teaching one learner-centered useful point; – checking the learners' understanding of what has been taught and promoting self learning. With the qualitative help of different specialists in medical teaching, rubrics were defined for each criteria on three performance-levels (very good, good, poor) describing very specifically the expected behaviour on that level. The grid was applied on 100 supervision sessions and the inter-observer reliability was assessed among ten different observers. The unreliable criteria were withdrawn. The grid has been used to help teachers improve their learner-centered teaching strategies, and they assessed subjectively their satisfaction on a 5 point Lickert scale.
Results: We obtained a reliable observation-grid containing the learner-centered teaching strategies on three performance levels.
Conclusion: The clinical teachers can be helped to improve their teaching effectiveness, while using a reliable observation-tool. The tool will help them to focus their teaching on the learner's needs and to time-efficiently structure their teaching so as to enhance the learning of their students and residents in a primary care setting.

OP-170

Quality assurance of training: how to engage trainees

Taibjee R. (Birmingham)

Trainees are busy gaining all the competencies to become family doctors. Often, informally, trainees will complain about aspects of their training but feel too disconnected from those ultimately responsible for training provision to know how to facilitate improvements. In the UK we have recently established a national trainees committee. We would like to share our experiences of setting up such representational structures and explore the strengths and weaknesses of various solutions. We will share our experience of using different methods of communication, attempts at engaging with trainees. We are currently piloting many ideas including: the involvement of trainees in selection to specialty training by their involvement in interview panels; trainees being part of Quality Assurance Visits of the training practices; QA questionnaires to be completed by trainees after specific clinical placements. Through national regulators such as the GMC and PMETB, trainees are involved in a national survey and also quality assurance inspection processes; experiences which may be worth sharing. This presentation will be of value to any organisation trying to improve trainee involvementin improving the quality of training.

OP-171

An immersion community study program to render medical students humanistic medical insight

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Objectives: To investigate the result of an immersion community study on humanistic insights and attitudes.
Methods: This qualitative research was made up of four groups of seven forth-year medical students form the Collabortive Project to Increase Production of Rural Doctors (CPIRD) of Lampang hospital. The participants spent two weeks living with hosts in target communities to gain insights into their ways of life together with the limitations which might impede effective treatments and interfere with mutual understanding between the patients and their physicians Seven community study tools were used and a series of lectures were made prior to the immersion.
Results: All participants have positive responses to the program. They procured human holistic and multi-dimensional concepts contributing to profoud understanding of the interrelationship between community residents and families which help to urge them to work willingly with the community.
Conclusions: The study is considered successful in that it helps develop insights, attitudes and experience for the medical students in working within the communities, enabling them to take effective care of the patients physically, mentally and socially which is the very essence of humanistic medicine.

OP-172

A Brazilian model for family medicine residency inspired by the science of complexity

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Purpose: To present a Family Medicine Residency Program based on the Science of Complexity.
Methods: The practice of patient-centered care is the core of Family Medicine. Knowing the patient as a whole is essential. Who is going to be our next patient? It is usually someone who has four different medical conditions and takes about eight drugs on a daily basis. Certainly, this patient is excluded from Cartesian clinical trials. Furthermore, patients are seen in a fragmented way in our dominant model of medical teaching. Taking these matters into account, we propose a model of family medicine residency program that includes the following tools, which will be incorporated in practical settings: 1. Outstanding humanities background: family medicine residents are encouraged to read classical books, watch movies and listen to music and operas. 2. Reflexive practitioner scenarios: discussion in groups about how we can understand ourselves, our practice and our dynamics as a team. The aim is to incorporate efficient teamwork and

solid leadership skills to the complex system of patient care. Elements of narrative medicine and education of the affective domain are also frequently adopted in these encounters. 3. Scientific meetings in which medical papers are discussed according to the needs of real patients. Also, case reports are presented while particular issues are considered as determinant factors on the development of each patient.
Results: This model allowed the development of many family doctors with better understanding of the complex nature of patient-centered care.
Conclusion: Medical educational systems based on the Science of Complexity use multiple tools to provide technical and humanistic improvement of residents. This allows them to always remain open-minded so they can treat their patient as a whole.

OP-173

Revitalizing a novel residency program in family medicine

Nicodemus L. (Manila), Sana E. (Manila)

Purpose: The dual track residency program in Family Medicine at the University of the Philippines-Philippine General Hospital (3-year clinical training and 1-year postgraduate degree) was the first of its kind in the country. It aims to provide graduates the options to be clinicians, researchers, educators and administrators. Four trainees had graduated from the program and are successful in their respective areas. However, nine more trainees failed to finish the program and prompted the suspension of its implementation. Thus, there was a need to review the program to revitalize and maximize its potential by developing an integrated program.
Methods: Following the first 3 steps of Research and Development design, a web-based survey was done to determine trainees' experiences about the program, looking at enabling and inhibiting factors that affected their performance. Document review was done to identify program goals, intended curriculum, implementation problems and their solutions. Then the intended and actual programs were analyzed. Then, the appropriate curricular components and methodologies were identified using literature reviews and Delphi among experts in the Department.
Results: Trainees reported that the program had redundant curricular contents, activities and requirements. The concepts, principles and theories covered in the postgraduate classes were inconsistent with actual clinical experiences in the Hospital. Accordingly, the program was revitalized thru curriculum integration using competencies and application of the core values of family medicine to clinical practice, teaching, research and management as connecting threads.
Conclusion: This project revitalized the novel residency training through curriculum integration to blend its 2 components by finding overlapping concepts, and activities to ensure graduation of trainees producing relevant practitioners who are able to advance the discipline and practice of Family Medicine in the country.

OP-174

Trading places: developing international standards for postgraduate family medicine education

Walsh A. (Hamilton), Rainsberry P. (Toronto), Frenette J. (Quebec)

Aim: Physicians are increasingly mobile, increasing the importance of appropriately assessing whether their training has equipped them for immediate practice in their new environment. The College of Family Physicians of Canada is engaged in a project which seeks out other countries' authorities and jurisdictions interested in reciprocity or equivalency with Canadian certification in Family Medicine. This workshop will discuss process and standards being used, and will seek to further the Wonca Education Working Party\'s work on developing global standards in family medicine education.
Organization: There will be discussion of participants' views of critical aspects of family medicine training using the Postgraduate Medical Education World Federation for Medical Education (WFME) Global Standards for Quality Improvement framework. The standards developed in Canada will be reviewed. The process required to develop a fair and ethical system to evaluate the training of family physicians whose training occurred in another country, will be explored.
Objectives: 1) Consider the critical standards for postgraduate family medicine education 2) Compare and contrast these standards with those developed in Canada 3) Discuss development of an ethical, fair and transparent process for assessing postgraduate education 4) Further the discussion of global standards in family medicine education, focusing on postgraduate education
Impact: There will be an opportunity to further the development of global standards for postgraduate medical education in family medicine and to examine Canada\'s work in developing equivalency/ reciprocity agreements with other countries.

OP-175

The emergent dynamic of living with type 2 diabetes

Griffiths F. (Coventry), Borkan J. (Pawtucket), Byrne D. (Durham), Crabtree B. (New Brunswick), Lindenmeyer A. (Coventry), Parchman M. (San Antonio), Reis S. (Haifa), Sturt J. (Coventry)

Aim: To explore a novel approach to understanding individuals as open complex adaptive systems for improving the tailoring of interventions for those living with type 2 diabetes.
Design and methods: Secondary analysis of interview data from 22 adults living with diabetes and participating in a clinical trial of a behavioural intervention for diabetes. Comparative analysis of cases to identify the emergent dynamics of living with diabetes, that is, current patterns of change resulting from the interaction of many aspects of life past, present and future. Further comparative analysis identified biomedical, behavioural and social attributes and explored how these related to dynamics.
Results: Individuals could be categorised based on how they live with diabetes (not necessarily blood sugar levels) as follows: calm and steady with not a lot of worry and not a lot of change; steady now in comparison with a chaotic or worried past; uneasy, worried and may be chaotic. The latter category included people who had volatile blood sugar levels and people who were otherwise distressed in relation to diabetes. These categories correlated with attributes such as use of routine to control diabetes, sense of control over diet and confidence about diabetes and its management. For attributes including BMI, HbA1c and perceived social support, no pattern could be found that explained the dynamic categories.
Conclusion: Individual's living with diabetes can be described in terms of their emergent dynamic. This may provide a way of understanding an individual's potential for adaptation and adjustment in relation to diabetes, capturing aspects of life relevant to diabetes that are missed by other assessments. Further refinement of this approach is needed to evaluate its potential use for patient assessment and tailoring of interventions for improved outcome.

OP-176

Comorbid depression in elderly with type 2 diabetes

Lygidakis C. (Bologna), Altini C. (Bologna), Rigon S. (Bologna), Spezia C. (Bologna), Luppi D. (Modena), Alice S. (Genova)

Aim: To evaluate the potential correlation between depression and type 2 diabetes mellitus (DM2) in patients aged 65 years and over accessing primary health care (PHC) units.
Methods: During the last semester of 2008, 109 elderly patients with DM2 (mean age 74.86, sd = 5.72) were examined by GP trainees in PHC practices. Demographics, BMI, waist circumference, fasting blood glucose (FBG), HbA1c and medicine treatment were queried. Dietary and drug therapy compliance and weekly physical activity in recreational time were investigated; expended energy was measured using Metabolic Equivalents (METs). Depression was assessed with the 15-item Geriatric Depression Scale (GDS-15) and mental health was evaluated with the General Health Questionnaire – 12 (GHQ-12). For comparison purposes, a short interview comprising the GDS-15 and GHQ-12 was performed in 52 non diabetic, randomly selected patients. The two groups were properly adjusted for sex and age.
Results: Moderate (GDS-15 scores 6–8) and severe depression (GDS-15 >9) were found in 33.9% and 17.4% of the diabetics respectively. Female patients seemed to have better FBG values ($r = 0.33$, $p = 0.006$) and more controlled HbA1c (<7%, $r = 0.37$, $p = 0.003$). However, only males with regular HbA1c showed significantly lower BMI (Mdn = 27.72, U = 128.00, $p < 0.001$) and waist circumference (Mean = 91.84 cm, $t = 3.32$, $p = 0.002$). Diabetics without depression signs were triply likely to do moderate weekly exercise compared with depressed ones (OR = 3.01, 95%CI = 1.36–6.57). Lower GDS-15 and GHQ-12 scores were correlated with more scarce therapy compliance ($r = 0.46$, $p < 0.001$; $r = 0.43$, $p < 0.001$ respectively). Diabetics seemed to be 2.83 times more likely to suffer from moderate depression compared with the control patients (95%CI = 1.19–6.68).
Conclusions: The findings of our study suggest that moderate depression is a common underlying comorbidity in DM2, affecting aspects of its management such as the physical activity and compliance of medical therapy.

OP-177

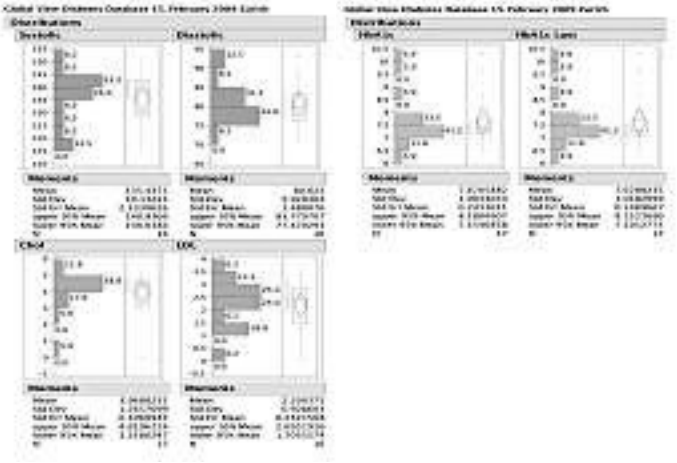
Quality of ambulatory diabetes care, in a medical network of GPs in the greater suburban area of Zurich, an observational study

Vecellio M. (Zürich)

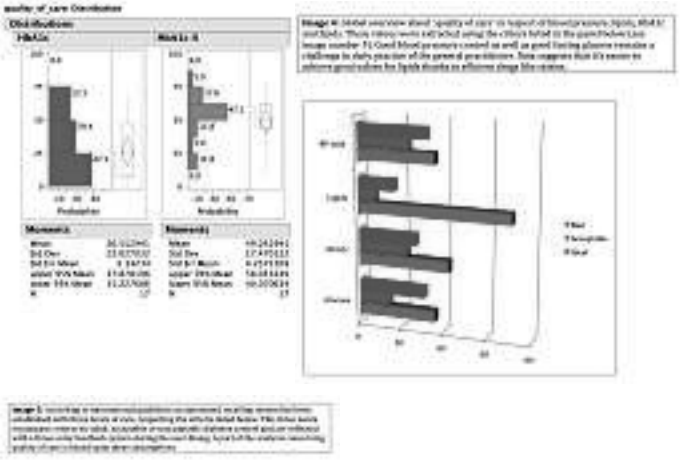
Aim: Data about quality of diabetes care in a physician network in the greater region of Zurich have been collected. The scope was to assess the real-life situation in the ambulatory setting (lab values, clinical findings, process indicators). We analyzed to which degree an electronic reminding system can help in the improvement of the ambulatory care of diabetes patients.

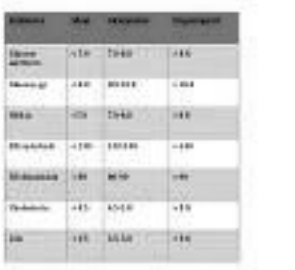
Design: We developed a software, which allows the GP to access a diabetes database. This allows a central registration of clinical findings, lab values, and control dates. The tool gives feedback to the GP with respect to crucial values of blood pressure, lipids, fasting glucose, and HbA1c. 17 physicians in the region of Zurich participated actively. Up until Feb. 2009, 410 patients with diabetes type 2 have been included.
Results: On Feb. 2009, results encompassed the 1016 single controls over a period of 12 months, starting at the end of Jan. 2008. Mean systolic BP of the population was 135 ± 10 mm Hg, and mean diastolic BP was 80 ± 5.9 mm Hg; mean cholesterol was 3.9 mmol/l ± 1.2, and mean LDL was 2.2 mmol/l ± 0.9 and mean HbA1c was 7.67% ± 1.0. Regarding quality of care, 30.5% of patients for fasting glucose were badly controlled, 13.6% were acceptably, and 35.5% were ideally controlled. For HbA1c, 26.5% of patients were badly, 22.5% were acceptably, and 40.2% were ideally controlled. 16.5% of patients were badly controlled for lipids, where 7.5% of patients were acceptably, and 70.2% were ideally controlled. BP included 31.9% being badly controlled, 23.6% being acceptably, and 35.5% being ideally controlled. We have seen a tendency for a slight improvement of HbA1c values to a value of 7.62% ± 1.0.
Conclusions: Data suggest a significant gap regarding ideal values for diabetes care, compared to findings attainable in the ambulatory setting of different general practices. It is easier to achieve appropriate values for HbA1c and lipids. An electronic tool with a reminding system can improve quality of care.

Summary Statistics Global Values



Details about Quality of Care





OP-178

Landscape of complexity discourse in academic literature on diabetes mellitus relevant to primary care: discourse analysis and implications for practice

Kovandzic M. (Liverpool), Cooper H. (Chester)

Aims and purpose: To map the patterns of usage of 'complexity theories' in generating knowledge on Diabetes Mellitus relevant to primary care. Purpose was to address questions of heterogeneity within complexity studies in healthcare and to contribute to the debate of what is a 'complexity proper' and how it can be useful to general medical practice.
Method: Discourse analysis was designed to answer how 'complexity theory' is done in academic literature on Diabetes Mellitus relevant to primary care. Data collection was conducted by systematic literature searches of electronic databases and publications' references. Generic in its scope, the selection method was not discriminating publications on the type of diabetes. The relevance of publications that met initial inclusion criteria (N = 30) were examined using an algorithm for systematic focused selection. The final set of publications (N = 11) were used as a qualitative dataset for the discourse analysis. The analytical framework included: labels and definitions of complexity, complexity concepts in use, application to diabetes care, methodological implications and respective referencing practices; Second layer of analysis looked at the differences and similarities between the messages for everyday practice of Diabetes Mellitus treatment, generated within each of identified discursive patterns.
Results: Five discursive patterns were identified. These were named as: 'alien', 'scientific', 'pragmatic', 'educationist' and 'managerial'. All were found to generate some useful practical implications examples of which will be discussed in the presentation.
Conclusions: Complexity theory is used in academic literature on Diabetes Mellitus in diverse and often incommensurable or contradictory ways. This heterogeneity needs to be acknowledged and understood in order to maximise pragmatic potentials of complexity theory in everyday general practice.

OP-179

Interventions to improve adherence to evidence based medicine tools in primary care professionals in order to improve the quality of type II diabetes disease management

Biasco A. (Rome)

Aims: Our aim is to review interventions aimed to enhance primary care providers adherence to Evidence- Based Medicine (EBM) tools available to primary care professionals (General Practitioners, nurses, care managers, multiprofessional teams) in order to improve the quality of type II diabetes disease management.
Design and Methods: A systematic review of randomized controlled trials was performed according to methods provided by the Cochrane Handbook for Systematic Reviews of Interventions. Selected studies were classified according to: type of proponent, participant, intervention and reported outcomes.
Results: A large number of study was identified. Starting with 1296 references only 21 studies met selection criteria and were assessed in full text. Of these 12 articles were include in the review. Most of the interventions were proposed by Health Care Organization (59%), and in most cases involved single handed physicians and multidisciplinary teams. One third studies assessed the effect of the different training educational programs; one third studies assessed the audit methodology combined with training programs, while the remaining evaluated the impact of ICT devices, with or without any additional training program.
Conclusions: Our review outlines that feedback reports and use of ICT devices are likely to be effective. Chiefly we found evidence that application of clinical decision support systems significantly improved clinician compliance with care guideline recommendations for diabetes, improving the process of care delivery and patient outcome. Despite the burden of diabetes and the huge proliferation of clinical and organizational guidelines, the adherence to EBM instruments is likely to improve process of care, rather than patient outcomes. This would emphasize the necessity for healthcare professionals to be guided on the standards' achievement, and not only to be targeted with them.

OP-180

Effectiveness and cost-effectiveness of reimbursement of nicotine dependence pharmacological treatment. Experimental study

Junco Anós E. (Spain), Olano Espinosa E. (Spain), Minué Lorenzo C. (Spain), Vizcaino Sanchez-Rodrigo J. (Spain), Gamez Cabero M. (Spain), Granados Garrido J. (Spain)

Justification: Smoking (SMK) is a worldwide pandemic. Pharmacological treatments approximately doubled the likelihood of dropping long-term abstinence versus placebo, and triple versus no intervention. A recent Cochrane review evaluated interventions that finance the costs of various treatments for SMK cessation. The combined OR for achieving abstinence for a period of 6 months was 1.48. None of these studies have been done in our environment. For this reason, it would be very useful to know if in our health centers the reimbursement of nicotine dependence pharmacological treatment (NDPT) increases the prolonged abstinence in similar way of other areas.
Objectives: 1. To assess wheather reimbursement for NDPT increases quitsmoking rates after 6 months. 2. A) Compare the effectiveness of the reimbursement of treatment versus non reimbursement. B) Calculate the cost-effectiveness of the reimbursement.
Methods: Randomized controlled clinical trial by conglomerates. 30 health centers in Primary Care. General SMK population over 18. Exclusion criteria: less than 18, those who smoke less than 10 cigarettes daily, pregnancy. Main variable: Abstinence rate at six months in smokers who have gone to consultation and have received an intervention.
Intervention: The health centers will be randomly assigned to the control group or to the intervention group. In the first group patients will be treated as normal management, in the second they will also provide reimbursement for pharmacological treatment. Those who are self abstinence make the measurement of CO in exhaled air bay co-oxymetrie.
Analysis: The results of the intervention group and control group will be compared by intention to treat using the analysis of mentioned variables, considering that the intervention is effective if there is an improvement of at least 50%. If it is demonstrated the effectiveness of the reimbursement of the recommended NDPT, we can make a proper planning and rational use of resources.

OP-181

Primary care: delegation vs. substitution – results of a systematic review

Redaèlli M. (Witten), Stock S. (Köln), Wilm S. (Witten)

Background: Some health care systems of industrialized nations have experimented with delegating or substituting "classic" physician tasks to specially qualified nurse practitioners and alternatively focused on a team approach due to the rising prevalence of chronic diseases and limited resources.
Aim: The purpose of this study is to identify strategies for nurse – physician cooperation in primary care relieving the General Practitioner's workload (GP) keeping up high quality care.
Methods/Design: In a systematic literature review relevant studies describing GP relieve by qualified nurses were identified. All relevant studies were retrieved and the articles screened for cooperation models which could be translated to the current health policy context in Germany. Suitable models were described and their relevance for the national setting evaluated.
Result: Preliminary results show that there is no "one fits all approach". Four different broad models could be identified which can be adapted as needed. Promising approaches bring physicians and qualified nurses into a team relationship in which each performs specialised tasks in the care management of chronically ill. While qualified nurses have higher patient satisfaction due to longer consultation times, better communication skills and patient education physicians are better at the diagnostic level. Thus the question is not substitution vs. delegation but how to bring both physicians and qualified nurses into a team where each can perform suitable aspects of care management.
Conclusion: The rising burden of chronic diseases needs more engagement in broad chronic care management on a GP level if the current high quality of care is to be sustained. Welcoming qualified nursing personal into the team can be one possible solution.

OP-182

The complexity of learning how to keep patients safe

Howe A. (Norwich), Education for Patient Safety

Aims: Avoiding harm and keeping patients safe is a core requirement of health care and there is a growing literature on how to minimise risks and prevent errors. The aim of this study was to investigate how pre-registration students from a range of healthcare professions learn about keeping patients safe from iatrogenic harm.
Design and Methods: Written curricula were reviewed from 13 courses (medicine, nursing, physiotherapy, and pharmacy) across England and Scotland. Data included observations of formal and informal teaching, interviews and/or focus groups with clinical educators, students, health service managers and patients involved in the courses.
Results: Many courses provide learning on common causes of error (poor communication, cross – infection, physical risks such as falling, diagnostic and drug errors). However, the complex nature of health trainings makes consistent messages hard to achieve, and learners experience differences between ideal and real practice. Effective learning about patient safety includes understanding why mistakes occur; clinical educators who make safe practice visible to learners: adequate supervised patient contact to enable them to rehearse relevant knowledge and skills under direct guidance; an emphasis on how professionals work need to work closely together and overcome disciplinary barriers; and role models who 'champion' safety issues, are prepared to discuss why things go wrong, and assist learning using every-day real-life examples.
Conclusions: Patient safety is a metaphor for the complexity of clinical education – how to get clear messages and good practice across the many settings and people from whom we learn. Academic, organisational and practice settings need to increase the co-ordination of their approaches to education to deliver this, or learners may become confused about how to apply their knowledge and skills effectively to achieve patient care.

OP-183

Capturing the complexity of European primary care systems in a European monitoring instrument

Kringos D. (Utrecht), Boerma W. (Utrecht)

Aim: The investment in PC reforms to improve the overall performance of health care systems has been substantial in Europe. There is however a lack of up to date comparable information to evaluate the development of primary care (PC) systems. This EU-funded PHAMEU (Primary Health Care Activity Monitor for Europe) study, aims to fill this gap by developing a PC Monitor for implementation in 31 European countries.
Design and Methods: On the basis of a systematic literature review on PC, and consultations with experts across Europe, a comprehensive set of PC indicators has been developed. The indicator-set allows to assess stages of development of PC systems and identify possible elements to be improved. The focus is on patient's access to PC services; continuity of care; coordination and integration; the range of services provided in PC, and outcomes. In 2009, a consortium involving organizations from 10 member states started implementing the developed Monitoring system by collecting PC data in 31 European countries by reviewing (inter)national literature and statistical databases, and consulting panels of national experts.
Results: The evidence underlying the key functions of PC will be explained. It will be shown how the complexity of European PC can be captured with the Primary Health Care Activity Monitor. Results will be presented for a number of countries which form a contrast in the approach and stage of development of PC.
Conclusions: The study has developed a monitoring instrument for PC development applicable to all configurations of PC in Europe, producing comparable information. Results are meant to be used by national decision makers, medical professional organizations, patient organisations, and PC providers, to better inform the policy making process for strengthening health systems through PC.

OP-184

Achieving complexity: patients balancing life and illness in the care of their chronic illness

Kljakovic M. (Canberra)

Aims(s) and purpose: To describe the complexity of chronic disease from a patient-centred perspective
Design and Methods: We conducted a qualitative study to develop an in-depth understanding of the experience of patients with chronic illness and their carers in Australia, including their experience with health services and their level of involvement in decisions. Face-to-face interviews were conducted with fifty-two patients and fourteen carers affected by one or more index condition, namely, type 2 diabetes, chronic heart failure, and chronic obstructive pulmonary disease.
Results: Content analysis of the interviews revealed that participants struggled with the ongoing task of balancing their life with the increasing demands and intrusion of their chronic illness – on the journey of negotiating how the disease and its management will be incorporated into their existing lives. Their ability to juggle the competing demands of their life and illness was seriously hampered by fragmented services, having to navigate through health services, relationships with health care professionals and others, and co-morbid conditions.

Conclusions: How patients and their carers balance their life and illness is complex. Future policy directions need to address this complexity by designing models of care and infrastructure that enable patient-centred care not only within health services, but also between jurisdictions of health, community and social support services.

OP-185

Primary health care, mental health services and severe mental disorders: working together in a common medical aim

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Equip Atenció Primària Dreta Eixample, Barcelona (Spain)
Centre Salut Mental Dreta Eixample, Barcelona (Spain)

Aims and purpose: Patients with severe mental disorders have a high cardiovascular risk, associated to the disease itself and also to antipsychotic drugs. Furthermore, these patients usually have a difficult management and follow-up. The main aim of this experience is to reach an all-round health approach, promoting the relationship between primary care and mental health care and drawing up a therapeutic plan to follow-up this patients.
Description: Members of Primary Health Care and Health Mental Services have made an all-round approach through several meetings: – To identify complicated cases with difficult approach to provide a multidisciplinary and common follow-up. – Detection, control and monitoring of cardiovascular risk factors (CVRF) before starting an antipsychotic treatment. Ask for: Personal and familiar history of methabolic diseases, weight and mass body index (MBI), blood pressure, blood test, electrocardiogram (ECG). – CVFR follow-up: apply for and gather weight at 3 and 6 months after treatment beginning, and once-per-year after. Annual blood pressure and ECG following-up. – General Health Care Education: healthy life-style habits, sexual education, vaccines, find out smoking, alcohol intake and drugs, advice and/or treatment. – Meetings between Primary Health Care and Mental Health Services teams to discuss patient's approach.
Conclusions: Thanks to a collaboration between Primary Health Care and Mental Health Services, we have developed a common and all-round approach to patients with severe mental disorders and we will be able to improve their physical and mental health, following-up and treatment adherence.

OP-186

How do GPs and specialists assess their mutual communication?

Berendsen A. (Groningen)

Background: Quality communication between GPs and specialists is important, if we want patients to receive the right type of care at the right moment. Most of this communication takes place through telephone contact, letters concerning information on patients more recently also by email, and joint postgraduate training. As much research has been aimed at the content of communication between GPs and specialists, we wished to address the procedural aspects of this communication. We addressed the following research question. How do GPs and specialists assess their mutual communication through telephone, letters and postgraduate courses?
Methods: A cross-sectional study was conducted among a random sample of 550 GPs and 533 specialists selected from the Netherlands Medical Address Book. The response rate was 47% GPs (n = 259) and 44% specialists (n = 232).
Results: Specialists qualify the GPs' telephone accessibility as poor; while GPs themselves do not. Specialists think poorly of the GPs' referral letter. Merely half of GPs feels their questions are addressed appropriately by the specialist, whereas specialists think this number is considerably higher. According to specialists, GPs often do not follow the advice given by them. GPs rate their compliance much higher. Less than a quarter of GPs feel the specialist's letter arrives on time. Specialists have a different perception of this. Both parties wish to receive feedback from one and other, while in practice they do so very little.
Conclusions: GPs and specialists disagree on several aspects of their communication. This impedes improvements. Both GP's accessibility by phone and time span to the specialist's report could be earmarked as performance indicators. GPs and specialists should discuss amongst themselves how best to compose a format for the referral letter and the specialist's report and how to go about exchanging mutual feedback.

OP-187

Hemobstacle

Aubin-Auger I. (Paris), Mercier A. (Rouen), Baumann L. (Paris), Lebeau J.P. (Tours)

Background: The faecal occult blood test proved its efficiency in medium risk colorectal cancer population. It allows a significant decrease of mortality due to this cancer of 15 to 18%, if repeated every two years among patients from 50 to 74 years old. Mass screening is gradually organized in France. A participation rate of at least 50% is needed to obtain a mortality decrease but not already reached in most of French areas. The obstacles of screening are numerous, on physicians' side as well as on patients' side.
Research Question: What are the doctors' barriers concerning colorectal cancer screening?
Methods: Qualitative method. Six focus groups have already been performed. A purposive sampling has be done trying to include GPs from different departments in France, GPs of different ages and GPs who are more and less convinced by the mass screening. The analysis has been done with a phenomenological approach and content analysis.
Results: (ongoing study) Many obstacles have been described by the GPs. Patients often talked about the screening at the end of the consultation. Thus it could be difficult to assess patients' level risk. Delivering the test and explanations were time consuming. Most of the youngest doctors were convinced by the mass screening relevance. It seemed more difficult for the oldest GPs to include public health actions during their daily practice. The main obstacle barrier came from the patients not spontaneously asking for the screening.
Conclusion: Many obstacles have been identified by the physicians concerning colorectal cancer mass screening. Some of the barriers were coming from the patients and will require further in depth exploration.

OP-188

Cervical cancer screening and GPs in Italy

Carelli F. (Milano), Alice S. (Genova), Forfori P. (Genova), Botto M. (Genova)

Background: Routine use of Pap smears has been associated with a dramatic reduction in the incidence rate of cervical cancer, and in mortality: by 90%, when the 85% of the target population is screened. According to the Italian Screening Programme, Papanicolau smear is offered, every three years, to all sexually active women, age 25–64 y, but only the 66.7% has been screened (51.8% among the unmarried) and the first screening age is 31 y, on average. In Italy Pap tests are carried out by Gynaecologists and only the 31% of eligible women were screened on suggestion of their Family doctors.
The role of GPs: The suggestion of Pap Tests is a task of the GPs, they should give information about the test, condition being searched for, possible results and their implications, they should relay the results and refer to the specialist when needed. GPs with special interest could also conduct the Pap smears. Thanks to their special long term relationship of trust, GPs can have a strategic role in increasing the screening rate and in lowering the age of first screening.
Conclusions: A reflection is needed to understand which are the barriers for italian GPs to improve the early detection and management of cervical cancer and the INHS should develop strategies to overcome these. In our opinion the first goal should be to improve GPs' awareness of the importance of the screening and of the fact that too many women are not adequately screened. This can be done during CME events, by providing GPs evidence-based information. Financial incentives for computerized recall/reminder system could be useful. Peer support and feedback on performance are also needed.
References: 1 de Wure C, La Torre G. Valutazione della diffusione dello screening del tumore della cervice uterina in Italia. Italian Journal of Publica Health 2007;2:12–6. 2 Coleman C, Day N, Douglas D. European Guidelines for quality assurance in cervical cancer screening. Eur J Cancer. 1993;29 a (suppl. 4):1–38.

OP-189

Melanoma: how to adapt post-graduate and continuing education to the recent guidelines?

Chambe J. (Strasbourg), Gras D. (Strasbourg), Perrigouard *C. (Strasbourg), Attuil R. (Strasbourg), Cribier B. (Strasbourg)*

Background: Melanoma is a rare and severe cancer. As Incidence is getting stable in other european countries, it is still growing in France. Early detection of that skin cancer is the only way to reduce mortality. A new recommendation promote a strategy that places the general practitioners in the center of healthcare coordination.
Research question: Using that recommendation, a training for interns and general practitioners should improve their ability to identify thin melanomas.

Methods: The training lasted half a day for the interns and one day for the GPs. They analysed the recommendation with a dermatologist expert. Short-term evaluation consisted in a pre-test and immediate post-test, with open questions and photo analysis. Mid-term evaluation was sent 3 months later by email. It consisted in open questions, photo analysis and qualitative evaluation of the training and their change in practice.
Results: 16 interns and 27 GPs were volunteers. The basic knowledge was good in both groups (67% and 63%). The short-term evaluation attested a global significant progress (78% and 76%, p <0.05). The best results concerned risk factors and Breslow index. The notion of solar prevention for children was a failure. Three groups of answers emerged in the picture analysis. A significant improve was noticed only in one of them, but recognition of melanoma progressed up to 88%. The mid-term evaluation showed a partial loss of efficiency to analyse malignant lesions, but it did not affect their attitude for 92%. Most of the participants appreciated the training, but wished to complete it with a clinical practice in dermatology.
Conclusion: A one-day training improves the skill of interns and general practitioners to detect early melanoma at short and mid-term. Future trainings should insist on the use of a risk score and a systematic examination.

OP-190

Interactions between fluindion and fluoroquinolones: study of 185 consecutive patients

Pernes S. (Amiens), Duhaut P. (Amiens), Schmidt J. (Amiens), Ducroix J. (Amiens)

Introduction: Anti-vitamin K (AVK) and fluoroquinonones (FQ) are frequently prescribed in general medicine, more particularly in the elderly. Interaction between AVK and FQ have been assessed on small series of patients for warfarin, but have never been studied for fluindion. We designed a population-based study in order to test for potential interactions.
Patients and methods: Patients under AVK for more than one week, and for whom FQ was introduced, were selected from a computerized prescription database. International normalized ratio (INR) before, and after, introduction of FQ were compared. Potential interactions and confounders were controlled in multivariate analysis.
Results: 185 consecutive patients were included over a 4-year period, 120 women (mean age: 76 ± 14 years), and 65 men (mean age: 69 ± 117 years). Ciprofloxacin (CIP) was prescribed in 19 cases, ofloxacin (OFL) in 139, and levofloxacin (LEV) in 27. The INR performed the day after the FQ administration were significantly higher than the pre-administration INR (p = 0.005). INR was lowered in 16% of patients, stable in 46%, and increased in 38%. CIP induced an INR decrease in 32% of cases and no increase, whereas OFL and LEV lowered the INR in 14%, and increased it in 42% of patients. Distributions of potential confounders (number and type of other drugs renal function, hepatic function, age) were similar for the 3 FQ. INR could vary by more than 2 points (extremes: – 4 to + 13). In multivariate analysis, only the type of FQ (p = 0.0068) and the association with other drugs modifying hepatic metabolism (p = 0.013) were associated with INR modification.
Conclusion: General practitionners must be aware of the INR modifications induced by administration of FQ, and old patients are more at risk for hemorragic or thrombotic complications. INR have to be controlled closely as soon as the second day of FQ introduction in patients with AVK.

OP-191

Survey observational case-control on the calculation of urinary tract: food and major risk factors

Colucci G. (Martina Franca), Iacovazzo P. (Martina Franca), Pavone F. (Martina Franca), Solito M. (Martina Franca), Petrelli G. (Martina Franca), Colucci E. (Martina Franca), De Felice C. (Alberobello), Contursi V. (Bari), Martinelli D. (Bari)

Introduction: Kidney stones (KS) are a multifactorial disease and different causes contribute to the development of this disease. Aim of the study: an observational case-control study on KS was performed, evaluating different risk factors and trying to find correlations to the development of the disease. **Materials and methods:** Databases of 10 General Practitioners were evaluated and cases of KS were recorded. Risk factors included: gender, age, Body Mass Index (BMI), food intake, goiter, water type intake, and other co-morbidities. Height and weight were evaluated and BMI was calculated. Also general water type and food intake were evaluated considering protein and natrium intake.
Results: 513 cases were recorded: femal 51.8%, male 48.2%, average age 58.1 years; control group included 515 patients, 53% females, and 46% males, with average age 57.6. There were non significant differences in the two groups as far as agne and gender was concerned (p >0.005). 27.7% of cases and 10.8% of controls had positive familiarity for KS (to be considered a risk factor, p <0.001) 13.4% of cases versus 4.5% of controls had goiter (risk factor, p <0.001); there was no positive correlation with overweight and obesity. As far as water intake, a protective factor of the use of mineral water versus tap water has been recorded (p = 0.002) while oligo-mineral water is a risk factor (p <0.001). Vascular hypertension is not directly correlated to KS. 48.1% of patients versus 30.1 % of controls has also other pathologies (risk factor p <0.001), while there is no direct correlation with diabetes, cardiac diseases, Chronic obstructive lung disease, arthrosis; there is association and direct correlation with nephro.-urinary pathology, digestive and tumors. There is no correlation between KS and food intake.
Conclusions: Cardio-vascular disease do not correlate with KS; data concerning water and food intake may be the consequence and not the cause of KS.

OP-192

PUMA – potentially unappropriate medication in the elderly – an analysis of primary health care in nursing home residents

Niebling W. (Freiburg), Kossow S. (Freiburg), Böhme K. (Freiburg), Loh A. (Freiburg), Beck S. (Freiburg)

Aims and Purpose: Adverse drug events are frequent and costly; they are increased in elderly patients and with inappropriate medication. This study wants to analyse the current extent of inappropriate medication in elderly nursing home residents cared for by primary care physicians.
Methods: 37 GP practices of the quality practice network Freiburg registered 549 patients they cared for in nursing homes. All medication prescribed, age and weight were recorded in the nursing homes. Relevant diagnoses and serum creatinine were collected at the GP practice. Data were analysed using the modified Beers list 2008 and the Prescription-Software RpDoc to assess appropriateness of prescription.
Results: Patients mean age was 83.3 years and 77% were female. On average, 7.75 drugs were prescribed for a patient (ranging from 1 to 29 drugs). The number of diagnosis recorded for a patients averaged at 8.25. Only 5% of patients had two or less diagnosis, up to 30 diagnosis were registered for a patient. Currently, 187 of the 549 records are analysed completely. In 34% of patients, inappropriate prescriptions were found, in 27% this concerned one medication only, in 5% it occured with 2 different prescriptions, in 1.6% with 3 or more prescriptions. Critical medication prescribed most often is a benzodiazepine: 24% of all 549 patients. 69% of all patients are prescribed psychotropic medication, on average 2 different drugs. Most often, patients have a record of neuroleptic prescription (67% of patients presribed psychotropic drugs), followed by antidepressants (58%).
Conclusions: Prescribing in the elderly is complex because of multimorbidity, polypharmacy with frequent prescription of psychotropic drugs and organ failure. A software prescription tool can help to minimize inappropriate medication in the primary care setting, either used in the GP practice or directly in Nursing homes.

OP-193

Early stages of schizophrenia: improving detection skills of general practitioners

Simon A. (Bruderholz), Cattapan-Ludewig K. (Kilchberg), Müller T. (Bern), Jegerlehner S. (Bern), Frey P. (Bern)

Aims and Purpose: Schizophrenia is among the most disabling and costly diseases. Subsequently, one of the major goals in psychiatry over the past two decades was to define the early phases of schizophrenia in order to model specific intervention strategies. Early intervention, however, requires early recognition of psychotic patients or patients at increased risk for developing psychosis. Analyses conducted to identify the help-seeking pathways of these patients consistently found that general practitioners (GPs) are the most often contacted health professionals. This emphasizes the important role of GPs along the early course of schizophrenia. Between 2003 and 2005, the International Study on GPs and Early Psychosis (IGPS) was conducted among 11 sites in 7 countries (England, Norway, Austria, Canada, Australia, New Zealand and Czech Republic) and sampled 2784 GPs. This study was an extension of a Swiss study among 1089 GPs that was carried out in 2001/02. The main finding in both studies was that GPs underidentified the insidious features of beginning schizophrenia.
Design and Methods: Against this background, we designed a randomized study model to test whether repeated sensitization contributes to sustained diagnostic knowledge, in particular of insidious features of beginning schizophrenia. The study is conducted between September 2008 and September 2009 among 1180 GPs from 3 distinct regions in Switzerland. In this study, diagnostic knowledge of GPs is assessed at baseline, at 6 and at 12 months via questionnaire. Between baseline and 6-months assessments, GPs are randomized in 2 groups, with one group receiving 2-monthly education

via case vignettes. We hypothesize that the educated GP group shows better diagnostic knowledge at 6-months with a sustained effect at 12 months.
Results: We shall present 6-months outcome data.
Conclusions: Will be shown at the conference.

OP-194

Antiphospholipid syndrome in a male patient with SLE-case report

Punosevac D. (Krusevac), Zivic M. (Krusevac), Simonovic D. (Krusevac)

Antiphospholipid syndrome (APL sy) represents an increased tendency to form blood clots (thrombi), in any kind of blood vessels, due to the presence of APL antibodies in the blood of these patients. It usually appears as a secondary phenomenon in autoimmune diseases (especially SLE), women with frequent spontaneous abortions, while using drugs as oral anti contraceptives, antibiotics and so on. My male patient, 32 years old, at the time, started first to complain of the pain in his right thigh. He was diagnosed with deep vein thrombosis of the right thig hand treated with anticoagulants. His condition was well until half a year later when he got subfebrile temperatures and swollen neck lymphglands. He was treated with antibiotics, but he wasn't feeling any better, so biopsy of the glands was performed. It showed granulomatous, non caseous, inflammation of the glands. Further examination at the Pulmology institute showed that patient had enough diagnostic criteria for SLE (Systemiclupus erythematosus). After the treatment with prednisolon, he was feeling much better, but due to previous deep vein thrombosis the patient was forwarded to Immunology institute to be checked for APL sy, because of his previous deep vein throbosis of the right thigh. The anti cardiolipid and anti beta2 GP-1 antibodies were found, which verified the diagnosis of APL sy. For the time being he takes oral prednisolon, 20 mg/day and Aspirin 100 mg/day and has regular check ups of the eyes and kidnies as well. APL is not so rare, and it should be taken into consideration especially if you find any sort of thrombosis in a young person. Diagnosing and curing the sy in women with repeated spontaneous abortions helped them to carry out their pregnancies til the endand give birth to healthy babies.

OP-195

Methodological challenges in complex intervention trials – successes and challenges of MOSAIC, a cluster randomised trial of social support for abused mothers among primary health care population

Taft A. (Melbourne), Small R. (Melbourne), Hegarty K. (Melbourne), Lumley J. (Melbourne), Watson L. (Melbourne)

Aims: MOSAIC aimed to reduce depression and IPV and increase social support, wellbeing and attachment to children among abused or at risk pregnant and recent mothers referred by their family doctor (GP) or maternal and child health (MCH) nurse.
Design and methods: MOSAIC is a complex multi-method trial. 32 clusters (24 GP clinics & 8 MCH nurse teams) were randomised following innovative IPV training. Participating health care providers (HCPs) referred only 215 eligible mothers over two years and 174 (81%) were recruited. 76% (n = 132) mothers were retained. To "realize" social support, we recruited, trained and supported over 50 local mentors to provide weekly empathic, non-judgmental support and advocacy for women in the intervention arm for twelve months. Women in the comparison arm were offered support from upskilled HCPs. We employed a Vietnamese bilingual researcher for a sub-study with 10 Vietnamese-speaking mentors and 25 women. All women completed a survey measuring depression (Edinburgh Depression Scale), IPV (Composite Abuse Scale), parent-child interaction (Parenting Stress Index SF), social support (MOS Scale) and wellbeing (SF36) at baseline and twelve months later. Analysis by intention to treat is underway. We conducted interim and impact HCP evaluation surveys to improve recruitment. 35 women have been interviewed about the impact of the intervention on their lives.
Results and conclusion: Despite >6 hours training, resources and ongoing support, HCPs referred slowly, in limited numbers and at a 2:1 intervention to comparison ratio. Process evaluation with providers, ongoing participant contact and prioritising safety and confidentiality assisted the successful completion of this complex and challenging study.

OP-196

What do patients think about physicians' appearance in primary care in Adana, Turkey?

Ozcan S. (Adana), Anber N. (Adana), Bozdemir N. (Adana)

Purpose: Since Hippocrates, doctors have been aware of the importance of their appearance, as it often influences the doctor-patient relationship. We aimed to explore patients' preferences for physicians' appearance in primary care.
Design and methods: A cross sectional study was carried out, between March and May 2008 in a southern city of Turkey. Eight primary care centers were selected randomly among 83 centers. A total of 770 patients were interviewed while they were waiting for their physicians. First, they were asked whether they thought that a physician should wear white coat or not. Then, photographs of physicians worn different dress styles are showed and wanted them to put in order the photographs according their preferences. Finally a five point Likert scale was used to measure patient's comfort with particular items of appearance.
Results: Five hundred fifty (71.4%) of the patients were women and 220 (28.6%) of them were men. Seventy two percent of the patients preferred physicians to wear white coats. No significant relation was found between the preference of white coat and the patients' age, gender, educational, and occupational status. The most preferred photographs were white coat with trousers, shirt and tie for male physicians and white coat with skirt for female physicians. Patients stated that they were not comfortable with shorts (84.4%), unshaved (67.5%), tight cloth (63.2%), beard (51.9%) for male physicians and blouse above the navel (79.7%), shorts (68.2%), and heavy make-up (50.3%) for female physicians.
Conclusions: Despite the claims that white coat has become a treat for patients for establishing more equal relationship, most of the patients still prefer the physician to be dressed in a white coat in primary care in Adana, Turkey.

OP-197

Why do patients ask for euthanasia?

Winkler M. (Gouda)

What can anthroposophic medicine add to give the appropriate answer to the patient? If patients in case of unbearable suffering without perspective ask for euthanasia, according to the Dutch law it is allowed to give euthanasia, provided that protocol is followed. Why do patients ask for euthanasia? There can be anxiety for pain and loss of dignity. He or she can be feeling himself as a burden to the family and environment. A patient longs in our times for being self active, selfregulating. Besides that coming near to death brings a dissociation between what one thinks, one feels and the deeper will. This can bring up asking for euthanasia. Body language says often something else as what sounds out of the words of the patient. How do we find the question behind the question? What does my patient really wants and needs? What perspectives anthroposophic medicine can give to come to the final answer witch does justice to the real question of the patient.

OP-198

Obesity and dietary habits in Turkish adolescents living in semi-urban area of Istanbul: gender differrences

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Aim: The aim of this study was to investigate weight and dietary and physical activity habits among adolescents in semi-urban schools in Istanbul.
Design and Methods: A descriptive study was conducted with the 369 adolescents age of 11–14 years. Participants answered the 72-hour fed food records, and could stand up for measuring were included. After basic socio-demographic information was obtained, a questionnaire was applied to all students asking family history, fast food consumption, frequency of meals, exercise and sedantary activity habitudes, diseases and some symptoms related with overweight. Height and weight were measured. Having BMI >= 85th percentile was defined as excessive weight and having BMI >= 95th percentile defined as obesity. Energy intake and macronutrient variables were calculated by a dietician.
Results: The prevalence of overweight and obesity were 11.7% and 3.3% respectively and higher among girls ($p = 0.046$). Amount of protein and fat intake is higher in boys than in girls ($p = 0.003$, $p = 0.001$). Boys were doing more regularly physical activity versus girls ($p = 0.03$). Logistic regression analysis revealed that eating at least 3 meals was conversely related with excessive weight or obesity both boys and girls (OR: 0.277, 95% CI 0.105–0.730; OR: 0.430, 95% 0.195–0.946). There were no differences between the sexes and intake of macronutrients.
Conclusion: In this study we found some differences regarding weight status, macronutrient intake and physical activity habits among to sexes. Although the prevalence of overweight and obesity is found to be lower than many countries, it is still important to promote physical exercise, especially for girls, and three times meal per day in order to decrease the obesity prevalance in our region.

OP-199

"Rechercheservice Evidenzbasierte Medizin (REM)" – an internet based tool to implement evidence based medicine in primary care

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Aim and purpose: It is a challenge to implement evidence-based-medicine (EBM) in primary care, because it is complicated by various factors: no access to EBM-databases, lack of time, poor knowledge of EBM principles. We therefore designed a new web-based tool (REM) for a continuous and problem focused EBM-implementation. In this study we explore the efficacy of this tool regarding implementation and usage.
Design and Methods: Primary care physicians in Austria and Switzerland are offered a web-based service platform where they can ask medical questions that arise in daily practice. A team of researchers at the Paracelsus Medical University in Salzburg (PMU) then performs a literature search and evaluates clinical studies and systematic reviews from various databases ("PubMed", "Cochrane Library", "EBM-Guidelines for General Practice", and others) to give an answer to the GP according to current best evidence. The asking physician has the possibility to give feedback regarding the usefulness of the answer in practice.
Results: More than 800 GPs and specialists in Austria and Switzerland have registered for REM until February 11th 2009. Altogether we received 318 questions from the registered doctors. Only about 20% of the registered doctors have sent at least one inquiry. The general user-feedback was 4.5 (Likert scale 1 = not helpful, 5 = very helpful) with a feedback-rate of 42%.
Conclusion: REM is the first project which offers a continuous and problem focused implementation of EBM in primary care. In comparison to other similar international projects REM has been more successful regarding the number of physicians registered, the number of questions submitted, and the duration of the service. The fact that only about 20% of the registered REM-users have actually submitted a question points out that implementation so far has only been partially successful. Further research is needed to explore the reasons for the lack of usage.

OP-200

Extracting and using electronic clinical data in general practice

Schattner P. (Melbourne), Saunders M. (Melbourne), Stanger L. (Melbourne)

Aims: The computerisation of general practice has enabled general practitioners (GPs) to review patient clinical data on a practice-wide basis. Quality improvement programs such as the Collaboratives in the United Kingdom and Australia base their strategies on electronic data and the development of small scale reflective activities to bring about change. Several data extraction tools have now become available to assist GPs in this task. In this study, we investigated the change management processes used in general practice to extract and use electronic clinical data to improve the quality of patient care.
Design and methods: Fifteen practices were given a data extraction tool (i.e. a small software program) which searches clinical databases. Selected patient data are then displayed as reports which GPs can review and use as they see fit in order to improve the quality of care they provide. Project officers from a regional division of general practice (i.e. a government funded organisation aimed at supporting local practices) provided training and support. The project officers also carefully tracked which clinical data were extracted, and the small scale quality improvement processes that practices undertook after reviewing the data. This study reports on the information that the project officers systematically collected for 9 months.
Results: The most common areas that practices chose to improve on were: completeness of data entry, e.g. for drug allergies; and diabetes management (e.g. whether clinical measures such as average HbA1cs are at or below 'target' values). Practices used a range of strategies to improve defined clinical areas including placing reminder stickers on computers or involving practice nurses in the management of patients with diabetes.
Conclusions: GPs and practice staff are able to use data extracted from their clinical databases to develop strategies to improve their practices.

OP-201

New tools for the GP in coordinating care of individuals with multiple problems

Kunnamo I. (Helsinki), Braunold G. (London)

Aims(s) and purpose: The increase in the number of elderly patients with multiple and complex health problems and the specialization and fragmentation of care call for coordination and patient-centredness. Many initiatives such as Connecting for Health and the Quality and Outcomes Framework in the U.K. the EBMeDS decision support service in Finland, and the Patient-Centered Medical Home in the U.S.A. put primary care physicians in a key position. The presentation aims at presenting new information management tools that enable the GP to serve as the coordinator better than ever before.
Methods: Review and demonstration of new tools.
Results: The tools facilitating the work of the GP as a coordinator include summary care records and interoperability of electronic medical records (and specifically how they should be developed to support coordination and managed care), ecommunication between clinicians, patients and their careers, decision support that aims at taking into account complexity, preventing medical errors and predicting the benefit of interventions (not only for suggesting effective interventions, but also for avoiding ineffective or harmful interventions), and quality improvement tools and measures that are specifically planned to deal with complexity and take into account patient preferences.
Conclusions: Innovative and practical tools for care coordination are emerging, and GPs should take the lead in developing these tools.

OP-202

Clinical data transmission from hospital to GP's. An ethnographic research

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Purpose: In 2007 has started in Trentino (Italy) a project called Ampere: a new network to send clinical data from hospitals to GP's. This study is a brief analysis of the impact of Ampere project in the GP's practice.
Design and Methods: The study has been carried out using a qualitative methodology: the case studies research. The normal work of four GP's has been actively observed for a week, following the ethnographic research rules. Doctors have been chosen by a theoretical sampling process using both geographical (working in city or rural town) and IT skills (good or poor) criteria. Taken notes have been catalogued with focus on innovative elements and criticalities.
Results: Preliminary results show that clinical data received from hospital have been useful to permit a better knowledge of clinical situation, diagnostic paths and therapeutic decisions of assisted patients. In some cases the Ampere project permitted even a faster diagnosis and treatment, with a positive outcome in patient's health and satisfaction. The study shows also some open problems. Some of most important unresolved issues are: obtaining agreement to treatment of personal details, storing data and protecting privacy.
Conclusions: The electronic medical reports transmission from hospital has a remarkable effect to the GP's work, often with a positive feedback, but this new tool involves deep changes in habits, spaces organization and IT skills. The study shows also some criticalities as the difficulty of managing the increasing number of information and privacy safeguard. Extending the number of observed GP's could be useful to improve the knowledge of potentials and limits of the Ampere project.

OP-203

Family violence: trying to reach European consensus on registration

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Aims and purpose: Family violence (FV) has a high prevalence and serious and lasting consequences. It often remains undetected and untreated in general practice. A European network is created to improve this. One of it's goals is to develop a registration tool for FV in primary health care to facilitate and describe actual practice, identify problems and evaluate care pathways. Research question: Which items of information should a GP best register in the medical files of (suspected) victims or patients at risk of FV in order to deliver and evaluate care adequately?
Design and Methods: After literature study and consensus meetings, 113 items were subjected through an online questionnaire (Formsite) to be scored on importance (1–4) by Belgian and European experts. Oportunity to comment was given. Scores were analysed using SPSS. This way items could be categorised as: necessary (Score-Stdev>3,5), to be recomended (3,5>Score-Stdev>3) or useful in more extensive documentation (3>Score-Stdev>2,5). Based on these scores a prototype registration form was again presented to experts to be adapted. This study was financed by the Belgian Federal Service on Public Health.
Results: 16 experts completed the questionnaire in the first round. In total 18 items could be categorised as always important to register and 37 items as recomendable. 33 experts adapted the registration form in the second round. Broad consensus exists on a core of items necessary to register in every situation of FV. A registration tool should be flexible enough to adapt to specific situations.
Conclusions: Based on the consensus on content, a flexible electronic registration tool is submitted in a qualitative research

protocol to a representative sample of GP's in order to study feasability and acceptability for use in everyday practice taking into account technical and confidentiality concerns. Such formats may proof useful for international comparison.

OP-204

General Practitioners rating specialists: first experience with a novel online tool to assess specialists' quality of work in the PizolCare medical network

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Introduction: General practitioners in medical networks are subjects to quality assessment in terms of being rated by their patients. In contrast specialists are rarely qualified by patients. GPs working together with specialists in medical networks are predestined to adequately assess the specialists' quality of work. We used relevant indicators to develop an internet-based tool to assess specialists' quality of work by GPs in the Pizol Care Medical Network.
Method: We developed an internet-based form with 22 questions related to the quality of the specialists' work. Every question would be rated with a figure between one (absolute dissent) and ten (absolute consent).
Results: 264 forms were filled in and 48 out of 61 specialists were assessed. 24 out of 32 GPs participated in the rating process, each rating between 3 and 19 specialists. 26 specialists were rated fewer than five times and therefore were not subject to statistical analysis. 7 specialists were assessed by more than 10 GPs, 15 were rated by five to nine GPs. The medians are shown on a separate sheet.
Discussion: As to our knowledge few is known about how GPs qualify the work of specialists. We tried to collect data within the framework of Pizol Care. These data showed that there is quite a good satisfaction with the specialists' work except for the fact that mostly there was no structured referral form offered, facilitating the referral process. Difficulties were also expressed regarding responsibility in care of patients with chronic illnesses and concerning the adequate timing of the first appointment at the specialists' office as well as sending the patient back to the GP. In general it can be said that this novel assessment-tool is able to detect differences between the specialists' quality of work. Weather this will have an impact on better cooperation with GPs remains to be seen.

OP-205

Optimal monitoring frequency of asthma control by the asthma control questionnaire

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Rationale: International guidelines suggest composite control measures for use by health care providers to assess the state of control of their patients' asthma and by patients for self-assessments to guide their asthma management. The Asthma Control Questionnaire (ACQ) is a validated instrument that measures the level of control over one week (Juniper ERJ 1999). The optimal ACQ monitoring frequency should balance feasibility with avoidance of unobserved loss of control. Aim To assess to what extent a single 1-week ACQ provides a representative classification of asthma control during the preceding 2 week – 3 month observation period.
Methods: 200 patients with physician diagnosed asthma (GINA treatment step 2–4) aged 18–50 years, participated in a study on internet-based self-management (Smashing-project). Weekly internet monitoring via the ACQ was performed for one year and ACQ-scores were categorized into well controlled (<0.75), partly controlled (0.75–1.5) and uncontrolled asthma (>1.5). The agreement between the current level of control and the worst level of control during a preceding observation period was determined.
Conclusion: The agreement between a single ACQ and the worst level of asthma control within one month was good, with less than 11% unobserved loss of asthma control. This suggests that monthly ACQ monitoring is the lowest feasible frequency for guiding asthma treatment.

Table1

Preceding observation period	2 weeks n=1164	3 weeks n=588	1 month n= 378	2 months n=101	3 months n=45
% perfect agreement	96%	92%	89%	78%	67%

OP-206

How accurate are the diagnoses of asthma and chronic obstructive pulmonary disease in general practice?

Schattner R. (Melbourne), Lucas K. (Melbourne), Thien F. (Melbourne), Sulaiman N. (Melbourne), Del Colle E. (Melbourne), Aroni R. (Melbourne), Abramson M. (Melbourne)

Aims and Purpose: Spirometry considered the "gold standard" for diagnosis of both asthma and Chronic Obstructive Pulmonary Disease (COPD) is rarely used in general practice. This raises questions about diagnosis accuracy. The aim was to trial spirometry as an intervention for management of asthma and COPD in general practice. Accurate diagnosis is essential to optimum management.
Design and Methods: 386 patients aged 8–70 years and prescribed inhaled medication in preceding 6 months were recruited through 31 general practices. Doctor diagnoses were extracted from practice records. Adult participants completed the European Community Respiratory Health Survey questionnaire. Spirometry was performed using Micro-Medical turbine spirometer before and after bronchodilator following ATS/ERS guidelines. Forced expiratory volume in the first second (FEV_1) and Forced Vital Capacity (FVC) were measured.
Results: We had Doctor diagnoses for 278 patients: asthma 192 (69%), asthma/COPD 40 (14%), COPD 38 (14%) and 8 (3%) other (pulmonary fibrosis, bronchiectasis, undiagnosed cough). An asthma diagnosis was correctly reported by 93% of patients. Only 61% of patients with COPD reported this diagnosis. Among those with both asthma and COPD, 83% reported asthma and 48% reported COPD. Of those with a diagnosis of COPD, 65% had fixed airflow limitation (post bronchodilator FEV_1/FVC <0.70). Conversely only 14% of those meeting this criterion had been diagnosed with COPD. Median (interquartile range) bronchodilator reversibility in FEV_1 was 6.0 (3.0–11.6%). There was no significant difference between those with diagnoses of asthma or COPD.
Conclusions: Doctor diagnosed asthma is accurately reported by general practice patients. However COPD remains substantially underdiagnosed in general practice. Acute response to bronchodilator does not distinguish these groups, possibly because of long acting bronchodilator use.

OP-207

Simple prediction model for COPD in people presenting cough in general practice

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Study aim: To quantify the diagnostic value of patient history and physical examination for COPD in patients older than 50 years who present with cough at the general practitioner.
Methods: We performed a diagnostic study in the Netherlands between January 2006 and May 2009. Participants who were older than 50 years of age and presented with cough for 14 days or longer at the general practitioner, and were not known by their GP with COPD were included. Information on signs and symptoms as well as results of spirometry were gathered both during the episode of acute cough as six weeks later in a stable condition. Finally, after twelve weeks after inclusion, all patients underwent state-of-the-art lung function measurements in an out-patient clinic including measurement of airway resistance and diffusion. After this, an expert panel established definitive diagnoses (COPD or no COPD) in all subjects based on the results of all tests. This panel diagnosis is the reference test. By multivariable regression analysis and ROC-curves the most optimal diagnostic strategy for COPD was determined. Internal validation of the model was done by bootstrapping and shrinkage of beta coefficients. With this model, clinically relevant risk categories were determined.
Results: Until now, data of 291 participants have been analysed. On the congress we will be able to show results of all included 390 participants. Of the 291 patients, 90 (31%) had COPD. Age, gender, current smoking, history of wheezing, asthma, cardiovascular disease and wheezing on pulmonary auscultation were independent predictors of COPD. A model with these predictors had after internal validation an area under the ROC-curve of 0.79.
Conclusion: With results of only six items of standard history taking and physical examination, GPs can make an clinically relevant assessment of the risk of COPD in patients who present with cough.

OP-208

C-reactive protein assisted prescribing for respiratory tract infections to stimulate antibiotic stewardship (CAPRESA); a randomised controlled trial in general practice

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Context: Most antibiotic prescriptions for respiratory tract infections in primary care are not warranted. C-reactive protein (CRP) point of care testing and the delayed prescribing strategy are both proven effective methods to restrict antibiotic prescribing without compromising patient

outcomes. Combining these methods may further optimise RTI management.
Objective: To determine the effect of CRP assisted prescribing strategies for acute lower respiratory tract infections (LRTI) and acute rhinosinusitis in general practice.
Design: Open, randomised controlled trial in general practice.
Intervention: CRP test, available within the consultation, as an additional diagnostic tool, to assist antibiotic prescribing decisions compared to usual care (without CRP available within the consultation).
Main outcome measure: Antibiotic use after the prescribing decision at index consultation. Secondary outcomes were antibiotic use over 28 days, reconsultation, patient satisfaction and clinical recovery.
Results: 32 general practitioners recruited 258 adult patients (129 in every arm of the trial) with LRTI (107 patients) or rhinosinusitis (151 patients). 56 (43.4%) patients in the CRP group used antibiotics after the prescribing decision on day 1, compared to 73 (56.6%) in the control group ($p = 0.03$). This difference in antibiotic use remained statistically significant during the follow-up period of 28 days ($p = 0.04$). Patient satisfaction was higher in the CRP group ($p < 0.05$). 23% of delayed prescriptions were filled in the CRP group versus 72% of the delayed prescriptions in the control group ($p < 0.001$).
Conclusions: Combining CRP with prescribing strategies for LRTI and rhinosinusitis in general practice may enhance the proces of targeting the right antibiotic prescription at the right patient, leading to improved antimicrobial stewardship.
The authors are part of WONCA-WESIG: GRIN

OP-209

How can national guidelines be implemented successfully in primary care? Experiences of the German guideline implementation trial asthma (Leitlinien-Implementierungs-Studie L.I.S.A.)

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Background: Although national and international high-quality recommendations exist, the primary care of patients with asthma in Germany is too often not evidence-based. The knowledge transfer from theory to practice is obviously no process that runs by itself. Current studies show that a passive implementation of guidelines is insufficient and therefore an active implementation essential.
Aim: The purpose of this study is to verify the most promising guideline implementation strategies for the primary care of patients with asthma.
Methods/Design: The 5-armed prospective and controlled implementation study contains 3 modules: a lecture, E-learning and seminars for the employed practice nurses. The recruiting of the participating general practitioners (GPs) took place in quality circles where the combination of the optional learning units (blended learning) could be chosen freely by the participating 318 GPs. While the GPs filled in a questionnaire before a lecture, the employed practice nurses (PNs) did the same with an equivalent questionnaire before their seminar. The success of the intervention has been measured on the part of the GPs after 1 month and after 3 months again with a questionnaire. On the part of the PNs the success was measured singularly with another questionnaire 3 months after the intervention.
Result: In succession of the intervention a significant increase of knowledge and guideline- conforme behaviour can be measured on part of the GPs' as well as on the PNs' part. Especially the E-learning group profited from the intervention. Further results are expected in the near future.
Conclusion: On the base of these results the authors come to the conclusion that in future national guidelines are implemented most effectively if they are introduced by a study adapted on the situation of care.

OP-210

GRACE – observations on current diagnostic procedures in Europe

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Aim and Purpose: There are a number of examinations and investigations that are available to clinicians when a patient presents with symptoms indicative of a lower respiratory tract infection (LRTI). This presentation will explore variations in the use of these examinations and investigations across Europe. Qualitative research on attitudes towards them will also be presented.
Design and Methods: Cross-sectional observational study of 3,368 primary care patients presenting with a new or worsening cough or clinical presentation suggestive of lower respiratory tract infection. Information on whether the following examinations were carried out was collected: temperature (all patients), auscultation, blood pressure, pulse rate, respiratory rate, pulse oximitery, and peak flow. Information on whether the following investigations were ordered was also collected: CRP, full blood count, inflammatory markers (ESR, PCT), chest x-ray, urea or creatinine, electrolytes, serology, sputum culture, nose or throat swabs, and spirometry. The qualitative component was based on 81 semi-structured interviews with clinicians in 9 of the 14 networks.
Results: Wide variation was observed in the frequency and type of examinations and investigations that were carried out, with little evidence for a clinical justification for such variation. Clinicians were divided in their views on the use of such tests, with a number of advantages and disadvantages being highlighted.
Conclusions: The use of examinations and investigations across Europe is not standardised. The usefulness of the findings of such tests may be bolstered by their use in conjunction with a suitably designed prediction rule or algorithm.

OP-211

Male vs. female doctors: what kind of choice?

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Background: Due to its intimacy and individualized nature, the physician-patient relationship is unique among the professional relations. In this context, the physician gender is important as a possible factor that may interfere in the physician and patient interaction.
Objectives: Verify if there is a difference in the doctor's profile according to its gender, in a population sample divided in two distinct age groups.
Methods: Descriptive cross-sectional study performed on 763 individuals (211 Elderly and 552 Young-adults). A questionnaire was designed, containing 64 items in which there were 3 options of answer: male physician, female physician or no difference. Said questionnaire enquired about the physician profile, practical medical situations and different specialities of Medicine.
Results: The majority did not express preference (about 70%) for a physician gender. However, those who have expressed a preference, the majority associated to female doctors a more empathic and patient-centred communication style and the profile of medical specialities that require a greater degree of relationship, communication and intimacy and to male doctors a greater technological capacity, as well as a profile for more technical specialities.
Conclusions: The majority of patients associate female doctors to a superior ability to interpersonal communication, and male doctors to a greater technical skill. This is particularly evident in the Elderly.

OP-212

Policy and attitude-related reasons for gender disparity in post allocation for graduate medical education in Austria

Spiegel W. (Vienna)

Objective: To explore the policy-related and psychological reasons for the gender disparity in post allocation for graduate medical education in Austria.
Methods: This study employed a cross-sectional questionnaire design and a qualitative method. A self-administered 12-item questionnaire was sent twice to all of the 8,127 licensed Viennese physicians. To estimate any possible responder bias respondents from the first and second mailing were compared.
Results: 34% completed the questionnaire. Whereas 56.8% of male physicians attained the chosen medical specialty, only 41.4% of the female doctors did. When a specialty is favoured by men, the chance for women to achieve that specialty decreases. According to the qualitative results, men were more often ready to accept training in a specialty different from the one originally desired. Examples of physicians' opinions as to why the chosen medical specialty was not attained are analyzed.
Conclusions: Female physicians were put at a disadvantage by department heads due not, as hypothesized elsewhere, to an unconscious process on the part of department heads but to reasoning based on organizational aspects and sex-stereotyping. Several possible reasons are suggested for explaining the phenomenon that men are more often ready to accept training in a specialty different from the one originally desired.

OP-213

Validation of a tool for the evaluation of the gender perspective in research

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Objectives: The gender perspective has been a habitual lack in the investigation projects, detecting these lacks would help to modify this tendency. Our work hypothesis is that the gender perspective is not included in the different stages of investigation, what rebounds in a negative way in the health of women. Investigation without gender perspective, impacts strongly in the direct attention to women. At the moment the investigation is based mainly on what happens to men, carrying out an erroneous, or retarded diagnosis, and a mistaken treatment over women. Our objective is to design and reach a consensus a protocol that allows to evaluate the application of the gender perspective in the investigation. It is also sought to carry out proposals of specific formation in that environment.
Methods: Revision of the literature Qualitative methodology, to establish consensus among expertise related to a list of items. Group of discussion have been made, requesting the participation of experts in investigation in health and gender. We convened a 2-day workshop in June 2008, with 6 methodologists and researchers to draft a checklist of items. We compared and revised this list during several meetings of the coordinating group and in e-mail discussions within the research group, taking into account the revision of the literature and methodological considerations. The information was organized taking into account the different sections of a project research: title, abstract, introduction, methods, future results, impact. In a later phase the protocol has been validated, introducing it in the questionnaires of valuation of different investigation calls. We have needed help of expert appraisers for this end.
Results and conclusions: We present our novel and validated protocol with 2–3 key questions related with gender in each phase of an investigation project. This tool will help to researchers to considerer best the gender perspective when they edit a project.

OP-214

Practices of prescribing combined hormonal contraception: A survey among primary care physicians in Finland

Sannisto T. (Tampere), Kosunen E. (Tampere)

Purpose of the study: Public primary health care services in Finland include contraceptive counseling free of charge. The purpose of this study was to investigate professional practices and medical eligibility criteria applied when prescribing combined hormonal contraception (CHC, including combined oral contraceptives [COCs], vaginal ring and contraceptive patch) among primary care physicians.
Design and Methods: An online questionnaire survey was conducted in Pirkanmaa Hospital District in Western Finland among 122 health center physicians involved in family planning in their community health centers (N = 63). Clinical practices when initiating CHC were assessed against Finnish and WHO guidelines.
Results: Eighty-three (68%) physicians responded. Of them, 41 (49%) initiated COCs weekly and 38 (46%) every month. Prescribing rings or patches was less common (42% and 19% monthly). Most physicians routinely took a number of tests and examinations when initiating CHC, including pelvic examination, blood pressure measurement and cervical cytology. Some gaps were identified in physicians' knowledge about the medical eligibility criteria for CHC. Most strikingly, 34 (41%) respondents did not recognize migraine with aura as a contraindication. Twenty-five (30%) physicians applied a minimum age for use of CHC (13–16 years). Nine (11%) respondents reported no age limits for smoking women, and of those who did, 13 prescribed CHC even for smokers over 35. Fifty-six respondents (67%) applied a maximum blood pressure limit, but that limit varied widely.
Only 16 (19%) respondents reported the recommended limits (140/90 mm Hg). Prescribing CHC in extended cycles was rather uncommon.
Conclusions: Overall, prescribing practices of CHC among Finnish primary care physicians were satisfactory. However, the primary health care system has been quite slow to adopt the latest recommendations for medical eligibility criteria and new prescription practices.

OP-215

Do GPs take care of gynaecological health problems in a different way according to their gender?

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Aims and purpose: According to a systematic literature review by Sampietre-Colon et al in 2004, little information on women's preferences exists. Most studies were conducted in Canada, UK of United States. A study conducted in 1999 by Schmittdiel et al, showed a rather low preference of female patients for their own GP (13.3%) in case of gynaecological issues. 60.3% of the interviewed female patients have a preference for a gynaecologist, and one of the main reasons is having a male GP. Unfortunately, these data were gathered in a large health centre, which might cause a biais in the preferences for gynaecologists. This study aims to compare care provided for gynaecological health issues by GPs being part of an ongoing and in real time network in France in 2007 according to their gender.
Design and Methods: A retrospective transversal descriptive study, using data gathered by an ongoing and in real time network in France in 2007. 19 Results of Consultations (RC), according to gynaecological health problems, as defined in the database will be analysed, using data collected during consultations and home visits. Main analysis concerns patients taken care of for every RC and for all RC by GP, searching for a link with GPs age and working place (urban versus rural).Secondary analysis concerns the number of consultations/ home visits per RC by patient and by GP.
Results: The study being in progress, results will be presented during the conference.
Conclusions: This study might give useful information about preferences of female patients for a gynaecological health issue in a GP-setting, helping GPs provide qualitative care to their female patients. It might lower the preference of female patients for basic gynaecological care, for a gynaecologist, and so using specialist-consultations more efficiently. On the other hand, GP is feminizing since several years. This study will help us appreciate the impact of the type of GP on the way of taking care of gynaecological problems.

OP-216

The effect of patients' and physicians' gender on cardio-vascular risk factors management among primary care patients from Southeastern New England

Tabenkin H. (Afula), Eaton C. (R.I.), Roberts M. (R.I.), McMurry J. (R.I.), Borkan J. (R.I.)

Background: Cardiovascular diseases (CVD) are the leading cause of morbidity and mortality in the U.S. for men and women. Treatment of cardiovascular risk factors by behavioral and pharmacological means improves morbidity and mortality. Yet, in recent years concern has been raised about gender disparities in the management of cardiovascular disease.
Objective: To examine the extend of patients' and physicians' gender differences in cardiovascular risk factors' management at the primary care level.
Design: The analyses for the purpose of this study are based on the data base collected for a large cluster randomized trial – The Cholesterol Education and Research Trial (CEART).
Setting: Thirty practices from southeast New England.
Patients: Patients that belong to physicians from the 30 practices. Intervention: Patients that gave their informed consent answered a telephone questionnaire regarding CV risk factors. In addition, chart audits were performed and data regarding cardiovascular risk factors' management (Hyperlipidemia, obesity, smoking, physical activity, Diabetes mellitus and Hypertension) was collected.
Results: 4195 patients participated in the study, 60% females and 40% males. 52% of them had lipid disorder, 40.3% hypertension, 9.65% DM, 32% had BMI >30, significantly more women were physically inactive ($p = 0.02$). More men than women were at high risk for CVD ($p < 0.0001$). 14% were smoker. After controlling for CV risk, patients, physicians and practice variables, no gender differences were found in LDL at goal in lipid and DM management and in the rate of controlled HA1C and BP in DM patients. Yet, less women than men pts are on medication for their disorder (lipid, DM), while more women pts than men receive diet and wt loss advice especially from their female physician. Among hypertensives, more men than women were controlled. patients and physicians gender interaction showed differences in receiving diet advise especially from female physicians, in ACEI treatment for diabetics more female patients getting diet advise, more diabetic male patients getting ACEI by female MD and more hypertensive male are controlled.
Conclusions: Despite increase awareness there are still patients' and physicians' gender differences in the management of all CV risk factors. The slogan "women get advice and men get medication" still rings true. Women's life expectancy is longer than men so maybe in general, women benefit from advice for healthy life style instead of medications. Yet Diabetes mellitus markedly increases the risk of CVD

especially among women. Therefore, physicians in general and especially women physicians should be more aware that women need the same treatment as men when they are at equal CV risk.

OP-217

Basic diagnostical activity, small-surgery procedures, team-work and telemedicine solutions in primary reception. How it affects referral and finding serious cases

Veskimägi M. (Tõstamaa)

Introduction: Tøstamaa-Varbla is rural area in south-western part on Estonia, Pärnu county. There is approximately 2400 inhabitants, in two communities. Medical service take place in healthcare centre with basic equipment in laboratory (whole blood analyser, CRP rapid quantitative detection, blood sugar, urine test, occult-blood, rota-adenovirus and H. pylori antigen detection from stool etc). During reception is available also X ray, ultrasound, blood-pressure monitoring, spirometer, ECG, stress-test, tympanometer etc. Medical team consist 5 worker, specialised family doctor, 2 nurse, and nurse of physical therapy. There is available technical possibilities for telemedicine, in some fields there is done approximately 10–50% consultations by this way.
Aims and purpose: Aim of present study is to get an overview patients amount, work which is done by doctor and nurse and data ofreferral on urgent, telemedicine and ordinary way grouped by specialty.
Design and methods: Retrospective statistical analysis of healthcare centre reception, based on electronical data record and analysis of covering notes during time period 01.01–31.01.2008.
Results: During period 01.01–31.01.2008 there is done 693 reception: 22,5% physician's primary, and 13.5% repeated reception and 1% homevisits. By nurses is done 67% receptions and 3% homevisits. Number of out-patient's consultation is 33, 5 of them on telemedical way. There were find 4 serious cases which is forwarded to hospital urgently. On ordinary way there is forwarded to hospital 8 patient. 93.5% of all patients remain on responsibility of family physicians team.
Conclusions: Due-to basic diagnostical activity and team-work there is possible to find on first reception serious cases which need urgent admission and consultation. Majority of patient's remain on responsibility of family physician's team, their problem is resolved by ordinary treating, small-surgery procedures and follow-up.

OP-218

Improving quality by improving cardiovascular risk management: working towards new and transparent ways in general practice

Beijaert R. (Utrecht), Veld C.J. (Utrecht)

How do you organize this quality in your own surgery?
Background: As in the rest of Europe CVRM is a hot topic in the Netherlands. The Dutch Government issued laws prohibiting smoking in public places. The laws are implemented since July last year. What do we know about the quality of CVRM in European General Practice? What is quality and how can we manage it in our own surgery? How do you organize the quality of CVRM in your own surgery? And last but not least: how do we evaluate the rate of CVRM in our surgery at this moment? Can we approve of it? We will try and understand the meaning of Quality with the help of Pirsigs 'Zen and the art of motorcycle maintenance' and provide the participants with some elements of QI applicable in daily practice. Then we will demonstrate a way to improve organisation in General Practice using the Dutch (translated in English) Quick scan for GPs on cardiovascular risk management: what is already good or excellent in your practice, what can be improved?
Aim: of the presentation is to compare the ways European GPs run 'Quality'.
Back home the Monday after the congress the GP can reflect on the subject, and recognize the strengths and weaknesses of the organisation in his/her own setting.

OP-219

To diminish interruptions is to improve the quality

Boada Valmaseda A. (Barcelona),
Perez Rodriguez F. (Cornellà De Llobregat),
Fuentes Bautista B. (Sant Boi De Llobregat),
Lopez Gonzalez V. (Cornellà De Llobregat),
Muñoz Orti F. (Cornellà De Llobregat),
Martos Medina R. (Cornellà De Llobregat)

Aims of the experience: To implement a program of improvement of the quality to diminish the number of interruptions of the sanitary consultations in a center of health.
Design and Methods: Market study of intervention with application of a program of constant improvement of the quality.
Description of the experience: The management team of the center, they stimulate a project of improvement as practice of a course of methodology of the quality. After studying several offers they decide to act on the numerous interruptions in the consultations of the sanitary personnel. They consider as aim to reduce to the half the number of interruptions applying stepwise the methodology of quality studied during the course. This way, after describing the initial situation and raising the mission to continuing, they qualify and number all the interruptions in the consultations, implying to the sanitary personnel. To classify the interruptions a scheme realizes type Ishikawa's thorn. To quantify the interruptions there is realized an active work of the sanitary ones of the center for 1 week of visits. With the results, there is designed a plan of action and a calendar to fulfill it adapted to every type of interruption.
Results: Six months later there are evaluated results, which certify the fulfillment of the initial aim, and there are extracted conclusions that serve to detect the failures and to propose improvements. The global decrease of the interruptions was 55%.
Conclusions: 1. The quantification of the interruptions of the consultations allows to detect that the sanitary ones we are the principal causers of the same ones. 2. It is possible to diminish the number of interruptions of the consultations with gesticulate easily asumibles. 3. The decrease of the interruptions provides a high degree of satisfaction in the sanitary personnel.

OP-220

Assessing GP's work from solo practice to group practice: lights and shadows

Mangiagalli A. (Pioltello), Brigatti M. (Milano)

In the last ten years Italian GP's have changed their way of working, trying to adapt their organizations to a new way of dealing with the complex requirements of modern patient care. This evolutionary shift has focused primarily on moving from a solo practice to a group practice model, through an intermediate organization based on network practice. In network practice every GP works in his own office, linked to other colleagues only by the Web. In the group practice model all colleagues share the same office and staff. To investigate if and how this change was accepted by patients, five GP's who had previously worked a "sole practitioners" administered to practice patients (7000) a Europep questionnaire to measure patient opinion of a broad range of specific aspects of GP care. As change occurs quickly, we updated the standard questions, adding some new items which specifically address certain aspects of our new way of working, for example, the presence of students in the office during consultations, the increasing management of paperwork by practice staff and the need for website information. At the end we asked patients to give an overall evaluation of the group practice-its advantages and disadvantages-compared to a solo practice. The results show that in many aspects group practice has great advantages, but shady areas linger on, mainly with regard to secretarial service, telephone management and the ability to make an appointment on short notice. In the short term, a critical aspect of a five-GP group practice like ours will probably be staff formation, to better address these „non-medical" problems, and website management with a priority on providing fast, affordable and reliable information. Telephone management seems today to be one of the most critical aspects for both GP's and patients, requiring a specific system to handle the huge amount of calls which are part of the daily routine.

OP-221

Analysis of the emergency appointment in a primary care centre

Tierno Ortega M.T. (Barcelona), Mestre Llop I. (Barcelona), Gómez Lumbreras A. (Barcelona), Bou Barba V. (Barcelona), Santanach Soler J. (Barcelona), Buil Ferrero C. (Barcelona)

Aim: we analyze the emergency visits occurred in a primary care health center and the number of days between this first emergency visit and the next one with a doctor in the center in order to define a new model of organization and to promote a correct use of the emergency visit by both, patients and doctors.
Methods: all the doctor's emergency visits in the center were analyzed during one month of each season of the last year. The data collected were: number of consultations-previous appointments versus emergency visits-, gender and age of the patients and purpose of the consultation. Moreover, the number of days to contact again with a doctor was divided in three periods: less than 7 days, between 7 and 14 days and between 15 and 30 days.
Results: the emergency visits represented, from the total ones, a percentage between 14.37% (spring) and 29,4% (winter), being superior on Mondays (29,3%). The group that consulted the most was women (51–79%) and the patients aged 20–40 years (about 40%). The main medical purpose of the visits were viral respiratory infections in all seasons (winter 26.2%, spring 17.89%, summer 4.5% and autumn 15%) followed by digestive infections like gastroenteritis (winter 14%, spring 12.63%, summer 3.60%, autumn 7.22%). Non-

medical problems (certificates for work, prescriptions…) caused a high percentage of our consultations (up to 30%). Surprisingly, the number of patients contacting again with a doctor in the health centre before a week time after the emergency visit turned out to be extremely high, till a maximum of 71.2% (in winter).
Conclusions: there were a great number of emergency visits which constantly disturb the doctors' schedule. These results support the need of focusing in other models of organization. Doctors have to be concerned to solve all the patients' needs in only one visit to avoid worsen the waiting list. Health education is needed tomodify the patient's self-care and illness behavior.

OP-222

Organisational problems affecting patient satisfaction in primary care in Samsun – Turkey

Dikici M.F. (Samsun), Cubukcu M. (Ardahan), Yaris F. (Samsun)

Aim: Patient satisfaction needs to be evaluated. Our aim was to explore the problems of the factors on the patient satisfaction in primary health care in Samsun to improve the quality.
Methods: Turkish version of the EUROPEP was administered to patients in five different rural and urban primary care centers in December 2006 and September 2007. Primary care physicians were visited for the study in five day medical practices, twice for each day. Every day, a minimum of 10 patients were consecutively included the study after the informed consent. The patients were asked about demographic details and 23 questions in EUROPEP with a rating scale 1–5 (bad to excellent). The questions were evaluated in four main domains; communication, information/support, medical/technical care and organization. The percentages of the patients who rated four and five were evaluated.
Results: Of the 580 patients, 389 (67.1%) were female, 191 (32.9%) were male. Total 383 were adults, parents were interviewed in pediatric group. Percentages of the patients whose scores were 4 and 5 on five questions in communication main domain were 88.2, 89.7, 84.4, 88.8 and 83.8. Percentages of information/support and medical/technical care were 71.9, 77.3, 73.7, 67.5 and 75.9, 87.2, 80.1, 77.9, 68.3, respectively. In the organization main domain, percentages of the 4-5 scores were 18.2 (providing quick services for urgent health problems), 28.5 (getting through on the phone), 28.7 (getting an appointment), 29.9 (being able to speak to the practitioner on the telephone), 39.6 (referrals), 45.0 (waiting time), 72.5 (knows previous contacts) and 72.7 (other staff).
Conclusion: These results show that patient satisfaction on organization main domain is low. Providing quick services for urgent health problems was the worst. We need more effort to improve organizational and practice management problems ie., appointments, accessibility, co-ordination and urgent problems in primary care.

OP-223

General practitioners and the Swiss invalidity insurance: opportunity for early initiation of medical appraisals to judge reintegration measures for their patients

Eichler K. (Winterthur), Bollag Y. (Basle), Auerbach H. (Winterthur), Stöhr S. (Basle), Gyr N. (Basle), Brügger U. (Winterthur)

Aim and purpose: General Practitioners (GP) feel responsible for the continuity of care of patients with chronic diseases. For such patients, the maintenance of the occupational status via reintegration measures may be important to avoid chronification and invalidity with severe socio-economic consequences. The Swiss social insurance system may fund such reintegration measures. Little is known, however, how early medical appraisals are initiated to judge eligibility. We aimed to assess the current time pattern for initiation of medical appraisals for the Swiss Invalidity Insurance as part of a larger survey.
Design and methods: Cross sectional study using a web-based questionnaire. We included all medical appraisals (from February to April 2008) of the Swiss Invalidity Insurance, health care insurances and private insurances. Information about medical appraisals was collected by staff of the participating insurances after provision of teaching sessions and stored in a SPSS ® database. For our descriptive analysis we provide proportions, means (SD) and medians (IQR with 25–75% percentiles).
Results: We analysed n = 2444 medical appraisals of the Swiss Invalidity Insurance (77% of all included n = 3165 appraisals). Before the first episode of disability, 88.4% (2161/2444) of those patients with a medical appraisal for the Swiss Invalidity Insurance had a workplace (employed or self-employed). The mean time interval between a first episode of disability and the commissioning of a medical appraisal for the Swiss Invalidity Insurance was 4 years (mean: 216 weeks [SD 216]; median: 137 weeks [IQR 72-264]). At that moment, the fraction of patients that still had a job had already diminished to 22.9% (560/2444).
Conclusions: GP should use their unique position for patient care to actively promote timely medical appraisals. This could result in early reintegration measures for their patients to keep contact to the labour market.

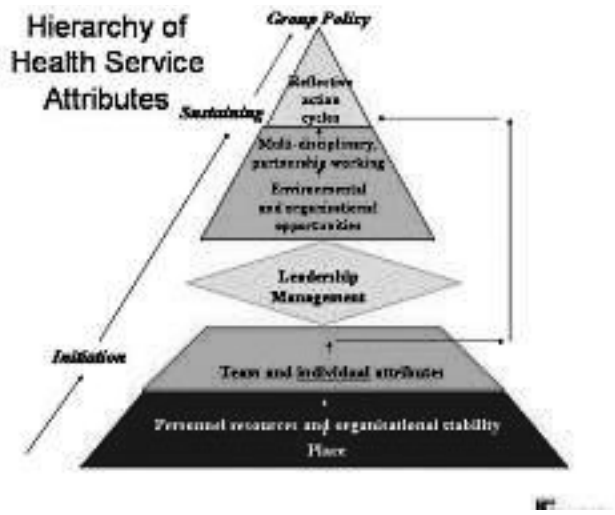
OP-224

Health service attributes necessary for effective delivery of a policy to support breastfeeding in primary care: an ecological model

Hoddinott P. (Aberdeen), Britten J. (Glasgow), Pill R. (Cardiff)

Aim: To understand why breastfeeding rates declined in three of seven areas of Scotland that participated in a cluster randomised controlled trial of a policy to provide breastfeeding support groups for pregnant and breastfeeding women in primary care.
Design and methods: We used an ethnographic approach to design and evaluatethis complex intervention and prospectively built mixed method embedded case studies. We conducted individual or focus group interviews with health professionals, managers, volunteers and participants (n = 126); 17 group observations and four telephone surveys with 20 key informants.
Results: An explanatory model (a tiered pyramid) of health service attributes emerged and explained variation in (a) the implementation of the policy (b) the breast feeding outcomes. In the three localities where breastfeeding rates declined, negative aspects of place including deprivation, unsuitable premises and geographical barriers to inter-professional communication; personnel resources including staff shortages, high workload and low morale; and organisational change predominated (the base model tiers). Managers focused on solving these problems rather than delivering the policy and evidence of progress to the higher model tiers was weak. In contrast, where breastfeeding rates increased the base tiers of the model were less problematic, there was more evidence of leadership, focus on the policy, multi-disciplinary partnership working and reflective action cycles (the higher model tiers).
Conclusions: Our inductive model provides insights into how the delivery of this complex intervention was context dependent and describes the health service attributes necessary for the breastfeeding group policy to work. This can be considered an ecological model of health promotion and contrasts with the more usual individually orientated approach. We suggest that more attention is given to complex systems within which health promotion interventions occur.

Hierarchy of health service attributes



OP-225

Intended workload of future physicians. Student questionnaire

Romerio Bläuer S. (Basel), Martina B. (Basel), Tschudi P. (Basel)

From 2002 – 2008 we annually performed questionnaire interviews with all medical students at all university levels. The aim of the questionnaire was to assess the career goals of medical students and the intended workload as future physician during postgraduate training and their professional career. In addition, in 2006 we examined the intended workload (part time, full time work).
Methods: Questionnaires answered by 410 medical students, 77% return rate. 56% of all medical students were females.
Selected results: Workload during postgraduate training: 240 medical students (77% total, 88% of male and 70% of female students) have

the intention to work full-time during postgraduate training. 50 students (16% total, 12% of male and 19% of female students) would like a workload of 70–80%. 22 students (7% total, 0% of male and 11% of female students) would like a workload of 50% or less. Workload after completing postgraduate formation:147 medical students (47%) have the intention to work full-time after completing postgraduate training: 74% of male and 23% of female students. 112 students (36%) would like a workload of 70–80%: 26% of male and 45% of female students. 47 students (15%) would like a workload of 50%: 0% of male and 28% of female students. 6 students (2%) would like to work less than 50% of time: 0% of male and 4% of female students.
Conclusion: At the Basel University medical school 74% of all maleand 23% of all female students intend to work full-time in their future profession. The remaining 26% of male students intend to work 70–80%. 77% of female students plan part-time work, 60% of them with a workload of 70–80%, 36% with 50% and 4% with less than 50%.Therefore, due to the increasing feminization of medicine combined with the increasing wish for part-time work more students and physicians are required to guarantee and maintain the same level of medical care in the future.

OP-226

Family practice development in Moldova – picture based on family doctor's opinion

N. Zarbailov[1] (Chisinau), Y. Rahim[2] (Torino)
1State University of Medicine, Moldova; 2University of Torino, Italy

Background: In Moldova Family Medicine started as a response to the health care reforms after state independence. Re-training of physicians working in ambulatory care to become family physicians was implemented in the period of 1993 to 2008.
Objective of study: To assess the current status of family physicians based on their opinion, in order to identify challenges of their daily work and to define their future needs.
Method: A random sample of 20% of all registered family doctors was selected. After pilot-testing the questionnaire, this was sent to these 358 family doctors by post. The pilot test and the main study were anonymous, confidentiality was guaranteed by authors. The response rate was 39,3%. We used SPSS v.15 for our statistical analysis.
Results: The family physicians strongly agreed that, as a specialty, Family Medicine is a central discipline of the health care system in Moldova, which needs to be supported by the Ministry of Health and by the professional association, in order to keep sustainability and to continue development of primary health care. After re-training, family physicians feel more skilled in treatment of common diseases and management of preventive care. Reproductive and mental health, minor surgery and other specific problems still are not managed well by family doctors, according to their opinion. Practice management also needs further improvement.
Outlook: The development of primary care in Moldova should be monitored and evaluated continuously so that suggested solutions and recommendations can better be evidence based. Opportunities and risks related to lack of practice, needs of family physicians and other actors affected by the reform process should be taken into consideration.

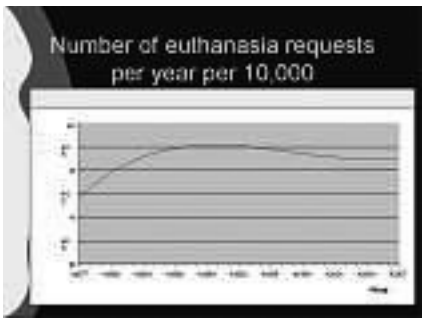
OP-227

The impact of the euthanasia act on the number of requests for euthanasia and physician assisted suicide

Donker G. (Utrecht), van Alphen J. (Utrecht), Marquet R. (Utrecht)

Aim: To investigate changes in the number of and reasons for requests of Euthanasia and physician assisted suicide (E/PAS) in Dutch General Practice after implementing the Euthanasia Act in 2002.
Design: Retrospective dynamic cohort study during the period 1977–2007.
Participants: Standardized registration forms were used to collect data annually on E/PAS via the Dutch Sentinel Practice Network. This network of 45 general practices represents 0.8% of the Dutch population and is representative at a national level for age, sex, geographic distribution and population density.
Results: Analysis of 1011 E/PAS requests (54% male) showed an increasing trend until 1990. Thereafter a slight decrease, which stabilised after 2004 around 2.2 per 10,000 ($P < 0.05$). Malignancies were reported in 74.8% of these requests. The group younger than 60 years of age (23.7%) is overrepresented. Pain showed a declining trend over the years ($P < 0.001$), but remained the most frequent reason for requesting E/PAS. Deterioration was a frequent reason for patients' requests until around 1991; thereafter this reason decreased ($P < 0.01$). Dyspnoea showed a decreasing frequency during the period 1977–2007 ($P < 0.05$).
Conclusions: The incidence of requests for E/PAS in Dutch General Practice did not increase after implementing the Euthanasia Act. Pain has declined, but remained the most frequent reason in requesting E/PAS in Dutch General Practice throughout the study period.

Number of requests for euthanasia



Reasons for requests of euthanasia

OP-228

Patients' opinions and experiences of generic substitution in the Czech Republic

Maly J. (Prague), Dosedel M. (Prague), Hojny M. (Prague), Havlicek S. (Prague), Byma S. (Prague), Herber O. (Prague), Kubena A. (Prague), Vlcek J. (Prague)

Aims and purpose: Generic substitution is a common piece of health care system and is used in some European countries. Generic substitution was established by a law in the Czech Republic in the beginning of January 2008. The aim of this study is to evaluate and analyze patients' attitudes towards and experiences of generic substitution after the first year of new law in the Czech health system.
Design and methods: Data of this prospective study are collected by interviews with 500 patients who visit randomly selected pharmacies. The interviews are conducted by 2 researchers. Interview consists of 30 questions which are referred to demographic characteristics of respondents, their knowledge of, attitudes towards and positive and negative experiences of generic substitution and the generic drugs. Interviews will be finished in March 2009. Data will be processed by descriptive statistics and by nonparametric statistical methods.
Results: This study should point out relevant and exclusive data about the use of generic substitution in the Czech Republic. The rate of patients' knowledge of or confidence in generic substitution will be evaluated. We are going to analyze correlation between patient's characteristics such as gender, age, education, salary, number of medications and questions concerning knowledge, experiences of generic drug and substitution. The study will point to positive and negative experiences with generic substitution. Especially negative experiences of patients relating to the generic drugs will be useful (such as intolerance of some drug).
Conclusions: Patients' satisfaction will indicate confidence in generic substitution, pharmacist and physician. Negative experiences or lack of knowledge in patients should motivate to change of legislative conditions or health care professionals' attitudes.

OP-229

Medical case reports: how do we capture the lessons we learn each day from our patients in family medicine?

Kidd M. (Adelaide)

Aims and purpose: Accurate recounting of clinical experience continues to be essential to the progress of medicine. A case report provides important and detailed information about an individual, which is often lost in larger studies. The purpose of this presentation is to describe the types of case reports submitted by family doctors/general practitioners to a new open access online journal devoted to medical case reports.
Design and Methods: Published case reports can be aggregated into a structured case reports database. A database makes it possible to search for patterns of drug reactions, or demographic data and disease information, across multiple case reports. Patients can also make contributions to case reports describing their own experiences.

Results: The author will present details of the types of case reports submitted by family doctors, including the number of reports, the country of origin, the categories of case reports and examples of cases arising from general practice and family medicine which have contributed to the expansion of current medical knowledge.
Conclusions: Case reports can serve as an early warning signal for the adverse effects of new medications, or the presentations of new and emerging diseases. Lessons learned from our patients as part of our daily clinical work can add to medical knowledge and act as a stimulus for new research.
Declaration: The author is editor-in-chief of ajournal publishing case reports andreceives an honorarium for his editorial work with this journal.

OP-230

Narratives for healing and teaching

De Benedetto M.A. (São Paulo), Blasco P. (São Paulo), Levites M. (São Paulo), Garcia D. (São Paulo)

Purpose: The purpose of this study is to determine the benefits of including Narrative Medicine in a didactic Palliative Care Clinic addressed to medical students and first year Family Medicine residents.
Methods: We dare to affirm that, according to the Science of Complexity, Family Medicine, Palliative Care and Narrative Medicine could be considered inter-related complex systems which act simultaneously for composing new conceptual frameworks able to improve medical education and patient care. Medical students and junior doctors usually demonstrate difficulty to deal with themes as pain, suffering and death. Although these issues represent a common place in doctors' practice, they have not been properly broached at Brazilian Medical Schools. In a didactic Palliative Care Clinic conducted by family doctors, students and first year Family Medicine residents were introduced to principles of Narrative-based Medicine and orientated to pay attention to patients' stories, feelings, beliefs and vision of life. Then, preceptors, students and residents participated of reflective writing sessions (the activity that commonly closed the encounters) in order to share feelings, meanings and apprenticeship awakened by the practice. The data were collected from three sources: participant observation by authors, texts written by students and residents at reflective writing sessions and a questionnaire applied to them. The data were analyzed in a qualitative way. The main themes were assembled in categories.
Results: Writing, sharing and reflecting about narratives had a didactic and healing role for trainees by helping them to deal properly with themes as frustration, incapacity, pain, suffering and death and improving the clinical practice. Trainees missed the teaching of Narrative-based Medicine methodology in Brazilian Medical Schools.
Conclusion: The practice of Narrative-based Medicine and its component, reflective writing, is essential for the students' schooling.

OP-231

Verbal communication in general practice – some facts

Litschgi L. (Basel), Fehr F. (Heiden), Schlumpf A. (Basel), Ott C. (Basel), Riesen E. (Ziefen), Lienhart H. (Basel), Babics J. (Ettingen), Bally K. (Basel), Gantenbein M. (Basel), Handschin M. (Gelterkinden), Nüscheler M. (Basel), Lehmann S. (Reigoldswil), Tschudi P. (Basel), Romerio Bläuer S. (Oberdorf)

Objective: 92% of time with patients is spent with verbal communication. During 80% of the time we simply talk together. Hardly any empirical studies have been conducted on this most important component of our work. Verbal communication in hospitals or in psychotherapy has been studied more extensively. For this reason findings from hospitals or psychotherapy are transferred to the private practice. Our results show that these situations are not comparable.
The study: We recorded consultations at twelve general practitioners in our region. Verbal communication from 127 consultations was analyzed for the following: total time of consultation, number of medical subject matters discussed (coded according to ICPC2) and each subject matter's proportion of total consultation time, distribution of speaking right between doctor and patient. The narrative elements were isolated and quantified. Each consultation was graphically illustrated. We recorded patient satisfaction for each consultation.
Results: Consultation time lasts an average of 12.5 minutes. Actual medical procedures take up only 20% of the time. The rest is verbal communication. In 30% of time, both physicians and patients are talking in a dialog. 29% of consultation time consists of patients' monologues and 21% consists of physicians' monologues. The purely narrative part, i.e. verbal communication without therapeutic intention, amounts to 14% of consultation time.
Conclusions: The variety of subject matters discussed and the rapid changes of topics prove the complex nature of our consultations. The fact that patients have a more extensive right to speak in a GP practice than in hospital or other medicine settings, demonstrates how very close general practitioners are to the patients in their singularity. To master a complex problem in a unique situation within 12.5 minutes is truly a great accomplishment. How do we achieve it? And why don't we take more time for it?

OP-232

The relationship in the team narrated in a virtual community

Collecchia G. (Massa [MS]), Milano M. (Pianezza [TO]), Gambarelli L. (Scandiano [RE]), Longoni P. (Milano [MI]), Tombesi M. [Macerata (MC])

Purposes: In Italy, primary processes of care are heterogeneous and not standardized. Furthermore, GPs have a poor tradition in benchmarking activities and seldom show a willingness to share their experiences.
Aims of the study: 1. Can GPs share experiences about solutions adopted in their organizations? 2. Is a virtual community useful to share these experiences? 3. Which are the experiences about the topic "Relationship in the team"?
Design and methods: We included 37 GPs interested in organization and with ability in Internet use. Two steps followed: 1. A simplified Hanlon method was utilized to identify priorities concerning the organization and management of primary care. GPs were asked to list ten critical topics, assigning for each aspect a score 0 to 10 (quantitative analysis). 2. Through a Delphi technique, a facilitator proposed one topic a week, chosen among those previously identified. GPs were asked to answer to a semi-structured questionnaire (qualitative analysis).
Results: The 12 topics considered as the more critical for size and seriousness of the problem were discussed. During 18 months, 36 GPs sent 799 mails, discussing on their organisation. Finally, 22% of the physicians declared that they had modified some aspects in their setting as a consequence of the generated debate. About the topic "Relationship in the team", two dilemmas got higher: professional communication and rules of teamwork with the embedded difficulties in definition of dynamics and objectives.
Conclusions: Virtual community was useful to share experiences among GPs: each one could fully express himself/herself. This experience confirmed that teamwork and communication are strictly related. You cannot put together a group of people to make a team: you have to know well the rules and lead the teamwork dynamics and processes.

OP-233

Immersion in nature: a treatment to be prescribed to doctors?

Mottu F. (Versoix / Geneva)

Aims of the presentation: To show that immersion in nature can be a source of renewal as well as a fount of knowledge for the general practicioner.
Method: Images of wildlife will be analysed, and their story told, in a descriptive fashion. 1. From nature the doctor can draw strength and rediscover the necessary relational distance from patients. Coming across a white Arctic wolf imposes on us a change of viewpoint and routine: here I am tolerated only as a visitor. This puts my daily agitation into perspective when confronted with the aggressiveness of the health system... 2. From nature the doctor learns innumerable truths, often hidden in our modern world. Here he find a fascinating complexity: – **An awakening of the senses** precedes the analysis, the deductive synthesis. This awakening is a form of receptiveness, of listening or vigilance, to the smallest details; it precedes and completes our knowledge. – **To be silent**, to let impressions come, rather than to precipitate them, to let patients speak in their own words, before talking oneself and saying what we believe to be true... – Without doubt nature can remind us notions such as **respect and modesty** (which are threatened to become old fashioned). 3. In the wild a doctor may make some amusing comparisons; studying animal behavior is a fascinating game! The attitude and body language of the **wolf** or **bear** may lead humans to false assumptions. Wolves seem menacing and self-confident when, in fact, they are very close to man and not very dangerous; bears seem cuddlier and warmer, welcoming, like a teddy bear, when, in fact, they are cunning and wicked and some humans are killed by them every year.
Conclusion: Nature is, for doctors, a source of information and renewal. One of its advantages is that it is all around us – provided we know how to open our eyes and our mind…

OP-234

What kind of health troubles are linked to neuroleptic drugs prescribed among a French general practitioner's computerized network

Gallais J.L. (France), Naudet M. (Paris), Miche J.N. (Stains)

Background: Among mental diseases, psychotic troubles are often underdiagnosed although antipsychotic agents are prescribed by general practitioners and psychiatrists for both out and inpatients.
Aim: To perform a quantitative and qualitative study that highlights psychiatric and somatic medical diagnoses presented by outpatients receiving antipsychotic agents prescribed by general practitioners.
Method: Retrospective data analysis (2005–2007) in a national general practice computerized observatory. We selected all consultations with a prescription of one of the drugs representing ¾ of the total neuroleptiques prescriptions in France: Cyamenazine, Risperidone. Oleanzapine, Haloperidol, Tiapride, Sulpiride. We analysed all somatic, psychological and psychiatric diagnoses of those consultations according to age and gender.
Results: Between 2005 and 2007 we found 10,311 prescriptions of neuroleptic drugs issued during 8,322 consultations for 2,250 different patients. Among them, the six antipsychotic agents studied represented 1,707 patients and 7,340 consultations with 26,514 psychic and somatic diagnoses. Cyamenazine, Risperidone, Oleanzapine, Haloperidol, Sulpiride and Tiapride represented 31.1%, 12.8%, 9.6%, 8.1%, 7.3% et 5.5% of the total amount of antipsychotic agents prescriptions. For each drug, gender, age and diagnoses associations will be presented during the conference.
Conclusion: Neuloleptics are a relevant entry to analyse psychotic troubles and mental diseases in general practice. General practitioners have to cope with various mental troubles associated with acute or chronic somatic complaints and diseases. Needs in cooperation among general practitioners and mental or somatic health providers are underlined.

OP-235

Italian ISDB study on depression – ISD

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Aims and purpose: Evidence Based Medicine is playing an increasing role in good clinical decision making. Current literature on depression highlights the wide uncertainty regarding its diagnosis and management, particularly in the Primary Care setting. ISD aims to describe how GPs perceive, diagnose and treat depression disorders in their daily practice.
Design and methods: ISD is a prospective (12 months) epidemiological surveillance of a large cohort of patients (3.000) with certain or possible depressive disorders, for whom a formal care strategy is required. The treatment strategy will be decided by the GP, or assigned by randomization when the GP will be uncertain on which approach (pharmacological or non-pharmacological) could best be suited.
Results: 374 GPs and 38 NHS Pharmacists are currently involved into the study (the study started in January 2008). To date, 1206 patients have been included. 71% was female and the average age was 47 years. 827pts (68.4%) were already known to their GP as depressed patients and 379pts (31.4%) were new depressed patients. After inclusion visit, GP defined his diagnosis as probable for 364pts (30.2%) and uncertain for 50pts (4.2%). 373pts (30.9%) are managed only with pharmacological treatment, 142 (11.8%) with non pharmacological treatment, 675 (56%) with both approaches. GP was in doubt regarding his treatment choice, and so he adopted randomization, for 45pts (3.7%).
Conclusions: ISD preliminary results reveal that a fairly little number of GPs are uncertain in diagnosing or managing patients with depressive disorders. This scenario seems in contrast even with the more recent literature which still casts doubts on antidepressants use, particularly in Primary Care setting.

OP-236

Evaluation of depression in the mothers of children with chronic diseases

Cayir Y. (Ankara), Sunay D. (Ankara), Cayir A. (Ankara)

Purpose: To assess depression and related factors in the mothers of children with chronic disease.
Design: The mothers of 27 children with chronic renal failure, 33 with diabetes mellitus, 37 with leukemia, 27 with familial mediteranian fever attended to Dı skapı Children's Training and Research Hospital between January-November 2008 were included in the study group, 46 mothers of healthy children were included in the control group. Demographic characteristics of mothers and medical history of children were obtained by using questionnaires and Beck's depression inventory (BDI) was used to determine depression.
Results: The average BDI scores of the mothers in the study group were higher than the control group ($p < 0.001$). The average BDI scores of the mothers in leukemia and chronic renal failure groups were higher than that of the mothers in the diabetes mellitus group and FMF group ($p < 0.001$). The severity of depression were higher in the mothers whose children were diagnosed before 1 year, who had 1 child and whose children were hospitalized for the first time or more than 6 times ($p < 0.001$).
Conclusion: In this study we concluded that depression rate is significantly high in the mothers of children with chronic diseases. Therefore as the primary caregivers of children diagnosed with a chronic disease both at home and at hospital, the mothers need more psychological and social support and health professionals dealing with children with chronic diseases should inform the caregivers, especially the mothers in detail at every step of thetreatment and be prepared to deal with emotional reactions and mood disorders.

OP-237

Outcome of eating disorders in a primary care-based study

Van Son G. (Leidschendam), van Hoeken D. (The Hague), van Furth E. (Leidschendam), Donker G. (Utrecht), Hoek H. (The Hague)

Purpose: Most outcome studies of eating disorders are based on samples of patients that had entered specialized mental health care. This might be a group that does not represent all patients with an eating disorder and possibly shows a different course and outcome. Little is known about the outcome of newly diagnosed patients with an eating disorder in primary care.
Method: We studied the course and outcome of eating disorders in a nationwide 3–7 year follow-up study of patients detected in primary care in two previous incidence studies (1985–1989 & 1995–1999). The method of data collection was identical for both periods. The research team assessed the outcome (good, intermediate and poor) at follow-up based on the information provided by the GPs by questionnaire. In the assessment BMI, menstrual status, binge eating, purging behavior (self-induced vomiting & laxative use), the opinion of the GP about recovery and the overall level of functioning were considered.
Results: Response rates were 67% for anorexia nervosa restrictive subtype (ANR), 80% for anorexia nervosa binge/purge subtype (ANBP) and 69% for bulimia nervosa (BN). We assessed the representativeness of the follow-up sample. Good outcome was found for 55% ANR, 57% ANBP and 61% for BN. Poor outcome was found for 21% ANR, 23% ANBP and 6% of BN. The BN group had the shortest median time to recovery (2.8 yrs) and this differed significantly with the ANBP group (4.4 yrs) (Logrank = 4.6; $p = .03$). Age at detection was a predictor for both eating disorders. A younger age at detection predicted a favorable outcome.
Conclusions: After a mean of 4.8 years follow-up more than half the patients of an eating disorder cohort detected in primary care could be considered recovered. ANBP showed the most extended median survival time. Early detection in primary care is of major importance.

OP-238

CLOX: an executive clock drawing task. Screening for dementia in primary care

Ingram C. (Mankato)

Objectives: The CLOX workshop provides the attendees the opportunity to learn the CLOX dementia screening test. The participants will gain insight into the background and scientific development of the CLOX test. Executive function and clinically relevant neuroanatomy for primary care will be reviewed in addition to other cognitive domains. A review of cortical and subcortical dementia will be provided in a compact and clinically relevant and useful way. Patient illustrations will be used from my primary care clinic as well as work from Dr. Royall the designer the CLOX test. A participant completing the workshop will be able to perform the CLOX test upon returning to the clinic and interpret the results. Participants will have a new tool to help identify patients with executive dysfunction that may be missed with commonly used office based dementia tests such the Mini Mental Status Exam. Participants will be provided with supporting literature and a laminated pocket reference card.

OP-239

Acute psychotic patient in the out-patient clinic of general practitioner-legal aspects. Importance of early diagnostic, treatment and dispensarisation of schizophrenia

Brljevicová G. (Bratislava), Pecenak J. (Bratislava), Motovský B. (Trencín), Ernsten H. (Amsterdam)

Every doctor must provide a psychiatric examination for an acute psychotic patient as it is a state of emergency.The urgent medical treatment of an acute psychotic/whatever reason it may be/patient is necessary. Neuroleptics are administered.Psychoterapeutic crisis intervention of acute psychotic state is challenging.We do not try to disprove a patient's pathological statements,we do not fight with arguments. Peacefully, patiently and objectively we accept the reality and inform the patient on every step we take: on the need of examination, hospitalization, medications, or about needed fixation and police assistance. It is not advisable to prolong discussion. During transportation, attending personnel must be a superiority in number, namely 5 to 1 for the psychotic patient. Because an acute psychotic state represents a danger not only to himself but to persons coming in contact with the patient as well, non-treatment creates a serious risk to the patient's mental health, and therefore doctors of first contact must provide for adequate health care to such persons, even in cases of refusal from the patient involved. This fact is legally provided for by law though in every country there are differences.In EU member states it is recommended by the Board of Ministers EU 2004/10 in the Protection of Human Rights and Dignity of People suffering from Psychotic Disorders, obligatory hospitalization due to therapeutic or diagnostic reasons. Differences in health legislation regarding therapeutic care of mentally ill persons in European countries lead to casuistic I have met in practice.Casuistics in Annex es monitors the progress of mental disease in consequence of different health legislation in force regarding the treatment of schizophrenia in two European countries. Schizophrenia has a serious and often chronic an lifelong brain defect, a progressive encephlopathia seriously disturbing the abillity of patient to think clearly and create adequate emotional relation-ships.The disease results in a functional and cognitive deficit and it is accompanied by a high number of suicides/10-30%. The final state of patients suffering from this disease depends on early recognition of symptoms by a doctor, and by the fact whether a patient will accept the therapy or not: so-called compliance. The patients, due to their psychological disorder, are not aware of the pathological nature of their state and therefore they do not seek medical attention!.....

OP-240

Prevalence of giving positive answers to 2 standard questions for depression in the GP practice

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Background and Methods: In GP practice the prevalence of depression among patients is approximately 9%. Without screening, many GP patients may remain undetected despite depressive symptoms. Screening with verbal interviews by the GP or by telephone are well established, although they have a relatively low specificity. We performed an anonymous simple questionnaire interview in the GP waiting room to determine the prevalence and predictors of depressive symptoms. 389 GP patients from 5 GP practices filled out anonymous questionnaires with standard questions for depression. The two questions were: 1) during the past month have you been bothered by feeling down, depressed, or hopeless? 2) during the past month have you been bothered by little interest or pleasure doing things?
Results: The 389 GP patients are 54 ± 21, range 10–93 years old, 70% are female, with mean body mass index of 25 ± 5 m/kg^2. 15% receive antidepressants. 39% of GP patients give positive answers to either of the two standard questions for depression, and 19% give positive answers to both questions in an anonymous questionnaire. Patients living alone at home are more likely to give 2 positive answers to standard questions for depression (41% vs. 22%, p = 0.001). Further studies may clarify whether by an anonymous less time-consuming questionnaire more depressive symptoms might be detected than by an open personal interview, by what GP measures the depression diagnostic accuracy can be improved and how the outcome is.
Conclusion: 39% of GP patients give positive answers to either of the two standard questions for depression, and 19% give positive answers to both questions in an anonymous questionnaire. Persons living alone are at significantly elevated risk. This compares well with data from other larger international populations. Further attention to these patients would help to identify more patients with early depression. The low test specificity has to be kept in mind.

OP-241

The relational and therapeutic issue of physical examination in a general practice consultation. Analysis of patients' personal experience from 37 semi-directed interviews

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Goal: Analyzing patients' personal experience of physical examination in a general practice consultation to understand the role of this examination in relational and therapeutic terms.
Method: A qualitative study was carried which took stock of 37 semi-directed interviews of adult patients consulting a general practicer. The interviews were analyzed on an individual and cross-cutting basis thus highlighting three aspects: patients' experience, the components of the doctor-patient relationship with regards to the body and the therapeutic dimension of physical examination.
Results: Physical examination is not only considered the general practicer's professional duty but an essential part of the consultation. Uneasiness linked to nudity remains secondary. Physical examination allows for the construction of a confidence-based relationship between a doctor and his/her patient and for the patient to be reassured which. The attention given to the body is considered as care: the inspection, palpation and auscultation carried out by the doctor are seen by the patient as looking, touching and listening to him/her. By confronting the representations of the doctor and that of the patient, physical examination can be a place of intersubjectivity between scientific knowledge and sensible knowledge of the ailing body and illnesses.
Conclusion: Beyond its diagnostic role, physical examination has a real part to play in the construction of the doctor-patient relationship and can be a first therapeutic response for the patient.

OP-242

Substitution effect of nurse practitioner and specific remuneration system in diabetes patients

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Purpose: Primary care is generally less expensive than hospital care, and therefore, countries try to enhance their primary care with as goal substitution of medical specialist's services by general practitioners (GPs). In the Netherlands, two innovations have taken place to keep diabetes mellitus patients in the primary care: the introduction of nurse practitioners (NPs) and a reimbursement for specific interventions that are expected to substitute for secondary care. For diabetes mellitus patients, this is diabetes treatment per year. The aim of the study is to evaluate cross-sectional to what extent these measures were related to GPs referral behaviour of known and new diabetes patients to the internist and ophthalmologist and longitudinally how referral behaviour has changed in time.
Methods: Data were derived from routine electronic medical records, recorded in 2002–2007 in 85 general practices, that participate in the Netherlands Information Network of General Practice (LINH). The data hold information on morbidity, prescriptions and referrals. Multilevel logistic regression analyses are used to analyze whether the odds of referral to internist and ophthalmologist of diabetes patients were lower with diabetes treatment per year or treatment of NP. And whether the odds of referral to internist and ophthalmologist of diabetes patients had decreased since these measures.
Results: Results show that diabetes treatment per year and NP do not influence the odds of referral to the internist in new or known diabetes patients, but both do influence the odds of referral to the ophthalmologist positively in new diabetes patients. Time analyses show a decrease in referrals to the internist in time for new diabetes patients, but not to the ophthalmologist.
Conclusion: On the basis of preliminary results, NPs and diabetes treatment per year do not seem to have a substitution-effect. However, the referrals to the internist of new diabetes patients decreased.

OP-243

A preliminary community-based study of non-adherence to medication among elderly patients with chronic diseases in the south of Thailand

Sirirak T. (Songkhla), Gaensan T. (Songkhla)

Aims: Completion of a course of treatment is the key to successful control of chronic diseases. The purpose of this study is to determine the spread of non-adherence to medication programmes/regimens among the Thai elderly with chronic diseases and identify any associated risk factors.
Design: Cross sectional descriptive study.
Methods: Suitable elderly patients (>60 years) suffering chronic diseases and receiving regular treatment in the Primary Care Clinic at Songklanagarind Hospital were selected through simple random sampling. Non-adherence to their medication programmes was assessed both by Morisky Scale and knowledge of medication at their home. The potential risk factors were their medical history, drugs

regimen and prescription factors. Social support was evaluated with the Duke-UNC Functional Social Support Questionnaire (FSSQ) and for cognitive function the MMSE-Thai 2002 Questionnaire was used.
Results: There were 60 participants recruited with a mean age of 72.5 years and 75.0% were female. The Morisky Scale showed moderate reliability (Cronbach's = 0.6) and the prevalence of non-adherence to medication was 55.0%. Risk factors that increased non-adherence to medication were cognitive function impairment (odds ratio 2.8; 95% CI 0.5–15), change of medications in the past 3 months (odds ratio 2.2; 95% CI 0.7–3.4), had been taking a varying number of different drug-frequency regimens (odds ratio 1.9; 95% CI 0.6–6.5) and low knowledge of the medication (odds ratio 1.8; 95% CI 0.6–6.5).
Conclusions: The study showed a high prevalence of non-adherence to medication. Although the risk factors gave no statistical significance they have given initial data indicating further community-based experimental studies are needed. Patients with cognitive impairment should be the first target group for any intervention. Physicians should simplify their medication regimens and should give clear indications when medication is being changed to improve usage.

OP-244

Time or diagnosis: that is the question

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Background: Attention has been focused recently in the Italian media on the waiting lists and times to obtain health services, varying across the country's regions, as citizens, and sometimes health staff, are quite dissatisfied. The General Practitioner (GP), has to manage pressures and conflicts of interest, particularly significant in the absence of good information about the health system and the health of citizens.
Purpose: to verify in a limited area of north-eastern Italy the real, effective waiting times patients face in the as-yet unconfirmed presence of a suspected pathology by the GP. To analyze where "slow-downs" occur and whether these involve the citizens, the hospital structures or the physicians/health personnel. Methods: In a period of 12 months we chose newcases and followed them over time, considering data from the moment of the first diagnostic process to effective diagnosis and application of therapy. Some 28 patients were selected and then interviewed to investigate any personal problems experienced during the period of the diagnosis.
Results: – The time spent appears quite arbitrary, being unrelated either to the gravity or the impact of the event on the life of the patient. This data shall be presented in detail, and includes a surprising waiting time (80 days) for the diagnosis of tumor-related illnesses. – The patients' narrations of the diagnostic evolution they faced and the pathology they were "forced" to confront have been gathered. – The GPs' narrations of events have been gathered.
Conclusions: In spite of the fact that the data presented concerned a small area of Italy, this study leads us to think about a new organization of health services. As the GP's computer briefcase is organized according to problem type, diagnostic services should also be thusly structured.

OP-245

Medical microstructures for addictive patients' follow-up: are they more beneficial than conventional follow-up by general practitioners? A randomized controlled study using addiction severity index

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Background: Only a few studies deal with the different ways to manage the drugs addictive patients (AP) in primary care. In France, where the general practitioners (GP) use to work alone, "Medical Microstructures" (MM) are little and light structures for AP. A MM consist in a GP, a social worker and a psychologist working together in the doctor's office.
Question: Is the APs' follow-up more efficient in a MM than in a conventional way by the Gps alone?
Methods: 25 microstructures participated in Alsace between 2000 and 2003. Each GP should include 16 willing patients. The patients were randomized in two legs: conventional or MM follow-up. The French validated Addiction Severity Index (ASI) and other specific questions were used to asses the APs' status at the inclusion (T0) and after a 24 months follow-up (T24). A linear regression stratified on each GP practice was used for statistical analysis.
Results: 349 AP were included and 188 remained at T24 (lost cases: 42.7%). The MM were as efficient as the conventional follow-up for the alcohol score (p = 0.89), the patient's health score (p: 0,49), the legal state score (p: 0.43), and the job score (p: 0.99). They presented better results in drug score, the main item (p = 0.02), social relations score (p: 0.03), and psychiatric score (p: 0.02). Aside the global scores, each item was studied separately and related with the APs' participation in the MM or in the conventional follow-up. This study could not allow the evolution of practitioner's efficiency because the patients were randomized between the both follow-up in in each office.
Conclusion: Despite a hight rate of lost cases (expected in a such population), MM are an interesting alternative to methadone centers. The cooperation between GP, social work and psychological approach of patients is the key element of success of these MM.

OP-246

Interdisciplinary implementation of guidelines for GPs and nurses for the care of people with dementia and challenging behaviour in nursing homes

Bureick G. (Witten), Wilm S. (Witten), Vollmar H.C. (Karlsruhe), Halek M. (Witten), Hardenacke D. (Witten), Krüger C. (Witten), Bartholomeyczik S. (Witten)

Aim and Purpose: The current study aims at improving the care for residents with dementia and challenging behaviour living in nursing homes. We try to reach this goal through implementation of an "understanding of diagnostic" guideline in the field of nursing, a dementia guideline for general practitioners (GPs) and an improved cooperation between both professional groups. Furthermore regular case conferences and ongoing support for nurses and GPs are realized.
Design and Methods: The study uses a pre-post test design. The residents' psychotropic medication (primary outcome), quality of life (Qualidem), challenging behaviour (NPI-NH) and physical maintenance (PSMS) are assessed before and nine months after the interventions (guideline implementations, trainings and case conferences). The prescription rate of neuroleptics in a regional group of GPs serves as control to detect secular effects. There are a total of 183 residents with dementia (MMSE ≤24) who complete the pre-intervention phase in 15 nursing homes in two regions of North Rhine-Westphalia (Germany).
Results: The educational part has been completed in February 2009. Preliminary results of the study will be presented. Furthermore, supporting and impeding factors of the trainings will be discussed.
Conclusion: Dementia care especially for people with challenging behaviour comprises high demands on nurses and GPs. The successful implementation of both guidelines might make daily life easier and better for residents, nurses and GPs. In addition it is important to identify the supporting and inhibiting factors for good teamwork of nurses and GPs in nursing homes.

OP-247

Typology of physicians participating in a professional practice assessment on the internet

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Background: Improving the quality of patients care is a constant concern for doctors. The Professional Practice Assessment (PPA), ethical and legal obligation in France, is a recognized tool for improving the care of patients. The main obstacles to the involvement of doctors seem to be extra work, cost and travel. An assessment conducted by professionals online on the Internet at home or at their practice for a minimal cost seems a good solution.
Aims: To know the basic characteristics of GPs performing a PPA on various topics using an Internet tool, in terms of gender, place and type of exercise.
Methods: A descriptive cross study analysing the anonymized file of the GPs performing a PPA on line on the mentioned criteria.
Results: 77% of the participants are men, 89.7% live in rural areas. One in two practices in a city with fewer than 5,000 inhabitants. Half the GPs involved work solo. 71.8% of registered voters actually make their evaluation.
Conclusion: The first results of this analysis of the population of participants in the Net-EPP reveal differences from the description of the average general practitioner according to the demographics of the French College of Physicians. This difference may be due to the sample size. It seems appropriate to continue this study to verify the hypothesis. A parallel study will be conducted on the changing practices of the participants.

OP-248

The surplus value of a practice nurse in diabetes care

Neijens A. (Deventer)

Introduction: One of the aims of the St. Vincent Declaration was to delay or avoid complications by effective management of diabetes. Working under supervision, using guidelines and algorithms, the practice nurse can free up valuable doctor time. Most practices in the UK and the Netherlands depend upon practice nurses for the delivery of chronic disease management. This presentation aims to cover the training, the roles, and the value of practice nurses in the delivery of

structured care to patients with diabetes. Perhaps it's time for a paradigm shift in our approach?
Design and methods: Comparing reviews on the effectiveness of practice nurses. [123]The quality of care delivered by the nurse can be the same as that of the doctor. Some organisational adjustments in practice are needed.
Results: The result is better quality of diabetes care within the same costs The monitoring of eyes, feet, kidneys, and blood pressure improved. There is still a very important role for the family doctor, beside the possibilities for a shift of well described tasks to the practice nurse.
Conclusions: Although there is no significant difference between clinical parameters such as HbA1c, the introduction of a practice nurse seems to improve the structure of monitoring, education, and reduces the number of badly controlled patients. This presentation shows the paradigms of organising and implementing structured diabetes care.

1 Renders E, et al. The effectiveness of a qualityincreasing programme on the care for diabetespatients in general practice; Huisarts en Wetenschap 2002 pg 512–7.
2 Loveman E, et al. Practicenurse for diabetes mellitus; The Cochrane Library, Issue 4, 2003.
3 Houweling ST, et al. 2006, Shifts of tasks in diabetescare in general practice; Huisarts en Wetenschap 2006 pg 118–22.

Handenscan

OP-249

Tele-coaching based disease management in diabetes and cardiovascular diseases in Finland (the TERVA program)

Nenonen M. (Hartola), Kuronen R. (Lahti), Absetz P. (Helsinki), Talja M. (Lahti), Patja K. (Helsinki), Auvinen A. (Tampere), Wiklund T. (Helsinki), Oksman E. (Lahti), Kettunen R. (Lahti)

Aims: The burden of chronic lifestyle related diseases and conditions give rise to new approaches in primary care. TERVA Health Coaching Program was developed to focus on empowering patients in disease management skills and so to support physicians' work in motivating their patients e.g. in lifestyle changes. TERVA is a secondary and tertiary prevention program in patients with type 2 diabetes, coronary heart disease and heart failure. The goal of this randomized, open, controlled study is to demonstrate the effects of the use of a structured, telephone-based, technology-supported health coaching program on the health behaviour and clinical signs of the patients and on the use of health care services and total costs.
Design and Methods: During one year period starting October 2007 patients with undertreated type 2 diabetes (T2DM) (Hb1Ac >7), recent Myocardial infarction (MI) or Cardiac failure (CF) (hospitalized <2 years) were identified from regional databases and taken to the one year program. Inclusion criteria to the study were fulfilled by 2598 patients from those 1532 were willing to participate (T2DM = 1002, MI = 251, CF = 122). They were blindly randomized to intervention (n = 970) and control (n = 470) groups. Six coaches were hired and trained for the project.
Results: Median age of enrolled patients at time of inclusion was 65.0 years, and median BMI 30.4. Waist circumference was over 94 cm for males in 87.5/71.9/78.9% and 80 cm for females in 95.8/83.8/70.3% of the T2DM/MI/CF patients. Preliminary clinical results will be presented.
Conclusions: Empowering patients in disease management skills demands multidisciplinary approach and also new, capacity building tools. The program is supported by a web-based database that provides the coaches access to patient records in primary and secondary care and an opportunity to consult or send messages concerning progress in 8 goals to the patient own doctor/nurse.

OP-250

Exploring the implementation of paper-lite practice in primary care. Lessons learnt from a general practice surgery in England

Begg S. (Newcastle Upon Tyne), Whitfield S. (Durham)

Purpose: To discuss the practical aspects of implementing a paper-lite surgery in General Practice. Highlighting the benefits and experiences from such an implementation.
Method: The journey will be outline of the implementation of a paper-lite service in a Primary Care practice. The setting is the Claypath Medical Practice in Durham, North East of England, which has been a paper-lite surgery since August 2007. The practice received NHS paper-lite accreditation in August 2008.
The focus will be upon: – the rationale behind choosing to go paper-lite; – the organisation and administrative process changes; – the effectiveness and efficiency resulting from the implementation; – the importance of an audit trail; – the benefits for coding.
Results: The attendees would be made aware of the practical aspects of a paper-lite system implementation. This would give them a greater perception of the effects of such a system upon their working practice.
Conclusion: The presentation will give insight into the viability of implementing a paper-lite workflow in a variety of GP/FM practice settings in Europe. With the increase in the volume and complexity of clinical and administrative workload upon GPs, this presentation aims to propose ideas and share experiences that may help mange these demands more efficiently.

OP-251

A Dutch anthroposophic primary health centre

Ephraim M. (Zoetermeer)

The Primary Health Centre 'Therapeuticum Aurum' in the Dutch town Zoetermeer offers primary health care to about 7000 people of the 110.000 inhabitants in an integrative way: An integration of regular and anthroposophic medicine is practiced. This will be made explicit with a patient case. The collaboration of the 4 general practitioners with nurses and therapists will shortly be described, as well as the way the Health Centre is integrated in the regular medical field in this town. Main aims, possibilities and limitations of anthroposophic medicine will be mentioned. The balanced use of both natural and regular medicaments plays an important role. In addition, artistic therapies (like painting, modeling and music therapy) and physical therapies give new possibilities to support self-healing forces and autonomy of patients. Feed back of health insurance companies shows that costs are equal or less. Participation in the GP-training gives both the training and trained doctors an impulse for personal and practical development and research. Anthroposophic medicine has a holistic approach which can give new inspiration and practical methods for professionals, patients and health care organisations.
(Planned together with the oral presentation of Dr. Med. Danielle Lehmann, Langnau, CH: "General Medicine at a Regional Hospital")

PHC Therapeuticum Aurum

OP-252

Hospital polypathology department ambulatory care = a new experience

Franco Sánchez-Horneros R. (Madrid), Castro Arias M.L. (Madrid)

Aim: To determine the epidemiological and clinic characteristics of outpatients sent from the Ambulatory Clinic to the Hospital Polypathology Department (UPPAMI), describe UPPAMI and its relationship with the Ambulatory Clinic.
Methods: A descriptive transverse study of outpatients attended in UPPAMI between 1/1/07–31/12/07. Age, gender, reasons why patients were sent toUPPAMI, the incidence of hospitalization,medical tests ordered and final diagnosis were the demographic and clinical information registered. Analysis program: SPSS16. Description UPPAMI: 25 hospital beds, 2 doctor's consulting rooms and Day Hospital. UPPAMI offers an innovate option to shortened hospital stays, inpatient care and periodical evaluation of outpatients medically stable. Patients are directly sent from Ambulatory Clinic to Hospital (without being examined in Emergency Department) in less than 24 hours. Hospital doctors weekly have an appointment with doctors in different Ambulatory Clinics to resolve together difficult cases, discuss about different medical points of view and get a combined evaluation of some patients.
Results: There were sent 200 patients (67% male). The average age was 57.46 years, February was the month with the highest incidence

of patients attended.The most frequent reasons of derivation were: anemia, constitutional syndrome, fever of unknown origin, dyspnea and radiological-analytical findings. Only 4 patients needed hospitalization.
Conclusion: The percentage of polypathological patients is increasing. Only a low number of patients needed hospitalization. It means that Polypathology Department could be used as "medical evaluation of high resolution" in ambulatory outpatients, specially about difficult diagnosis, with the advantage of avoiding hospitalization. Although the reasons of derivation are very different, anemia and constitutional syndrome are the most important. An easy, close and bidirectional relationship between Ambulatory Clinic and Polypathology Department is absolutely required.

OP-253

Attitudes towards, ideas and knowledge about decision makers (DMs) respectively steering committees (SCs) of general practitioners (GPs) in the German health care system

Wilm S. (Witten), Redaèlli M. (Witten), Simic D. (Witten)

Background: It is no exception that GPs aid as a collective for research to reflect reality. But little is known about their attitudes, ideas, and knowledge concerning DMs respectively SCs in the health care system. Our study gives insight for the first time in this context.
Methods: *Qualitative approach:* to begin with 5 focus groups (53 GPs) spread over Germany have been interviewed according to the theoretical sample. The groups were selected taking into consideration the urban compared with the rural situation, different regions nationwide and the degree of professionalism. All interviews have been recorded, afterwards completely transcribed and analysed as regards content by a multiprofessional team. The identified codes were then brought together in 8 different categories. *Quantitative approach:* these categories extracted from the qualitative approach served as a basis for questionnaires. At this time the questionnaire survey of the quantitative approach is still taking place with 5,000 GPs participating.
Results: The results of the interviews show an average level of knowledge of the GPs concerning DMs respectively SCs. Altogether a negative attitude predominates. Many GPs complain about an insufficient transparency of the institutions and too little integration. We expect that the results of the questionnaire survey will confirm the tendencies of the interviews.
Conclusion: For the first time in Germany GPs – directly affected by DMs and SCs – were asked about their attitudes, ideas, and knowledge. The results show that they need to be more integrated in processes of decision to increase the acceptance of decisions made by public institutions.

OP-254

General practitioners and the economics of smoking cessation – the PESCE project

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Background: In the frame of the PESCE project, 31 organisations from 27 countries have developed evidence based policy recommendations and practice based implementation strategies to increase the engagement of GPs in smoking cessation in Europe. The project was running from August 2006 to June 2008 under the leadership of Tabac & Liberté (France) and is co-funded by the European Commission Public Health Directorate (Grant Agreement 2005319).
Aims: The general objectives of the project have been to promote increased smoking cessation interventions of GPs in Europe by addressing the socio-economic environment of their practice, highlighting the economic benefit from increased smoking cessation interventions on the health care budget in Europe, and motivating decision makers to change the working environment of GPs through political measures.
Design and methods: Policy recommendations have been developed in a three stage procedure: an international literature review (including academic and "grey" literature in partner countries) identified factors that motivate GP's interventions in smoking cessation; a study evaluating the economic benefit of increased advice by GPs; and an European consensus on 15 evidence based policy recommendations and practice oriented implementation strategies.
Results: Policy changes to increase engagement of GP's in smoking cessation are clearly among the most cost-effective public health measures. The recommendations and implementation strategies were grouped in 4 categories: Capacity Building, Resources, Policy Framework and Communication.
Conclusions: GPs' role and activities in smoking cessation must be integrated, according to the cultural environment, the legislative framework and the available financial resources, into the different health systems of each country.
More information http://www.tabac-liberte.com

OP-255

Evidences in Spain on health parameters in immigrant population in contrast to native. A systematic review 1998–2007

Elorza-Ricart J.M. (Barcelone), Berra S. (Barcelone)

The arrival of new migrant populations to Spain during the last years, raised the concern for improving the knowledge of their health status and to assess the new healthcare needs from this part of the population. This concern has been noticed in the increase of biomedical literature published in Spain on the issue.
Aim and purpose: to evaluate the scientific evidence available in Spain on health in immigrant population and identify their unmet needs.
Methods: Search in 15 bibliographic databases of original articles comparing the health parameters of immigrant and native population, published from 1998 to 2007. Studies were critically appraised through SIGN and own tools, selecting only those with average or high quality.
Results: A total of 1079 references were reviewed, in an increasing trend during the period. 91 publications compared natives (NA) and immigrants (IM) and only 47 were considered of enough quality. Results in children and women health: Differences between the two populations have been detected in preventive activities, lower in IM, like vaccines, pregnant controls or deficiencies in diet.
Results in infectious diseases: The patterns of HIV transmission found to be different (higher proportion of sexual in IM), but not in the diagnose, treatment or survival. Incidence of tuberculosis found to be double to four times higher in IM. Results in chronic diseases: no differences were found in the treatment or control of hypertension. Results in general: IM had poorer health perception.
Conclusions: There is a little number of publications providing good scientific evidences on the health status in NA and IM in Spain, mainly related to the women health and infectious diseases. The main differences between the two populations have been noticed in preventive activities and incidence of tuberculosis. An effort to improve quality publications is needed.

OP-256

Morbidity of undocumented migrants in general practice

Van den Muijsenberg M. (Nijmegen)

In the Netherlands some 180.000 undocumented migrants (UDM) live. In several studies they rate their own health as very low and mention many health problems and problems in accessing healthcare. UDM can not get medical insurance, however General practitioners can get a reimbursement of 80% of the cost of medical care for this group. It is not known how often and with what morbidity UDM visit General Practitioners. The aim of this study is to get insight in the morbidity of UDM presented in general practice as well in the problems GP's experience in providing care for these patients.
Design & Methods: Data will be gathered from a questionnaire among a representative selection of Dutch GP's and data from medical records of GP's with many UDM's in their practice. The study will be carried out from march 2009 – july 2009.
Results: At the Conference the results of this study will be presented.
Conclusion: The results of this study will help GP's in recognizing and dealing with medical problems of UDM in daily practice.

OP-257

Access to general practice for undocumented migrants in the Netherlands

Van den Muijsenbergh M. (Nijmegen), Schoevers M. (Nijmegen), Yosofi T. (Nijmegen), Lagro-Janssen T. (Nijmegen)

Aims and purposes: Undocumented migrants (UDM) report many health problems. Therefore, adequate access to health care is important. UDM can not get medical insurance but have a right to medically necessary care. As in The Netherlands the General Practitioner is gatekeeper to all medical care, access to general practice for this group is of paramount importance. Our purpose was to find out whether UDM do visit General Practice and to identify possible obstacles in accessing General Practice.
Design & Methods: Information for this qualitative study was obtained through semi structured interviews with 100 undocumented women and 20 undocumented men in the Netherlands.
Results: Only half of the UDM were registered with a G.P (compared to over 95% of the Dutch population) and they visited the GP much less compared to the Dutch population, despite many health problems. Of UDM that had no contact with voluntary aid organisations less than a quarter of the women and none of the men had visited a GP. Most important reasons for not visiting a GP was that UDM thought they were not allowed to and fear of being turned into the police. Some UDM were refused as a patient by a General Practitioner and a few received an invoice they could not pay and did not dare to come back.
Conclusion: UDM have limited access to General Practice. Barriers are predominantly lack of knowledge and fear on the side of the UDM.

Access to General Practice for UDM could be approved by informing UDM about their right to visit General Practice and about the professional secret of GP's and informing GP's about the possibilities to register this group and get reimbursement for the costs of medical.

OP-258

Improving access to prescription drugs for undocumented immigrants living in Geneva, Switzerland: a model of cooperation with community pharmacies

Besson M. (Genève), Jackson Y. (Genève)

Aim: Undocumented migrants without health insurance have no sustainable access to prescription drugs in Switzerland. The use of returned drugs in community pharmacies could favour a better access for patient and facilitate the medical prescription.
Method: Since 1996, Geneva University Hospitals run a medical Unit dedicated to provide health care to people without health insurance living in Geneva, which mostly include undocumented migrants. This Unit is composed of a team of nurses, social workers and medical doctor and is integrated in the private/ public network of institutions active in the field of socio-economical precarity. Several community pharmacies gather returned essential drugs. After careful selections by pharmacists regarding remaining shelf-life duration and quality, these drugs are made available free of charge by two selected pharmacies to undocumented immigrants seen at the Unit.
Results: Around 10% of collected medicines are adequate for reuse. These drugs mostly cover frequent medical problem seen in a primary care setting. They have a remaining shelf-life of at least one year, are well preserved and are given with professional counselling. In 2008, around 12'000 consultations have been made in the Unit. More than 2500 prescriptions have been addressed to the two pharmacies. Nearly half of these can be fully or partially delivered with returned medicines. Non available prescribed drugs are paid by the patient and the Unit.
Conclusions: The use of returned drugs is an effective and cost-saving solution to improve access to essential medicines for undocumented immigrants and other people without health insurance. This local system involves a close cooperation of different health professionals in contact with the targeted population.

OP-259

Management of the pesticides: Greek farm workers' point of view

Pogonidis C. (Serres), Xenodochidou E. (Thrace), Chatzaki E. (Thrace), Konstantinidis T. (Thrace)

Background/aim: In recent years, increasing attention has been given to the consequences of pesticides in Public Health. The aim of this study is to estimate the management and occupational risks of the pesticides by taking the point of view of 103 Greek farm workers in six-month period of time.
Study Design: The instruments used for this randomized study were two self administered questionnaires. The population of the study was categorized in 60 professional and 43 part-time farm workers.
Results: There is a significant frequency (49.5%) of accidents during the pesticide management. Absence of the self – protection equipment characterized the majority of those accidents (77.9%). 88.3% of the population knows the consequences of the pesticides for health and environment. 78.4% avoid the use of the any pesticide in its own private garden. The average percentage of the correct answers in the second questionnaire is only 37.9%.
Conclusion: The management of the pesticides is a huge problem not only in this particular population but globally. Training seminars from health care providers could be beneficial for the farm workers.

OP-260

The change in the management of the pesticides after intervention

Pogonidis C. (Serres), Xenodochidou E. (Thrace), Chatzaki E. (Thrace), Konstantinidis T. (Thrace)

Background/aim: In recent years, increasing attention has been given to the consequences of pesticides in Public Health. The aim of this study is to estimate the possibility of change in the management and occupational risks of the pesticides by interviewing 103 Greek farm workers in eleven- month period of time.
Study design: The instruments used for this randomized study were two self – administered questionnaires. The population of the study was categorized in 60 professional and 43 part-time farm workers.
Results: the measures of the variables in the intervention assessment questionnaire were significantly improved compared to the first results before intervention. The improvement observed was significant for the prevention of the occupational risk in both groups. The reported policy on pesticides use was to limit down the overuse according to public health and environment safety guidelines (p <.005).
Conclusion: The management of the pesticides 'use is a huge problem for occupational safety and public health. Educational seminars from health care providers could be beneficial for farm workers.

OP-261

Australian zoster study: GP and patient views about herpes zoster (shingles), its complications, and the likely acceptance of a zoster vaccine

Litt J. (Adelaide), Cunningham T. (Sydney), MacIntyre R. (Sydney)

Half the population who reach the age of 80 years will have developed shingles [1]. The burden of morbidity from shingles and its complications is considerable [2]. Until recently, there has been no therapeutic strategy available to prevent the development of shingles. Anti viral agents can ameliorate the severity of the acute symptoms of shingles in up to 50% of subjects if given early enough [3]. A vaccine, which bas the potential to reduce the incidence of Zoster by 50% [4] will be listed on the National Immunisation program in 2008 for all older persons.
Aims: The aim of the study is to identify the knowledge, attitudes, concerns and key beliefs about herpes zoster and its complications and the factors that may influence GPs and patient to offer/accept immunisation against herpes zoster.
Methods: A random sample of GPs and a nested random sample of patients (aged between 60 and 85 years) were identified and selected to provide an overall sample size of 1450 patients. GPs completed a questionnaire and the patients were interviewed by phone. The main GP outcome measure is their current knowledge and practice with patients who develop shingles or its complications. The main patient outcomes relate to their current understanding of shingles and its impact together an exploration of the various factors that may influence their intention to get the Zoster vaccine.
Results and conclusion: The initial GP and patient survey results will be presented with a focus on the factors that may influence both GPs and patients to offer/receive the Zoster vaccine.
References
1 Schmader K. Clin Infect Dis. 2001;32(10):1481–6.
2 Gauthier A, et al. Epidemiol Infect. 2008;1–10.
3 Gnann JW Jr, Whitley RJ. N Engl J Med. 2002;347(5):340–6.
4 Oxman MN, et al. N Engl J Med. 2005;352(22):2271–84.

OP-262

Impact of iron supplementation on substantial unexplained fatigue in iron deficient but not anaemic menstruated women

Favrat B. (Lausanne), Avril L. (Castres), Druais P.L. (Le Port-Marly)

Aim: To determine the impact of iron therapy on the quality of life of non-anaemic iron-deficient women with substantial unexplained fatigue.
Methods: Double blind randomised placebo controlled trial in 198 women aged 18 to 53 and having a ferritin level <50 ng/mL, assigned to either oral ferrous sulphate (80 mg/day of elemental iron daily; n = 102) or placebo (n = 96) for 12 weeks, by 44 general practices in France. Main outcome measures: Level of fatigue, depression and anxiety, measured by a 24-item self-administered questionnaire. Level of fatigue was also assessed with a visual analogue scale.
Results: 171 (86.4%) women were eligible for efficacy analysis. Mean age, haemoglobin concentration, serum ferritin concentration, level of fatigue, depression, and anxiety were similar in both groups at baseline. Both groups were also similar for compliance and dropout rates. After 12 weeks, asthenia score decreased by −12.9 ± 10.37 points (50.8%) in the iron group compared with −9.01 ± 11.71 points (36.7%) in the placebo group (p = 0.02), whereas depression and anxiety scores, already low at inclusion, slightly decrease to the same extent in both groups. In an intention to treat analysis, by considering a responder to iron supplementation as having more than two points decrease on the fatigue 10-point visual analogue scale, iron group had 83,3% (85/102) responders vs. 69.8% (67/96) in the control group (p = 0.02). The number needed to treat to have a benefit was 7.
Conclusion: Iron supplementation is an efficient inexpensive approach to manage unexplained fatigue in non-anaemic iron-deficient women.

OP-263

A health insurance company initiated multi-facetted intervention for optimising acid-suppressing drug prescriptions in primary care; a randomised controlled trial

Smeets H. (Utrecht)

Background and Aims: acid-suppressing drugs (ASD) are prescribed up to 10% of the population in most Western countries. Although indications for prescription are often not in accordance with dyspepsia guidelines, prescription behaviour proves difficult to change. We evaluated the effectiveness of an intervention strategy aimed at optimising ASD prescription in primary care.
Design and Methods: In a randomised controlled design peer review groups of GPs in the middle of the Netherlands were randomised to an intervention or control group. GPs in the intervention group received a standard "stop-protocol", a list of their patients on chronic ADS, and financial compensation for consultations. Prescription data were extracted from the database of the regional health insurance company. Outcome measures were the proportion of patients that reduced ASD intake and the changes in annual volume and costs of ASD prescription. Differences in volume were analysed applying a multilevel regression model.
Results: At baseline 23,433 (2.4%) patients of the participating practices used ASD chronically (>180 DDD annually). During the intervention 14.1% of the patients in the intervention group reduced ASD compared to 13.7 in the control group (rate difference 0.4%, –0.63; 1.43). The mean difference in volume over six months between both groups was after adjustment in the multilevel model 0.33 DDD (–3.0; 3.6); less than one DDD per patient annually.
Conclusion: This multifaceted health insurance company initiated intervention, including financial; incentives, did not change prescription practice in primary care. Different strategies are required to promote evidence based prescription policy.

OP-264

Has evidence based medicine reached primary care in Germany? Experiences of a national study with mixed methods research

Simic D. (Witten), Redaèlli M. (Witten), Bücker B. (Witten), Wilm S. (Witten)

Background: International literature shows that a change of behaviour of general practitioners (GPs) in primary care is quite difficult and often possible only on a long term. Various research groups worldwide have therefore surveyed under which conditions and how the academical approach of evidence based medicine (EbM) is applied in practice.
Methods: *Qualitative approach:* To begin with 5 focus groups (53 GPs) spread over Germany have been interviewed according to the theoretical sample. The groups were selected taking into consideration the urban compared with the rural situation, different regions nationwide and the degree of professionalism. All interviews have been recorded, afterwards completely transcribed and analysed as regards content by a multiprofessional team. The identified codes were then brought together in 8 different categories. *Quantitative approach:* The categories extracted from the qualitative approach served as a basis for questionnaires. At this time the questionnaire survey of the quantitative approach is still taking place with 5,000 GPs.
Results: The results of the interviews show that the acceptance of the EbM among GPs is high. This result confirms earlier surveys showing an increase of EbM guided attitudes. But at the same time these surveys show clearly a poor translation into action in everyday general practice. Following the results of the qualitative approach we therefore differentiate two kinds of EbM among GPs: the academical evidence and the evidence put into practice. The results of the quantitative approach are expected in the near future.
Conclusion: Concerning the qualitative approach we found out that the GPs use parts of the EbM to combine them with their own experiences. On base of the questionnaires' results we expect that their acceptance of EbM will further increase according to earlier surveys.

OP-265

Perceptions and barriers to the implementation of prevention and health promotion in general practice: a study of Swiss GPs

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Background: General Practitioners play an important role in screening, counselling, prevention procedures and the encouragement of healthy lifestyle. Nevertheless, remarkable gaps have been found between medical associations recommendations for such activities and their implementation in daily practice. Precise information about GPs' perceptions, needs, attitudes and perceived barriers to the implementation of recommendations is lacking.
Research Question: How do Swiss GPs perceive their role in health promotion and prevention? Taking into account GPs' perceptions, what tools may be developed to support their activities in these fields?
Method: We conducted a qualitative study with 13 focus groups of 103 Swiss GPs in German- and French-speaking regions. The groups were composed of 4–11 GPs, and lasted approximately 2.5 hrs; the GPs were paid expenses for their participation. Composition of the groups was determined by a purposive sample taking into account type (urban/rural, individual/group) and duration of practice. The interview grid covered representations of prevention and health promotion in General Practice, problems faced and possible solutions to overcome them. The sessions were recorded and transcribed verbatim.
Results: Results show that GPs stress the importance of the doctor-patient relationship and patient-centred interview approaches. GPs question their role in preventive medicine in the context of the evolution of society and medicine and the constraints imposed by the wider health system. Far from being a "standard package", interventions depend on the individual patient profile and the skills and interests of each GP. Lack of time, demotivation, and doubts about the effectiveness and innocuousness of prevention and the reliability of information sources may serve as barriers. These concerns should be taken into account in the development of further education programmes, for which GPs express considerable enthusiasm.

OP-266

Health promotion and prevention in general practice

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Background: Preventive medicine is one of the most frequent issues in general practice (France's and The Netherlands' Network registration data). For evaluation, research, and practice improvement, it is crucial that general practitioners (GPs) systematically record the most relevant preventive and health promotion activities that they perform. The International Classification in Primary Care (ICPC-2) contains certain items for this, but these are limited. In this study we questioned GPs about their involvement in and their opinions regarding prevention. With results, we wish to propose more differentiation, if needed, in the prevention rubrics of the ICPC. Research question: What is the involvement of GPs in daily practice regarding health promotion, screening, counselling and immunisation?
Method: We designed a questionnaire to describe the core component of daily preventive services in primary care. Sixty-seven questions are related to the four major preventive services: check-up, screening, counselling and immunisation. It defines the rate of major preventive interventions, the way to promote these services and GPs' opinion of their responsibility and cooperation with other national public health organisations. The questionnaire was available in English and in French. Invitation to participate was sent by email, in 10 European countries. Answers are returned online to the Nijmegen General Practice Department, ensuring centralization of data entry and analysis.
Results: Ongoing study. We will compare the answers according to the country concerned and to GP characteristics. Expected results should confirm that GPs order more tests than they give verbal advice. Differences in the structure and organisation of practices between countries should be associated with a large variation in the degree of GP involvement. We propose to develop ICPC-2 prevention rubrics according to opinions of European GPs.

OP-267

Immunization schedules in the European Union (EU)

Cibois-Honnorat I. (Mirabeau)

Context: Patients travel and arrive with vaccination schedules, not always conform to national standards. In addition, some parents and/or doctors tend to over-vaccinate or to refuse certain immunizations. What is the most appropriate attitude? There is also the problem of vaccines such as chickenpox, since a mass vaccination programme should be instigated only if high coverage can be guaranteed. However, some countries have introduced such mass vaccinations programmes.
Method: The immunization schedules of all European Union (E.U.) countries were examined; the comparison focused on vaccines proposed in childhood. Information was collected on the incidence of diseases such as meningococcal meningitis and chickenpox and the means of epidemiological surveillance in primary care.
Results: Strategies for anti-tetanus vaccination in the E.U. are highly disparate, but all countries advocate three injections during the first year. Belgium has the most intensive schedule and Italy the least. The incidence of tetanus is quite similar in all European Union countries. There are differences between countries in the incidences of hepatitis B, meningitis C and chickenpox, but these do not reflect differences in immunization schedules.
Conclusion: The vaccination strategies of the different countries depend more on the type of health care system, conventional

practices and results of national studies than upon real epidemiological differences. There are elements common to all E.U. countries for DTP vaccination. The existence of simple rules for vaccination schedules would enable physicians to reassure parents travelling to countries where schedules differ. Knowledge and comparison of the different schedules might enable us to put our national immunization schedules into perspective.

OP-268

A profile of intervention on people who can benefit from flu vaccination in a district of the province of Turin To4 (Northern Italy)

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Background: Flu vaccination is the safest and most effective means of prevention for this disease and is recommended that people who are at high risk of having serious flu complications (aged >65 yrs and people of any age with certain chronic medical conditions) should be vaccinated each year. It is difficult, at least in Italy to obtain the real percentage of people at risk for chronic disease being effectively vaccinated because we don't have the denominator "people at risk for chronic disease". Usually these data are collected through telephone interviews,(PASSI Study) but they lack precision.
Aim: To establish the real percentage of people aged 14–65 yrs, who have three diseases of high health importance (diabetes, chronic pulmonary disease and cancer) being vaccinated against the flu in 2008 in an italian district (Ciriè-To4) in Turin province (North Italy), using GP data bases.
Methods: Using data from GP data bases we built registers for the three diseases from May to September 2008.The vaccination was performed from October to December 2008.
Results: The GPs involved in this study were n = 89 (100% of the total number in the district of Ciriè-To4) and the total number of patients aged 14–65 yrs was 80.660. The total amount of diabetic patients was 2210 and 1269 were vaccinated (57,4% S.D. 27.1), patients with cancer were 1934 and 811 (41.9% S.D. 28.2) were vaccinated and patients with chronic pulmonary diseases 1847 and 1225 (66.5% S.D. 26.5) those vaccinated.
Conclusions: The active involvement of GPs is the crucial factor to obtain the exact percentage of people at risk for diseases being effectively vaccinated. We plan to build similar selective registers for the other diseases at risk (cardiovascular, renal diseases etc…) next year, with the aim to improve further our performance.

OP-269

Children, move! Not only when you are overweight!

Schnyder-Etienne H. (Leuk-Stadt)

Children, move! Not only when you are overweight! Our school medical survey in the rural areas of the Swiss Canton Valais (1993–2006) has shown a massive increase in back pains. We have had to diagnose back and thorax pathologies and considerable muscular contractures with mobility deficiencies particularly in the hips. We suspect the main causes of these health problems to be associated with a lack of exercise and increase in sitting activities. Together with the school boards we started a physical health project in 2003 "Healthy children – fitter through exercise" from the kindergarten through to the ninth school year with the objectives of bringing more exercise, poise and relaxation into everyday life at school. A targeted vocational training for the concept of a school in motion prepared all teaching staff for a comprehensive physical exercise project in the school. With teaching methods oriented towards physical exercise, dynamic sitting, breaks with physical exercise and intermittent relinquishment of motorised school transport, the concept was implemented into everyday life in the school. At the beginning of our project, after one year and 4 years we asked pupils about their back pains and were able to establish that with simple measures the back pains were significantly reduced. Thanks to information campaigns with hundreds of parents, school children and teaching staff, the project idea also caught on in other regions of the canton. In order to ensure the sustainability in such a sedentary society we sought further alliances with doctors, politicians, the school authorities and the cantonal education board. The doctors in the Upper Valais approved an exercise manifesto which was handed over to the responsible cantonal councillors. A master's thesis brought further indications that targeted promotion of exercise in the schools enhances performance and is beneficial to the health. The project is being continued.

OP-270

Musculoskeletal problems in overweight and obese children

Krul M. (Rotterdam), van der Wouden J. (Rotterdam), Schellevis F. (Utrecht), van Suijlekom-Smit L. (Rotterdam), Koes B. (Rotterdam)

Purpose: Since the obesity epidemic in children is spreading at alarming rates. Musculoskeletal problems can influence physical activity. We compared the frequency of musculoskeletal problems in overweight and obese children to that in children with normal weight.
Methods: We performed a cross-sectional database and face-to-face interview study that included 2459 children aged 2–17 years from Dutch Family Practice. We collected self reported height and weight (BMI), self reported musculoskeletal problems in the 2 weeks prior to the interview, Family Physician consultations for musculoskeletal problems in one year and age (two age groups were analyzed; 2–11 years and 12–17 years, because of the proxy interview in the youngest age group). We calculated Odds Ratios (OR) and 95% Confidence Intervals (CI) for musculoskeletal problems in overweight and obese children, compared to normal weight children.
Results: Overweight and obese children in both age groups (2–11 years and 12–17 years) reported significantly more musculoskeletal problems; OR (95%CI) 1.86 (1.18–2.93) and 1.69 (1.08–2.65), than normal weight children. The total group of children with overweight and obesity reported more lower extremity problems, than the normal weight children; OR 1.62 (95%CI 1.09–2.41), they reported more ankle and foot problems than children with normal weight; OR 1.92 (95%CI 1.15–3.20). Overweight and obese children aged 12–17 years consulted the FP more often with lower extremity problems than the normal weight children; OR 1.92 (95%CI 1.05–3.51).
Conclusion: This study shows that overweight and obese children more frequently experience musculoskeletal problems, than normal weight children.

OP-271

The art of case-taking and its significance for the physician's personal development, his knowledge and skills

Dietrich C. (Wohlen)

Thesis: Open anamnesis leads to the only individual and therefore original structure of illness.
Aim: Establishing a clear view of all relevant personal dimensions of the patient's health and illness (physical, mental, social..).
Method: Anamnesis (Rememberance) is commonly used for one of the most important steps in treating patients. Retrieving all significant data means establishing a most intimate contact with the life of our patients. "Open Anamnesis" enables the patient to tell us with his own and therefore genuine expressions his personal feelings and thoughts.
Conclusion: For the examiner a specific attitude is needed and must be trained in medical education Example: Homoeopathy disposes of a large field of experience by applying the above mentioned elements for a long period of time. The patient's story (totality of symptoms) guides us to indivduality and therefore to find the helpful remedy for this individual. By considering all information related to the remedy ("the story the remedy tells us"), we find a new and more indepth perception of our materia medica. If totality and individality of the patient's symptoms match with the genuine structure of the remedy, we speak of similarity, and in case of a perfect match of "the simillimum". Applying this structure in an appropriate way to the patient, we can often see an amazing gain in health and life quality.

OP-272

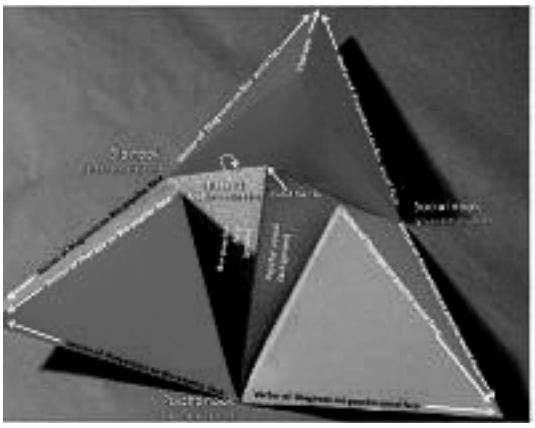
Proposal of a new 3d model for family medicine/general pratice

Bisconcin M. (Venezia)

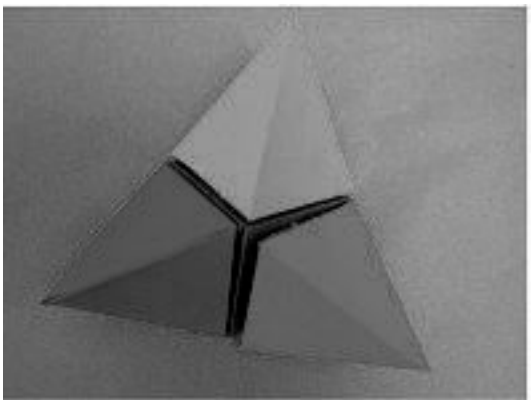
Up to now some Authors tried to draw some pictures representing the Family Medicine/General Practice (FM/GP): flat figure, a square; 3D solid, a pyramid. In these teaching experiences in Italy, 1) the national postgraduate examination and, 2) the specific FM/GP vocational training, a solid 3D multi-tetrahedron has been elaborated and used to stimulate a complete comprehension of the domain of FM/GP. FM/GP is a discipline which includes many human sciences: biology, pathology, psychology, sociology, science of education, legal matter and many others. The definition of FM/GP itself must be done using many adjectives and descriptions of the operational settings. On the contrary, it's easier for the medical branches and/or the specialties to represent themselves: generally an organ or a system themselves, even if in form of sketch, are exhaustive for an immediate recognition of the specialty and also for a prompt feeling of membership. In other word FM/GP seems to lack of a specific symbol or a founding picture. From the three concepts which sustain the bio-psycho-social approach, an equilateral triangle has been drawn. Starting from the

centre of this base, a life-time line constitutes the height of a tetrahedron whose lateral faces are the mutual relationships between the three poles: Biological, Psychological and Social. On each of these three lateral faces of the tetrahedron, three classical actions in medicine, the Diagnosis, the Therapy and the Prevention, can be applied. These three actions, like three vectors or axes, can be observed along the whole life time, so they converge to the same vertex, forming a new tetrahedron. Three tetrahedron, can sprout from each of the three lateral faces of the original one: a complex 3D solid which is the crystal of FM/GP.

The (open) crystal of Family Medicine



The (close) crystal of Family Medicine



OP-273

Community-based teaching: a qualitative study of patients' motivations and assessment

Brinkley B. (Geneva), Hammer R. (Geneva), Cavalli S. (Geneva)

Aims and objectives: Patients involved in community-based teaching seldom have the opportunity to voice their expectations, concerns, and experiences about the use of consultation as a setting for medical education. A placement for young (second year) medical students following a patient's consultations during one year was used as the setting of this research, which aims to describe and understand these patient's experience. Two core questions are dealt with: how they globally evaluate the clerkship and their reasons for participation.
Design and Methods: Qualitative research in a longitudinal design was chosen to elicit patient's often complex attitudes and feelings, about the presence of a medical student during the consultation and the interference of a teaching agenda. A total of 56 semi-structured interviews involving 34 patients were conducted in two series, one at the beginning and one at the end of the clerkship, transcripted verbatim and reviewed using discourse analysis.
Results: The evaluation of the clerkship (in majority very positive) is linked to the quality of the ongoing relation with the student, and to both the patients and the students expectations being met. Willingness to participate is based on several factors such as altruistic motivation towards their doctor and the student, and wanting to contribute to the education of future doctors. Many patients valued illustrating core values of family medicine such as personal continuity of care, patient-centered care, and importance of the relational dimensions, contrasting with their experience in hospital care.
Conclusions: Patients play an important role in medical education through their implication; quality of doctor-patient relationship is a key determinant in obtaining the patient's consent in participating.

OP-274

Student satisfaction and experiences with family medicine outpatient care: a comparative analysis between the community and tertiary-based setting

Suvarnabhumi K. (Songkhla), Wanichanon W. (Songkhla), Pinsuwan T. (Songkhla)

Aim: To compare medical students' satisfaction and experiences studying in a Family Medicine outpatient care in a community-based setting with those at a tertiary hospital in order to provide an appropriate learning experience for their future practice.
Methods: A cross-sectional survey was undertaken with students across three academic years using a self administered questionnaire. Each student was given learning experience of family medicine outpatient care both in the community and at a tertiary hospital.
Results: Comparing the two experiences the students reported learning more about disease pattern recognition and how to manage chronic medical problems from the community. The common presenting problems in community-based settings are more comparable to national statistics than are those of the tertiary-based setting. The mean student satisfaction is higher in a community-based setting.
Conclusions: Family Medicine outpatient care in a community-based setting has more relevance for the future practices of medical students and they show a higher learning satisfaction in this setting than in a tertiary-based setting.

OP-275

Training extension posts: developing skills in medical education

Taibjee R. (Birmingham)

In the UK several regions are establishing short one year positions for trainees who have completed their training as family doctors, to gain experience in medical education. These provide a useful insight into the challenges faced in providing postgraduate medical education. These placements also give an opportunity for trainees to gain leadership skills in developing projects. This presentation will explore the various ways trainees can gain experience, through designing web based resources, writing induction materials for new trainees, providing peer support and dealing with queries, teaching on training schemes, setting up small group teaching learning sets, gaining small group facilitation skills. These positions present an opportunity to strengthen peer support and educational activities for newly qualified family doctors, and will help build skills in the next generation oftrainers.

OP-276

European exchanges for trainees and young doctors

Del Olmo Fernandez S. (Spain), Moszumanska M. (Kracov), Akbayýn Z. (Istanbul), Pettigrew L. (London), Ansar M. (Dundee), van Geest T. (Rotterdam)

Introduction: The international exchange of ideas and experiences between family doctors is essential for the development and growth of family medicine in Europe and across the rest of the world. We face many challenges in order to set up and run successful exchange programmes, as every country and system has its own attributes as well as its challenges and idiosyncrasities. Set up by the Vasco da Gama Movement Exchange group, this workshop hopes to highlight and discuss different possibilities as how to set up and run an international exchange programme between family doctors, including a presentation on the existing "Hippokrates-programme". All those who attend will have the chance to share both positive and negative experiences on exchanges.
Goals: The objective of this workshop are to give a global overview of the different aspects and challenges faced running different kinds of exchanges, and to offer new and innovative proposals to move forwards. The workshop also aims to reflect on experiences of Family Medicine and Health Care Systemsin different European countries, in order to inspire and consider alternatives to the way we are trained, work and continue to our develop skills.
Methods: After a short presentation from the exchange group members, the speakers will share their own experiences of family medicine exchanges. Participants will be asked to discuss their own personal experiences in small groups and subsequently will share conclusions with the whole workshop.
Programme Outline: 1. Introduction. Exchange possibilities in Europe: why and how. (10 minutes). 2. Trainee visit to Spain (10 minutes). 3. Setting up exchanges in UK (10 minutes). 4. WES, what is it? Exchanges by Dutch Young Family Doctors (10 minutes). 5. Trainee visit to Utrecht (10 minutes). 6. Discussion in small groups (15 minutes). 7. Discussion and conclusion in plenary (15 minutes).

OP-277

Pay for performance to improve patient access – experience from England

Addink R. (Groningen), Bankhart J. (Leicester), Baker R. (Leicester)

Introduction: Patient experience is an important indicator for monitoring general practice. Due to migration, practitioners encounter these days more patients from different ethnic groups and cultural backgrounds. In England, a national survey of patient experience of access has been undertaken annually for the past two years, providing information about the performance of each practice, and supporting a financial incentive scheme to practices aimed at improving patient access.
Objectives: To describe the trend in patient experience over last two years of the pay for performance scheme and determine the factors responsible for difference in patient experience between ethnic groups.
Design and methods: The study included 223 practices in three local primary care trusts in the east of England (Leicester City, Leicestershire County and Rutland, and Northamptonshire) that had completed the access survey in 2007 and 2008. The patient access survey was randomly allocated to an average of 432 patients per participating practice. In regression models, we investigated the associations between patient experience of access and patient and practice characteristics, including performance and disease prevalence data extracted from the quality and outcomes framework incentive scheme, for 2006/7 and 2007/8.
Results: The total patient experience scores are increased from 81.6% in 2006/7 to 82.3% in 2007/8. The mean scores for practices with 0–5% ethnic minorities are increased from 83.8% to 84.4%; the practices with 5–50% minorities from 80.2% to 80.8% and the practices with over 50% ethnic minorities 72.1% to 75.3%.
Conclusions: There have been some small improvements in patient experience of access, but most practices with poor performance in 2006/7 had not resolved the problem by 2007/8. Practices with a high proportion of ethnic minority respondents tended to achieve lower patient experience reports than practices with predominantly white respondents.

OP-278

General practitioner prescriptions assessment, according to official recommendations and clinical usefulness: current state and economical evaluation

Picquet M. (Amiens), Schmidt J. (Amiens), Duhaut P. (Amiens), Ducroix J. (Amiens)

Aim and purpose: Medications have been classified in France, according to evidence-based assessment of efficiency, into 5 usefulness groups (1- Major, 2- important, 3- moderate, 4- weak, 5-insufficient). Reimbursement rates (from 100 to 0%) are based on this classification, however with variations within each group. We assessed the impact of reimbursement rates on severely ill patients' expenses according to efficiency groups.
Design and methods: Severe patients were defined as patients taken care of by GPs at home, needing a hospitalisation. Prescriptions before hospitalisation were analyzed. A mean prescription usefulness index (MPUI) was computed for each patient (a score of 1 meaning highest, and of 5, lowest, usefulness). Comparisons between previous, and current reimbursement based on usefulness groups were performed according to age and sex.
Results: 255 women and 183 men were included during the first semester of 2008. Thirty seven were below 40, 100 between 40 and 60, 183 between 60 and 80, and 118 were older than 80. The number of medications increased with age ($p = 0.0001$) and was similar in both sexes ($p = 0.9$). MPUI was equal to 1 in 0.7% of patients, 2 in 82%, 3 in 15.7% and 4 in 1.6%. MPIU was similar in women than in men (2.28 ± 0.42 versus 2.19 ± 0.36, $p = 0.13$), and decreased significantly with age ($p = 0.008$, Wilcoxon rank sum test). Monthly costs significantly increased with age (from 20 [2-184 to 82 [2-596], $p = 0.0001$), and were similar in both sexes. However, the burden of lower reimbursement supposedly based on usefulness groups, significantly increased with age both in absolute value ($p = 0.0001$) and in value relative to total monthly expenses ($p = 0.031$).
Conclusions: The 'saving' objective of the usefulness groups is probably fulfilled. However, it is at the expense of the severely ill elderly patients (mostly over 60), in spite of the higher efficiency index (lower MPUI) of prescription in this age range.

OP-279

The use of generic drugs in primary care practice

Lewek P. (Lodz), Kardas P. (Lodz)

Aims and purpose: According to the European legislation, generic drugs should be characterised by the same qualitative and quantitative composition of active medicinal substances, the same formulation, and be proven to be equal to their brand name counterparts in bioavailability tests. Their obvious advantage over brand name drugs is their affordability. However, there is still some uncertainty regarding their usage among European family doctors. Consequently, there is a big variation in their market share across European countries: from 5% to 65% by volume. Therefore, the aim of this presentation is to put some light over both brand name and generic drugs, and discuss pros and cons of generic drugs usage in European primary healthcare in unbiased manner.
Design and methods: The presentation will provide up-to-date information covering following principal topics: 1. History of generics; 2. Legal basis of generic medicines; 3. Generic and biosimilar medicines; 4. Role of generic medicines in the sustainability of Healthcare systems 5. Reimbursement of generic drugs in the European Union; 6. Generic drugs safety in family medicine; 7. Generic drugs and patient compliance in family medicine; 8. Future of generics.
Results: This presentation will provide evidence-based knowledge on generic drugs and their possible role in the European primary healthcare.
Conclusion: European family doctors need unbiased information to take evidence-based decisions in their daily practice. Generic drugs may help them improve both effectiveness and cost-effectiveness of their work.

OP-280

Risk sharing between GPs and health insurance companies: a remedy for quality and costs?

Bezakova D. (Zemianske Kostolany), Szalayova A. (Bratislava)

Introduction: Interaction and payment mechanisms between GPs and Health insurance companies (HICs) in Slovakia are changing. While few years ago the GPs were reimbursed simply according to the number of insurees within their practice, several HICs introduced variable capitation payment based on the quality and cost-effectiveness of used treatment. Financial constrains resulting from global economic crisis lead to increased need for cost-containment while maintaining or increasing the quality of care. Risk sharing contracts can bring motivation for GPs to provide cost-effective care while increasing their income based on successful fulfillment of expected results.
Aims and purpose: The aim of our study was to explore the willingness of the GPs in Slovakia to accept modern payment mechanisms with risk-sharing features.
Design and methods: Questionnaire was sent to representative sample of GPs in Slovakia by e-mail. Collected data from survey were evaluated and analyzed.
Results: GPs show different attitudes towards risk-sharing features in payment mechanisms like variable capitation based on the quality of provided health care or cost-effectiveness of the treatment, virtual budgets for drugs and diagnostic tests, patient management and disease management, or pay for performance. Differences in willingness to accept such changes were observed in different age groups of GPs and on regional basis.
Conclusions: Specific features of risk sharing contracts for GPs can be an acceptable option for containing the costs, improving quality of care and increasing the income of GPs.

OP-281

Family physicians awareness of drug cost and attitudes on prescribing practices

Fonseca M. (Palma De Mallorca), Cibrián S. (Palma De Mallorca), Tamborero G. (Palma De Mallorca), Etxagibel A. (Palma De Mallorca), Rigo M.T. (Palma De Mallorca), Caldentey M. (Palma De Mallorca), Servera M. (Palma De Mallorca), Fleitas G. (Palma De Mallorca), Timoner E. (Palma De Mallorca), Picornell C. (Palma De Mallorca)

This study examines awareness of drug cost and what influences physician attitudes on prescription drug of family physicians/general practitioners (GP) in Mallorca island (Spain).
Design and Methods: An ad hoc questionnaire survey was directly administrate to 236 GP, selected from the Community Health Centres in the area of Mallorca. The questionnaire elicited information about quantitative and qualitative aspects on demographic characteristics of respondents, actual knowledge of prices of the 14 most prescribed cardiovascular (CV) drugs, influence of drug costs on prescribing habits,sources of information on costs, among others. Field: GP in Mallorca during 2007. Sample: 236 GP. Information source: ad hoc survey, with 14 items addressed to evaluate awareness of the CV drugs cost, and 11 items more addressed to evaluate factors involved in the GP attitude on prescribing practice was checking as a essay in one of the health centre ($n = 17$).
Results: A high level of inaccuracies of drug cost awareness about CV drug's cost was detected. Consistently GP underestimated the cost of expensive drugs (>50%) and overestimated the cost of inexpensive drugs (>50%). There was no relationship between cost awareness and

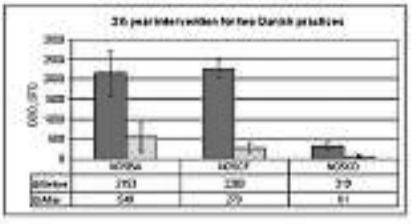
location work, gender, experience of practice, residency year, as important in ordering results. A 60% declared have a poor information about drugs' cost and even difficulty to accesses to this information. 41% GP consider cost in their therapeutics decisions. Economical rewardis not the most important factor influences their attitude to prescribing practice.
Conclusions: In Mallorca's GP exist important deficiencies in knowledge of CV medicine's cost, which should be overcome. In the other hand, GP demand more information, formation and education in order to improve their; economical reward is not the most important factor influences their attitude to prescribing practice.

OP-282

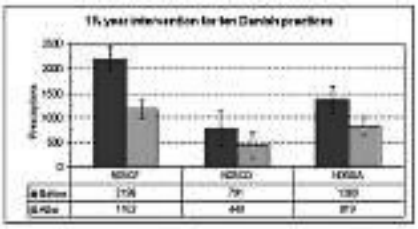
Benzodiazepine and Cyclopyrrolone reduction in general practice: it's easy!

Jørgensen V. (Thyborøn)

Aims and purpose: The global consumption of benzodiazepines (BD) and cyclopyrrolones (CP) is generally excessive. The hypnotic and anxiolytic effects of these agents typically diminish after a period of weeks or months. Patients may be caught in a trap where the usefulness of these substances is reduced – doses are consequentially escalated and a subsequent phased reduction in dose can be difficult. Although considerable resources have been expended on reducing consumption, no effective method to reduce use has yet been identified.
Methods: In 2004 two general practice clinics in Thyborøn, Denmark attempted to reduce the consumption of BD and CP. The intervention, which complied with recently introduced legislation, subsequently involved 10 medical practices, comprising 13 medical practitioners and a patient base of approximately 18.500 patients. The practitioners' intervention consisted of: • The elimination of telephone prescriptions for BD and CP drugs. • The issue of single prescriptions only, following consultation. • The issue of medicine sufficient for a single months use only. • A discussion at each consultation regarding future treatment requirements as well as a possible phased reduction of treatments.
Results: The result of this initiative was a reduction in the use of CP and BD by 90% and 75%, respectively, within a period of 2½ years. Fifteen months after the introduction of the intervention in 10 medical practices, the use of CP was reduced by 50.3%. BD-hypnotics were reduced by 46.5% and BD-anxiolytics were reduced by 41,7%.
Conclusion: The project was a resounding success, demonstrating that this simple and effective intervention can be implemented in all medical practices with a minimum of supplementary training. The described intervention was subsequently introduced as the official regional policy in this area, and has been incorporated in new national guidelines adopted in Denmark.



Development in the number of prescriptions issued by two Danish practices, before and after the initiation of the intervention. The intervention covered a 2½ year period, and included the anatomical therapeutic chemical (ATC)-code classified N05CD (e.g. flunitrazepam and triazolam), benzodiazepines and N05BA (e.g. oxazepam and diazepam), as well as N05CF cyclopyrrolones (e.g. zopiclon and zolpidem).
Data compiled before the intervention is derived from prescriptions are quarterly averages for the four quarters of 2003, data for prescriptions issued after the initiation of the measures are for the last two quarters of 2005 and the first two quarters of 2006. Error bars denote the 95% confidence interval of the means. "Before" and "After" values are significantly different, (P < 0.05; two-tailed T-test for samples with equal variance)



Development in the number of prescriptions issued by ten Danish practices, before and after the initiation of measures for the reduction of N05CD (e.g. flunitrazepam and triazolam) benzodiazepines and N05BA (e.g. oxazepam and diazepam), as well as N05CF cyclopyrrolones (e.g. zopiclon and zolpidem). The intervention covered a 15½ year period. Data compiled before the intervention is derived from prescriptions are quarterly averages for the period April 2004 to June 2005, data for prescriptions issued after the initiation of the measures are for the first quarter of 2006. Error bars denote the 95% confidence interval of the means. "Before" and "After" values are significantly different, for N05CD P=0.16 (two tailed T-test for two samples with equal variance)

OP-283

The student portfolio: a new learning method in bioethics? An international experience

Moreto G. (São Paulo), Pinheiro T. (São Paulo), Blasco P. (São Paulo), Altisent R. (Zaragoza), Bariani D. (São Paulo), Rodríguez del Pozo P. (Qatar)

Every medical act has an inseparably dual nature, technical and moral. However, educational efforts in medicine are often directed towards the purely scientific, overlooking medicine's moral dimension. While ethics is part of the curriculum, traditional lecture-and-case based teaching methods seem to have little impact on students' moral development. Requiring students to incorporate – and act upon – the notion that every single medical practice involves a moral dimension appears to be a promising new educational strategy for the bioethical development of future physicians. Preparing a portfolio on medical ethics has proven to be an effective pedagogic tool for promoting this development. The portfolio consists of a series of reports in which students analyze ethically thorny cases they have come across during their rotations. Students receive a template first developed and implemented as a pilot at the University of Zaragoza in Spain. The template provides students with an analytical outline including sections on: moral doubt, case description, reflection on relevant ethical issues, comments on one's own learning, bibliography and other sources. Other pilots were run in three medical schools in Brazil, and in a medical school in Qatar. The objective of these experiences was to find if, and how, a portfolio method can contribute to the bioethical learning among medical students. A qualitative analysis indicated that the portfolio can be an effective tool for learning ethical issues related to seven categories: professional attitudes, confidentiality, professional reflectiveness, animal research, palliative care, teaching by example, and patient-centered medicine. Initial experiences support the idea that the bioethics portfolio is a sound learning tool for biomedical ethics, and should make its way into the formal curriculum. Further research would help fine-tune this promising new learning method.

OP-284

How do caregivers in Dutch primary care out-of-hour services see patient safety?

Van de Vooren R. (Utrecht), Zwart D. (Utrecht), Langelaan M. (Utrecht), van Rensen E. (Utrecht), Kalkman C. (Utrecht), Verheij T. (Utrecht)

Aim and Purpose: To improve patient safety a positive safety culture is necessary. We are developing an instrument to measure patient safety culture in general practice, called SCOPE. It was derived from a validated Dutch safety culture questionnaire for hospitals, the COMPAZ. To validate our questionnaire it was assessed in three Dutch primary care out-of-hours services. Next to validation, our aim was to explore how aspects of patient safety culture were appraised by the respondents.
Design and Methods: The SCOPE consists of items concerning teamwork, non-punitive response and open communication about incidents. It inquires about number of incident reports and appreciation about patient safety in the respondent's out-of-hour service. Most questions must be answered by a five-point Likert-scale (from strongly disagree to strongly agree, from never to always and from failing to excellent). The questionnaire was sent to all health care workers personally (n = 664; GP's, medical nurses, chauffeurs and managers). The response was gathered and analyzed in a SPSS-database.
Results: The overall response rate was 51%. Of the respondents 71.9% rated patient safety at their out-of-hours service as good or excellent. However, 78.4% never reported an incident. 88% (strongly) agreed with the item "people support one another in this service". But only 11.1% reported always "speaking up freely if seeing something that could negatively affect patient care".
Discussion and conclusion: This patient safety culture survey revealed some interesting contradictions. While most respondents rated patient safety high in their out-of-hours service, most had never reported an incident. Moreover, it seems respondents do not associate patient safety with open communication.

OP-285

"Care as usual" in dealing with incidents in general practice

Zwart D. (Utrecht), van Rensen L. (Utrecht), Kalkman C. (Utrecht), Verheij T. (Utrecht)

Background: Incident reporting is an important tool to manage patient safety, but it is still uncommon in general practice. Before starting research on the feasibility of centre-based incident reporting in Dutch primary health care centres, the current management of incidents was studied. The aim was to explore the current way incidents are dealt with by caregivers in general practice.

Design and methods: A survey was developed to assess incident management practices in the five participating health care centres. The survey was sent to all 115 employees in the participating centres.
Results: The response rate was 89%. Of respondents 84% reported they had no defined protocol on how to deal with incidents in their health care centre, or did not know about it. Almost three quarters of respondents (n = 73) reported having been involved in an incident in the past two years. They reported 22% of these incidents had been harmful to the patient and 56% had been potentially harmful to the patient. Ninety three percent of respondents discussed the incident with a colleague within their discipline, and 55% discussed it with other disciplines. Systematic analysis of the incident in a multidisciplinary team was reported by 16%. More than 80% of respondents reported that they had personally learned from the incident, 64% shared this with direct colleagues and 20% with other disciplines. Individual measures to prevent recurrence of the incident were initiated by 80% of respondents, organisational improvement measures were initiated by 30%.
Conclusion: Caregivers in Dutch general practice deal with incidents on a case-by-case basis. A local incident reporting procedure and multidisciplinary analysis and discussion might improve organisational learning.

OP-286

The living will: research about patient opinions near advance health care directives

Della Vedova R. (Sagrado), Degenhart M. (Ronchi Dei Legionari), Tombesi M. (Macerata), Bernabè S. (Pianezza), Visentin G. (Dueville)

Aims and purpose – Thanks to the advances in medical technology, some patients who formerly would have died can now be kept alive by artificial means. Sometimes such treatment may be undesirable because it may only prolong the process of dying rather than restore the patient to an acceptable quality of life. As long as a patient is mentally competent, he or she can be consulted about desired treatment. When a patient has lost the capacity to communicate, however, the situation is different. In Italy, but not only in Italy, Living Will law is still missing. The aim of this research is to investigate patient opinions about the Living Will.
Design and methods – This study adopted an observational cross-sectional design, conducted by questionnaire, in multicentric general practitioner offices. The physician assistant offers to any consenting adult presenting in doctor's office for any cause a document with an explanation of the research and the informed consent. Elected patients receive an' anonymous questionnaire, that they compile in the waiting-room and then hand back. The questionnaire consists in 3 areas, the first one investigates general informations about the patient, the second one concerns life-sustaining treatments, the third is about the Living Will. Quantitative statistical analysis will be performed.
Results and conclusions – The research is going to begin and we expect to obtain relevant informations about patient opinions concerning advance health care directives. These informations could be very useful for every GP facing patients at the end of life, because dealing with this ethical issue is of great complexity.

OP-287

Principal problems of clinical ethics in general medical practice

Fantacci G. (Niederhasli)

Aims and purpose: The current treatment guidelines recommend ever-more complex treatment schedules, e.g. for diabetes mellitus patients. They are now supposed to receive, in addition to antidiabetic drugs, Aspirin and a cholesterol reducer since, they are treated the same as myocardial infarction patients. This measure alone triggers a huge rise in costs. We are often confronted by patients with unhealthy lifestyles (smoking, overweight, drugs) or who, for various reasons, fail to follow therapeutic advice (e.g. not keeping to the diabetes diet or insufficient compliance in taking medicines). In dealing with such patients one is constantly confronted by ethical borderline situations (e.g. a patient with cirrhosis of the liver continues to consume alcohol, even though he has just been in hospital for an oesophageal variceal bleeding). What is the GP supposed to do?
Design and Methods: First, the structure of the Practice is analysed. During five years in my practice, diagnoses and treatments from consultations have been recorded twice annually for one week. Each year 7,500 consultations are held, with 2,200 different patients. By analysing the medical problems in a general practioner practice, the ethical challenges become clear (e.g. the number of patients with Diabetes Mellitus). Examples from ethical conflicts in day to day practice and their possible solutions help to bring options to the surface. The division proposed by Jonsen et al. into medical indication/patient preferences/quality of life and contextual aspects to examine each individual case works well for everyday practice.
Results and Conclusions: To find a decision that fits a given situation, it is best to consider ethical questions early on. Ethics can be learnt with the help of examples. This involves following a path somewhere between the wishes of the patient for therapeutic options and tolerating, at the same time, their own powerlessness in the face of a terminal illness.

OP-288

Local alternative therapy: usage and perceptions among habitants of Trikala district, Greece

Yakimova V. (Pyli), Egnatiadis N. (Pyli), Komninos I. (Crete), Soukouli P. (Pyli), Katsiamanis D. (Pyli), Kaliora H. (Pyli), Venizelos M. (Pyli)

Aims and purpose: The purpose of this research is to estimate the usage and define the perceptions about alternative therapy among health-service users of Trikala district, Greece.
Design and methods: Structured personal interviews were performed with randomly selected habitants from three demographic types of regions (highland rural, lowland rural, urban). Each basic group included 8 age-based subgroups of 10 randomly selected persons, in equal gender analogy. The interviews included 9 questions, classified in three units: personal features, alternative methods usage, perceptions about alternative therapy compared to conventional.
Results: The sample included 240 persons (120 male/120 female), 19–94 years old. Alternative therapy usage was recorded in a higher percent (57.1%) regarding rural regions (40.9%), more among women (33.8%), apparently increasing in subgroups of over 55 years age (39.6%). Most common medical reasons of usage were headaches (36.2%), cold/fever (32.5%), hypertension (32.5%), fatigue (25.1%). Most frequent therapeutic methods were local herbs (43.3%), "release from the devil eye" (40%), lemon extract (32.5%), cupping massage (31.2%), all strongly corresponding to local traditions as known by folklore and history sources. 25,8% consulted a medical doctor before using alternative treatment. In case of serious health problems conventional medicine was preferred by 38,8%.
Conclusions: The usage of local alternative therapy registered in Trikala region is significant, appears to be correlated to type of region, age and gender, refers mainly to common health problems and the variety of methods corresponds to local cultural traditions and topic nature sources. On the other hand, in case of serious health problems a positive attitude to prefer conventional medicine was registered. Therefore, alternative therapy usage in Trikala district, Greece is a highly popular practice, probably based on acceptance and confidence in conventional medicine.

OP-289

Webcast as an educational tool: opportunities and threats

Dijkstra R. (Utrecht), Ballieux M. (Utrecht)

Introduction: Live or non live webcasts are new types of medical education. They offer discussions, presentations, interaction with participants and information that can be viewed on the Internet. The Dutch college of General Practitioners developed a webcast in order to support the implementation of new guidelines. The webcast was introduced free of charge and was completely done by 700 general practitioners within two months. Aim of the study was to identify barriers and facilitators of this new educational tool.
Methods: A questionnaire was mailed to 850 general practitioners and trainees. It contained questions on whether or not the webcast was attended and what barriers were met. Also evaluation forms of the 700 participants of the webcast were analysed.
Results: Thirteen percent of the 485 responders had completed the webcast, while 4% had followed part of the webcast. GP-trainees had followed the webcast relatively less frequent compared to GP's. Only few responders replied that they had encountered technical problems or had lost login codes. The majority answered that they had had no opportunity yet due to lack of time and some were not interested in e-learning or had not understood what a webcast was. Half of the responders would welcome more webcasts on other guidelines, however only one third was willing to pay for it. From the 700 general practitioners that had actually attended the webcast, over 90% was enthusiastic and stressed the positive effect of visual demonstrations. They replied that their interest in e-learning had been increased.
Conclusion: Webcasts are promising new types of education. Fitting them better to the needs of the GP's is the next challenge.

OP-290

Evidence-based medicine guidelines at the point of care – user statistics and survey

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Aims(s) and purpose: EBM Guidelines is a collection of desktop clinical guidelines for primary care combined with the best available evidence. The collection was first launched in Finland already in 1989. Today it and it´s translations include almost 1000 concise primary care

practice guidelines, over 3700 high-quality evidence summaries supporting the given recommendations graded from A to D according to GRADE criteria and multimedia features like a photograph and video library.
Design and Methods: The presentation consists of automatically collected user data from log files including used search terms, obtained guidelines, their using frequencies and possible seasonal variation. A user survey including information on user professional groups and the guideline's influence on daily clinical practices will be performed in spring 2009. Results: The user data and results of the survey will be presented.
Conclusions: Automatically collected log files with complimentary user surveys can be valuable tools in further implementation and development of clinical guidelines.

OP-291

"Evidence-based Medicine Guidelines": dissemination and usage of an online compendium in four European countries

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Aims: The "Evidence-based Medicine Guidelines" have been developed in Finland for rapid online information in GP decision making. The first adaptation to a different health system was published in Austria and disseminated also in Germany and Switzerland. We investigated differences in dissemination and usage between Finland and the German-speaking countries to discover obstacles regarding implementation.
Methods: We compared usage statistics of the online versions in Finland and the German speaking countries regarding number of users and frequency of use in 2008, and connected these data with the implementation measures applied.
Results: In 2008, 98% of the Finnish physician used the online guidelines regularly, while in the German speaking countries only a minority of physicians had access to the compendium (Austria 27%, Switzerland 23%, Germany 2.1%). The average Finnish physician opened 167 articles per year, Austrian and Swiss doctors 8, Germans only 0.5. The difference between Finland and the German speaking countries remains when the number of articles opened per year is divided by the number of users (Finland 170, Austria 31.2, Switzerland 33.5, Germany 24.3). In all four countries a login-peak during working hours was shown. Comparing usage with periods of intensified marketing reveals a possible impact for Germany and Austria, but not for Switzerland.
Discussion and Conclusions: Finland provides free access to the ebm-guidelines for every GP in the public health system. Acceptance of guidelines is good, there exists little fear of data misuse, and all Finnish GPs have been used to working with open internet access for years. In the German speaking countries, individual practices with lower acceptance of standardized care, lack of internet access as well as costs for the guidelines may be important factors to explain the vast differences of usage compared to Finland.

OP-292

Functional and contextual criteria for sick leave prescription in general practice: the ATCIF study

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Introduction: Sick leave prescription involves medical issues (influence possibly negative of a too short or too long sick leave on the outcome of a health problem). Our main aim was to describe the functional limitations and the contextual factors of patients prescribed a sick leave.
Methods: We conducted a cross-sectional study, between December 2007 and March 2008. The investigators were nine general practice residents in teaching practices, formerly trained to the use of a checklist derived from the International Classification of Functioning, Disability and Health (ICF). Data were collected using a questionnaire informed within the consultation.
Results: We have included 435 patients, aged 36.9 years in average, among which 54.3% men, 57.7% employees, 71.3% living in a couple, without chronic pathology for 75.4%, and 81.1% were prescribed an initial sick leave. The most frequently reported impairment was a sensation of pain (19.5%), activity limitation was focusing attention (16.6%). An environmental obstacle was identified in 41.6% of situations, mainly due to a lack of adaptation of work station (40.6%).
Discussion: ICF adapted checklist was considered quick and easy to use by the investigators (median time of 3 minutes per patient), and suited to the description of functional limitations. They were less familiar with incorporating environmental obstacles in their clinical assessment. The acceptability of this approach remains to be explored further.

OP-293

Therapeutic information on the physician's software

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Background: The quality of the therapeutic contents of medical softwares for clinical use in Italy (therapeutic information and tools to assist drug prescription) are unknown. A multidisciplinary group decided to start a project to assess the quality of the therapeutic contents of the medical softwares and to propose recommendations to improve their quality.
Aims: To assess the quality of therapeutic information contents and other tools to support prescribing of eight of the most used softwares for GPs in Italy. To define a set of contents to improve the quality of those softwares.
Methods: The therapeutic contents of eight of the most used softwares by italian GPs have been assessed through a ten ITEMs assessment tool. A representative list of drugs were selected to assess each ITEM.
Results: None of the softwares contains the complete (Summary of Product Characteristic) for the drugs considered and low quality information, were found just in 3 of the 8 softwares. Information for the public have never been provided. Seven softwares contained information about drug interactions, but no information is provided on what GPs could do to manage such interaction. No updated information on safety (Dear Doctor Letters) were found. No one software provided a full list of available generic drugs. For drugs that require some type of monitoring just 1 software provided this tool. In 6 of the 8 softwares it is possible to calculate the individual score of the global cardiovascular risk.
Conclusions: The quality of therapeutic information contained in the softwares assessed is low. All the therapeutic information that could help GPs in decision making should be available easily in the software while GPs prescribes. An International benchmark project among the most used softwares for GP's in Europe deserves to be implemented.

OP-294

Emerging approaches in cardiovascular interventions: health informatics and its role in evidence-based medicine

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Aim: Evidence-based medicine (EBM) requires the integration of the current best research evidence from clinical care research and the patient's unique values and circumstances. 1 It is a tool used to select and incorporate healthcare research into the interventions on cardiovascular risk factors. 2 This paper is to explore health informatics and its role in EBM with regards to the impact on interventions for cardiovascular risk factors.
Methods: An integrative literature review, searching MEDLINE, EMBASE, the Cochrane Library and Wiley-Blackwell from March 1990 to June 2008, resulted in 112 references. The review was designed to answer a number of questions, which include health informatics and its role in EBM, response to cardiovascular risk factors, and effective strategies in the intervention of cardiovascular disease (CVD).
Results: Forty-eight were excluded because they are not systematic review. Another 24 studies were excluded because of failure to meet inclusion or exclusion criteria, inaccessible outcomes, or improper study design. There are further six studies were excluded because they are duplicate publications. Thirty-four met criteria for validity assessment. Sixteen studies used the parameter of waist-to-hip ratio, 20 studies included body mass index, 16 studies used blood pressure, 12 studies considered cholesterol level, 13 studies included exercise and physical activity, and eight used smoking status.
Conclusion: It is hard to get the evidence at the point of interventions on CVDs. EBM is the scientific method applied to the practice of cardiovascular health. Health informatics lies at the heart of EBM, integrally bound up with the process of interventions for cardiovascular disease and risk factors. The practice of health informatics and its role in EBM can therefore be strengthened to deliver the right balance, and to ensure interventions are safe and effective, provide patient care and education, and ensure an improvement in the quality of life.

OP-295

Neurologic adverse effects of drugs oftenly prescribed in general medicine

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Introduction: Malaises, falls, and acute confusion are frequently seen in the elderly, and the family physician is often the first to address the issue. Psychotropic drugs may be involved. Our goal was to assess the prevalence of serious side effects of these medications.
Patients and methods: Prescriptions were compared in patients with falls, malaises, confusion, or transient hallucinations, and patients without. Only prescriptions written and signed by the general

practitioner were taken into consideration. Potential confounders, such as renal function, metabolic perturbations, antihypertensive drugs, and alcoholism were recorded.
Results: 553 consecutive patients (314 women and 239 men) were included. 9.76% were between 20 and 40 years old, 23.51% between 40 and 60, 39.06% between 60 and 80, and 27.67% over 80. The median number of prescribed drugs was 5 for females (1–14) and 5 for men (1–11). The number of drugs significantly increased with age (p = 0.0001). 36% of patients took benzodiazepines, 14% antidepressants, 4.2% neuroleptics, 17% various pain killers. 12% of patients recognized excessive alcohol consumption. 12% of patients presented with falls and malaises, and 6 % with confusion. There was a significant association between prescription of psychotropic drugs and acute confusion (OR = 2.308, 95 CI: 1.123–4.741, p = 0.020), a tendency between psychotropic drugs prescription and falls (OR = 1.605 , 95% IC: 0.958–2.688, p = 0.07). Risk of confusion increased with age (p = 0.008) and the number of psychotropic drugs prescribed (p = 0.008), but not with the total number of drugs prescribed (p = 0.2). In multivariate analysis, only age (p = 0.0036) and alcoholism (p = 0.0001) remained associated with falls, whereas only age (p = 0.0070) and psychotropic drugs (p = 0.0065) remained associated with acute confusion.
Conclusion: prescription of antidepressants and benzodiazepines should certainly be restrained, more particularly in the elderly.

OP-296

Heart-type fatty acid-binding protein in the early diagnosis of acute coronary syndrome: systematic review of a novel biomarker

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Aims: Timely diagnosis of acute coronary syndrome (ACS) enables adequate therapy aimed at improving prognosis. The diagnosis is based on medical history, electrocardiographic findings and serum levels of cardiac biomarkers. Heart-type fatty acid-binding protein (H-FABP) has been investigated in several studies yielding varying results. Aim of this systematic review is to determine the usefulness of H-FABP in the early diagnosis of ACS.
Methods: An electronic search was performed identifying studies on the diagnostic value of H-FABP. Studies were included based on their domain (patients suspected of ACS) and use of a valid reference standard (international guideline on acute coronary syndrome). For each study theprevalence of ACS, negative predictive value (NPV) and positive predictive value (PPV) of H-FABP were calculated.
Results: Of the 1395 original articles we retrieved, 17 studies satisfied the selection criteria (3466 patients, mean age 63 years, prevalence of ACS range 17-69%). Results were not pooled because of large heterogeneity between the studies, especially in the methods used to assess H-FABP levels and in cut-off value chosen (range 5.1 to 16.8 ng/ml). Also, the time since symptom onset differed considerably (range <30 minutes to >24 hours). Multivariate regression analysis did show an association between both PPV(beta 0.60, 95%CI 0.18–0.94) and NPV(beta –0.24, 95%CI –0.50 – 0.11) and the prevalence of disease.
Conclusions: Studies performed on H-FABP differ markedly making a combined estimation of the diagnostic accuracy undesirable. What can be concluded however is that in a setting with a low prior probability of ACS (ie primary care) the NPV of H-FABP has the highest diagnostic value and H-FABP seems useful to rule out ACS, whereas in a setting with a higher prevalence of ACS (emergency room/coronary care unit) the PPV provides most diagnostic information and could be useful to rule in ACS.

OP-297

Use of ambulance carriage from urban and rural areas around a large city

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Purpose: tp investigate use of ambulance carriage. Design-Methods: 222 patients, 108 males, mean age 67.4 ± 18.8 years brought by ambulance in emergency department of a hospital in 1 month were submitted in a questionnaire regarding demographics, reason for calling ambulance, and past history. Admission in a ward or discharge was recorded.
Results: the majority were natives (94.6%). Urban calls were 95% and rural calls 5%. 47.3% of cases were admitted to hospital. Mean number of comorbidities in medical history was 2 ± 1.44. Mean age for those admitted was 74.13 ± 13 years and for those discharged 61.3 ± 21.2, p <0.001. Mean number of comorbidities was 2.4 ± 1.4 and 1.6 ± 14, respectively, p = 0,005. There was no difference in gender, address of residence (urban or rural), and ethnicity between those admitted and those discharged. Socioeconomic/educational status was associated with admission rate as scientists/clerks had low admission rate (25 and 36.4%), unemployed/housewives and professionals had moderate rate of admission (43.4 and 50%) and those-in-retirement had high rate of admission (80%). Admission correlated with age (r = 0.39, p <0.001) and number of comorbidities (r = 0.228, p = 0,007). In multivariate analysis only age was independently associated with admission.
Conclusions: less than half of emergency ambulance calls require hospital admission. No difference existed between urban and rural calls. In univariate analysis, age, comorbidities and educational/professional status was related with hospital admission, with educated people been more prone to call an ambulance for less important occasion. In multivariate analysis only age was independently linked with possibility of admission. These findings should be taken into account from ambulance services and help redesign their policy to avoid unnecessary calls and increase response speed in real emergencies.

OP-298

Applying a complexity perspective to the uncertainties of pandemic flu

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Aim and Purpose: To explore how the Complexity perspective and the Cynefin framework can inform the planning processes for pandemic influenza.
Background: The primary care sector can be thought of as a Complex Adaptive System (CAS) because of its interactive, interdependent, self-organising and unpredictable nature and its need for 'noise', as information, to sustain an edge of chaos position; a position where a CAS is able to spontaneously adapt practice to ensure system viability. The processes of rational strategic management can stabilise these natural characteristics by reducing lateral communication, removing the sense of ownership, reducing the sensitivity to noise and consequently adaptability. Whilst the UK government recognises the complexity of pandemic flu and that conventional planning will not cope, processes to date have concentrated on the rational linear approach of developing strategies, check lists, action plans and virtual desk top exercises. The concern is that evidence suggests that health care professionals in front line services feel unprepared for an outbreak of pandemic flu.
A New Framework for Planning: Complexity and the Cynefin framework allows us to deal with complex and unpredictable problems such a pandemic flu by promoting a balance of rational planning together with processes that empower experts at the front line to recognise patterning and to probe-sense-respond spontaneously. Experts in the field are in a position to recognise the patterns and organise the rapid transfer of information throughout the operational levels where self-organisation allows them to deal with the situation that emerges locally, flexibly and autonomously.
Key message: Managers dealing with pandemic flu must be aware of how the health care system works as a CAS and how rational planning stifles the natural ability of professional to spontaneously and rapidly adapt practice.

OP-299

Additional support and quality of life of homecare patients caregivers

Plaza S. (Madrid)

Aims: To determine the quality of life of chronic diseases patients caregivers related to the additional support received.
Method: Pilot descriptive study. Inclusion criteria: principal caregivers of chronic disease patients from our Primary Care Centre with Eastern Cooperative Oncologic Group (ECOG) = 3–4, with well-established caregiver. Caregivers data: additional support, and quality of life questionnaires: Ruiz and Baca , Goldberg and Zarit. Homecare patients data: age, sex, principal diagnosis, and quality of life questionnaires: European Organisation for Research and Treatment of Cancer (EORTC QLQ-C30, version 3.0) and EuroQol-5D
Results: N = 28.
Caregivers: Additional Support: Monetary: 1; Health: Primary Care: 26; Home visits: 4, Social: Relatives: 14; Non-relatives: 2; Employees: 9 23 received <2 types of support/ 5 received 2 or more types of support RUIZ BACA: Social support average: 3.17 "few" = 7; "moderate" = 13; "enough" = 8. General satisfaction average: 3.14 "few" = 10; "moderate" = 17; "enough" = 1 Physical/psychological comfort average: 3.17 "few" = 11; "moderate" = 14; "enough" = 3. Absence of burden average: 2.44 "very overloaded" = 7; "enough overloaded" = 14; "some overload" = 7 GOLDBERG: Psychosocial problems: score >7: 13 Score >6: Subscales A: Psychosomatic symptoms: 13, B: Anxiety: 21,C: Social Disfunction: 17, D: Depression: Score>6: 7 ZARIT: <47:20/ 47-55:4 />55:4.
Conclusions: – Physical and phychological comfort is higher in caregivers with more additional support (p <0.03). – In our sample, caregivers feel theirselves less overloaded when they received more

additional support (p <0.05). – Caregivers with few additional support are more overloaded (p <0.009). – Contrary to what we have thought, caregivers with more additional support have more psychosomatic symptoms (p <0.008).

OP-300

Quality of life (QOL) of homecare patients related to their caregivers

Pouplana M. (Madrid)

Aims: To determine the relation between QOL of patients with chronic diseases and their caregivers.
Methods: Pilot study. Inclusion criteria:caregivers of chronic patients with ECOG 3-4.Caregivers data: QOL questionnaires: Ruiz and Baca, Goldberg and Zarit. Homecare patients data: diagnosis, and QOL questionnaires: EORTC QLQ-C30 and EuroQol-5D
Results: N = 28,Caregivers: **Ruiz Baca**: Social support average: 3.17 few 7; moderate 13; enough 8. General satisfaction average: 3.14 few 10; moderate 17; enough 1. Physical/psychological comfort average: 3.17 few 11; moderate 14; enough 3. Absence of burden average: 2.44 very overloaded 7; enough overloaded 14; some overload 7 **Goldberg**: Psychosocial problems: score >7: 13; Score>6: Subscales: A: Psychosomatic symptoms: 13 , B: Anxiety: 21, C: Social Disfunction: 17, D: Depression: Score>6: 7 **Zarit** :<47:20/ 47-55: 4 />55:4 Patients: oncological: 5; neurological: 17; cardiorespiratory: 2; others: 4 **EORTC**: Functional scale mean score: 39.64. Functional status “not at all”: 2; “a little”: 21; “quite a bit”: 5,(average scores: 22.3,37.5 and 55.5respectively). Symptoms scale mean score: 20.73 “not at all”: 19; “a little”: 9 (average scores: 15.36 and 32.06 respectively). Global health status mean score: 58.62; Bad status: 5; Medium status: 14; Good status: 9 (average scores: 23.33, 55.35 and 83.33 respectively) **EUROQOL**: 6-14: 19/>14: 9
Conclusions: General satisfaction average in caregivers is fewer when patients have more symptoms (p <0.05) – Neurological patients caregivers suffer from more Social Disfunction (p <0.001) – Depression is more frequent between caregivers of patients with worst global health status score(p <0.05) – Caregivers are more overloaded when EUROQOL of the patients are affected in all the domains (p <0.05).

P-001

Metabolic syndrome and diabetes mellitus type 2

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The number of people with diabetes mellitus type 2(T2DM) is growing rapidly. Many of them have a metabolic syndrome a long time before T2DM was diagnosed.
Aim: was to recognased people with prediabetes and T2DM in group of patients with metabolic syndrome(MeSy).
Design & Methods: The epidemiological, four month long research included 215 patients, aged 18–70 years (mean 45), without previosly established T2DM, but with diagnosed MeSy. Diagnosis of MeSy was based according to the International Diabetes Federation criteria (IDF). For all patients with elevated fasting plasma glucose >=5.6 mmol/l, oral glucose tolerance test was recommanded. All patients were received an invitation from their general practitioner (n = 4) to measure their own waist circumference and blood pressure, to mnitor raised of plasma glucose and lipid status.
Results: From 215 patients with established MeSy, 195 patients (90.69%) had elevated fasting plasma glucose and OGTT was done. 104 (53.33%) patients had impaired fasting glucose (IFG), 59 (30.29%) patients had impaired glucose tolerance (IGT), and in 32 (16.41%) patients was diagnosed T2DM.
Conclusions: This research confirmed that MeSy is a strong predictor for development prediabetes and T2DM even them are not already present. Early detection and more intensive management of the metabolic syndrome in order to reduce the long-term risk diabetes is now duty in daily practice of general practitioners.

P-002

Metformin in cardiac patients with metabolic syndrome and prediabetes

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Aim: To study effectiveness and safety of metformin, in metabolic syndrome (MS) patients without diabetes mellitus (DM).
Materials and methods: This open, randomized, parallel study included 31 patients (10 men, 21 women) aged 30–65 years (mean age 54 ± 2 years) with at least 3 MS components (NCEP ATP III criteria, 2001). Group I received metformin, Group II – standard therapy. Follow-up period lasted for 14 weeks. At baseline and 14 weeks later following parameters were measured: blood pressure (BP), heart rate (HR), body weight, waist circumference, total CH, LDL-CH, HDL-CH, triglycerides (TG), insulin, uric acide, lactate, creatinine, fasting and 2-hour post-OGTT glucose; ECG at rest was registered.
Results: Three-month metformin therapy was associated with significant decreases in insulin resistance (HOMA-IR; –35%), fasting and 2-houre post-OTTG glucose (–5% and –17%, respectively), comparing to baseline and control group. Adding metformin to initial antihypertensive therapy resulted in additional reduction of systolic (–7%) and diastolic BP (–2.4%). Anorexigenic effect manifested in body weight (–1.7%) and waist circumference (–2 cm) reduction. TG level significantly decreased (–29%), and HDL-CH level increased by 14% with unchanged total CH and LDL-CH levels. Lactate and creatinine levels remained normal in both groups.
Conclusion: Metformin (1000 mg/d) improves systemic metabolism and is safe in DM-free MS patients. Metformin could be included into complex prevention of DM and cardiovascular complications.

P-003

Screening for metabolic syndrome in a male working-population

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Background and aims: Metabolic syndrome (MeS) and its correlation with chronic illness have been widely studied. At present, limited informations are available about screening programmers in the working-population. The aim of this study was to screen the prevalence of MeS in a male working population in order to assess the need for specific preventive measures.
Methods: workers subjected to a surveillance programme in compliance with the current Italian law, were involved in the study. Relevant data (waist circumference, blood pressure, fasting plasma glucose, triglycerides. HDL-cholesterol) were recorded as in the NCER-ATPI-II definition. All subjects were asked about drug consumption and medical examination during the last year.
Results: 162 male workers (23–63 years old) were screened, with a prevalence of MeS of 12.7% (IC 95% 9.4–17.1). The percentage of subjects with two diagnostic criteria was 32.5% (IC 95% 27.4–38.0). The most frequent sing was hypertrigliceridemia (30.6%). Followed by low HDL-cholesterol (23.2%), hypertension (22.9%), visceral obesity (12.7%) and hyperglycemia (7%). 60% of the subjects with MeS declared not to have attended any medical examination during the last year. This percentage was significantly higher than that of workers without MeS ($p < 0.05$).
Conclusions: Mes was a frequent condition in screened workers. Moreover, the combination of two diagnostic criteria was reported in one worker of three, underlining that an even higher proportion of these subjects was at risk to develop MeS. These observations suggest that the introduction of a screening programme for MeS in workers could be important in order to apply specific preventive measures.

P-004

Patients with multiple vulnerabilities in primary health care settings

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The purpose of this study was to find out the most important barriers for obtaining adequate health care, identified by individuals who belong to hard to reach groups with multiple vulnerabilities.
Methods: The study population consisted of 50 randomly selected sex workers from Belgrade. All individuals involved in this study have multiple vulnerabilities; in addition to therework insex industry some of them are illiterate, homeless (including rough sleepers), living with domestic violence, transgender, MSM, as well as dependent on drugs and/or alcohol. Majority (82%) of them were advised to visit a doctor in the Primary Health Care Center by outreach workers from NGO JAZAS (Association against AIDS) during the period of two years (2007–2008). Selected individuals were interviewed by a doctor in Health Center. They were asked two questions: 1. "Do you visit your family doctor regularly (at least once a year)?" and 2. "If not, what are the reasons for that?".
Results: There was no one positive answer to the first question. The second question was answered as follows: 67% said they feel unconfortable in the doctors office, because of doctors behaviour which can be explained in terms of judgmental approach, verbal and non-verbal disapproval, lack of confidentiality, understanding and respect, blaming patient for his own life circumstances and illness, not taking into consideration patients ability to use the traumatic experience as a source of future growth and resilience. 33% answered in terms of decreased health-seeking behaviour: they don't care about health, have no documents, do not believe in positive outcomes, they are more familiar with traditional (folk) healing methods.
Conclusion: Although we doctors like to think that every our patient has an equal opportunity in our office, it is clear that our behaviour is often the main reason why vulnerable patients are less likely to be registered with the GP than the general population.

P-005

Quality of life in adolescents from Barcelona

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Aim(s) and purpose: Estimate Quality of Life Related to Health (HRQL) in adolescents from our urban area, and its relationship with sociodemographic and health variables.
Design and Methods: We designed a cross-sectional descriptive study with adolescent students, using a sociodemographic questionnaire and measuring HRQL with Vecú et Santé Perçue de l'Adolescent (VSP-A). As inclusion criteria we considered students from 3rd and 4th years of Secondary Education from a public and a private school. We excluded students who didn't have a written consent from their parents and those who didn't attend class the day of administration of questionnaires. Final sample was 194 schoolchildren from a possible total of 223.
Results: 51% were girls. 60.3% of adolescents were between 14–15 years old, 34% were immigrants, and 55% did physical exercise outside school. 21.6% were smokers, 64.4% referred alcohol consumption, 33.5% had consumed some leeks, 3.6% design drugs, 11.3% tranquilizers, 3.1% cocaine, and 0.5% heroin. Native adolescents at private school were 69.4%, while at public school were 30.6%. In general, girls have lower HRQL scores than boys, but scored higher for dimension "relationship with friends", HRQL gets lower as adolescent age increases. Native adolescents scored better than immigrants in "relationship with friends", "relationship with teachers", and "school activities" and "leisure activities". Adolescents from private school have better scores at "relationship with teachers", and "school activities" and "leisure activities". Adolescents who do physical exercise outside school had better HRQL scores. Multiple regression model explained 15.1% of VSP-A variance, including 4 explanatory sociodemographic variables.
Conclusions: Adolescents who have better HRQL are those who: 1 Do exercise outside school. 2 Have close relatives without alcohol problems. 3 Have not used drugs. 4 Are natives from Catalonia or Spain.

P-006

Primary care screening for diabetic retinopathy using a non-mydriatic camera

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Aims and purpose: The screening of diabetic retinopathy, forces the patients with diabetes mellitus to go to the ophthalmologist as an established itinerary, increasing waiting lists. The purpose of this trial was to reduce the ophthalmologist waiting list and involve the general practitioner in the detection of diabetic retinopathy creating a circuit in a Primary Care unit.
Design and Methods: A non-mydriatic camera (NMC) for the obtaining of digitized images was acquired; this was connected to computerized clinical history, sending images to the general practitioner. All doctors participating in the trial took lessons with the ophthalmologist. A circuit was created: the doctor sends the patient to the NMC visit, were a trained nurse takes the photography. Weekly each doctor evaluates all images taken. In case of doubt or pathologic image, a review of the ophthalmologist is required, and if retinopathy is confirmed the patient will be sent to the ophthalmologist to the treatment.
Results: 8 Primary Care units, with 6537 diabetic patients (prevalence of 5.7%) participated in the trial. A total of 2640 diabetic patients were examined by NMC between 1rst January 2007 and 30th June 2008. Only 21,40% (565) required ophthalmologist review, and 8,48% (224) were sent to the retina section of Ophthalmology Service of the hospital, so 2075 avoid the ophthalmologist visit.
Waiting list for the screening of retinopathy was reduced from 1,5 years to zero.
We reivised in a random for a total of 879 patients in the audit. The sensivity of the study was 81, 14 and the specificity above 95%.
Conclusions: Using NMC improves the screening of diabetic retinopathy, reducing the waiting list and avoiding unnecessary ophthalmologist visits. An earlier diagnosis of retina pathologies and a faster treatment is achieved. The inclusion of Family physicians in the screening system seems to be effective in the diagnosis of diabetic retinopathy.

P-007

Smoking cessation: effectiveness of three different intervention strategies from primary care

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Aims: To analyze the effectiveness, feasibility and acceptability of three methods used for treating tobacco addiction in a specialized primary care unit.
Design and Methods: A prospective cohort study was conducted from January 2006 to December 2008. Data were obtained from the medical records of 614 patients smokers: 268 (43.6%) men and 346 (56.4%) women, attended for tobacco cessation Patients followed were assigned to three groups: Group I: 186 (30.3%) received visits for tobacco advice. Group II: 207 (33.7%) received medical advice, as well as an intensive motivational therapy, frequent medical consultations, and continuing contact. Group III: 221 (36.0%) received same intervention of Group II plus a pharmacological treatment. Descriptive statistical methods were used to analyze information with Epi-Info program.
Results: The overall performance of the cessation program was as follows: stopped smoking 295 (48.0%). Continue to smoke 217 (35.3%), and reject or abandon the program 102 (16.6%), Looking at each intervention group there are significative differences: Smoke cessation in Group I was 37 (6.0%) people, in Group II, 106 (17.3%), in group III, 152 (24.7%) Continue smoke: 98 (16.0%), 72 (11.7%) and 47 (7.6%) respectively. (Mantel Haenszel? 2: 79.42. P <0.0001), Rejected the program in Group I, 51(8.3%), in Group II, 29 (4.7%) and in Group III, 22 (3.6%) (Mantel Haenszel? 2: 64.75. P <0.0001).
Conclusions: This study show that our intervention for smoking cessation that combines information, motivation, cognitive-behavioural therapy, continuous contact with patients, and in some cases pharmacological treatment, is effective.

P-008

Investigating hypertension in children and adolescents of an urban area. Primary results

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Aim(s) and purpose: It is internationally recognized that the prevalence of hypertension in younger people is higher than initially thought. In addition, it seems that it is a mark of early onset of adult hypertension. The aim of this study was to investigate this phenomenon in children and adolescents in an urban area in a Mediterranean country.
Design & Methods: The sample of our study consisted of 78 children (37 boys, 41 girls), age 8–18 years old who came to the Primary Health Care unit of an urban area in Greece in order to undergo a physical examination for health certificate in order to use it to their school. All children participated to the study after the parents signed an agreement. Three blood pressure measurements were carried out; the mean values were recorded. The NHANES criteria were used for classification of hypertension (>95th percentile), adjusting for age and sex.
Results: Nine children (11.53%) were hypertensive, similarly distributed across three age categories (8–11, 12–15, 16–18). The prevalence of hypertension did not differ significantly between genders. (Boys: 10.81%, Girls: 17.07%, p = 0.524), while it was significantly correlated with increased body weight (Prevalence in normal: 4.62%, prevalence in obese/overweight: 38.46%, p = 0.003).
Conclusions: Although the sample of the study is not large enough, the primary results are alarming regarding the health status of children and adolescents in an urban area. The early recognition of the problem and the help of parents and the family physician might lead to lifestyle change and therefore, successful treatment of this concerning phenomenon.

P-009

Elderly who fall: risk factors and prevention

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Aims: Falls cause immobility and dependency in the elderly and endanger their morbidity and mortality. We aim to study the risk factors (RF) for falls in the elderly (FE) in order to achieve prompt detection of these RF and to establish preventive avoiding procedures, empowering their quality of life.
Methods: A prospective study practiced in 2 health care areas, performing 3 questionnaires a) Record of falling incidents, stumbles, fear to fall, consequences in daily basic activities (DBA) and self perception of health b) Record of demographic data (age gender household carers, etc). c) Health problems, drugs, tumble location, complications.
Results: 45.9% suffered 1 fall in the last year, 11% several, 34.8% a stumble (an institutionalized or not p <0.05 difference). Falls were more frequent in men, 65% had fear to fall, 26% had deterioration of DBA. Main FE consequences: bone fractures 5% (1% hip fractures), 40–50% were minor injuries, contusions or hematomas, 8% disabled a DBA, 10% suffered depression. Mean fall age 75 years old, greater number of falls in patients with no physical activity (71%). Major RF were viewing deterioration, benzodiazepine intake, previous tumbles, and older age. Predisposition RF: a) environmental (slippy floors, high beds, stairways without handrails, high/narrow stairsteps, poor illumination, furniture obstacle, inadequate footwear or clothing).
b) disease (osteoporosis, osteomalacia, osteoarthrosis -hip, coccyx, spondyloarthrosis-, foot malformation, amyotrophy, orthostatic hypotension, dementia).
Conclusions: Our results suggest that physical activity practice prevents FE, empowers self perception of health and diminishes less DBA due to this fear. We must outstand the key role of Primary Health Care in order to evaluate and promptly detect RF and to establish a suitable FE prevention. We need to continue FE research studies due to the consequences in their quality of life.

P-010

Female genital mutilation and primary care

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Aims: The FGM is a very common practice in the world, particularly in Africa. It consist in the partial or total extirpation of the genital female organs. The FGM does not take any religious origin, is a form of violence against the women, like a way of controlling them. It is an attempt against the children and the human rights. In Catalonia

(Spain)exist laws that punish her practice. It is a problem of Public Health and they are the health's professionals those who have to do the preventive intervention.
Methods: A nurse presented two years ago a Project of Preventive's Surgery of the FGM in the health center of Salt in Catalonian (Spain), in labour schedule, one day a week. If risk is detected she derived to Social Services and to the paediatric team. People target: The girls of countries where it is practised 15-year-old minors. The parents and mothers of these girls. All the persons of countries sub-Saharan where the FGM is practised. Girls in Salt of countries where the FGM is practised: 0–5 years 187, 5–10 years 124, 10–15 years 49. All girls 360 Global rateimmigration 43.39% Rateimmigration 0–5 years 60, 60% Rateimmigration 0–15 years 54.23% Spanish population 56.51% Sub-Saharan14.49% Moroccan 16,99%
Results: Beginning of the surgery 26/03/07 to 14/07/08 All persons visited 317 Girls 120 (represent 30%) Women 77 Men 120.
Conclusions: To promote this type of surgery for competent personnel is a qualitative step in the prevention of the FGM. It is necessary neither to be neutral nor to criminalize the group or to limit his freedom of travelling. The role of the social worker, the judicature or the police it define the Protocol, and they intervene if they are requested by health's personnel or of other areas. A specific surgery on FGM led by nurses in a public center of Health is the way. with associations, NGOs and social groups.

P-011

Why don't rural-areas-women participate in Extremadura's breast cancer screening program?

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Aim: Knowing the reason for non-participation in Extremadura´s Breast Cancer Screening Program (BCSP), during the 2007–08 biennium.
Design and methods: Descriptive study of reasons for non-participation in BCSP of women in rural areas in Extremadura, during 2007-08. The selection was made using the list of women who have been summoned by letter from the BCSP for a mammography realization and didn't attend. There were three phone calls at different times. The interview consists of 12 multiple-answers, closed-questions. It's been done previously and validated in other studies. We made a pilot study with the first 20 interviews. Descriptive statistics and statistical analysis with Chi-square and Student'st test for independent-data were employed, using SPSS 12.
Results: 1100 telephone calls were made. 520 women attended and only 160 wanted to complete the survey. The women characteristics were: 42% had no education and 39.5% were first-degree. The mean age was 62.53 ± 6.21 years. The degree of screening program information was medium in 53.1% and high in 30%. Best informer was family doctor (54.9%), television (19.1%) friends/neighbours (14.4%) and miscelanea (11.6%). Only 47.2% had a mammography and 79% didn't participate previously.The main reasons for non participation were: 20.4% hadn't received the letter from the BCSP; 31.5% were already being studied, 13.6% had made the mammography, 7.4% suffered a breast cancer, cancerophobia 3.1%, 3.7% fear of mammography's inform, 3.7% said it wasn't a major disease, and the rest argue otherwise. We found no statistically significant differences between age and history of previous mammography.
Conclusions: We made 1,100 phone calls and only obtained 160 surveys Half of women were aware BCSP, because of family doctor. 79% didn't partcipate, because were being studied or hadn't received the program letter.

P-012

Prevalence of type 2 diabetes in obese patients

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Introduction: Abdominal obesity enhances the risk of developing type II diabetes according to the body mass index (BMI). Thus 44.5% of patients with BMI .35 kg/m² develop diabetes. Treatment and prevention of obesity significantly decreases the risk of diabetes and its complications. The goal is to prevent the accurance of diabetes of diabetes by: early identification of obese patients, weight loss and surveillance of body weight maintaining BMI <29.9 kg/m².
Materials and methods: The study included 100 obese patients divided in 2 groups: Group A 25 obese patients with BMI media 36.2 kg/m², they were subjected to a hypo caloric diet and physical activity according to their cardiovascular status. Group B 25 obese with a BMI media 36.6 kg/m² who refused hypo caloric diet and physical activity. In both groups the following examination were performed at 9 and 12 months: fasting plasma glucose, 2 hours postprandial plasma glucose, oral glucose tolerance test and body weight control.
Results: After 12 months of treatment group A patients lost weight (BMI = 30.7 kg/m²) and type II diabetes prevalence was 11%, while in group B, BMI enhanced to 37.1 kg/m² and 25.3 developed type II diabetes.
Conclusions: Lack of appropriate treatment leads to a two times higher prevalence of type 2 diabetes among obese patients.

P-013

Risk factors which are involved in the development of foot ulcers in patients with diabetes mellitus type 2 and peripheral neuropathy

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Aims and Purpose: To identify the coexisting risk factors that are involved in the development of diabetic foot ulcer.
Design and Method: This is a case control study. Thirty three patients with DM and a history of peripheral neuropathy with a history of ulce, were matched with 33 patients with DM, with peripheral neuropathy without a history of ulcer, as for the gender, age, duration of DM, and the anatomical abnormalities of the feet. The following fields were analyzed: tests for peripheral neuropathy, somatometrics, complete hematological and biochemical tests and ankle brachial index. Concurrent diseases and pharmacological interventions were monitored. For data analysis was used t-test and logistic regression.
Results: Our sample was consisted by 42 men and 24 women with mean age 65.8 ± 10.3 and mean duration of DM 14 ± 11.1. Between the two groups, there were differences in BMI (29.6 ± 5.5 SD VS 32.7 ± 7.6, p = 0.07), in HbA1c levels (6.3 ± 0,2 vs 6.9 ± 0.96, p = 0.03) and ankle brachial index (0.95 ± 17.2 vs 0.85 ± 10, p <0.001). We observed a correlation between history of ulcer and coronary disease, chronic renal failure, smoking, retinopathy and microalbuminuria (0R 3.0, 6.6, 7.8, 5.7, 3.3). In the multivariate analysis we found smoking and coronary disease to be independent risk factors.
Conclusions: Smoking and CD are the main independent risk factors correlated with the development of diabetic foot ulcer in patients with DM type 2.

P-014

Sleep quality: an often neglected issue in primary care

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Aim(s) and purpose: Sleep quality and disorders are issues that are usually neglected in primary health care (PHC). The aim of this study was to record the prevalence and the nature of sleep disorders and to evaluate for any association with clinical symptoms.
Design and Methods: Stratified randomization of users of PHC services at the Health Centre of Vyronas, Athens, led to a sample of 178 patients (92 men, 51.6%). A close-ended and already validated questionnaire regarding sleep disorders, insomnia and other variables, was used.
Results: Response ratio was 88.3% (n = 152). Only 7.9% of the participants stated that they have discussed sleep disorders with their family physician at least once. Almost one in two (44.1%, 95% Confidence Interval [CI]: 36.1–52.3%) reported drowsiness during day, while 38.8% (95% CI: 31.0–47.1%) reported symptoms related to transient, acute or chronic insomnia. Insomnia was significantly related to hypertension (86.5%, p <0.001), anxiety disorder (64.8%, p = 0.02) and depression (88.2%, p = 0.03).
Conclusions: Although neglected, sleep disorders are a rather prevalent health problem in PHC services users. The reasons for the low attention given to this subject are rather unclear. Given the relationship of sleep disorders with usual diseases, a further sensitization of the health care personnel is suggested.

P-015

A three-year perspective survey of continuous subcutaneous infusion of insuline in patients with diabetes mellitus type 1

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Aims and purpose: To asses the affect of continuous subcutaneous insulin infusion for optimal glycemic and metabolic control as well as to assess the incidence of complications in patients with DM 1, after 1, 2, and 3 years of follow up.
Design and methods: In this study were recruited 44 patients that had already been in the intensified insulin therapy using multiple daily injections of insulin, without satisfactory (w glycemic control. Between the second and the third year following fields were analyzed: glycated hemoglobin, cholesterol, aminotransferases, triglycerides, HDL,

24 hour urine albumin, blood pressure, body weight, the frequency of hypoglycemic episodes and the units of insulin required. Finally, we assessed any kind of diabetic complications. The analysis was made with paired T-test.
Results: There were not observed any differences in the mean (median) value of HbA1c (7.28% vs 8.08%, p = 0,2), between the second and third year of follow up, nor in the mean insulin given (45 vs 44.8, p = 0.98). Bolus insulin was the 40.5% of the total dose in the second year, and the 51% of the total dose in the third year. During the third year, we recorded a decrease in the mean concentration of cholesterol (201 mg% vs 180 mg%, p = 0,01), HDL(72MG % vs 49 mg%, p <0.001) and the mean concentration of triglycerides (103 mg% vs 83 mg%, p = 0.04). On the other hand, we recorded an increase in SGOT (15,2 VS 21,4, P <0.01), SGPT (15.5 vs 22.3 p = 0,03) and in the incidence of hypoglycemic episodes(3 vs 7.8 p = 0.04).
Conclusions: 1. There is a tendency for worsening of glycemic control during the third year of follow up, with concurrent raise of incidents of hypoglycemic episodes. 2. A decrease in cholesterol values was recorded, with a concurrent decrease in HDL, probably due to changes in nutritional habits. 3. The increase in transaminases is a question that requires extensive long term follow up.

P-016

Immunisation status of children aged 6-7 in an isolated area of the Northwest Peloponnese in Greece

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Aim: Was the recording of the immunization status of children aged 6–7 years old in our district.
Design and methods: 57 students, who attended the 1st and 2nd class of our district's Elementary School in the year 2007–2008, was the population of our study. We used their health- booklets to obtain information which vaccines had been performed.
Results: 96.4% of the children had received all 5 doses of the vaccine against Tetanus-Diptheria-Pertussis and Poliomyelitis. In the remaining 3.6% the 5th dose was yet to be performed. 85–9% had received 2 doses of the MMR vaccine, whereas 12.3% had received only one dose of the vaccine and the remaining 1.7% had received none. 96.4% had received all 3 doses of the vaccine against Hepatitis B (HBV), whereas the remaining 3.6% had received none. 80.7% had been vaccinated against Meningitidococcus Group C. 33.3% had had the Varicella vaccine. 29,8% had a history of prior Varicella infection and the remaining 36.9% was susceptible to the disease. 45.6% had received both doses of the vaccine against Hepatitis A (HAV) and 7% had received only the 1st dose. Only 5.2% had been vaccinated with BCG – mostly immigrants' children. 97% had been vaccinated against H. influenzae and 3.5% against Str. pneumoniae.
Conclusions: The children's coverage percentage is remarkably satisfying, as far as the old, established vaccines are concerned, that are part of the National Vaccination Programme (NVP) for years. On the contrary, vaccines which recently been included in the NVP have not been used to an adequate extent yet. As knowledge and data about vaccines become wider and enriched, constant and systematic observation of children's immunization status becomes of vital importance, in order to achieve higher percentages of immunity.

P-017

Vaccinational behaviour of 16 year old students in Olten between 2003 and 2008

Weber T. (Olten)

Aim: The aim of this research is to understand the vaccination behavior of the 15 to 16 years old students in a small town of Switzerland (Olten has 18'000 residents). The focus of the research was put on the rate of vaccinations between the years 2003 and 2008 as well as on the success of the recommendations given by the school doctor.
Design: All vaccination passes of these students had been controlled and the students were being informed about lacking vaccinations. The guidelines given correspond with the Swiss vaccination plan. At the age of 16 following vaccinations should have been done:
– diphtheria, tetanus => 6 vaccinations
– poliomyelitis => 5 vaccinations
– measles, mumps, German measles => 2 vaccination
– hepatitis B => 2 vaccinations
The numbers of students differ yearly from 115 (in the year 2008) to 153 (2004). On average there were 7 vaccination passes missing every year.
Results: The 4 different types of vaccination show different rates of vaccination. There's no standardized trend.
Vaccination type / Rate / Trend
diphtheria, tetanus / 40–45% = low / no increase nor decrease
poliomyelitis / 75–92% = high / declining since 2007
measles, mumps, German measles / 60–77% = insufficient / increasing since 2003 to 2007
hepatitis B / 10–35% = very low / increasing since 2006.
Conclusions: Only 10 to 25 percent of the 16 year old students have had all 4 types of vaccination. Tue category of completely vaccinated students shows neither an increase nor a decrease between the years 2003 and 2008. The research displays a constant vaccination behavior in general, although there is a small missing rate of vaccinations for poliomyelitis, a medium one for measles, mumps, German measles and a big one for hepatitis B. According to this research the school medical recommendations did not improve the vaccination behavior nor increase the vaccination rate. The information letter addressed to every student is not being taken into account or they simply don't follow the recommendations.

P-018

Vitamin D status in elderly or chronic ill patients in urban Zurich

Dreiding P. (Zürich)

Are their levels predictable with the knowledge we have of our patients?
A sufficient Vit.D supply is important for many different tissues in our body. We also know that a Vit.D insufficiency is relatively common. Our Quality Circle, composed of family doctors from urban Zurich tested whether in our patient population the Vit.D status was sufficient. We also estimated whether a lack of Vit.D is predictable with the knowledge we have of our patients' medical background. Therfor we measured the Vit.D level of our chronically ill patients, including all patients over 65 years of age after we had estimated their Vit.D levels using our knowledge of these patients. We found that in this so defined population the Vit.D levels were frequently insufficient. The predictability of the Vit.D levels using the general knowledge of our patients was imprecise. We concluded that, although expensive, we should measure more often the Vit.D level in the population at risk to be able to substitute them sufficiently.

P-019

Prevalence of dyslipidemia in Swiss army recruits – a descriptive study

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Objectives: Early detection of a dyslipidemia is of major importance in the prevention of cardiovascular disease. Military drafting procedures, which are compulsory for all men in Switzerland, are a good setting to study the prevalence of risk factors for cardiovascular diseases.
Methods: 385 men presenting at the military drafting centre in Rueti were included into the study. Body mass index (BMI) and waist and hip circumferences were determined. A serum lipid profile was obtained and lifestyle issues were assessed with a self administered structured questionnaire.
Results: The mean ± SD age of the men was 20 ± 1 years, BMI 23 ± 3 kg/m^2. The mean ± SD waist and hip circumferences were 82.67 ± 9.94 and 95.0 ± 9.22 cm. In 25% of the men lipid profiles were obtained in the fasting (defined as >3 hours postprandially) state and 75% postprandially. The mean ± SD total cholesterol of the population was 4.37 ± 0.73 mmol/L, the LDL 2.40 ± 0.64 mmol/L, the HDL 1.34 ± 0.25 mmol/L and triglycerides (TG) 1.4 ± 0.76 mmol/L, respectively. 14% had TG > 2.0 mmol/L, 7% a HDL <1.0 mmol/L, 3% a LDL >4.0 mmol/L, 1% had a total cholesterol > 6.5 mmol/L. 21% had a BMI >25 kg/m^2 and 4% were obese (BMI >30 kg/m^2). In individuals with a BMI >25 kg/m^2 a triglyceride value >2 mmol/L and a HDL value <1 mmol/L was found in 26% and 15%, respectively. 6% had both conditions. In 4% of this subgroup the LDL was >4.0 mmol/L. A significant relation was found between the waist circumference and the HDL (r = –0.30, p <0.001).
Conclusion: This descriptive study shows a high prevalence of low HDL-cholesterol levels in this population, which doubled to 15% in individuals with a BMI >25 kg/m^2. The military drafting might be a good setting to assess lipid status and obesity. In view of the high prevalence of risk factors preventive strategies in this population should be considered. The annual military repetition courses would be an ideal place for sustainable implementation of preventive interventions.

P-020

HDL-cholesterol values in hypertensive patients in reference to the intervention type

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Introduction: Lowered HDL cholesterol (HDL-C) represents a risk for the atherosclerosis process (1.2.).The statins have a beneficiary effect on the HDL -C increase. (3).
Goal of work: Determination of which kind of intervention in case of dislipoproteinemia has a more beneficiary effect on the HDL-C value.

Method: In 48 test persons of female sex, average age 57.5 ± 6.1 years, with verified hypertension, without other diagnosed cardiovascular disease, a lowered HDL-C has been detected in lab tests. The exposed group, with total cholesterol value of >=7.0 mMol/l, consisted of 19 test persons. Control group, was represented by 29 patients. Beside the antihypertensive therapy, the control group received, within the therapy, an education on healthy lifestyle, while the exposed one received statins in addition. The control lab analysis was conducted two months after the intervention. The test persons, treated on the territory of Belgrade, were monitored in the period from July 2008 to November 2008. The recommended HDL values are defined according to the references of the International Diabetes Federation (IDF) 2005.
Results: In the exposed group, where the patients received simvastatin, the values of HDL-C were in the range of the recommended in eight test persons. In the control group, where only healthy lifestyle was implemented, nine patients had the recommended HDL-C level. After intervention measures in both groups, the HDL-C increased to the recommended levels in 35% (n = 17) of test persons; RBI (Relative Benefit Increase) = 0.35; 95% CI (0.21–0.49); ABI (Absolute Benefit Increase) = 9%; NNT = 11.
Conclusion: In order to achieve one positive outcome, it is necessary to treat 11 test persons in the exposed group in reference to the control group. There is no significant statistical increase of HDL-C in test persons treated with simvastatin compared to the intensive implementation of healthy lifestyle.

P-021

Disease prevention calculosis vesicae felleae

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Calculosis vesicae felleae is chronic, progressive and oftenasymptomatic disease of digestive system. Clinic image is miscellaneous, and complications of late diagnosis (Colica biliaris, Icterus-Cholestasis, Cholecistitisacuta, Cholangitis acuta, Pancreatitis acuta, Peritonitis acuta) canlead to unnecessary risk for patient, and add additional expenses forhealth system.
Goal: Overview of frequency and risk factors for the purpose ofplanning prevention of this disease.
Method: Retrospective analytical study of patients which have hadtheir abdomen examined with ultrasound method.
Results: From total of 4299 patients who had their abdomen checked with ultrasound method 129 or 3% had this disease. Out of those 129, 102 were female (79%) and 27 were male patients (21%). Based on that we can observe, that gender is a risk factor. Obesity is significant risk factor for both genders: out of 102 female patients, 87 (81%) were overweight and out of 27 male patients, 21 (80%) were overweight. Distribution by age: 30–40 (3F, 1M), 40–50 (15F, 2M), 50–60 (18F, 3M), 60–70 (29F, 6M), over 70 yrs. (38F, 15M.).
Conclusion: gender, obesity and age are risk factors for this disease
Requirements: – To plan correction of overweight patients. – Periodical ultrasound abdomen check on female, overweight and older patients. – Train doctors for ultrasound diagnostics.

ultrasound

calculosis

P-022

Evaluation of active collection systems in the vaccination against papillomavirus

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Aim: Assessing the impact of the recapture by phone call or by letter on increasing immunization coverage in the vaccination program against the papillomavirus (HPV).
Design and methods: From the data recorded on the immunization information system in the Valencian Community (Spain) we have identified the girls belonging to the target population of the vaccination program against the HPV that have not received the first dose of vaccine Within the time specified. In order to get her vaccination, we have been sent a letter or made a phone call. We analyzed the percentage of children vaccinated in each group.
Results: Issued a total of 3021 warnings getting vaccines is 904 girls, representing a positive response of 29.92%. When the announcement was made by telephone, the response rate was 46.75% while 28.00% were vaccinated in the girls notified by letter.
Conclusions: Reuptake systems active in the vaccination program against the PHV improve vaccine coverage obtained. Reuptake by phone gets better results than using the mail. Probably the direct contact that involves the phone call justifies these findings.

P-023

Relationship between weight and the risk of atrial fibrillation in hypertensive patients

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Aim(s) and purpose: The last studies show that the obesity is a risk factor to develop atrial fibrilation. The objective of our study is to knowing if exists any relationship between the weight and the atrial fibrilation (AF) in the hypertense patient.
Design and Methods: This is a descriptive study conducted between December 2007 and December 2008 in an urban primary care center. From a cohort of 3304 hypertensive patients (code I 10) were studied 194 that also presented AF (5.87%) (code I 48), and we analysed their body mass index (BMI).
Results: We evaluated 194 hypertensive patients with AF but in 69 of those were not possible to obtain the BMI because of the absence in the clinical history. In this way, finally we studied 125 patients that were distributed in four groups according to their BMI (under, normal and over weight, and obesity). There was no patients with AF in the first group: Under Weight (BMI <18.5), in the second group: Normal weight (BMI = 18.5–24.9): we observed 11.2% patients with AF, 36% in the third group: Overweight (BMI = 25–29.9) and in the Obesity group (BMI >30) the hypertensive patients with AF was the most mumerous, 52.8%.
Conclusion: It is known that the obesity increases the risk of developing an AF and the last studies postulate that the risk increases proportionally to the increase of the body mass index. We have found similar results in our study, so we observated that the number of hypertenses patients with atrial fibrillation increased in accordance with the growth of Body Mass Index.

P-024

Pocket doppler in primary care

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The diagnosis of peripheral arterial disease (PAD) is important since it involves an increase of cardiovascular disease and of mortality for the patients who suffer it. Often it remains without undiagnosed.
Objective: To perform a screening of PAD in the diabetic patients (DP) attended in Primary Care.
Material and methods: Cross-sectional descriptive study in an Urban Primary Care Center with an attended population of 13341 inhabitants. To analyze a random sample of 120 DP (12% of all DP attended), measuring the ankle – arm index by pocket eco Doppler for the screening of PAD in low extremities.
Results: 120 DP, average age 68.1years old (DE ± 11.34). 40% women. 20% smokers, 46.6% ex-smokers. 63.3% Arterial Hypertension, 66.6% dyslipidemia, 13.3% chronic ischemic heart disease,10% cerebral stroke disease. 30% of the patients presented PAD (low stenosis 16.67%, moderated 6.67%, severe 16.67%), arterial calcification 16,67%. The average age of the patients with PAD73y (DE ± 8,17), 33.3% smokers, 66% ex-smokers, 55.6% Arterial Hypertension, 88.8% dyslipidemia, 33.3% chronic ischemic heart disease, 11.1% cerebral stroke disease. 55.5% of the patients with asymptomatic PAD.
Conclusions: PAD is more frequent in DP, more than a half areasymptomatic. The pocket eco Doppler it's an easy managing instrument for the General practitioner that allows an early diagnosis of the PAD. It's inclusion in the normal control of the DP in Primary Care would be appropriate.

P-025

Socio-demographic distribution of sensory deficiencies in elderly people

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Aim(s) and purpose: To describe the distribution of the visual and hearing deficiencies associated to socio-demographic characteristics in elderly people. Identify the personal and social variables of such deficiencies.
Design and Methods: Observational, cross-sectional, prevalence study. A random sample of 1,159 persons over 65 years were included in the study. Their visual acuity (<20/40) and hearing (Ventry/Weinstein audiometric criteria) were determined. Using logistic regression, the associated clinical/socio-demographic factors were identified.
Results: 43.6% (95% CI: 40.7–46.4) had hearing deficiency and 21.0% (95%CI: 18.6–23.3) had visual deficiency, 12.6% had both (95%CI: 10.7–14.5). Hearing deficiencies was greater (p <0,05) in lower social classes (OR = 1.3), >75 years (OR = 3.1), single/widowed (OR = 1.4) and those on multiple medication (OR = 1.4). Visual deficiency was greater in illiterate persons or in those that could only read and write (OR = 1.9), >75 years (OR = 1.3) and single/windowed (OR = 2.2). These three variables were also associated with the presence of both deficiencies.
Conclusions: The socio-demographic situation determines the distribution of sensory deficiencies in elderly persons. These results will help to establish priorities when preparing recommendations for prevention (early detection).

P-026

Knowledge and beliefs of health professionals on human papillomavirus

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Aims: To asess knowledge, beliefs and attitudes on health professionals regarding the human papillomavirus (HPV) before the start of the vaccination program against this virus.
Material and methods: Before starting vaccination program against HPV in Valencian Community (Spain) we asked health professionals who attending meetings of presentation of the program to complete a survey to asess the level of knowledge about the virus and the beliefs related to vaccination. The survey was conducted between May and June 2008.
Results: There were 119 questionnaires (response rate 42%), 38.7% men and 61.3% women with a mean age of 45.5 years. The 42.9% of respondents were nurses, 25.2% family physicians in primary care and 13.4% pharmacists. 78.2% worked in primary care. The main sources of information about HPV were professional journals (65.5%), colleagues (54.6%) and pharmaceutical industry (53.8%). In Table 1 shows the proportion of professional related serotypes of HPV 16 and 18 with cervical pathology. 48.1% believed that the efficacy of the vaccine was optimal, while 5.9% believed that their efficacy was low. 45.4% thought the vaccine was safe or very safe, compared to 8.4% who felt that it was unsafe. 60.5% thought it had to inform mothers of adolescent girls and 65.5% that it was appropriate to report directly to teenagers. 64.7% felt that it was not necessary to inform all women. With regard to the risks of vaccination, 61.6% thought that vaccination could lead to a reduction in the prevention of other sexually transmitted diseases and 55.6% to a decline in participation in screening programs of cervical cancer. Finally, 30.3% felt that the main limitation for the use of the vaccine was its high price.
Conclusions: It is necessary to improve the level of knowledge of health professionals regarding the HPV vaccine. It is necessary to strengthen efforts to maintain and improve screening programs and the use of preventive measures against other sexually transmitted diseases.

Table 1. Serotypes relationship with pathology

	16 Serotype	18 serotype
Cervical cancer	68.1%	69.7%
High-grade cervical lesions	52.9%	49.6%
High-grade vaginal lesions	31.9%	32.8%

P-027

Cutoff of percent body fat to predict obesity and metabolic risk in children and adolescents

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Aims and purpose: To examine the optimal cutoff of percent body fat to predict obesity and metabolic risk using 2007 Korean children and adolescents physical growth standard.
Design and Methods: Anthropometries and body composition analysis using bioelectrical impedance analysis were obtained from 1,015 children diagnosed as obesity. We investigated the optimal cutoff of percent body fat to using the receiver operating curves (ROC) analysis.
Results: The prevalence of obesity were 48.1% by Korean BMI standards for 95 percentile and 82.6% by Korean PWH for 120%. Cutoff of percent body fat were 38.1% by Korean BMI standards for 95 percentile, 34.6% by Korean PWH for 120% and 38.4% by at least metabolic risk factor. Sensitivity and specificity were 55.1%, 72.7% for Korean BMI standards, 72.3%, 64.4% for Korean PWH standard and 40.1%, 84.4% for at least one metabolic risk factor.
Conclusions: Cutoff of percent body fat for obesity were 38.1% by BMI standard and 34.6% by PWH standard. Cutoff of percent body fat to predict metabolic risk was 38.4%.

P-028

Importance of microelements in the treatment of iron-deficiency anemia

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Objective: Anemia is public health problem of epidemical size. Today about 30% of the world population are treated from anemia. Primary care physicians must treat about 80% of iron-deficiency anemia in their praxis. Preferred treatments are iron supplements but additionally microelements: Zn, Mg, Mn, Al give full contents in rebuilding of erythrocytes.
Methods: Research pooled sample of 44 female patients who were treated by mineral water with 108 mg/ml of iron but also with daily microelements in duration of one month. Daily dosage of Fe is 20 mg/l and microelements in permitted daily doses. Observed researched parameters are: erythrocytes, Hgb, Htc, MCV, MCH, MCHC, RDW, Fe. Participant's average age was 45.5. Research took place in May 2008 in the office of family medical practice. Data was collected & analyzed using program SPSS14.
Results: Blood samples were taken first, fifteenth and thirty day of the research. The erythrocytes improved from min value of 3.48 to max 5.37. Additionally other elements: Hgb, Htc, MCV, MCH, MCHC, RDW, Fe have improved significantly.
Conclusion: The research shows that correction of iron-deficiency anemia with mineral water daily dosage of 20mg Fe in combination with microelements has significant impact. This indicates that in prevention of iron-deficiency anemia small dosage of Fe with microelements should be used for better results.

P-029

Evaluation of metabolic syndrome prognostic value in the identification of acute coronary syndrome by the different of Idf-Nhlbi/Aha-Ncep Atp III determinations

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Aim: The metabolic syndrome,(MS), has been related with increased riskfor cardiovascular events The abdominal obesity not only has been connected with the metabolic syndrome, but also has been recognized as independent prognostic factor for cardiovascular disease,(C.V.D). However, even if IDF definition of MS, emphasize in waist perimeter, his prognostic rule was not prooved better than others in prognosis of the C.V.D. Our purpose was to investigate the discreet faculty between the IDF, NCEP and NHLBI definitions of metabolic syndrome, in the prognosis of acute coronary events not including other end points of C.V.D.
Method and design: In the study participated 211 patients with acute coronary syndrome, (A.C.S), while 210 individuals were the control sample. The correlation of definitions of metabolic syndrome with A.C.S has been evaluated with 9 models of logarithmic dependence and 6 models with factors such diabetes, arterial hypertension, lipidaimic profile, gender. The sensitivity and specificity of the models have been evaluated with the surface of curve ROC.
Results: In the multifactor analysis only the definition of IDF was significant related with acute coronary events. The waist perimeter remain as an independent prognostic factor for C.V.D.
Conclusions: The definition of metabolic syndrome by IDF is a strong weapon in prevention and primary care, by increasing the prevalence of metabolic syndrome and also identifying the risk for developing C.V.D.

P-030

Correlation between bacterial development in diabetic foot ulcers and aetiological factors in diabetes mellitus

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Aims and purpose: To assess the most frequent isolated pathogens in diabetic foot ulcers and their possible correlations with diabetic complications or factors correlated to diabetic control.
Material and methods: Fifty five diabetic patients (37 males, 18 females) with diabetic foot ulcers were recruited with mean age 66 years. We obtained a history of smoking and duration of diabetes, as well as two wound specimens, we monitored HbA1c and the presence or absence of albuminuria and peripheral neuropathy and vascular disease was evaluated.
Results: Median duration of diabetes in the group of patients was 16.8 years (range 2-54 years). Median HbA1c was 7.99 (95%CI 5.0–14.5%). 83.6% had peripheral neuropathy, 47.3% had albuminuria, 45.5% (27.3% were smokers, 27.3 unknown) were smokers. Among 55 patients, 45 of them had positive culture results, 24 (53,3%) of which developed more than one strains. The following bacterial species were developed: Coagulase negative Staphylococci 18 (24.3%), Staphylococcus aureus 11 (14.86%) (3 of them MRSA), Escherichia coli 10 (13.5%), Pseudomonas auruginosa 7 (9.45%), Proteus mirabilis 6 (8.1%), Enterococcus faecalis 5 (6.75%), Stenotrophomonas maltophilia 3 (4%), Citrobacter spp. 3 (4%), Enterobacter cloacae 3 (4%), Klebsiella oxytoca (2.7%), Flaribacterium 1 (1.3%), Streptococcus agalactae 1 (1.3%).
Conclusion: The predominant bacteria were gram positive cocci. In many patients developed gram negative bacteria, especially if they had previously consumed antibiotics. All patients with MRSA had HbA1c >9.1, peripheral neuropathy and albuminurea. Apart from MRSA, no other correlation between developed bacteria, their resistance to antibiotics and other factors was observed.

P-031

Vertebral pain and osteoporosis in elderly patients in primary care

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Aim: Vertebral fractures are common and usually an indication for osteoporosis treatment. However, screening is not recommended, and many fractures go undetected. The aim of our study was to determine the incidence of osteoporosis fracture in patients with vertebral pain in primary care.
Materials and methods: The study included 73 patients, 56 female of mean age 69.7 (65–78) years and 17 male of mean age 71.3 (67–79) years, who were propounded symptoms of atypical thoracic-cervical-lumbar pain on admitting at the Emergency Department and the Outpatient Clinic during a 8-month period. None of them had histories of osteoporosis or received osteoporosis medications. Clinical, laboratorial and chest radiographic evaluation was performed.
Results: 11 patients – 9 female and 2 male – (14%) had vertebral fractures indicating osteoporosis. These findings were confirmed in DEXA measured.
Conclusion: Osteoporosis remains a certain disease in postmenopausal women such as aged men. Physicians in primary care must become familiar to discover vertebral fractures and determine the possibility of of osteoporosis development.

P-032

Optimizing diabetes care regarding cardiovascular targets at general practice level in Luxembourg, DIRECT@GP

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Purpose: to measure current cardiovascular target attainment concerning lipids and blood pressure (BP)in type 2 diabetes mellitus (T2DM) patients followed-up in general practice (GP).
Methods: the Luxembourgish arm of the study was conducted in the same manner than the Belgian i.e. a non-interventional, cross-sectional study.
The research questions were: What proportion of T2DM patients followed-up in GP are at target for blood pressureand/or lipids? What proportion of T2DM patients followed-up in GP are on a statin? What proportion of T2DM patients followed-up in GP are taking antihypertensive medication? There were 63 investigators (general practitioners) recruited by sales representatives. Each one was asked to include 10 consecutive patients meeting in- and exclusion criteria in their surgery. Inclusion criteria were: T2DM, age >40, signed and dated informed consent. Exclusion criteria were: type 1 diabetes mellitus, age <40. The study population counted 613 patients. The primary outcome measure was if patients are on target for LDL-Cholesterol (<100 mg/dl). The secondary outcome measures were: mean values for lipids and BP, target attainment of these values, use of hypolipidemic and of antihypertensive medication. The statistical analyses plan comprised descriptive statistics of the population (age, gender, BMI, HbA1c, smoking, hypertension, personal history of cardiovascular event, use of low-dose-aspirin), guideline adherence and target attainment for lipids, guideline adherence and target attainment for BP. The results will be obtained during the month of February 2009, up to 80% of data are already analysed. The preliminary analyse shows a different outcome for Luxembourg compared to the Belgian study.

P-033

Iron supplementation in healthy children up to two years old

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Introduction: Iron is an important element to the child development. Its deficiency is the most common nutritional deficit in the world, being the main cause of anemia in children, especially in developing countries. The increase of iron needs and poor diets are the basis of these changes. However, it is necessary to evaluate the benefits and risks of a routine iron supplementation for all children.
Objective: To determine whether iron supplementation in healthy children up to two years, affects the psychomotor development, the anthropometry and morbimortality.
Methods: We searched in the databases MEDLINE, National Guideline Clearinghouse, Canadian Medical Association Infobase, The Cochrane Library, DARE, Bandolier, TRIP and InfoPoems, using the MeSH terms: *Iron, Infant and Dietary Supplements*. The search was limited to articles published between January 2000 and December 2008, in English, French, Spanish and Portuguese. The Strength of Recommendation Taxonomy (SORT) of the American Family Physician was used to assess the Level of Evidence.
Results: One guideline, two evidence based reviews, two metanalysis, one systematic review and four clinical trials met the inclusion criteria. Among the studies, there was no influence on psychomotor development, anthropometry, morbimortality in healthy children without risk factors and supplemented with iron. In children with increased risk for iron deficiency anemia the iron supplementation has proved to be beneficial.
Conclusion: Most of the existing trials studied populations in developing countries, using inconsistent methodology. It would be advisable to do high quality, long-term, controlled and randomised studies. To data there is no evidence of benefit in a routine iron

supplementation in children without risk factors up to two years of age. It is recommended a routine iron supplementation for up to twelve months of age in children who have an increased risk of anemia by iron deficiency (SOR B).

P-034

Improving vaccination-status of adults in a primary care network by counselling and vaccination by medical practice assistants

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Aims and Purpose: We tested the feasibility of improvement of the vaccination status by counselling and vaccination of healthy adults by medical practice assistants (MPA).
Design: Between may and july 2008 the medical network «säntiMed» (23 primary care physicians) sent 3832 invitations to the adult members (25-65 years old) of their Managed Care Insurance. They were invited to see their family doctor for a free check of their vaccination status and, if necessary, to complete their immunizations according to the recommendations of the Swiss Health Ministry. Immunization check up, counselling and vaccines shots were provided by the MPAs under supervision of a physician. All MPAs involved in this program had completed a previous training offered by säntiMed.
Results: 639 (16,7%) of the 3832 invited adults visited their doctors office to get the vaccination-check. 543 (85%) got a vaccination in order to complete their immunization status. MPAs provided counselling without any problems. There where no complications. The average cost per adult was sFr. 40.– including sFr. 25.– for the vaccine.
Conclusions: Medical practice assistants in a primary care setting can provide counselling and vaccination shots in healthy adults without any problems. Prerequisite is a previous training and the availability of a physician. Most persons responding to the invitation needed a vaccination shot. Their immunization status could be improved with minimal additional work load for the primary care physician, the work of the MPAs could be valorized and the cost minimized.

P-035

Prevention of diabetes

Desanka V. (Belgrade)

Introduction: Prevention and postponement of emergence of diabetes two, is directed towards the condition of pre-diabetes, impaired fasting glucose, IFG and/or impaired glucose tolerance, IGT.
Method: Using a method of a random choice, 110 persons, without diabetes diagnose, age 35 and older, were surveyed. These people contacted a chosed doctor, due to the various health-related needs, during the last two months of the previous year. A questionnaire "Risk Assessment Questionnaire" of the national programme, Early detection and prevention of diabetes, type two, in the Republic of Serbia, was used. A result marked the level of risk for development of diabetes, type two, within next 10 years.
Aim: Heaving established risk of the polled people in order the prevent development of the diabetes two and at the same times degrees the reasons for arasing cardiovascular diseases.
Results: The questionnaire consisted of eight questions: age; BMI; waistline man, daily psysical activity, nutrition; hypertension art.; previously increased glycaemia; family anamneses of diabetes. On the base of the received score >= 12 (groups of moderate, high and very high risk), approximately the same are endangered women (41,6%) and men (42%). Low and lightly increased levels were approximately the same, as well, both at women (58,3%) and men (58%). Concerning the age, a risk >= 12, is mostly represented within age group 55–64, speaking of women (18.3%), and little more when it comes to men (20%), and the least within age group from 35–45 years. Less when it comes to women (1.6%), and more, when it comes to men (4%). The biggest number of these people did not have genetic pre-disposition, but metabolic syndrome (60%).
Conclusions: With wide approach influence individually and via media on to change the life habits. Prevent reduce the possibility of emergence of diabetes two in all age group, that is important task and responsibility of the primary medical care.

P-036

Is it important to use the international society for clinical densitometry (ISCD) criteria in DXA scan interpretation?

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Aims: DXA scan reports include several places measures -including Ward's Triangle (WT). Practitioners interpret these results for clinical decisions. ISCD-2004 recommended using neck femur, total femur and Lumbar Spine sites only. Our purpose is to assess the impact of WT inclusion in the DXA scan report and if may affect the prescription of Bisphosphonates.
Design: Observational, Prospective, Nested Cohort study.
Study setting: Urban setting. Barcelona (Spain).
Subjects: Subjects included those who had two DXA scans in the last 8 years, and who completed a questionnaire about fracture risk factors, illnesses and medications during these visits. N = 9297.
Diagnosis/interventions: DXA scan and secondary diagnosis, following ISCD 2004 recommendations also including WT, in both DXA scans. Questionnaire including clinical risk of fractures, other illnesses and medications.
Statistical analysis: Frequencies and percentages for each category of DXA scan result (Normal, Osteopenia or Osteoporosis). For subjects who are taking Biphosphonates in 1st and 2nd visit.
Results: Diagnosis following ISCD recommendations at 1st visit: Normal 17.1%, Osteopenia 47.1%, Osteoporosis 35.8%. At 2nd visit: Normal 15.6%, Osteopenia 51%, Osteoporosis 33.4%. Diagnosis including WT at 1st visit: Normal 14.6%, Osteopenia 44.5%, Osteoporosis 40.9%. At 2nd visit: Normal 12.2%, Osteopenia 46.7%, Osteoporosis 41.1%. Subjects who could be misdiagnosed using WT at 1st visit: 7.6% (703 subjects). Subjects having Biphosphonates: at 1st visit 5.9%; in 2nd visit 20.2%. Subjects misdiagnosed at 1st and have been newly prescribed Biphosphonates between 1st and 2nd visit: 17.5%; and who were having biphosphonates at 1st visit, but not any more at 2nd: 1.8%.
Conclusions: Using Ward's Triangle interpreting DXA scan increase the Osteopenia and Osteoporosis diagnosis. This situation entail to an excess in Bisphosphonate prescriptions.
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P-037

A way to improve clinical care of elderly patients: implementation of Balint groups at a primary health centre

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Aim: to describe two cases as examples of the way Balint Group (BG) discussion can enable practitioners to improve their clinical care of elderly patients.
Methods: Setting: we instituted sessions of BG at our Primary Health Center (PHC) from 2002, involving general practicioners (GP), nurses, and social workers.patients: selected patients are discussed and the attitudes and emotional responses of involved professionals raised by patient's care are analyzed. During this period, around 60 cases have been discussed. We present two of them focused on geriatric practice in order to describe BG's potential benefits in this context.
Results: Case 1. A 68 year-old male visited usually at home with very bad hygienic conditions and vascular disease related to diabetes was presented in the BG by his GP in relation with his difficulties to create an empathic relationship. The discussion resulted useful for a better understanding of the patient behaviour in the context of geriatric frailty. Case 2. A 75 year-old female living with her husband and with reports by her sons of suspicion of ill-treatment was presented in the BG in order to discuss the difficulties to verify this circumstance. The chance to share the case with the other members of the group, specially with social workers, provided a wider perspective of the case.
Discussion/conclusions: In both cases, discussion with other members of the BG resulted in a better understanding of the symptoms of the patients in the context of geriatric practice and, therefore, in an improvement of their clinical care.

P-038

Will the prevention of colorectal cancer be possible?

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Objective: To evaluate the results of a program for detecting patients with increased risk of colon and rectal cancer (CRC) in Primary Care.
Patients and methods: Design: Descriptive cross-sectional study.
Setting: Urban Primary Care Center (PCC). Allocated population: 32000 inhabitants.
Subjects: Random sample of patients aged over 15 who came to the PCC from April/2007 to October/2008. We review computerized medical history OMI-AP-database (PCC) and SAP-database (Hospital). SPSS 14.0 statistical software was used.
Measurements: We interviewed 1298 patients in order to derive those with risk factors (RF) of CRC Service gastroenterology (GE) of the Hospital of reference.
Variables: age, sex, RF CRC (>= 1 family of >= 2 first or second degree relatives with CRC, CRC before 60 years, multiple CRC, CRC, and first-degree relatives with CRC or endometrial <60 years,

adenoma >= 3 or advanced non-polyposis syndrome), referral to GE, conducting fibrocolonoscopy (FCS) and outcome.
Results: The study group included 1298 patients (59.6% female) and average age was 45.7 years ± 14.8. 23.8% (309) had RF CRC, mean age was 52.9 years ± 14.2 (60.2% female). 86.7% FR group had >= 1 first-degree relative with CRC, 10% >= 2 relatives of second degree and 3.2% other RF. Were visited at GE 39.16% of patients at risk, 16.18% were pending visit, 44.66% no have information. FCS was performed in 29.1% of patients with RF and 10% were outstanding to do. 57.8% of FCS were normal, 21.1% were no-advanced adenomas, 4.4% adenomas advanced, and 16.7% other injuries.
Conclusions: Primary care can identify individuals with higher risk of CRC that can benefit of preventive measures. Family history of CRC is the most common RF. Most of the FCS of patients with RF didn't detect any lesions.
Keywords: Colorectal neoplasm, risk factors, screening

P-039

Adequacy of the prescription of benzodiazepines in elderly patients

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Aims and purpose: To identify the prevalence of chronic treatment with benzodiazepines (CTBZ) in patients >= 85 years old. Profile of the study group. To evaluate an action of improvement to adapt CTBZ.
Design and methods: Retrospective descriptive study in an Urban Primary Care center with an attended to population of 13341 inhabitants.To analyze a sample of patients >=85 years.Analyzed variables: Age, sex, institutionalization, housebound patients (HB), falls, fractures, type, number and dose of BZ prescribed. Study period: January-June 2007. Intervention: Letter to the doctor prescriber with list patients >= 85 years with CTBZ, recommending withdrawal, change of treatment to shorter action BZ or decrease in the dose. Register of notification.
Results: 719 patients >= 85y (5.4%), 244 of these (33.93%) with CTBZ. 82,4%women, average age 88,98a (IC 95% 88.57–88.39y). 45% (n = 110) institutionalization(I), non institutionalization (NI) (n = 130), 71 (54%) HB, 12% live alone, 41% live together and 2% not stated. 31% have presented a registered fall during the last year, 9% fracture. Type BZ: 71% BZ short action, 14% BZ long action, 14% BZ analogous, 1% ultra short BZ. Most prescribed BZ: lorazepam (35,1%). 86.07% in treatment with one BZ (I:42.02%); 12.7% 2BZ (I:66.6%); 0.82% 3BZ (I:100%); 0.41% 4BZ (I:100%). After review by doctor prescriber it is notified: revision in 92 patients (37.7%), 11 CTBZ retired,8 changes for BZ of shorter action and 6 dose reduction.
Conclusions: Even considering the review of the medication for chronic geriatric patients a priority to avoid inappropriate use of medications considered of risk (BZ), specially in institutionalized patients, as they are the ones who present the highest consumption of these, we have obtained a low response to our intervention being necessary a greater awareness and training of the professionals in this matter.

P-040

Coronary risk of patients according to the degree of obesity

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Aims: To determine the coronary risk (RC) of the individuals according to their degree of obesity and obesity related to the different cardiovascular risk factors (CVRF).
Design and Methods: A descriptive cross-sectional study in Primary Health Care (PHC) with a random sample and stratified by age (between 10 and 99 years) and sex and calculated according to the formula of finite-risk populations alpha level of 0.05 and precision of 96. Include 142 patients (obese and non-obese according to body mass index [BMI]). Excluding patients with cardiovascular disease activity. Study variables: age, sex, weight, height, BMI, lipid profile, presence of diabetes mellitus (DM), figures for systolic and diastolic arterial pressure (TAS / TAD), electrocardiogram and calculation of RC according to Framingham. We performed Chi-square tests, analysis of variance and correlation analysis and relations (statistical significance p <0.05).
Results: 142 patients (84 women): 4 low-weight, 46 normal, 52 overweight, 40 obese. Medium weight 71.7 kg (SD 15). Average height 159 cm (SD 9 cm). BMI middle 28.08 kg/m2 (SD 5.01). Average age 59.3 years (range 16-93anys). DM 13.3%, 25.9% smokers. RCV average 14:06% (of 11.2, range <2% –48%). Correlations: BMI inversely with HDL cholesterol (r: -0.31) and positively with TAS (r: 0.46) and CAS (r: 0.37); RCV positively with TAS (r: 0.56), TAD (r: 0.39), LDL cholesterol (r: 0.39) and inversely with HDL cholesterol (r: –0.26); RCV with BMI, positively (r: 0.28), so that most obese patients have higher risk than non-obese.
Conclusions: We emphasize the statistical significance achieved between BMI and cardiovascular risk, which although already the medical literature, may not have sufficiently considered in clinical practice in primary care. We must encourage obese patients to reduce weight as well reduce the cardiovascular risk associated with it.

P-041

Cardiovascular risk factors in type 2 diabetes mellitus in primary care

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Objectives: Patients with type 2 Diabetes Mellitus (DM 2) have multiple cardiovascular risk factors that increased the risk of cardiovascular diseases. The benefit of blood pressure (BP) and lipid lowering should have an important place in primary and secondary prevention. The objective was to evaluate the control of cardiovascular risk factors in patients with DM 2 assisted in Primary Care and if there were differences in drug treatment between patients with and without Cardiovascular Heart Disease.
Methods: 800 patients with type 2 diabetes in Primary Care in Spain. Optimal control of cardiovascular risk factors was considered when BP values were <130/80 mm Hg; LDLc <100 mg/dl; HbA1c <7% and no smoking. Descriptive statistics and mean comparison (t-student, chi-square, ANOVA) were done with the SPSS v.10 software.
Results: 800 patients (54% women) with DM 2, mean age 68.4 ± 11; smokers: 12.6%; HbA1c <7%: 55.5% (52.8% women, 58.5% men); PA <130/80 mm Hg: 22.5% (20.5% women, 25.4% men); LDL <100 mg/dl: 20% (17.6% women, 23.5% men); HDL >40 mg/dl: 81.3% (99.3 women, 72.3 men); TG <150 mg/dl: 63.9% (63.7% women, 64.3% men). With 2 or more risk factors were 51.4%. All patients with diagnosis of hypertension were under antihypertensive drug treatment. Patients with history of cardiovascular disease (16.3%) had a better control of risk factors with more antihypertensive and statins prescriptions than patients without cardiovascular disease (antihypertensive drugs: 79.2% vs 64.5%; p <0.001 and statins: 56.9% vs 27.2%; p <0.001). LDLc in group without CHD was 131.9 mg/dl and HDLc 51.3 vs LDLc 119.8 mg/dl and HDLc 47.5 in patients with CHD (p <0.001).
Conclusions: More than 50% of diabetic patients had two o more cardiovascular risk factors. More aggressive BP treatment is needed because all patients were under antihypertensive drugs. Better control was found in diabetic patients with cardiovascular diseases under higher drug treatment. It is necessary to promote measures in order to improve the degree of cardiovascular risk factors control in diabetic patients.

P-042

Peripheral arterial disease and cardiovascular risk factors in a primary care unit

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Aims and purpose: Peripheral arterial disease is a common but frequently overlooked disease, often affecting the lower extremities. The aim of this study was the detection of peripheral arterial disease in a group of asymptomatic patients with cardiovascular risk factors (CVRF) determining the ankle-brachial index (ABI).
Design and methods: A cross-sectional study performed in a primary care unit, where patients with CVRF were selected. The chance of performing the ABI determination and detecting peripheral arteriopathy was offered to all users of the different primary care centers, by determining blood pressure with a Doppler scan. The presence or absence of pulse was registered and ABI was calculated, also social and demographic variables and CVRF were registered.
Results: primary care centers participated in the trial and 95 tests were performed. 55.7% were men with an average age of 64.8 years. Hypertension was registered in 58.9% of the cases, dislipemia in 27.5%, type 2 diabetes in 55.7%, there was a 26.3% of smokers, and previous cardiopathy was present in 15.7% and cerebrovascular event and previous arteriopathy in 5.2%. Arteriopathy was detected in 28.4% (when ABI was under 0.9).
Conclusions: The prevalence found in asymptomatic patients with CVRF was 28.4%, a simple ABI measurement identified a large number of patients with previously unrecognized arteriopathy, justifying the systematic use of the ABI determination in primary care centers in these kind of patients.

P-043

Risk factors for osteoporosis in women

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Introduction: Osteoporosis is a public health problem affecting more than 200 million people in the world. At least 90% of all hip and spine fractures among elderly women are direct consequence of osteoporosis. In light of these factors, it becomes more than evident that the measures to prevent osteoporosis should begin with screening and modification of its risk factors.
Aim: To determine risk factors for osteoporosis in women with diagnosed osteoporosis.
Design and method: 57 female patients with osteoporosis, registered with two family practices, were asked to complete risk factors screening questionnaire followed by comprehensive clinical evaluation. This retrospective study has been conducted in 2007.
Results: Of all participants, 3% belong to the age group between 40–49, 19% to the age group between 50–59, 51% to the age group between 60–69, 20% to the age group between 70-79 and 7% were older than 80. 46% of participants had 3 risk factors, 30% 1 risk factor, 10% 5 risk factors, 8% 2 risk factors, 4% 4 risk factors and 2% 7 risk factors. The risk factors were: decrease in height >2 cm (58%), aging (40%), radical hysterectomy (30%), glucocorticoids use (13%), prolonged period of inadequate calcium intake (23%), early menopause (20%), pathological fractures in age less than 40 (13%), family history of osteoporosis (13%), hypothyroidism (3%), excessive alcohol consumption (5%), chronic renal failure (3%), diabetes (3%).
Conclusion: In majority of participants, risk factors for osteoporosis could be modified by early preventive measures such as education, osteoporosis screening, and hormone replacement therapy, etc. Thus, family physicians should determine when to implement prevention for younger women and to provide the screening and modification of risk factors for osteoporoses in elderly women, which will immensely improve their care for female patients.

P-044

Influences of diabetes on clinical characteristics in heart failure patients

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Background: Diabetes is a high risk factor of heart disease. Among heart disease, the prevalence of heart failure is increasing in recent years. However, the influences of diabetes on heart failure have not been characterized in a systematic way.
Methods: This retrospective study including 375 patients (66.2 ± 13.4 years, 235 were male) admitted to our ward under the impression of heart failure. They were divided in two groups based on combining diabetes or not. Clinical characteristics, biochemical data and echocardiography were analyzed both groups.
Results: There were 133 patients diagnosed with diabetes in our patients. Patients with diabetes had higher level of white blood count (from 8666.80 ± 4294.73 to 7720.70 ± 4925.85, p = 0.005) and C-reactive protein (from 35.3 ± 49.7 to 23.60 ± 29.17, p = 0.018). Higher blood urea nitrogen (from 39.09 ± 34.36 to 31.35 ± 29.89, p = 0.003) and lower albumin (from 3.43 ± 0.70 to 3.62 ± 6.16, p = 0.004) were also noted in diabetes population.
Conclusions: These results demonstrate that correlation between white blood count, C-reactive protein, albumin, renal function and diabetes. Diabetes might influence target organ perfusion, inflammatory and nutrition condition on heart failure patience. When we assess the clinical condition of heart failure population, diabetes may necessary taken into consideration.

P-045

Evaluating a lifestyle behavior associated with smoking during adolescence: the VYRONAS study

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Aims(s) and purpose: To evaluate patterns of physical and sedentary activity, as well as eating behaviours that may be associated with smoking in a Greek sample of adolescents of an urban area
Design and Methods: A sample of 2008 students (1021 male and 987 female, 12–17 years of age, 7^{th}–12^{th} grade) was selected from all schools of a representative Athens suburb in Greece. All children completed a questionnaire that was developed for the purposes of the study which retrieved information about age, sex, school class, individual and family smoking status, dietary habits and physical activity.
Results: Smoking was associated with increased age, playtime, consumption of soft drinks and foods from school canteens. An inverse association was found with the daily consumption of fruits, dairy products and the frequency of breakfasts.
Conclusions: This study suggests the interrelationships between specific lifestyle behaviours and tobacco use in adolescents. Future research is needed in order to elaborate on the nature of these relations, especially for those at higher risk.

P-046

Diabetes mellitus – the most common cause of blindness

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Aim and Purpose: The recording of patients that suffer from legal blindness caused by diabetic retinopathy.
Design and Methods: We recorded 75 patients with legal blindness (BCVA <1/20 DSO) during the last two years 01/01/2007 – 01/01/2009. All patients were subjected to ophthalmological examination and they gave detailed accounts of their individual and family medical history.
Results: The cause of blindness can be classified as follows: 21 patients (28%) suffered from diabetic retinopathy, 17 patients (22.6%) from glaucoma, 11 patients (14.6%) from macular degeneration, 9 patients (12%) from retinitis pigmentosa, 4 patients (5.3%) from ocular trauma, 5 patients (6.6%) from keratopathies and 8 patients (10.6%) suffered from other diseases. The non invertable reduction of vision to the diabetic patients is a direct result of proliferative diabetic retinopathy – that is characterized from neovascularization, hemorrhages and retinal detachment – and of persistent macular edema.
Conclusions: Diabetic retinopathy is the major cause of blindness. The frequent ophthalmological examination is a significant part of preventive medicine for the diabetic patients.

P-047

Diagnosing type 2 diabetes in asymptomatic patients – clinical opportunistic screening in the first urban health centre in Greece

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Aim and Purpose: Greece is a country with a highly fragmented Primary Health Care (PHC), where most citizens consult directly private specialists – contracted or not contracted with social insurance funds. Vyronas is the first urban health centre (HC) and the only existing up to date, where medical personnel comprise exclusively of GPs. This submission is an effort to measure how often we make medical diagnoses of common chronic diseases, as type 2 diabetes, in the HC, and how early we make these diagnoses.
Design and Methods: A retrospective cohort study was undertaken in the chronic diseases department (CDD) of the HC of Vyronas which has 9.228 – unofficially – registered patients. All diagnoses of type 2 diabetes, wherever made, over a period of four consecutive years (2004–2008) were analysed (892 patients).
Results: The prevalence of type 2 diabetes in the CDD of the HC for the above mentioned period of time was 9.6% of the registered population. Since 2004, 74.4% of diabetic patients were diagnosed within the HC and the majority (84.1%) of diagnoses were made before the patients reported any diabetes-related symptom, as part of preventive testing of patients with other diseases.
Conclusions: A HC could be a very effective setting for clinical opportunistic screening, as GPs manage the widest range of medical conditions and they can consider the possibility of the patient having a condition other than that for which advice was sought.

P-048

The effect of physical activity on blood pressure: an often neglected issue

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Aim(s) and purpose: The progress in treatment of arterial hypertension with drugs is indisputable. It seems however, that there is a trend to displace the effect of healthy lifestyle on the same direction. The aim of this study was to evaluate the value of educating third age patients about moderate physical activity in terms of reducing blood pressure.
Design & Methods: The sample of our study consisted of 284 patients not diagnosed for hypertension or without treatment (141 men, 143 women), age 65–93 years old, who visited the Primary Health Care units of an urban and a rural area between June 2006 and June 2008 complaining for reasons other than hypertension. The patients were randomly allocated to two groups of 142 using strata randomization. The participants in the group A were informed orally and given printed content for the value of moderate activity and were invited to walk for 30 minutes for at least 5 days per week, according to

European Guidelines for cardiovascular risk (2003).The participants of group B had not such information.
Results: Follow-up ratio was 72.2%. A significant reduction ($p < 0.05$) was recorded in both Systolic Blood Pressure (139.15–134.52 mm Hg) and Diastolic Blood Pressure (92.73– 91.08 mm Hg) in group A, 45 days after the intervention, while this was not the case for group B.
Conclusions: The small but significant reduction of blood pressure levels, only with the adoption of a healthier lifestyle underlines the value of our intervention. The effectuation of health promotion programs is an important aspect of General Practice. The clinical value of our prevention program in combination with low cost might be a rationale for propagation of such programs which would improve the community's health status.

P-049

Acute and chronic toxicity due to pesticides – a case report

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Introduction: Pesticides are designed to control pests, but they can also be toxic to plants and animals, including humans. The severity of adverse effects on human health depends on the degree of exposure, including acute toxicity resultant from direct contact and/or long-term cutaneous, respiratory, neurological, hematological, gastrointestinal, renal, reproductive and psychological effects. Ultimately, seizures, coma and death may occur.
Case Report: We report a 68-year-old male farmer, married and inserted in a functional nuclear family, phase VII of Duvall's Life Cycle, and Smilkstein's Apgar of 6. He presented type 2 diabetes and peripheral venous insufficiency, and was followed in Hematology Department due to anemia and IgG-monoclonal gammopathy. He denied smoking, alcohol consumption, allergies or relevant family history. Six months ago, he was observed in Primary Care due to sudden onset of extensive, deep and painful ulcers located at left leg following spillage of herbicide (alachlor/atrazine). The lesions significantly worsened in subsequent hours, and the patient was sent to the Emergency Department, observed by Dermatology and hospitalized. Surgical debridement was performed and antibiotics initiated. Local wound care included hydrogel, hydrocolloid and hidrocelular dressings. During hospitalization, numbness, timbling and muscular weakness involving the hands and feet were noticed, and the diagnosis of sensorimotor peripheral neuropathy was confirmed by electroneuromiography. The patient was discharged after 35 days. Five months later, he maintains decreased extremity sensitivity, and ulcers are completely healed.
Conclusion: Workers regularly exposed to pesticides, namely those of the agricultural or pesticide manufacturing sector, are the most susceptible individuals to direct contact with these chemicals. Considering the significant cutaneous absorption, the use of protective clothing is recommended during pesticide application.

P-050

Human papillomavirus – a health education action at basic school

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Introduction: The human papillomavirus (HPV) is one of the most common sexually transmitted diseases in adolescents and young adults. Recently one new vaccine was disposable in market and in Portugal it has been integrated in National Immunization Program.
Aim: Our purpose was to transmit information about HPV to promote the voluntary vaccination for HPV in students of 8th year at a basic school.
Description: After a bibliographic review to establish the state of art on our objectives, we prepared and applied a non-validated questionnaire to 8th year students of a basic school of Matosinhos, Oporto. Then we built a health education action adjusted to their standard of Knowledge. This action took place in 2008, November at that school and consisted in three parts: an oral presentation, a video presentation, and a pamphlet distributed to students. The same questionnaire was applied by the end of action to measure the efficacy of our presentation. We used qui-square to compare partial results of tests and Mann-Whitney U test to compare the global mean.
Results: 129 boys and girls (M/F = 61/68) with mean age of 13 years old had participated in this action. By the end of our action the global percentage of correct answers to questionnaire raised from 27.4% to 71.1% ($p < 0.01$). This improvement was also true to all the topics present in questionnaire. The Knowledge of existing a vaccine raised from 32.3 to 96.9% ($p < 0.01$) and that vaccine was free and disposable at local Health Center raised from 23.6 to 91,3% ($p < 0.01$).
Conclusion: Although we can't say that this action will have a repercussion at immunization coverage, the results permit to conclude that our health education action was successful on transmitting information, leading this population on a better stage of knowledge.
Keywords: Human Papillomavirus, Preventive medicine, Health education

P-051

The RISK-INFO study: how Swiss GPs are using words, numbers and pictures to inform their patients about cardiovascular risks

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Aims: Only a minority of patients with cardiovascular risk factors (CVRF) is treated according to the guidelines. Besides other reasons, an inadequate communication between doctors and patients is assumed to contribute to this fact. Among different formats of risk communication (RC) – such as verbal qualifiers, numerical and visual formats – some are recognized to be more comprehensive and effective than others, thus affecting patients subsequent health behaviour. Yet, by now it is unknown how often the different formats are used in the daily clinical practice. In this study we quantify the frequencies of RC formats used by a sample of primary care physicians in Switzerland and analyse their association with patients' characteristics.
Methods: Up to 150 middle-aged patients with newly identified CVRF will be included. Data are collected (a) by audio recording the communication between GP's and patients and (b) by questionnaires asking for patients sociodemographics, understanding of received information, level of anxiety/awareness of CVRF and needs for medical information. Then, we quantify the frequencies of the main communication formats and assess the influence of possible covariates (patients characteristics) on the communication behaviour by means of logistic regression models.
Results and Disussion: To our knowledge this study is the first to measure how frequently verbal, numerical and visual formats or a combination of them are used in the communication between primary care physicians and patients about CVRF. This study challenges two main hypotheses: first, we assume that common recommendations about how to communicate risk (as e.g. using numerical formats with natural frequencies, optical formats and combinations of them) are not met in daily practice. Secondly, we hypothesize that patients' characteristics do not explain this gap between recommendations and reality. First results will be presented at the meeting.

P-052

The role of implementable nutrition knowledge in obesity

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Background: Overweight, obesity and physical inactivity are major modulators of chronic disease. Control of these lifestyle factors is of major preventive importance. Implementation of most lifestyle recommendations requires knowledge and understanding. In this study we assessed the understanding and knowledge of patients regarding their energy requirements and expenditure in a structured interview.
Method: 210 patients from the hypertension and obesity clinic were recruited (m/f = 90/120, mean ± SD age 52 ± 16 years, sys/dia blood pressure [BP] 133 ± 15 / 82 ± 10 mm Hg, body mass index [BMI] 31 ± 8 kg/m^2). The patients were asked to estimate for how long the energy content of a yoghurt (180 kcal) would suffice to cover the resting metabolic rate (timeRMR) and what distance (in km) they would have to walk (Dkm) to oxidize the energy content of the yoghurt.
Results: The mean (± SEM) estimated timeRMR was 191 ± 14 minutes, the mean deviation from the calculated timeRMR was 56 ± 12%. The mean estimated Dkm was 3.9 ± 0.3 km, the mean deviation from the calculated Dkm was 93 ± 14%. The BMI correlated with the percentage deviation from the calculated timeRMR ($r = 0.28$, $p < 0.0001$) and the calculated Dkm ($r = 0.25$, $p = 0.0003$). These relations were independently from gender or age of the patients.
Conclusion: Our study shows that most patients overestimate their energy requirements at rest and during exercise. The ignorance regarding the basic parameters of energy metabolism is reflected in the rather large deviation of the estimated energy requirement (+56%) as well as expenditure (+93%). The misjudgement correlated with BMI. To implement recommendations regarding body weight control the patients have to have not only the knowledge but also the understanding and capacity for implementing the basic facts about energy requirements. New teaching strategies are needed.

P-053

Usage of services for colorectal cancer screening

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Background: As a preventive health intervention option in health care of adult asymptomatic population age 50 and older, Colorectal Cancer Screening Services (CCSS) was introduced for the first time as routine practice of general practitioners at the primary health care level in Serbia in 2007.
Objective: To represent first results of usage of CCSS for asymptomatic population at the age of 50 and older.

Method: The study is observational – descriptive. We used data of usage of the CCSS, gathered from General practice physicians, through their reports. These reports are collected through the network of public health institutes, and used for planning for next year. General practice is included in the health care institutions at primary health care level, and is provided in 157 primary health centers. The primary health centers are state-owned and they cover the territory of one or more municipalities, distributed in 25 regions.
Results: In 2006 Republic Statistical Office of Serbia estimated population age 50 and older to be 2, 775, 442. Out of this population, only an average of 5% received CCSS (fecal occult-blood screening). This percentage varies withn the 25 regions, and the largest screening percentage being in Belgrade (capital), where 15% of target population used CCSS (fecal occult-blood screening).
Conclusion: Low level of CCSS as potential new health intervention option at the primary health care level in Serbia, shows a need for a better implementation.

Usage of Services for Colorectal cancer Screening at the primary health care level in serbia in 2007.

P-054

Chronic renal insufficiency in patients with hypertension

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Aims and purpose: The hypertension is currently one of the most common diseases in Serbian population. Chronic renal insufficiency (CRI) is a disorder which appears as a consequence of impairment and reduction in the number of functional kidney units – nephrons. It is characterized by metabolic acidosis and other abnormalities in plasma composition. The aim was distribution of patients with hypertension according to values of creatinine clearance and division into groups according to renal insufficiency.
Design and methods: Epidemiological research included 158 patients, aged 61,6 ± 9,9, 60 males and 98 females. Duration of hypertension was established in all patients, blood pressure measured at checkups and laboratory analyses were performed.
Results: In all patients glomerular filtration rate (GFR) was calculated with MDRD formula. According to GFR, all patients were divided into three stages. Creatinine clearance (CCR) above 90 ml/min had only 10% of patients (stage I); CCR between 60–89 ml/min had 67% (stage II) and CCR between 30–59 ml/min had 23% (stage III), duration of hypertension was significantly longer in the stage II and III as compared to stage I ($p < 0.005$). Better regulated hypertension had patients without renal insufficiency (stage I).
Conclusion: Reduction of blood pressure is crucial in prevention of chronic kidney disease. This research has shown that a large number of hypertensive patients are at risk of chronic renal insufficiency.

P-055

Osteoporosis in men in primary care. A little known but important problem of health

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Aims and purpose: Family Physicians don't usually manage Osteoporosis in men. Nevertheless, it is becoming increasingly common to treat Osteoporotic men in Primary Care. We review the profile of men who were asked to have a DXA scan and a Questionnaire.
Design: Observational, Transversal, Multicentre.
Study setting: Urban setting. Barcelona.
Subjects: those who have had a DXA scan via their Family Physician, and who completed a fracture clinical risk factors questionnaire. N = 371.
Diagnosis/interventions: DXA scan standard measurement and Questionnaire.
Statistical analysis: Categorical variables: Frequencies, Percentages. Quantitative: Mean (M) and Standard Deviation (SD).
Results: T-score Femoral Neck: (M-1.95, SD 1.09); Total Femur: (M-1.37, SD 1.22); L2-L4: (M -1.52, SD 1.77). Age: (M 65.17, SD 12.59). Height (cms): (M 164.8, SD 7.53); Weight (kgs): (M 75.2, SD 12.8). Family history of Osteoporosis 8.3%. Co-morbidity pathologies: Diabetes 6.6%, COPD/Asthma 5.8%, Rheumatoid Arthritis 1.8%. Prevalent Fractures: 0: 60.9; 1: 28.4%; 2 or more: 10.7%. Fracture sites: Forearm/Wrist 28.3%, Fingers/Toes 18.3%, Column 12.6%, Ribs 6.3%, Hip 5.2%. Physical activity: <5 h/week: 67.7%, >= 5 h/week: 32.4%. Smoking: 31.4%; non-smoker: 45.8%; ex-smoker: 22.8%. Drinker: 79.7% No and 20.3% Yes. Taking anti-resorptive agents: 38.2%; Corticoids 10.7%. Dietary Calcium intake: M 669, SD 275.7.DXA results: Normal 13.8%, Osteopenia 41.1%, Osteoporosis 45.1%.
Conclusions: Even though Osteoporosis is unusual in men compared with females, we should consider more frequently unhealthy habits (drinking, smoking, sedentary lifestyle), and low dietary Calcium intake as factors associated with worsening bone health. In our sample, we observed high percentages of Osteoporosis (45%) and Fractures (39.1%), which could mean that Family Physicians should think about Osteoporosis in men more often.
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P-056

Effectiveness of an intervention in cardiovascular prevention for patients with metabolic syndrome: Metbay Proyect

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Aim: The objective lies in assessing whether the inclusion in the cardiovascular prevention program designed on purpose makes patients diagnosed with MS, compared to subjects in the control group suffering the same pathology, optimize the control of those risk factors that constitute the criteria of the syndrome and/or reduce individual risk of suffering a cardiovascular event.
Methodology: Randomized Controlled Clinical Assay.
Study Scope: Primary Health Care, with three health centers participating.
Subjects: adult patients being less than 70 years old, with diagnosis criteria of metabolic syndrome, according to ATP III recommendations. Subjects meeting all the inclusion criteria will be assigned, by means of a simple random sampling, to an interventionor to a control group. The inclusion in the study will require informed consent by the patient.
Primary outcome: Efficiency of an intervention tool, measured using consecution terms of the control of risk factors defining MS, as well as the modification in the individual cardiovascular risk.
Outcomes to measure: Universal; sociodemographic; anthropometric; arterial tension; and biochemical (resistance to insulin, altered basal glycemia or diabetes mellitus, fraction and total cholesterolemia, triglyceridemia, microalbuminuria, fibrinogenemia, uricemia); therapeutic compliance; quality of life questionnaire.
Sample size: It is calculated by accepting a test power of 80% and a signification level of 95%. An increase in the control of the criteria that compose MS of at least 20% is accepted as a result. Taking into account the group of cases for intervention and controls, the sample contains 196 subjects.
Results: Determinations will be carried out through descriptive statistics; frequency distribution, dispersion and central tendency measurements. A measurement of possible associations between variables through contrast of hypothesis test will also be calculated.

P-057

Tuberculosis and primary care

Tamarit Corella F. (Salt-Girona)

Aims: Imported tuberculosis cases constitute a new risk factor which may lead to a rise in TB incidence in Spain, as in other industrialised countries. The aim is to know the persons infected by TB in immigrated population.
Methods: For 4 months a preventive intervention was done to every new person coming the center health. Among others a Mantoux test (PPD) was carried out. We have analyzed the rates of TB incidence and the evolution in the last seven years. It was controlled applying what says Catalunya PlaSalut 2002–2005. I practise the reading of the PPD at 48–72 hours, considering positive PPD >10 mm (vaccinated or not). A chest x-ray was done to all of them. Persons aged between 16–35 were requested for three months with isoniazid/rifampin. Finally were derivated to health team. to whom chemoprophylaxis must be applied.
Results: For 4 months 320 new persons gave each other in the health's center and we did a PPD to 224 of them. 54.9% was negative, 30.4% positive (PPD >10 mm) and 14,7% did not return to read it.

There was chosen the 16-35-year-old immigrant (206 persons, 64.31%). A PPD was practised 155 of them. 25 did not return to read it, 86 were negative and 44 positives (chest x-ray was done to 35 being of them 31 normally, 4 denials and 9 did not return to see the result). 33.8% was positive (44 of 206), with PPD >10 the 14,6% and PPD >15 the 19.2%, including those who did not come to read (44 of 155) were positive 28,3% PPD> 10 12.2% and PPD >15 the 16.1%.
Conclusions: All immigrant coming from countries that have TB incidence of 50-100x100.000 and arrived to our country less than 5 years ago, are requested to be a only chest x-ray, or PPD and chest x-ray. Woud it be convenient to arrange treatment for positive PPD between 16 and 35 years? Would Primary care be more actively involved? The evaluation of this intervention allows us to determine the epidemiological situation, adapt activities, and improve their efficiency.

P-058

Impact of previous knowledge of warning symptoms on extra-hospitalary latencies in patients with acute stroke

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Objective: Late arrival to Stroke Centre represents the main cause of exclusion of candidates for thrombolysis. We aimed (1) to evaluate the impact of the degree of awareness of warning symptoms of stroke on the duration of extrahospitalary latencies (ExL) and (2) to identify factors associated with a good knowledge of warning signs.
Study population and Method: We prospectively studied consecutive patients with an acute stroke of well known time of onset. Level of knowledge of warning signs was assessed by means of a questionnaire, administered to the accompanying relative by a neurologist upon admission to the Stroke Unit. Socio-demographic variables, vascular risk factor profile and vascular history were registered.
Results: Of 111 acute stroke patients (age 68.6 ± 11.8, 41% women), 94 had a known time of onset. Mean onset-to-door time was 251.2 minutes. Complete data about knowledge of warning symptoms was available in 87 (93%). Awareness of alarm symptoms was correct in 40 (45%) of them. Adequate knowledge of warning symptoms was associated with reduced ExL (233.08vs.303.89 minutes, p = 0.04). Degree of awareness of warning symptoms was independent of most socio-demographic variables, diagnosed vascular risk factors and documented vascular diseases, and was better among married (p = 0.029) and patients with a prior stroke (p = 0.044).
Conclusions: Correct knowledge of stroke warning symptoms is associated with reduced ExL. The degree of awareness of stroke symptoms in our setting was independent of the presence of vascular risk factors or vascular diseases.
Applicability: Educational campaigns are needed in the Primary Care setting to increase the knowledge of stroke warning signs in our population.

P-059

Vaccinations are well done?

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Detection of chronic renal insufficiency (CRI) is important to avoid fatal evolution of illness. In this patinents is necessary an strict control of vaccinations due to infectious oportunistic pathology can made worse CRI, instead in immunocompetent Transversal and descpriptive study, made with alive patients catalogated as CRI in clinical history at march 2008. Determinate vaccination in patients with CRI to hepatitis B virus, Streptococcus Pneumoniae and Haemophilus Influenzae. Fix correct no systematic vaccination in patients with CRI stage III or less, making reference to Catalunya Manual of vaccination 2006 and consens document about CRI of Spanish Nefrologi Society. Prevalence found is 0.4 per 1000. Only 23 patients affected of CRI. From whichs, 2 (9%) were vaccinated in front of Haemophilus Influenzae and 21 (91%) non vaccinated. Front of Streptococcus Pneumoniae, we found 14 patients (60%) and non immunizated 9 (40%) from those ones 2 (9%) were no vaccinated for her own decisions. Front of hepatitis B, we found 2 patients (9%) immunizated and 21 (91%) non vaccinated No patients were correctly vaccinated in front of the three vaccinations commented in manuals. Only immunization in front of Streptococcus Pneumoniae is superior at 50%, and there are no one well vaccinated in front of all vaccinations recommended. We think it is necessary to make and study with more and try to make aware sanitary workers and population about this problem.

P-060

Cerebrovascular risk appraisal: clinical usefulness of different calculation methods of stroke risk in primary care

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Aims and purpose: Esteeming what method predicts better the CVR in patients assisted in primary care.
Design and methods: Cohorts study, with 10-year follow-up, in primary care, based in an urban randomized representative sample. We assessed CVR esteemed according to Framingham score; algorithm of the ARIC study (Atherosclerosis Risk In Communities) and of the UKPDS (United Kingdom Prospective Study Diabetes). Of an aleatory sample formed in 1998 to study the Metabolic Syndrome (MS) (NCEP criteria [National Cholesterol Education Program]; n = 1500) we selected individuals between 54-85 years (applicable margin) without stroke, evaluating sociodemographic data, MS components and cardiovascular risk factors: systolic blood pressure, hypertension drug treatment, cardiovascular disease (angina, myocardial infarction, peripheral arteriopathy), atrial fibrilation, left ventricular hypertrophy, type 2 diabetes and smoking habit. Statistical analysis: comparison between scores and confirmed strokes of each method according to events, by means of ANOVA.
Results: 726 subjects (66.4 ± 7.4 years) were analyzed, 409 (56.3%) women. From them, 316 were obese (43.5%), 175 (24,1%) were diabetics, fulfilling 228 (31.4%) MS criteria. In the 10 years of final follow-up were registered 58 cases of cerebrovascular disease (31 men). The comparison of averages of the result of the CVR between the subgroup with stroke in front of the subgroup without it, was respectively: ARIC 6.7/4.1 (p <0.001) (range: 1.4–13.4); UKPDS 29.7/17.7 (p <0.05) (range: 2.9–83.1) and Framingham 18.0/10.6 (p <0.001) (range: 4.0–79.0).
Conclusions: In Primary Care, all three risk scores predict the CVR. The score more predictive was the Framingham score, but with an overestimation in Spain.
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P-061

Features associated with a pathological ankle brachial index in hypertensive patients in a primary care centre

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The measurement of the ankle brachial index (ABI) is a straightforward method for the detection of subclinical atherosclerosis in patients without known atherotrombotic disease (WKAD) in primary care prevention (PCP). An ABI <0.9 and arterial hypertension(AH) was associated with development of cardiovascular disease and mortality.
Aims: To estimate the associated features in patients with AH and ABI < 0,9 in patients WKAD.
Patients and methods: Multicenter, cross-sectorial, observational study. One hundred twenty-one patients, ninety-one hypertenses with AH WKAD were invited to participate in our study. In all patients was calculated the ABI by portable doppler. An ABI< 0,9 was considered pathological. We studied the following variables: age, sex, smoking habits, body mass index (BMI), pressure pulse (PP) and LDL cholesterol (LDL col). The total sample was divided into two groups depending on the presence or absence of pathological ABI. We calculated the test samples for independent student and comparing qualitative variables.
Results: The results from patients are: 75% was hypertenses with mean age: 65 years. 60% females. A low ABI was found in a 18% of the hypertenses patients. 11% was smoking habits. The median of BMI, PP and LDL col was 32 kg/m^2 (IC 95% 30–33), 52 mm Hg (49–55) and 120 mg/dl (114–126), respectively. Obesity is associated with low ABI and AH (p 0,008).
Conclusions: Measurement of ABI is useful in PCP with AH, WKAD and obese patients. The ABI should be incorporated into cardiovascular evaluation, particularly in subjects with potential risk cardiovascular.

P-062

Toxic habits in teenagers: detection in the primary healthcare

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The teenagers is one of the population groups which is seen less frequently by a doctor in a primary health center. However, the adolescence is a fundamental stage in the acquisition of beneficial or dangerous habits for the healt. The consequences of such habits

appear in the adulthood. As a consequence, it is during the adolescence when a preventive schedule can be more beneficial.
Aim: to asses the toxic habits in the teenager population between 15 and 20 years old and evaluate its detection in primary healthcare.
Design: Descriptive.
Location: Healthcare urban center. Subjects: Patients between 15 and 20 years old visited during 2006.
Method: Analysis of the results stored into the data base.
Results: N = 360. Middle age 18. Only the 28% of attended patients has record of toxic habits (just the 35% were asked about illegal drugs). The 47,3% consume some kind of toxic substance. Among them, the 31.6% are smokers (14% in 15/16 years old population and 37.2% in 17/20). The 28.3% consume alcohol (76.4% in non-working days; 7% in working days; 16.6% NC and according to the age: 15 years old 7.3%, 16 years old 14.5% and 17/20 years old 32%). The 8.3% consume cannabis (60% sporadically; 23% weekly; 16% NC; 1%). Consume of three toxic substances was detected in the 8,8% of the registered patients (average age of 18,9 years old). Alcohol and tobacco in 28,8%. Only alcohol 21,7%. Only tobacco15.8%.
Conclusion: Approximately only a third of the seen teenagers patients were registered in to the data base and just the 35% of them were asked about illegal drugs. An increase of the tobacco and alcohol consume is observed in the mid adolescence group. As a conclusion, it is essential to improve the access of teenagers to the primary healthcare services and raise awareness among the staff so as to potentiate the relationship between the family doctor, the nurse, the patient and the family and to get healthy habits.

P-063

Is the antihypertensive drugs intake higher in secondary cardiovascular prevention?

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Aims: To describe main characteristics of a hypertensive population treated with acetylsalicylic acid (ASA) as primary (PP) or secondary prevention (SP). To describe which cardiovascular events caused the prescription of ASA in SP group. To evaluate differences in the number of drugs in both groups.
Design and methods: Descriptive trial in primary care.
Population: hypertensive patients who initiated ASA from 1/06/2001 to 1/06/2006 with minimum 3 months of treatment. Information was obtained by telephonic survey and review of medical records.
Variables: age; sex; dyslipidemia (DLP); diabetes mellitus (DM); smoking; number of antihypertensive drugs; total drugs; kind of prevention and cardiovascular events. U Mann-Whitney test was used for the comparative of medians.
Results: 79 patients were included, 46.8% were women, mean age 70 (SD11.7). A 63.3% took ASA as PP. In PP group, 56% were women, mean age 72 (SD 10.4%) and 44% men, mean age 67 (SD 12.7%). In SP group, 31% were women, mean age 73 (SD 17.3) and the most frequent cardiovascular event was stroke (44%). 69% were men, mean age 70 (SD 8.9) and the most frequent cardiovascular event was ischemic heart disease (IHD) (55%). About modifiable cardiovascular risk factors, in PP group, 64% had DLP, 72% DM, 22% were smokers and 14% were ex-smokers. In SP group, 62% had DLP, 34.5% DM, 10% were smokers and 27% ex-smokers. In SP group, the reason to prescribe ASA was IHD (44%), stroke (34.5%), peripheral vascular disease (17.2%) and thromboembolic disease. No differences were found in number of antihypertensive drugs between groups, the median in both was 4.
Conclusions: Most patients took ASA as PP and most of them had DM. Although BP control objectives are stronger in patients with cardiovascular events, no differences were found in the number of antihypertensive drugs between groups.

P-064

Effect of low calorie diet and physical activity for cardiovascular risk of overweight and obese population

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Objective: The change of life style plays very important role for management of overweight and obesity and related cardiovascular risk factors. The aim our study was to screen practices for overweight and obese patinets, to teach them events of health life style.
Design and Methods: 2489 overweight and obese patients, 65% women and 35% men have been screened from 29 general practices since April of 2001. We surveyed their characteristic of life style: eating and moving habits, measure body mass index, waistline, rest blood pressure, heart rate and plasma glucose, total cholesterin, triglicerid, high density lipoprotein (HDL) after a 12-hour fasting. A team, which consist of an internalis, a dietician and a physical instructor deals with patients. After ruling out secondary obesity the team tailored an individual life-style. We followed the change their body mass index, waistline and metabolic parameters more frequently in the first year (3.,6.,12. month) and once at the end of the second year.
Results: Eating habits of patients reflect the fact that they live in a traditional agricultural area.12 months later the body mass index decreased significantly average 0.56 kg/m^2 and more 0.088 kg/m^2 by the end of the second year, the waistline first increased significantly average 0.84 cm then decreased 0.04 cm. The rest systolic blood pressure cut down significantly on average 5.9 Hg mm int he first year, then remains unchanged, the rest diastolic blood pressure did not change significantly. The metabolic parameters decreased also significantly: total cholesterin 0.23 mmol/l in the first year, 0.07mmol/l in the second year, triglicerid: 0.17 mmol/l; 0.08 mmol/l, blood glucose: 0.15 mmol/l; 0.18 mmol/l. The level of HDL did not change.
Conclusions: It is very important for management of overweight and obesity that patients adopt changes of life style. Our results show that these patients must be followed very strictly.

P-065

Differences in smoking initiation between adolescents in urban, semi-urban and rural regions of western Greece

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Aim and purpose: The initiation of smoking and tobacco use in early ages is one of the most important problems in modern societies. The purpose of the present study was to examine if there are difference in the beginning of smoking between adolescents aged 11–15 living in urban, semi-urban or rural regions.
Design and Methods: A cross-sectional survey was carried out, including a total of 1460 high school students from different schools in Western Greece. All students were administered to fill out a questionnaire which included demographical variables, smoking behaviors of the students and their family or friends as well as the age of smoking initiation.
Results: Prevalence of daily smoking was significantly higher in urban (16%) and semi-urban (15.6%) regions than in rural areas (9.2% $p < 0.001$). The students from rural areas were more likely to start smoking in younger ages (12 ± 0.6 years) than the students from urban (14 ± 0.8 years) and semi-urban regions (14 ± 1.2 years).
Conclusions: Students living in rural areas are more likely to start smoking in younger ages, however, the prevalence of daily smoking is lower in rural than in urban and semi-urban areas, probably due to different moral attitudes and restrictions. Furthermore school-based interventions to prevent initiation of smoking are necessary.

P-066

The effect of reduced sodium consumption on blood pressure: an often neglected issue

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Aim(s) and purpose: The progress in treatment of arterial hypertension with drugs is indisputable. It seems however, that there is a trend to displace the effect of some “classical” dietary habits on the same direction. The aim of this study was to evaluate the value of educating third age patients about low-sodium diet in terms of reducing blood pressure.
Design & Methods: The sample of our study consisted of 586 patients not diagnosed for hypertension or without treatment (278 men, 308 women), age 65–94 years old, who visited the Primary Health Care units of an urban and a rural area between June 2006 and June 2008 complaining for reasons other than hypertension. The patients were randomly allocated to two groups of 293 using strata randomization. The participants in the group A were informed orally and written for DASH diet, while the participants in the group B were not.
Results: A significant reduction ($p < 0.05$) was recorded in both Systolic Blood Pressure (151.3–147.7 mm Hg) and Diastolic Blood Pressure (93.9–91.2 mm Hg) in group A, 45 days after the intervention, while this was not the case for group B.
Conclusions: The effectuation of health promotion programs is an important aspect of General Practice. The clinical value of our prevention program in combination with low cost might be a rationale for propagation of such programs which would improve the community’s health status.

P-067

Considerations on the role of GP in the prevention of cardiovascular disease in younger patients

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Aims(s) and purpose: Although in the literature the role of GPs in the prevention of diseases such as CVD and DM is well defined in our area of responsibility the percentages of young otherwise healthy patients with acute MI has increased. A recent study in Mediterranean islands revealed changes in dietary habits and hidden morbidity on Crete. The aim of this presentation is to share the concerns of young GPs; working in rural practices; about their role in the prevention of cardiovascular diseases.
Design and Methods: We evaluated our actions on prevention of diseases during the last 2 years through our registration books and electronic file system.
Results: More than 70% of our consultation was due to patients over 60 and concerned drug prescription. Approximately 85% of these patients were vaccinated against flu and pneumoniococcus. Health promotion advices concerning dietary habits, smoking sedation and exercise were given to any patient seeking consultation for any reason. Appointments forsmear test, mammography and prostate cancer screening were provided. The intervention provided though was limited to patients seeking medical consultation during office hours. Younger especially male patients are not consulting their rural practices in general. Older people without known diseases do not also approach rural doctors. Doctors are restricted indoors prescribing medication, being in this way far from any disease prevention target in the community.
Conclusions: Screening and disease prevention seems limited and fragmentary in Greece. The endless prescriptions and the lack of human resources including social workers and community nurses are considered as major drawbacks in playing an important role in the prevention of CVDs. National community projects together with the outdoors teamwork by Health Care Centers are needed in order to reduce the rapid increase of CVDs in Greece.

P-068

The influence of body composition on obese patients' psychological well-being

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The body composition changed with ageing may aggravate life, impair well being and health especially with increasing body fat mass.
Aim: to investigate the relations between parameters of the body composition and psychological well-being of the elderly.
Design and methods: 46 out-patients (27 women and 19 men, aged 59–88) filled a World Health Organization-Five Well-Being Index (WHO-5) questionnaire (the sum of 5 items was used, the higher the scores, the better well-being). Anthropometrical measurements analyzed included: weight, height, arm, waist, hip, calf circumferences, body mass index (BMI), waist-to-hip ratio (WHR). The cutoff points recommended by WHO for WHR (>0.9 for men and >0.85 for women) were used for central obesity. Data were analyzed using multiple regression method.
Results: 93% women and 79% men were diagnosed to have central obesity. The reliable differences between all parameters in groups of women and men were not found, only the reliable difference was found in WHR (0.89 ± 0.01 and 0.95 ± 0.019). The multiple regression showed that only BMI had a reliable impact (b = –0.47) on psychological well-being. In the women's group BMI (b = –0.39), arm (b = –0.66) and calf (b = 0.42) circumferences had a significant impact on well-being. Conversely, none of the parameters influenced the men's condition. The analysis of the influence of separate parameters on psychological well-being showed significant correlation between WHO-5 scores and hip circumference (r = –0.405) in the women's group and arm circumference (r = 0.517) among males.
Conclusions: According to the research a negative impact on the psychological well-being of the elderly was caused by body composition especially that conditioned by obesity. The worse psychological well-being of women was also related to peripheral limb obesity. However, the anthropometric parameters of men did not have influence on their psychological well-being.

P-069

Influenza vaccine coverage among children aged 0-6 years in Warsaw

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Background: Influenza vaccinations are highly recommended for healthy children aged 6 months – 5 years because of clinical and epidemiological reasons. The course of the disease is more severe ate this age, related with a higher ratio of complications, hospitalizations and deaths. The aim of our study was to find influenza vaccination coverage among preschool children in Warsaw
Material and methods: We analyzed medical documentation of 1466 children aged 0-6 years from three out-patient clinics in Warsaw.
Results: We found 44 children who had a written prove of vaccination against influenza, so the influenza vaccine coverage was estimated as 3%. The average age of a vaccination against influenza was 4,4 years. Most of vaccinated children (54.5%) were vaccinated at the age 1–2 years, 34% at the age 3–6 years, 11% were vaccinated before 1st year of life. 92% of children were vaccinated during September, October or November. 50% of children vaccinated for the first time in their life were given only one dose of vaccination (the course of vaccination was incomplete). 20% of this children continued vaccinations against influenza during next years after the first vaccination. For 95% of children vaccination against influenza was the only one given during a visit in the medical office. Medical history of vaccinated against influenza children revealed that 89% of them were also previously vaccinated with combined vaccines (hexavalent or pentavalent), 75% of them were given monovalent vaccines which made their vaccination schedule wider.
Conclusions: Influenza vaccination coverage among preschool children in Warsaw was low (3%). Most of children were vaccinated at the age between 1st and 2nd year of life and half of individuals vaccinated for the first time in their life did not completed vaccination scheme. Vaccinations were mostly performed during autumn months.

P-070

Prevalence of peripheral arterial disease in subjects at moderate cardiovascular risk: Swiss results of Pandora study

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Objectives: Lower extremity peripheral arterial disease (PAD) is associated with a very high risk of cardiovascular complications even in asymptomatic patients. ACC-AHA Guidelines recommend that individuals with asymptomatic PAD should be identified by measurement of Ankle-Brachial Index (ABI). PAD remains under recognised by clinicians, and detection of ABI remains largely under-used in clinical practice. In subjects without CVD, the presence of PAD, diagnosed by measurement of the ankle-brachial blood pressure index (ABI), predicts an approximate 30% 5-year risk of myocardial infarction, ischemic stroke, and vascular death.
Design & Method: The PANDORA study was a non-interventional, cross-sectional, multicentre study conducted in Switzerland and 5 EU countries. The primary objective was to assess the prevalence of lower extremity PAD through ABI measurement in subjects at moderate CVD risk (male >= 55 or female >= 45 years, plus >= 1 additional risk factor), with no overt CVD, or diabetes mellitus. Secondary objectives included assessing the prevalence and treatment of CV risk factors, and characteristics of both subjects and physicians as possible determinants for PAD under diagnosis.
Results: In Switzerland 551 subjects were enrolled at 39 investigational sites. The mean age was 63.8 years and 61% were male. The mean prevalence of asymptomatic PAD, defined as ABI<0.90, was 12.2%. Mean age of the 62 subjects with ABI<0.90 was 67.8 years and 50% were male. Hypertension, age and physical inactivity were found to be significantly associated with asymptomatic PAD (p <0.031).
Conclusion: Asymptomatic PAD was highly prevalent in subjects with moderate CV risk the majority of whom are not candidates for ABI assessment according to current guidelines. These patients should be carefully examined in clinical practice and ABI measured so that therapeutic interventions known to decrease their risk of myocardial infarction, stroke, and death may be offered.

P-071

Favorable trends in disability due to cardiovascular diseases from 1987 to 2006 in Switzerland

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Despite a reduction of mortality rates observed during these last 20 years, the burden of cardiovascular diseases (CVD) among active population remains high in Switzerland. Surprisingly, little attention has been focused on disability related to CVD.
The objective of this study was to analyze the trends of disability between 1987 and 2006 due to CVD, as compared to other causes.
Patients & Methods: Disability was reported as the number of impaired persons receiving a pension (DC) from the Swiss disability insurance, according to data published yearly by the Swiss office of statistics. The causes of allocation of disability pension were specified, using their own classification by systems. Cardiovascular diseases (CD) were identified separately from cerebrovascular diseases (CerVD).
Results: From 1987 to 2006, the all causes number of DC increased from 120'029 to 256'300 (+114%). During the same period, the number

of DC due to CD reduced from 11'491 to 10'527 (–8%;), whereas the number of DC due to CerVD increased from 8'405 to 21'899 (+161%). On the other hand, the proportion of DC due to CD decreased from 10% in 1987 to 4% in 2006 (57%; p <0.001), and inversely increased from 7% to 9% (+ %; p <0.001).These trends were similar among men and women.
In conclusion, in regard to the significant reduction of disability due to CD, but not to CerVD, these results show that more efforts are needed for the prevention of CerVD.

P-072

Variations and determinants of antibiotic use in adult outpatients: a representative analysis of claim records from the Swiss population

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Aims and purpose: Most antibiotics (AB) are used in primary care, but representative data of prescribed antibiotics that are actually delivered to patients are missing in Switzerland. Reimbursement data from health insurers can close this gap.
Design and Methods: We used reimbursement data from 2007 of Helsana, the largest social health insurer in Switzerland and measured the defined daily doses of ABs per 1000 inhabitants (DDD1000pd) aged 17 or older. We used descriptive and regression analysis to further determine factors associated with different prescribing patterns of ABs in ambulatory care.
Results: We analysed data of cost claims from 1'067'934 adults representing 17.2% of the Swiss population. For the 5 favorite ABs, DDD1000 pd were 2.32 for amoxicillin/clavulanate, 1.00 for ciprofloxacin, 0.97 for clarithromycin, 0.71 for doxycylin, and 0.62 for amoxicillin. DDD1000pd for amoxicillin/clavulanate varied in the German speaking region of Switzerland between 2.69 und 2.83, and was higher for the Italian (3.48) and French speaking region (4.05). Regions with higher DDD1000pd showed higher seasonal variability in AB use than regions with lower DDD1000pd. There was a strong relation between prescription of ABs and use of point of care tests (POCT). Physicians using CRP and urine tests prescribed 19% (95%CI 9% to 28%) fewer amoxillin or amoxillin/clavulanate and 18% (95%CI 9% to 26%) fewer fluoroquinolones than physicians not using POCTs. Use of X-rays was associated with a 26% (95%CI 4% to 52%) higher use of amoxicillin or amoxillin/clavulanate.
Conclusions: Use of AB in ambulatory care is highly variable and highest in the French speaking part of Switzerland. POCTs such as CRP and urine tests are associated with lower AB prescriptions and offer interesting perspectives to streamline the use of ABs in primary care. Such strategies need evaluation by rigorously conducted trials that are designed to the needs of primary care.

P-073

The relevance of recognizing diabetes mellitus as high-risk category for ischemic heart disease

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Objective: Diabetes mellitus is recently established as an independent risk factor for ischemic heart disease. The objective of our study was to identify, among diabetic patients, the high – risk category for ischemic heart disease.
Methods: We studied 70 patients with diabetes mellitus. Half of the patients were treated at hospital for the coronary disease. They were compared with 35 diabetic out-patients without coronary disease. Standard protocol included: medical history, cardiological examination and laboratory tests (glucose level, Hgb A1c, lipid status).
Results: There was no significant difference in sex ratios between diabetic patients with and without coronary disease. Diabetics with coronary disease were significantly older. Patients with poor glycemic control (HgbA 1c >7%) (45.8% vs. 22.6%) were at significantly greater risk. There was no significant correlation between duration of diabetes and risk of coronary disease. Diabetics with other factors had significantly higher risk of coronary disease, especially those who had two or more associated risk factors. (78.6% vs. 59.2%). Hypertension was more frequent in diabetics with coronary disease (86.8%vs. 68.9%), as well as dyslipidaemia (54.6% vs. 47.2%). Smoking hasn't been shown to be significant risk factors for coronary disease.
Conclusions: Diabetic patients with high-risk for ischemic heart disease are older (p <0.01), with poor glycemic control (p <0.01), who have two or more associated risk factors (p <0.05), especially hypertension (p <0.01) and dyslipidaemia (p <0.05). Because of that, it is very important to recognize risk factors of coronary disease on time and prevent it. The role of family doctors in this case is of great importance.

P-074

Malignant diseases as a cause of anemia

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Malignant diseases in the population of older than 55 years cause anemia. It's discovery can be a sign of malignancy.
Aim and purpose: Discovery of the malignant diseases joint with anemia in the population of older than 55 years.
Method: Evaluation of the medical records with anemia diagnosis in the last year on the four general practitioner's population. Data are taken from personal medical records. Standard diagnosis and procedures, such as laboratory, x-ray units, Adler-Weber test, etc. are used.
Results: In the number of 4630 medical records of the four general practitioner's are registered 185 persons with anemia (4%), of which 71 patients (38.38%) are ill of different organs malignancy. Women are in the percentage of 66.2 of this number. Diagnosis of the colorectal cancer has 35.2%, of which men are in the population of 60%. Malignant breast and prostate diseases are in the second place with 16.9% each. In the examined age stage 10% has positive family history.
Conclusions: Malignancy beginning is often discovered by accident, what implies larger need of the regular screening and health examinations of the population and education about the care for their own health.
Keywords: malignity, anemia.

P-075

Dyslipidemia and coronary artery disease risk

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Some patients have normal low-density lypoprotein cholesterol (LDLc) levels and current lipid lowering guidelines may underestimate their cardiovascular risk but that patients are at particularly high risk of premature coronary artery desease (CAD).
Aims: The aims of this research was to determine how much patients with dyslipidemia
have normal LDLc but atherogenic dyslipidemia with high risk for CAD.
Design & Methods: The total of 279 patients were included aged 18–70 years (mean 45). All patients were received an invitation from their general practitioner (n = 4) to monitor their lipid status included triglycerides, high-density lypoprotein cholesterol (HDLc) et LDLc.
Results: From 279 patients 70.83% of them had some type of dyslipidemia. 51.58% of patients had higher levels of trigylcerides, 44.79% of patients had higher levels of LDLc, 55.21% had normal levels of LDLc but 50.01% of them had atherogenic dyslipidemia such as higher levels of triglycerides et lower levels of HDLc. From all patients 70.47% had lower levels of HDLc.
Conclusions: This research confirmed that HDLc is a stronger predictor for development premature CAD than LDLc and that HDLc can better detect atherogenic dyslipidemia which require treating.

P-076

The importance of systematic medical check-ups for the early detection of diseases

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Aims(s) and purpose: To show the importance of systematic check-ups for the early detection of the non communicable diseases.The most important risc factors have been stressed as follows: smoking, obesity, hyperlipoproteinemia and diagnostics of cancers, diabetes mellitus and cardiovascular diseases. In the analyses we have included only new detected cases.
Design and Methods: The study was done during 2008. and included 300 patients: 120 (40%) younger than 35years and 180 (60%) older than 35 years.The medical examination was done on the patients who didn't come for the check-ups regularly.
Results: The results show that in the group of 120 patients younger than 35 years 75 (25%) of them were smokers, obese were 43 (14.3%), with hyperlipoproteinemia 32 (10.7%), 18 (6%) had hypertension, 3 (1%) diabetes melitus and 22 (7.3%) glucose intolerance. The cancer was detected in 3 (1%) patients (all females, 2 breast cancer and 1 cancer of cervix uteri).The results of the examination of the patients older than 35 years,as we expected, were worst than in the younger group. Among 180 of them, we detected 67 (22,3%) smokers, 92 (30.7%) with hyperlipoproteinemia, 78 (26%) obese, 48 (16%) with hypertension, 5 (1.7%) with angina pectoris,15 (5%) diabetes melitus and 44 (14.7%) glucose intolerance. The cancer was detected in one out nine patients in this age group, 5 lung cancers,4 breast cancers,6 colorectal cancers,3 cancers of cervix uteri, 2 prostate and 1 gastric cancer.
Conclusions: In the sample of 300 patients the medical examination detected 47.3% smokers, 36.7% patients with hyperlipoproteinemia,

22% with hypertension, 6%diabetes melitus and 22% glucose intolerance. In each 24 (8%) patient was detected some type of cancer. That is the testimony of the great importance of the systematic medical check-ups in the early detaction, opportune treatment and secondary prevention. Visiting the physicians patients received the health behavior advices and with the changes of behavior they can influence on the appearance of diseases.

P-077

Anaemia: a road sign to chronic diseases

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Anaemias in older population are in most cases the consequence of chronic diseases.
Aim of research: The analysis of the most frequent causes of anaemia in the age group above 55 years.
Design and method: The source of the data is medical documentation of the patients older than 55 years, with the diagnosis of anaemia in the previous calendar year. The data from the personal anamnesis were noted as well as the way of discovering anaemia (accidentally or by aimed medical check-up).
Results: Four doctors took part in this research with 4360 examined patients. The number of patients with anaemia in the age group above 55 years is 185 (4%), out of which 69% are women. The most frequent causes of anaemia are: malign diseases (38.4%) – the most frequent is colorectal cancer; digestive system diseases (ulcus, gastritis, and collitis): 32%, then chronic rheumatic diseases and kidney diseases. In male patients malignity is more frequent cause than in female patients (m: 43%; f: 36%). Anaemia gravis and anaemia perniciosa make 15% of all anaemias and are more frequent in women (78%). Anaemia was detected accidentally in 40% of all examinees.
Conclusion: Anaemias in older patients are most frequently the consequence of chronic diseases. Anaemias are often detected by accident which makes screening and systematic medical check-ups necessary. They can be the early sign of malign diseases and a road sign towards their discovering.

P-078

Ankle brachial index, tobacco and cardiovascular risk in primary health care

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Aim: The ankle brachial index (ABI) detects peripheral arterial disease (PAD) and predicts vascular events. We estimated the prevalence of a low ABI and to investigate the relationship of smoking to PAD.
Method: descriptive cross sectional study in Primary care.407 men, consecutive sampling, 50–65 years old (January 2007 August 2008),Tenerife.
Variables: age, PAD (ABI <0.9), tabaccism, Framingham cardiovascular risk (CVR).
Statistics: frequencies, means, standard deviation (SD).Chi2, independent Student's-t. Multivariable logistic regression analyses.
Results: mean age 56.8 ± 4.7, (50%: 50–56 and 49,9%: 57–65 years old), meanABI: 1.07 ± 0.2, mean CVR: 16,3 ± 7,4. With CVR >= 21: 32.7% (n = 133) (confidence interval [CI] 95%: 31.2–34.2%) and 25.1% (n = 102) (CI 95%: 24,1–26.1%); (53.9%: 50–56; 23.2%: 57–65 years old) smokers. *PADprevalence* was 13.3% (CI 95%: 10.1–16.5%) for the total; 9.9% (CI 95%: 6.51–13.29%), for those without CVR >= 21 (n = 274; 67.3%). CVR >= 21 was significantly associated with age (P = 0.001; 28.6%: 50–56 vs 71.4%: 57–65 years old) and tabaccism (46.1%vs 28.2%; P = 0.001).
PAD was associated with: CVR >= 21 (20.3% vs 9.9%; P = 0.004); age (33.3%: 50–56 vs 66.7%: 57–65 years old P = 0.030). A *statistically significant* relationship was found between ABI<0,9 and tobacco in both: the total sample (18.6% vs 11.5%; P = 0.013; ABI: 1.02 to 1.09; P = 0.002) and subgroup without CVR >= 21 (ABI: 1.03 to 1.10; P = 0.027). 245 participants without: CVR >=21, hypertension, hypercholesterolemia, diabetes. Here 9.8% (CI95%: 6.4–13.2) showed PAD and 21.2% tabaccism. In this case there was a statistically significant relationship between ABI <0.9 and smoking (ABI: 1.03 to 1.11; P = 0.016). In logistic regression analyses: age (odds-ratio [OR]: 1.93; 95% CI: 1.023–3.67; P = 0.049); CVR >= 21 (OR: 1.9; 95% CI: 1.06–3.57; P = 0.032) and smoking (OR: 1.86; 95% CI: 1, 004–3, 46; P = 0.049), were strongly associated with PAD.
Conclusion: high prevalence of PAD and tabaccism. Smoking in itself is associated with PAD, and doubles the risk. The ABI could be a routine tool in primary care and be useful in tobacco control programmes.

P-079

Design and validation of the Daily Activities Dependent on Vision (DADV) scale to assess the functional impact of visual impairment in the elderly

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Aim(s) and purpose: To design and validate a Daily Activities Dependent on Vision (DADV) scale that will evaluate the functional repercussions of visual impairment in elderly people.
Design and Methods: Cross sectional, observational study, in a population aged over 65 years, to determine the reliability and validity of a questionnaire administered through a personal interview. A total of 1,387 subjects were selected by simple random sampling. The scale, jointly developed by the investigators, comprises 9 questions with three response options. An analysis of the intra- and inter-observer reliability was performed and the construct validity and the convergent validity with the VF14 questionnaire were determined. The DADV scores of subjects with different degrees of visual acuity were also compared.
Results: The intraclass correlation coefficient (ICC) of the intra-observer reliability analysis was 0.883 and that of the inter-observer reliability analysis was 0.900. Factorial analysis demonstrated that one single factor explained 63.2% of the total variance. The scale showed a high degree of convergent validity (ICC: 0.857) with the VF-14 questionnaire and a high internal coherence (Cronbach's alpha: 0.918). The best visual acuity of each participant showed a weak to moderate, statistically significant, correlation with the DADV score ($r = 0.366$; $p < 0.001$). The number of patients who had some difficulty in performing any of the activities in the DADV was 223 (19.2%; 95% CI: 16.9-21.5).
Conclusions: The DADV scale showed a high correlation with the VF-14 questionnaire and a weak correlation with visual acuity. The results indicate that the scale has acceptable reliability and is valid to evaluate visual function and to determine the effect that visual impairment has on daily activities.

P-080

Control of hypertension in family medicine

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Aim and purpose: Health promotion, disease prevention and the management of chronic diseases are the main goals in family medicine practice. Aim of this study was to assess the quality of hypertension care provided by family medicine team at Family Medicine Teaching Centre Tuzla (FMTC) through a medical audit.
Design and Methods: This retrospective analysis included 705 medical records of patients with hypertension treated by family medicine team at FMTC Tuzla. Audit record form contained questions on sex, age, blood pressure level, annual examinations of blood pressure, body mass index (BMI), lipid profile, creatinine and urinalysis, smoking habits, patient education and prescribed antihypertensive drugs.
Results: Medical records of 705 patients with hypertension were analyzed: 247 men (35.04%) and 458 women (64.96%). Significantly more women had hypertension than men (P <0.0001). Family medicine team showed poor compliance with established criteria for hypertension control and monitoring. Control of high blood pressure was achieved in only 245 hypertensive patients (34,75%). Annual monitoring of blood pressure was presented in 528 patients (74.89%), while monitoring of lipid profile was very low. Only 284 hypertensive patients (40.28%) had total cholesterol level in their medical records, 13 patients (1.84%) had HDL-C level, 7 patients (0.99%) had LDL-C level, while 186 patients (26.38%) had triglyceride level in their medical records. BMI was recorded in 390 patients (55.32%), smoking status in 298 patients (42.27%), urinalysis in 244 patients (34.61%) and creatinine level in only 139 patients (19.71%). Only 16 patients (2.27%) had education by nurses. Majority of patients took >= 2 antihypertensive drugs.
Conclusion: Results of this study showed a high prevalence of deficiencies in the quality of hypertension care in family medicine that indicates more effective intervention in primary health care in order to reduce cardiovascular morbidity and mortality.

P-081

Can we improve secondary preventive treatment for coronary heart disease?

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Aim and purpose: Secondary preventive therapy is known to reduce cardiovascular morbidity and mortality. We evaluated secondary preventive treatment for coronary heart disease (CHD) and effect of family medicine team led on improvement of prophylactic therapy use for CHD.
Design and Methods: Study was conducted in Family Medicine Teaching Centre Tuzla and included 98 randomly selected patients (52 men and 46 women), aged 40–80 years, with established diagnosis of CHD. All participants were randomly divided in two groups: experimental group which received family medicine team intervention on using prophylactic therapy (50 participants) and control group which received usual care (48 participants). Study evaluated use of prophylactic therapy: aspirin, beta-blockers, ACE inhibitors and statins. After six months follow up of intervention, use of prophylactic therapy was evaluated again.
Results: Results showed that secondary preventive treatment for CHD in family medicine was inadequate. 76.53% participants took aspirin, 59.18% took beta-blockers, 57.14% took ACE inhibitors, and only 14.28% participants took statins. After six months of intervention proportions of participants who took prophylactic therapy were increased in both groups: 86.73% participants took aspirin, 73.47% took beta-blockers, 61.9% took ACE inhibitors, and 27.55% participants took statins. Intervention resulted with significant improvements in taking prophylactic therapy in experimental group: aspirin (P = 0.04), beta-blockers (P = 0.03), and statins (P = 0.005). There were no significant improvements in use of prophylactic therapy in control group.
Conclusion: Results of this study showed that evidence-based guidelines for the drug treatment of coronary heart disease are not adequately put into family practice in Bosnia and Herzegovina. There is probably a potential for improved drug prescribing in patients with CHD in order to reduce risk for recurrent coronary events.

P-082

Assessment of overweight in school students in rural Northern Greece

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Aim: To estimate the problem of obesity/overweight in schoolchildren.
Design and methods: During a screening exam of the students of the first 5 grades of primary school (6–11 years of age) in Ormylia Halkidiki height (cm) and weight (kg) was measured and BMI was calculated. Body mass index (BMI) was calculated, and the body mass index-for-age percentiles were estimated according to the 2000 National Growth Charts for Greece. As overweight we estimated all children over the 85th percentile. The results were analyzed using x2 and T-student tests.
Results: A total of 93 students (mean age: 9.55 years) were examined. 58.02% of the students were male and 41.9% female and 66.6% of greek origin and 33.3% of Albanian origin. The results showed: a) 35.5% of our population was overweight. b) The mean percentile for the male group was the 69th and the 62nd for the female group (p = 0.26). c) 40,7% of the male and 28.2% of the female population were found to be overweight (p = 0.152). d) Two thirds of the sample(66.7%)were of Greek and one third of Albanian origin (economic immigrants). 43.5% of the students of Greek origin were overweight and 19.4% of the students of Albanian origin. The relationship is statistically important (p = 0.018), e) The mean percentile for the students of Greek origin was the 70.38th, and the 58.93th for the students of Albanian origin-there is a trend for statistical significance (p = 0.055).
Conclusion: Childhood obesity is an identifiable problem in all social groups. As both education and health promotion are an integral part of the role of the general practice physician, an active intervention in the local community (lectures/ intervention for healthier food choices in the cantina) can promote better health.

P-083

Multiple modifiable risk factors for ischemic stroke in elderly

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Objectives: Stroke in older people will be more common in the next decades due to an increased survival of the world population. The purpose of our study was to examine the prevalence and distribution patterns of the risk factors in elderly (>=78 years) who suffered an ischemic stroke.
Participants: We conducted a case- control study in 125 ischemic stroke patients, hospitalised in different facilities in Athens or in Crete. The study protocol included: clinical and neurological evaluation, routine blood tests, ECG, Doppler, brain CT or MRI and echocardiography. Vascular risk factors were recorded. Stroke severity was evaluated with the NIHSS, outcome by modified Rankin scale, (disablement was definied mRS 3-6).
Results: Multiple, three or more, modifiable risk factors were found in 80% of elderly patients. The logistic regression analysis showed that the combination of hypertension, cardiac diseases and diabetes mellitus or hypertension, cardiac diseases and obesity are significantly associated with an ischemic stroke. Atrial fibrillation and heart diseases were the risk factors differentiating most markedly old and younger patients. 46 patients presented with a disabling stroke – RS>3 (23 had already the second episode of stroke) and 35,7% died within the first month.
Conclusions: The study reveals a high prevalence of multiple modifiable risk factors in elderly with ischemic stroke. Atrial fibrillation and heart diseases differentiated most markedly old and younger patients. The presence of multiple risk factors is one of the reasons for further medical problems and early mortality in the elderly.

P-084

Diabetes mellitus: risk factors for stroke

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Material and methods: 250 stroke patients were evaluated during two years period. Among this patients 149 were women and 101 men at the age range of 45–85 years. 25 stroke patients suffered from diabetes type I, 61 stroke patients suffered from diabetes type II. Classical neurological examination and neuroimaging (CT, MRI scans) were used to establish the diagnosis.
Results: We observed combination of diabetes and hypertension in 102 cases, atrial fibrillation and diabetes in 43 cases. 231 of patients had ischemic stroke and 19 hemorrhagic. In patients who suffered from diabetes type I lacunar ischemic damages in brain or transient ischemic attack were observed, while patients who had diabetes type II developed stroke.
Conclusion: our investigation indicates that regular control and treatment of diabetes significantly decreases risk of development of stoke. Patients with diabetes type II are more likely to develop stroke.

P-085

Asthenia in teenagers – case study

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Justification/Relevance: The medical consultation in family practice due to asthenia is as common as unspecific. Although in several cases is connected with benign transitory situations, sometimes it can be the only alert symptom of a more serious pathology.
Case Abstract: A 17 year old teenager, without relevant background, resorts to the family practioner with complains of asthenia and nauseas that evolved in a month motivating the request for a hemogram. By presenting severe macrocytic anemia with a mild leucopenia and thrombocytopenia he is sent to theemergency service and admitted in the hematologydepartment for study. The bone marrow aspirate analysis has shown megaloblastic changes and ineffective erythropoiesis being vitamin B12 non doseable. The high digestive endoscopy was compatible with gastric immune type atrophy changes with presence of anti intrinsic factor antibodies and antiparietal cell antibodies. He is now being followed in the gastroenterology consultation with a diagnosis of pernicious anemia and medicated with cyanocobalamin and folic acid.
Conclusion: This study shows how vague can the symptomatology of an auto imune illness be and alerts us to the special follow-up this kind of patient must have due to the risk raised of gastric neoplasia, the association with other imunitary illnesses and the need for family study.

P-086

Depression in the elderly: prevalence and associated factors in primary care

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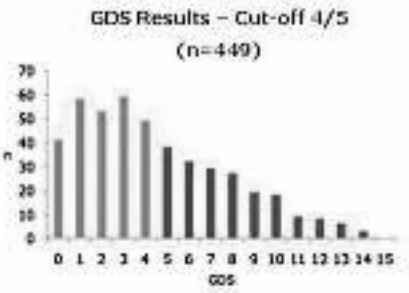
Introduction: Depression is a disabling and often under-diagnosed disease. International studies report a prevalence of depression in the elderly between 9.3% and 23.8%. To date there are no published studies on depression in the elderly in the Portuguese Primary Health Care.
Objectives: To determine the prevalence of depression and associated socio-demographic factors.
Methods: A cross-sectional study was conducted between May and September of 2008, in 590 individuals randomly selected from the list of people over age 65 registered at the Primary Care Centers of the authors.
The short version of the Geriatric Depression Scale of Yesavage was used to evaluate the presence of depression, using a score greater than 4 to diagnose depression. The data were collected in interviews, using a questionnaire that contained the Yesavage depression scale and socio-demographic information. Analysis of the data was done with SPSS v15 software.
Results: The study sample included 449 patients (response rate: 76.1%). No differences were found between respondents and non-respondents regarding gender and age. The prevalence of depression was 42.1% (CI 95%, 37.5–46.7). This was significantly higher in women, individuals with low education, and those unmarried. After regression analysis only the association between depression and female gender remained significant. (OR = 3.42; 95% CI, 2.12–5.38).
Discussion: The prevalence of depression on this study is higher than that found in other studies. This may be due to unique characteristics of the Portuguese population. The association between depression and women is similar to that found in the literature.
Conclusion: We found a high prevalence of depression in the elderly in this study. It is important to conduct more studies in Portugal to confirm the prevalence of depression in the elderly and to clarify the characteristics of the population at risk.



Multivariate Analysis

Table Multiple logistic regression for associations with depression

Variable	p	Odds Ratio	95% Confidence Interval
Sex			
Male		1	
Female	<0.01	3.4	2.10–5.30
Education	0.11	0.85	0.69 – 1.01
Marital status			
Married/ coupled		1	
Divorced /Separated	0.07	0.81	0.21 – 1.79
Single	0.08	2.77	0.82 – 9.21
Widowed	0.98	1.01	0.82 – 1.84

P-087

Angiotension-converting enzyme in treatment of hypertension in patients with chronic kidney disease

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Aims and purpose: Hypertension is one of the most frequent causes of chronic renal disease. Many experimental and clinical studies has shown that blockade of angiotensin can postpone the end stage of renal failure and also prevent chronic renal disease in risk group. The aim was to access the frequency of the occurrence of renal disease markers in two groups of patients involved in research study.
Design and methods: Prospective research anticipated 158 patients with hypertension and chronic renal insufficiency, chosen by random. The research focused on hypertensive patients not treated with angiotensin-converting enzyme (ACE) – first group, and second group – hypertensive patients treated with ACE. As only 16 patients involved in research study, conducted in Primary Health Center "Zvezdara", weren't treated with ACE, the second group of 16 patients was randomly selected from the remaining patients involved in study. There was no difference in age, sex, arterial pressure values and duration of hypertension and chronic renal insufficiency between two groups.
Results: HTE means the value of serum creatinin level in the group of patients not treated with ACE was 81 ± 2 µmol/l and that was significantly higher than in patients treated with ACE whose serum creatinine level was 74 ± 6 µmol/l. In patients not treated with ACE glomerular filtration rate (GFR) calculated with MDRD formula, was 73 ± 16 ml/min 1.73 m^2. In group of patients treated with ACE, GFR was 84 ±10 ml/min 1.73 m^2 ($p < 0.05$). We compared two groups of 16 patients; the group not treated with ACE had significantly higher serum creatinin level and lower GFR in comparison with group treated with ACE.
Conclusion: Use of ACE on patients with hypertension and chronic renal insufficiency had better controlled GFR then patients treated with other antihypertensive drugs.

P-088

Work-related stress factors and prevention

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Work-related stress is conditioned by, and contributes to, major environmental, economic and health problems. It affects at least 40 million workers in the 15 EU Member States and costs at least 20 billion Euros annually. Work-related stress is the result of a conflict between the role and the needs of an individual employee and the demands of the workplace. Physiologically we are programmed to deal with threatening situations by producing more adrenaline which increases heart-rate and puts our bodies into a short term state of arousal. The effect of excessive pressure is to keep the body constantly in such a state, which leads to the number of harmful signs and symptoms. The factors of stress are various and include the nature of the task, the work organization, the quality of the work relationships, physical environment and many others. This research aims at investigating different factors of work related stress and proposes some prevention methods. We have had twelve subjects of both genders working in an international law firm. They were given a nineteen-item questionnaire concerning their daily habits and work behaviour. Following our hypotheses we have concluded that men feel more negative consequences of stress at work than women and that the time we spend going to work daily does not significantly affect the level of stress. Finally, our results show that concentration and effectiveness do not diminish in function of time spent at work. However, the last result is probably due to the small sample of people working more than 40 hours per week. It must be emphasised that there is no universal solution in terms of prevention. Therefore, we can rely on occupational health doctors, ergonomists and ergo-psychologists but we can also use our own individual defending mechanisms to prevent occupational stress.

P-089

Hypertension and smoking as risk factors in Gypsy population

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Hypertension and Smoking as Risk Factors in Gypsy Population Over 10.000 Gypsies live in Leskovac and the vicinity and due to their way of life, bad socioeconomic conditions, bad life habits and different culture, smoking and hypertension is mass phenomenon in them. The risk from cardiovascular diseases with smokers is approximately twice higher than with non-smokers and it is especially harmful if united with hypertension, due to synergic effect.
Aim of work: to establish the extent to what arterial hypertension and smoking, being the leading factors, are present with Gypsy population in the region of the Leskovac municipality.
Method of work: Analysis and processing of data taken from questionnaires.
Results: The survey included 155 Gypsies (107 women and 48 men) aged 20–60 and older. What upsets most is that the data showed that 69% of the surveyed are smokers, 70% of which are women and 66.6% men. The greatest number of smokers is aged from 40 to 60. 51% smoke 20 cigarettes a day and 45.7% more than 20. What sets the Gypsy population apart is that they begin to smoke very early, up to the age of 10 (74.7% of the surveyed). 46.4% suffer from hypertension, 58.5% of men and 44.1% of women. What is interesting is that 100% of the surveyed said that they use a pharmacological therapy during which only 33.3% had tension to 140/*90 mm Hg. What is extremely bad is that great number of the surveyed has hypertension and smoke, even 45.7% of women and 25% of men.
Conclusion: It is obvious that hypertension and smoking are highly present with Gypsy population, it occurs very early and very often together and this is the reason why work on health and education, at every level of health care, would surely decrease the number of the sick and those dying from cardio-vascular diseases.

P-090

Obesity – risk factor for doctors' health

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Introduction: Obesity is frequent risk factor at doctors because of sitting way of life.
Aim: To indentify existence of obesity at doctors and influence that it has on other risk factors. We set up the hypothesis Ho – that obesity has not influence to other risk factors, and working hypothesis Ha – that obesity influence on other risk factors and intensifies them.
Methods: Examination was at November, 2008. Yea, in Krusevac, Serbia, from primary health care. All doctors completed questionnaire about own health. We made classification into groups by BMI: normal fed, before obese, obese. We statistical processed all data, following the other risk factors.
Results: The sample had 50 doctors: 7 male and 43 female, the average years 45.8. At normal fed, SP was 118.5 mm Hg; at the persons before obese SP was 131.42 mmHg, and at obese SP was 132 mm Hg (t = 2.77 p = 0.01). This was highly statistically significant. Statistically significant DP was higher at obese doctors – 80.7 mmHg compared with 74 mm Hg at normal fed (t = 2.06; p = 0.05). BMI had statistically significant increase (t = 5.73 p–0.001) from 22.11 kg/m^2 at normal fed, to 26.14 kg/m^2 at before obese persons, and to 33.22 kg/m^2 at obese (t = 7.82 p = 0.001). Average score for Diabetes mellitus was 4.62 at normal fed, 8.85 for before obese persons, and it was statistically significant increase (t = 7.82 p = 0.001), and for obese group it was 10.55. Physical activity was significantly reduced with obesity, (?2 = 6.082 p = 0.05).
Conclusion: Obesity had influence on increase of blood pressure, CVD, score for DM, and decrease of physical activity. We dismissed Ho and accepted Ha hypothesis that obesity influence on the other risk factors and intensifies them. KEY WORDS: Doctors, obesity, influence.

P-091

Ankle-brachial index in elderly diabetic patients

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The prevalence of peripheral arterial disease increases with age, may be associated with intermittent claudication and coronary artery disease. Modificable risk factors should be theated like cigarrettes smoking, diabetes, hypertension and dislipemias. The ankle/brachial index is used to predict the severity of peripheral disease.
Aim: To know the prevalence of periferal arterial disease in our elderly diabetic patients using the ankle/brachial index.
Material and methods: 55 elder than 65 years diagnosed of diabetes has been studied from September 2008 to January 2009 in our primary health center.
Age, sex, hypertension, dislipemia, obesity, cardial diasease, cronical obstructive pulmonary disease (COPD), venous disease, glicosilated hemoglobin (HbA1C) has been registered. Sensibility on both feet has been studied using microfilament. All this patients were studied a sensitivity feet test and the ankle-brachial index, results lower 0.9 was considered with peripheral arterial disease, and upper than 1.3 calcificated artery. Normal results between 0.9–1.3.
Results: Middle age 77.8, sex: men 34.6%, female 65.4%, hypertension diagnosed 88,5%, dislipemia 55.8%, COPD 25%, venouss patology 69.2%, obesity 53.8%, cardiological disease 53.8%. Midle HbA1C 6.58. Sensitivity alteraded right foot: 68.8%, sensitivity alteraded left foot: 75% Ankle-brachial index alterated in right members 77.5%, ankle-brachial index alterated in left members 80%.
Conclusions: The ankle-brachial index could become routine screening among elderly patients with diabetes mellitus to peripheral arterial disease diagnose. Ankle-brachial index detects peripheral arterial disease before detecting sensibility alteraded on inferior members.

P-092

Secondary prevention in patients with ischemic heart in a Mediterranean population

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Justification: Cardiovascular diseases constitute the leading cause of death in developed countries. Are the main cause of death in Spain is responsible for more than 40% of all deaths. Patients with ischemic heart disease (IHD) have a risk of 5 to 7 times higher in developing a new episode. Therefore, secondary prevention and treatment of these patients clearly decreases the risk of new episodes.
Objective: Assess whether patients with IHD were discharged from the hospital with the recommended treatment guidelines for treatment. Examines the record made in the clinical care of the primary pathology and risk factors prior.
Material and methods: Descriptive, longitudinal retrospective of patients in a mediterranea population (15,000 inhabitants) who had suffered an acute myocardial infarction (AMI) from January 1 to December 31, 2008.The information available in the clinical hospital and primary care. The data were analyzed using SPSS 14 statistical program.
Results: Antiplatelet 88.6% (54.1% AAS, 18.5% clopidogrel, 10.8% both). Anticoagulants 11.4%. Betablockers 54.3%. IECAS 62.9%. Not prescribed ARA-II. Statins 65.7%. 73% of patients had medical records in primary care. In 63% cardiovascular event records. At 100% are reported risk factors of first order (hypertension, diabetes and dyslipidemia). Smoking 74.7% and 21.6% peripheral arteriopathy.
Conclusions: Drug therapy at discharge is appropriate regarding the prescription of antiplatelet, and statin ACEI. The prescription of betablockers is clearly improved. There is a percentage of patients without clinical history in Primary Care. No cardiac events were recorded in all cases, which hinders the proper prevention and treatment of the patient. Correctly valued the traditional risk factors (hypertension, diabetes and dyslipidemia), giving less attention to smoking and peripheral arteriopathy.

P-093

Microlabuminuria decrease induced by weight reduction program

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Aims(s) and purpose: Microalbuminuria (MA) is investigated by general practitioners as a marker of complications of diabetes and hypertension and also as an early marker of atherosclerotic risk. Very controversial is still the relation of MA to obesity. Some authors have found MA risk in obesity comparable to hypertension and diabetes, some have found no risk in obesity.
Design and Methods: We have investigated 58 obese women during a period of 12 months. Repeated measurement Quik Read U-ALB Orion Diagnostica was used. Basal mean weight 85.6 kg, BMI 31.7 kg/m^2, waist circumference 127 cm, impedance 37.7%, sBP 128.1 mm Hg, dBP 72.8 mm Hg, glucose 6.7 mmol/l, MA 17.6 mg/l.
Results: No correlation was found between basic value of MA and other measured parameters including weight and waist circumference. All patients underwent a weight reduction program (mean weight change – 3.1 kg). All patients had education in diet, 5 patients were treated with orlistat, 53 patients were treated by sibutramine. Microalbuminiura change during weight reduction correlated (Spearman correlation) with age (r = –0.31, p-value = 0.01), waist decrease (r = 0.28, p-value = 0.03), weight decrease (r = 0.27, p-value = 0.04). The sample was divided in 4 groups and mean MA change was in the younger group with low weight decrease +2.2%, in younger group with great weight decrease –20.3%, in older grouip with low weight decrease +0.3% and in oldergroup with great weight decrease –27.0%. No correlation of MA decrease with blood pressure changes and blood glucose changes was found.
Conclusions: We have found no significant correlation of microlabuminuria to weight and waist circumference in obese women but weight and waist reduction correlated with microalbuminuria reduction especially in older patients.

P-094

Strategy of risk factors management for the optimization of ischemic heart disease prevention in the family doctor practice

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Conception of risk assessment is considered to be the main mechanism of optimization of management of patients with ischemic heart disease (IHD). Risk management (RM) is a logical continuation of risk assessment and is referred to validate optimal solutions for its elimination or minimization, and also monitoring of exposition and risks. The main principles of RM system of IHD were – Elimination or reduction of influence of factors; – Formation of significant risk groups.
Aim of the work: to create the system of referred questioning and RM for primary and secondary IHD prevention.
Design and Methods: The investigation took place in the Centre of Family Medicine in Kiev, Ukraine. 376 respondents participated in questionnaire: 211 (56.1%) women, 165 (43.9%) men, the mean age was 48.2 years (±5.4). The presence of IHD was assessed by means of complex evaluation of answers to the questionnaire questions. The patients, who had more than 3 positive answers, were referred to the group with high probability of IHD.
Results: 156 (42%) of patients had clinical signs of IHD, only 78 (21%) of them had been previously diagnosed with IHD. 183 patients had 2 or more IHD risk factors. Individual approach, that depended on risk factors of IHD, intercurrent diseases, was applied by physicians for investigations, treatment and monitoring of the condition of patient. The methods of danger identification (DI) were used. DI is the condition of the patient with IHD, when the risk of illness progression is considerably high (more then 70%).

Conclusions: We offer the conception of the integral risk assessment and DI for management optimization of patients with risk factors of IHD, that allow recommending personally-oriented system of prevention. Offered questionnaire is effective for the identification of patients with risk factors of IHD in the family doctor practice.

P-095

Frequency and pharmacological treatment of hypertension in patients with type 2 diabetes mellitus

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Introduction: Hypertension is often found in patients suffering from diabetes mellitus-a (DM), which increases the total cardio-vascular risk of these patients. The right pharmacological treatment, but the non-pharmacological measures too, are necessary for achieving the target values of blood pressure.
Aim: Find frequency and pharmacological treatment of hypertension in patients with Type II DM.
Methods: The study was conducted at Banja Luka Primary Health Center, BiH, in the period from November – December 2008. It consisted of surveying the patients' health files and measuring of participants' blood pressure. The information were collected and recorded in a self-created questionnaire.
Results: The study included 248 patients – 134 (54.03%) males and 114 (45.97%) females, 102 (41.13%) patients were over 65 and 146 (58.87%) patients were under 65. Insulin was administered to 66 (26.61%) patients, and 182 (73.39%) patients were on oral hypoglycaemic drugs. Among the examined patients, 172 (69.35%) had combined Type II DM and hypertension. The hypertension treatment included: ACE inhibitors – 94 (54.65%), Ca-channel blockers – 62 (36.05%), diuretics – 12 (6.97%), beta-blockers – 44 (25.58%), ACE inhibitors + hydrochlorothiazide – 54 (31.39%), others – 32 (18.60%). The most frequently used drug combination is ACE inhibitors + Ca channel blockers. Target values of blood pressure for diabetic patients (RR <130/80 mm Hg) were achieved by 96 (55.81%) patients.
Conclusion/Discussion: Even though the examined patients use pharmacological treatment in accordance with the new guidelines, only one half of them has well regulated hypertension, which indicated to a poor cooperation of the patients in implementation of a non-pharmacological hypertension treatment.

P-096

GP and women with intrahepatic cholestasis of pregnancy

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Aim and purpose: In Finland, intrahepatic cholestasis of pregnancy (ICP) occurs in one percent of pregnancies. When a woman in her last trimester of pregnancy complains of itching on her palms and soles, the GP or the nurse in health centre verifies ICP with laboratory tests. We studied deliveries of mothers with history of ICP and mothers without history, and the newborn children, respectively.
Design and methods: During 1969-1988 in Tampere University Hospital in Finland, we found 687 ICP cases, verified clinically and with laboratory tests. We took two controls for each ICP case, the previous and the following woman in the labour register. We studied mother's age at birth, frequency of induction, Caesarean section frequency, length of ward period, child's weight at birth, Apgar scores and stillbirth.
Results: In ICP cases, we found statistically significant risk to get induction of labour (OR 3.26, CI 2.68–3.97), Caesarean section (OR 1.47, CI 1.12–1.92), to stay in hospital ward for 10 days or more (OR 8.41, CI 6.83–10.36) and also in child's weight at birth less than 2500 g (OR 1.91, CI 1.35–2.72). We found no significant difference concerning Apgar scores, stillbirth or mother's age at birth.
Conclusions: GPs can calm down pregnant women with ICP. With contemporary care conventions, it seems that there is no extra risk during labour to the mother or the child. In future, we will study the health state in further lives of mothers with the history of ICP, and their children.

P-097

Hypovitaminosis D risk factors and young women in Rhône-Alpes area

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It is world-recognised that vitamin D deficiency is a frequent problem. In Rhône Alp area, a study in young veiled female population showed a very high prevalence of hypovitaminosis D. A new study was carried out in winter 2008 with two questions: what is hypovitaminosis D prevalence in this young women population and what are the confusing factors: sunlight exposure, food eating, skin colour, clothes, sport? 200 non veiled women and 100 veiled women had been selected by 15 GP's investigators in Rhône Alpes area, during winter 2008. Data had been extracted from a questionnaire about life quality (SF12), quantity of vitamin D in their food, sunlight time exposure, and vitamin D and PTH dosages. 196 questionnaires were collected with vitamin D and PTH dosages results(61 women wearing concealing clothes and 135 non veiled women). 96% of women (n = 188/196) had a vitamin D dosage under 75 nmol/l. For each threshold of vitamin D level (<52, <30, <10 nmol/l) the covered women were always more deficient than the other women. So concealing clothes can be considered as a major risk factor of hypovitaminosis D with skin colour and no sunshine exposure in summer. Sport inside, poverty, high BMI were also risk factors. Thevitamin D intake, estimated with a questionnaire, was very low among all women, lower than the weekly recommended intake. Thephysical quality of life was lower for women with great vitamin D deficiency, we found no difference on the mental quality of life. General practitioner would be careful with young women status vitamin D which is recognised now as an important vitamin for health. In autumn, a new study with the same pattern has been carried out in order to understand hypovitaminosis D prevalence at the end of summer. Results will be available for Wonca congress.

P-098

Hepatic disease associated to metabolic syndrome in the population of the local authority of Gastouni

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Objective: To determine the prevalence of Hepatic Disease (HD) associated to Metabolic Syndrome among municipality workers.
Method: Analytic cross-sectional study derivated from the local authority of workers cohort study. From 22 apparently healthy. Blood samples were collected and analyzed for hepatic functions, lipid profile and fasting glucose. Arterial tension and abdominal circumference were measured. MS was diagnose according to ATP III and alanine aminotransferase (ALT), aspartate aminotransferase (AST) and albumin <3.0 g/dl.
Results: From 22 participants, 4 (19%) showed elevation of some of the transaminases. The AST was elevated in the 42.9% of the subjects and the ALT in 96.7%, albumin in 1.2%. AST presented a media of 41.6 U/L, ALT of 64.4 U/L, and albumin of 4.1 mg/dl. The 67% were men of 40 years ± 9.3 in average. The 67.8% is between 30 and 50 years. The 50.6% presents over-weight and the 28% obesity. The transaminase elevation was observed in the male group with a relation of 2:1. The workers who presented HD, the 37% of them were diagnosing with MS, the 15.3% with pre-diabetes, 66.3% with hyperglycemia. HDL was reduced in 68.1%, arterial hypertention 47% and abdominal obesity 33.6%.
Conclusions: The prevalence of MS in subjects with HD is high, strongly associated to the presence of obesity. Hypertriglyceridemia and the HDL low levels are the most frequent alterations.

P-099

Does obesity influence the metabolic control of diabetes mellitus?

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Aim and purpose: To determine if obesity influences metabolic control of diabetes mellitus type 2 (DM 2).
Design and methods: A cross- sectional descriptive study was carried out of 145 patients with diabetes mellitus DM2 who were followed both in primary and secondary care, selected by consecutive sampling. Using medical records and interviews, the variables: age, sex, body mass index (BMI) and the following metabolic control variables were studied (last value registered in medical record, valid if it was registered during the last 12 months); glycaemia in plasma (mg/dl), glycosylated haemoglobin (Hb A1) by percentage, plasma creatinine (CP), (mg/dl) and morning urine microalbuminuria (MUM), (mg/dl). BMI was classified in to 3 groups: normal when BMI <27, overweight when BMI: 27–30 and obesity when BMI >30.
Results: Average age was 70, 8 years (OF 10, 1). 56,6% patients were women. 39.3% had normal weight, 24.1% overweight and 36.6% were obese. Plasma glucose average was 145.9, 147.9 and 151.5 mg/dl (p: 0.808) in patients with normal weight, overweight and obesity respectively. The average percentage of HbA1 was 6.6, 6.9 and 6.9% (p: 0.660), respectively. Plasma creatinine was 1.1 mg/dl (p: 0.991) in all categories of BMI studied. Finally, MUM was 16.8, 17.4 and 14.3 mg/dl (p: 0.907) respectively.
Conclusions: Obesity had no influence on the metabolic control variables of the studied sample of patients with DM2.

P-100

Prevalence of high blood pressure in adolescents on rural northwest Peloponnese

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Aim: Recent studies indicate that idiopathic hypertension is not a rare finding among children and adolescents, probably because of the increased incidence that has been observed in childhood obesity lately. Aim of the study was to record the high blood pressure prevalence among the adolescent population of the rural and remote Peloponesse and to determine the risk factors.
Design and methods: We examined 562 students of Middle Schools and High Schools in Klitoria - Simopoulo (age 14,5 SD 0.07, Body Mass Index [BMI] 22,27 SD 0.2 kg/m^2). Blood pressure was measured according to the guidelines of the 4th Report about Diagnosis, Evaluation and Treatment of high arterial blood pressure in children and adolescents.
Results: The prevalence of pre-hypertension and hypertension in the examined population was 38.9 and 24.9 respectively. After a more detailed analysis of our data we were able to establish a positive correlation between Systolic BP (blood pressure) and BMI, age, male sex and a positive family history of obesity. Diastolic BP on the other hand demonstrated a positive correlation to age and male sex.
Conclusions: The prevalence of pre-hypertension and hypertension was found to be extremely high in our population. Increased BMI is a major Risk Factor for the development of hypertension among adolescents. Moreover boys seem to have higher levels of blood pressure than girls independent of age and BMI.

P-101

Efficient control of coexisting risk factors of type 2 diabetic patients in therapy: is it an attainable goal in primary care?

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Background: Risk factors for cardiovascular diseases (CVD) are very common in Primary Care, and the first cause of morbidity and mortality in developed countries. Although guidelines emphasize on their treatment and on identification of patients at high risk due to other coexisting factors, insufficient control of them is observed among the patients attended by GPs.
Aims: to detect the possible coexisting CVD risk factors in diabetes mellitus type 2 on drug treatment, and to verify their efficient control. Study population and methods: GPs of a Health Centre examined 517 adults randomly selected among the patients (58.2% males) aged 61.3 years (sd = 14.66). In the total sample, demographics, medical history, blood pressure and lab analysis were performed.
Results: 160 of the patients were found to be diabetics and 149 were treated. BMI was significantly higher in diabetic patients (Mdn = 30.00) compared to normal individuals (U = 22919.50, p <0.001). 32.2% were smokers and 89.9% suffered from hypertension but only 55.0% of them were controlled efficiently. Hypercholesterolemia was also a common coexisting risk factors (67 diabetics) but only the 49 were under therapy, and only 21 had a good control.
Conclusion: Detecting coexisting CVD risk factors seems to be a challenge for GPs and frequent failures in coping with them may result in hampering the achievement of an efficient disease management.

P-102

Cancer screening tests – knowledge and popularity among patients

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Background: Screening is a strategy used for preliminary detection of a disease in individuals without signs or symptoms of that disease. Unlike usual medical tests, screening is performed in subjects without any clinical presentation of disease. The intention of screening is to early identify disease in a community, and subsequent reduction of mortality and suffering from a disease due to early intervention and management of illness. The most recommended among screening tests are: cytology as a cervical carcinoma screening, mammography as a breast cancer screening and faecal occult blood test as a colon/rectum cancer screening. It is estimated that mammography among women over fifty years could decrease breast cancer mortality rates by about 30%. Faecal occult blood screening tests could reduce colon cancer mortality rates by about 15%.
Aim: Despite the fact that all aforementioned tests are free of charge and country-wide available, their infrequent use due to the lack of interest is still noticed in Polish population. The purpose of our study was to determine the patients' knowledge and their interest of screening tests.
Materials and methods: Our primary sources of data were questionnaires, which include questions about screening test definition, popularity and regularity of taking, patients' opinion about the need and effectiveness of that tests. The questionnaires were distributed among primary health care patients, 110 filled questionnaires were collected. The gathered data were evaluated and analyzed.
Results: Results will be presented at the conference, as the study is still being performed.
Expected conclusion: Knowledge of screening methods among patients is too low.

P-103

Trends in lung cancer mortality in Portugal (1955–2005)

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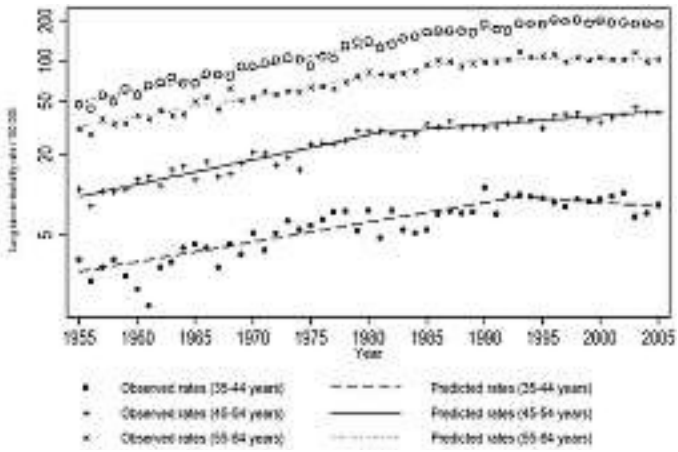
Introduction: The smoking prevalence has been decreasing in Western Europe, as well as lung cancer mortality rates in most of its countries. However, until 1998 there was no decline in lung cancer mortality in Portugal.
Objective: To describe the lung cancer mortality rate secular trends in Portugal.
Methods: The lung cancer mortality rates (CID10: C33-34) in Portugal, between 1955 and 2005, by sex and 5-year age group were obtained through the World Health Organization and the National Statistics Institute. Standardized mortality rates (direct method, world population) were calculated for the age groups 35-74/35-44/45-54/55-64/65-74 years. Joinpoint regression was used to calculate the mortality annual percentual change (APC) and to identify eventual inflection points.
Results: Between 1955 and 2005 we observed a stabilization in the lung cancer mortality in men aged 35–74 years, varying 3,77%/year (95% confidence interval [95%CI]: 3.53-4.01) in 1955–1986 and –0.15%/year (95%CI: –0.99–0.69) in 1996–2005 (fig. 1). We observed negative APC point estimates (non significantly less than zero) in the most recent tendencies except for the 45–54 group, where we only noted an APC deceleration since 1981. Among women aged 35–74 years, the mortality increased 1.60%/year (95% IC: 1.40–1.77) between 1955 and 2005.
Conclusion: In the last two decades we observed a lung cancer mortality stabilization among men, whereas among women the mortality increased continuously. These results place Portugal in the end of the third stage of the tobacco epidemics.

Variation of lung cancer mortality rate, men, by age class (age-standardised rates, direct method, world population, semi-logaritmic scale)



P-104

Use of health protection at adolescents

Radovanovic M. (Belgrade), Vilotic J. (Belgrade)

Aim: Estimate of adaptability of health service to adolescents, through registration of the level of information about health, self-estimate of health, attitude about health and use of health services.
Methods: Cross-sectional study of representative sample of adolescents age 10–19 (n = 1500). Research instrument: anonymous epidemiological questionnaire. Statistic data processing: descriptive, analytical statistics, factorial and correlation analysis.
Results: Almost 4/5 of the tested persons acquires information about health from parents, 10% did not ask for information from anyone. Younger tested more often consulted parents and twice less made no contact with anyone (p <0.01). Girls got information more often from mothers (39% to 25%), three times less from fathers (p <0.01). Every tenth tested followed health subject through media regularly, statistically significantly more girls. Even 83% of the tested evaluated

their health as good/relatively good; the older ones twice as often as average (x2 = 14,3 p <0.01). Majority of tested had desirable attitudes about health- 4/5 thought that they are responsible for their health, statistically significant more of older adolescents. In the case of health problem existence 51% of the tested contacted school doctor, more older adolescents (p <0.01) and girls. Private doctor contacted 10% adolescents, while *someone else* was contacted by 34% younger and 22% older adolescents (p <0.01). Higher interest towards health was in statistically significant negative correlation with undesirable attitudes towards alcohol, drugs and sport, and in positive correlation with desirable attitude about sport.
Conclusion: Adolescents in Belgrade had accessible health protection. Lager use the health services by order adolescents is explained by their larger need for preventive services.

P-105

Results of treatment in obesity "intragastric ballon" from Corporacion Dermoestetica – Spain

Montalva Barra J.C. (Spain), Esparza Fernandez P. (Spain), Gomez C. (Spain)

Introduction: Treatment with intragastric balloon (BIG) of morbid obesity grade I listed and is followed in our clinic for over 4 years. We had tried to make a detailed study in the last 2 years about 1300 BIG posts in our clinic.
Methods: Intragastric balloons in 1300 patients with BMI indices between 28 and 40 kg/m^2 with risk factors and did not have control of their weight with diet alone
Results: there has been a weight control in 80% of our patients with satiety up to 80% in women with very low levels of intolerance (12%) and achieving changes in dietary habits of 75% in women between 25–50 years and with changes in BMI next 10 points at the end of 6 months (after removal of BIG)
Conclusion: In morbid obesity I placing of BIG and changing habits can improve the metabolism and obesity in patients with greater reliability than other methods anti-obesity.

P-106

Prevalence of pathological ankle-brachial index in moderate risk population calculated according to score in primary care

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Aims: Principal aim: To evaluate the prevalence of pathological ankle-brachial index (ABI) (<0,9 or > 1,4) in 50-70 years population with moderate risk according to SCORE. Secondary aims:To study socio-demographic variables and cardiovascular risk factors distribution and their relationship with pathological ABI.
Methods: A cross-sectional study was conducted in Chopera Health Center (September 2008 – January 2009) and included patients with moderate risk according to SCORE. Exclusion criteria: coronary, cerebro-vascular, peripheral arterial or renal diseases or suspected; diabetes; not controlled neoplasm and thyroid disease; subclinical end organ damage. Sample size calculated was 235 subjects according to consecutive sampling technique. Dependent variable: ABI, assesed by bidirectional Doppler test and calculated as the difference of major pressures of both lower limbs and the major of the brachial. Independent Variables: age, gender, level of studies, labour and economic situation, Body Mass Index (BMI), waist perimeter, exercise, high blood pressure, dyslipidemia, smoking and biochemical blood sample data. Organization of workshop: First visit: recollect data from anamnesis and SCORE calculation. Second visit: telephonic appointment and ABI assesment.
Results: Number of patients 67, mean aged 63, 18 years (SD 4,22). 51 women (76.1%). Socio-economic characteristics: no studies 7.5%; basic 68.7%; superior: 7.5%. Clinical variables: Hypertension: 40.3%; dyslidemia 43.3%; not smoking 91%. Physcical exercise: sedentary 44.8%; intense weekly 25.4%. Prevalence of pathological ABI 20.9%. No differences for gender or age were found. According to BMI differences between pathological and no patological ABIs were found (27.5 and 29.5, p = 0.04).
Conclusions: ABI is a useful test in population of moderate risk according to SCORE. It would force in 1 of every 5 of these subjects to intensify the therapeutic measures and the search of arteriosclerosis in other vascular territories.

P-107

Preventive activities in the young adolescents of 14 years

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Objective: Describe the logging level of preventive activities among adolescents in the clinical history of primary care.
Methods: This is a descriptive cross-sectional study with a population of 14 years with clinical history of preventive measures visited in two consultations in primary care of two different health centers selected by systematic random sampling. We was a revision of preventive activities in 150 medical histories and studied the parameters of blood pressure, alcohol, weight control, anti-smoking and anti-alcohol advice, vaccines, drug use, prevention of accidents and sexual advice (prevention of pregnancy and the transmission of sexual diseases).
Results: Reviewed 150 stories (56% women and 44% men). The percentages of taking blood pressure, weight, vaccination, consumption snuff and drugs are respectively 61%, 61%, 91%, 43% and 43%. In only 10% of all medical histories were revised the parameters of accident prevention and sexual advice.
Conclusions: Detection levels are low for the addict habits, especially in drugs use, accident prevention and sexual advice. It is necessary that the family doctor is on alert in case of these age in which they must begin to acquire these habits.

P-108

Lifestyle modification and cardiovascular risk factors in primary attention

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Controversy dates about the fibrinogen levels and the relationship with cholesterol as cardiovascular risk factor (CVRF) are present in bibliography. The aim of this study was to determine the effect of two lifestyle modifications on fibrinogen levels in healthy subjects with hyperfibrinogenemia (cholesterol levels in a normal range) and the correlation between these two factors.
Study Design: Multicenter clinical trial in two cohorts with controlled assignation of intervention. One group received intensive intervention (I) proposing changes in life style (stop smoking, hypocaloric diet and physical exercise). Control group (C) subjected to normal health care. Eligible patients were: cholesterol <250 mg/dl and fibrinogen >300 mg/dl without cardiovascular events. Patients were monitored for two years (blood pressure, CMI, etc...) and analytical parameters (fibrinogen, cholesterol total, HDL, LDL, TG, and glucose), were evaluated at baseline, 8, 16 and 24 month.
Results: 211patients were assigned at C group and 196 to I group. No differences were detected between groups at any of studied parameters. Fibrinogen levels were 360 mg/ml in C and 361 mg/ml in I when patients were randomized. At eight month fibrinogen levels were 346 in C and 334 (p <0.03) in I, at 16 were 337 in C and 318 in I (p <0.01), and in month 24 were 334 in C and 303 in I (p <0.001). Cholesterol was significantly diminished only at 24 month in group I (218 to 210) (p <0.05). We do not found any statistical correlation between fibrinogen and cholesterol at any of the times studied.
Conclusion: Fibrinogen and cholesterol are independent CVRF. Moreover, lifestyle modification induced a significant decrease of fibrinogen levels at three studied times and might play a role in reducing future cardiovascular events in healthy subjects with hyperfibrinogenemia.

P-109

Significance of cardiovascular risk factors in patients with heart failure in primary care

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The objective of this study was to investigate the presence and control of cardiovascular risk factors in patients with heart failure (HF).
Methods: 52 family physicians registered all patients with diagnosis of HF during regular office visits. All physicians performed detailed physical examinations and completed the special designed questionnaire. Blood samples were taken for lipid profile and glucose level. We used data from paper medical record about cardiovascular risk factors and their treatment.
Results: We studied 938 patients (447 males and 491 females). Mean age 62.3 ± 10.4 years. 63.2% of patients had arterial hypertension, 36.5% had BMI ≥30 kg/m^2, 21.4% had diabetes, and 49.6% had hyperlipidemia. 72.6% of patients had at least two important modifiable risk factors for cardiovascular disease (hypertension, hyperlipidemia, smoking, obesity, diabetes); 32.6% of patients had all three risk factors. 24.5% of patients had the target blood pressure, 32.4% of patients had the target values of total cholesterol, and

82.1% of patients were non-smokers. Obese patients were less efficient in achieving therapeutic targets. Only 86 (9.2%) of patients were non-smokers and had optimal control of blood pressure and cholesterol level. The pharmacotherapy of risk factors in HF by family doctors was found in some instances not to conform to recommended guidelines.
Conclusions: It has been shown that modifiable cardiovascular risk factors in patients with HF were poorly controlled. Controlling hypertension, diabetes mellitus, body weight, lipid profiles and also educating people not to smoke, will help to reduce the cardiovascular risks and prevent the progression of HF.

P-110

Program of prevention and control of the tobacco addiction of integral the medical center of the university of the Andes, Merida, Venezuela. 2007. "By a free university of smoke"

Breyda A. (Merida-Venezuela)

Introduction: In Venezuela, a survey realised in our country, for year 1996 established that 16,000 deaths to the year were attributable to tobacco addiction, approximately 4.000.000 adults were consuming of cigarettes, 16% of the sent to school adolescents (of 6° to 9° degree) were consuming of tobacco products. Taking into account previously exhibited and considering tobacco addiction like a problem of public health, by such reason a group for professionals and technicians of the area of the health of the Merida State, we have proposed the creation of a foundation of antitabaquica fight in the region, having raised that must be an organization who structures like strategy a program of prevention and control of tobacco addiction.
General objective: Prevailed to reduce it of tobacco addiction in the Merideña population.
Methodology: Plan De Acción: For period 2004-2008. The study was of a field-descriptive-prospective type. To whom it was applied the smoking prevention program via participating.
Results: Poster contest in schools of the Liberating Municipality. Accomplishment of Great Parade with the participation of all the schools of the District, Institutions related to prevention d the health, Bands allusive Show and Comparsas to the 31 of May World-wide Day of Not smoking. Factories to implement MANUAL OF CESSATION TABÁQUICA to the doctors of different the ambulatory ones from the state, with the contribution of gratuitous medecines. (July 2007) Factories to implement the Manual FREE SCHOOLS OF TOBACCO SMOKE in all the schools of the state (octubre.2007). Campaigns through different mass media.
Conclusions: The dependency of the cigarette in a serious problem of public health. The majority of the smokers wants to leave them. When one is dependency to the cigarette, any passage towards the abandonment is a step nearer the success.

P-111

Breast DCIS: diagnostic and therapeutic approach

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Aims and Purpose: Breast Ductal Carcinoma in Situ (DCIS) represents an excessive proliferation of the epithelial cells limited within the lumen (basal membrane). The purpose of this study was the estimation of the DCIS frequency in the general population and the evaluation of screening programs regarding early diagnosis as well as the frequency in a General hospital admissions.
Design and Methods: The diagnosis and treatment of breast DCIS includes preoperational mammogram diagnosis (core biopsy or FNA), tumor localization and surgical excision of more than 1 cm surgical margins. Our study was based on a series of 289 patients of our hospital's 2nd surgical department, who underwent breast surgical biopsy and then treated according to the findings and special characteristics.
Results: Twenty one of our patients (7%) were diagnosed with pure DCIS according to the histopathologic examination. Clinically, DCIS of the breast was palpable in less than 20% of our patients and in 70% of them microcalcifications were present in the mammograms. The average size of the lesion was 1.5 cm or less and 10% of the women were 40 years old or younger with average age 55 years.
Conclusions: DCIS classification is based on the tumor size, the surgical margins and pathological findings as grade, multicentricity etc. DCIS is presented with remarkable mammographic, histopathologic and biologic heterogenity. It appears in more than 15% of the patients with breast cancer detected in screening programs. The Van Nuys Prognostic Index is valid today as a prognostic and therapeutic approach. DCIS is a potentially curable disease when is treated by mastectomy. In the majority of the cases a mastectomy was performed.

P-112

Awareness of the problem of hypertension in pregnant women among young doctors

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Background: Hypertension is one of the most common medical problems and it is steadily increasing over last few years. It is concerning not only bigger amount of people but starting to occur in younger age affecting as well the population of pregnant women. It is assessed that between 1 to 10% of pregnancies is complicated by hypertension.
Aim: The main aim of our study was to find out what is the level of awareness of this problem as well as knowledge about hypertension during pregnancy among young doctors finishing their studies.
Materials and Methods: This was a questionnaire-based study. Specially prepared questionnaires were distributed among young doctors in Lodz (central Poland). In this questionnaire we asked about their knowledge about hypertension during pregnancy, sources of that knowledge, as well as practical implementation of it and awareness of the problem.
Results/Conclusion: The increasing hypertension problem during pregnancy is requiring higher level of knowledge among young doctors starting their careers. A change of the way that students and young doctors are being taught about the problem should be taken under consideration, as well as providing them with more courses concerning the diagnose and treatment of hypertension during pregnancy.

P-113

Fascioliasis – an uncommon diagnosis in primary care setting

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Fascioliasis is an infection caused by liver flukes, either Fasciola hepatica or Fasciola gigantic. F. hepatica is more common and has worldwide distribution. Humans are accidental hosts and most commonly acquire infection by eating watercress grown in sheep-raising areas. Other freshwater plants may also transmit infection. Although the infection is frequent in developing countries, sporadic or grouped-cases have been described in Europe. We describe 3 linked cases of fascioliasis (2 males, 1 female) in patients from a Family Health Unit, detected in the north of Portugal. The contamination source was identified as being savage watercress from a rural area, which were consumed by all patients. The clinical symptoms were mainly digestive (nausea, non specific abdominal pain located to the epigastrium and right hypochondria during several weeks). Malaise with asthenia and pruritus were also present. One patient was fully asymptomatic. The diagnosis was suggested by intense hypereosinophilia founded in all cases, and suspicion from the watercress consumption source. The 3 cases of fascioliasis were confirmed by positivity on serologic techniques and/or the presence of the parasite in stools, that was also determined. The patients were referred to hospital care center to undergo specific treatment with praziquantel (unavailable in primary care setting). These linked cases of fascioliasis are important in unveiling the diagnostic complexity of uncommon infectious diseases that have public health impact. General practitioners should be aware of clinical symptoms and the common laboratory findings in fascioliasis, as described.

P-114

Who has insomnia in primary care patients in Lleida (Spain)?

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Aims and purpose: The purpose of this study was to assess the prevalence of insomnia in primary care patients aged 18 years or older in Lleida (Spain) according to age and gender.
Design and Methods: Cross-sectional study in 4 primary care Health Centers. The selection was leaded between March and August 2007. The sample was selected by consecutive random process. We used the Epworth Scale to diagnose insomnia. The statistical analysis was with SSPS.
Results: A total of 143 participants were interviewed by telephone (mean [SD] age, 49.78 ± 18.08). There were 59% women and 41% men. Prevalence was 35'7% (CI 95% 35.3–35.9). This prevalence increased by age until 80 years. Insomnia was most prevalent in the 66–80 age group. The difference with the other groups of age was

statistically significant (p <0.05). In contrast, the young age (<35 years) was a protector factor to develop insomnia (RR <1, p <0.05). By the gender, there was a little predominance in women but the differences between both gender groups were not statistically significant (p >0.05).
Conclusions: The prevalence of insomnia in our sample was similar from previous studies. The predominance in oldest people and in women was similar in other studies too. We concluded that this work has had important to know the distribution of insomnia in our population.

P-115

The hypertense patient with atrial fibrillation. Dangers and control factors from a primary care view

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Aim and purpose: Atrial fibrillation (AF) is the most common arrhythmia in the elderly and is, often, associated with hypertension. The objective of this study was to assess the main factors that had influence in achieving good control of blood pressure values in this subset of population and to evidence possible risk factors for the appearance of one of its most dreadful complications: cerebral vascular disease.
Design and Methods: Descriptive study (December 07-December 08) in an urban primary care center. Subjects = 315 patients with AF (1.79% of our population), we analysed a subset of 194 patients that also presented hypertension (61.5%). An univariate analysis was performed using contingency tables for binary variables and analysis of variance for continuous ones in order to detect clinical variables related with hypertension control and possible risk factors, among this population, that could act as “clinical warnings” of cerebral vascular disease appearance.
Results: The mean age of our patients was 75.9 (±8.32); women (60.8%). Adequate control of tensional values was achieved in 60.8% of patients and 17% of patients presented cerebral vascular disease. The following variables were found to be independent related to cerebral vascular disease appearance: diabetes mellitus (DM) (p0.045, OR 1.59) and structural cardiopathy (p 0,031, OR 1.29). Control of tensional values was only statically related to diabetes mellitus concomitance (p <0,001, OR1.52).
Conclusion: In this subset of population (hypertense with AF) general practitioners should be aware to those that also present DM and/or structural cardiopathy. Data shows that DM is related to increased blood pressure control failure rate. We have also validated that DM and structural cardiopathy have a strong relation with cerebral vascular disease. Finally we would like to reassert that any effort is not enough regarding prevention and control of possible complications in this complex subset of population.

P-116

Prevalence and incidence of cardiovascular risk factor in Catalonia

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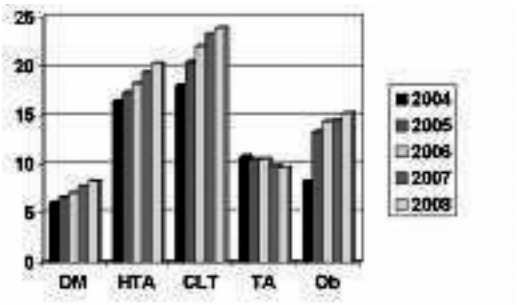
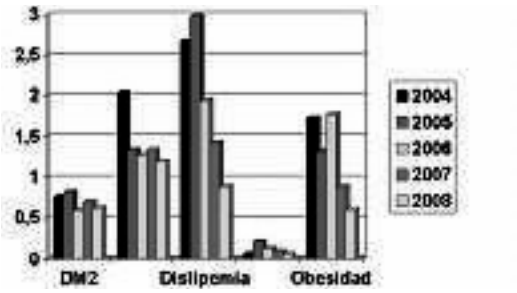
Objectives: To determine evolution in the incidence and prevalence of different cardiovascular risk factors (CVRF) during past 5 years and their relationship with socio demographic factors.
Design: Observational, descriptive and retrospective. Population: All patients assigned at Santa Coloma de Gramenet ABS4, urban population primary care center of Catalonia.
Measurements: Systematic review of all diagnoses related to CVR and recorded in informatics database E-CAP in according to CIE. Statistical study of incidence and prevalence recorded during the period between the years 2004 to 2008.
Main results: Prevalence of different CVRF was 5.99% for Diabetes Mellitus (DM), 16.38% for hypertension (HTA), 18.05% for hypercholesterolemia (CLT), 10.74% Smoking (TA) and 12.3% for obesity in 2004; In 2005 obtained prevalences were 6.65% DM2, hypertension 17.25%, 20.41% CLT, TA 10,44% and Obesity 13.29%; In 2006 DM2 7.12%, hypertension 18.26%, 22.07% CLT, TA 10.49% and Obesity 14.33%; In 2007 DM2 7.71%, hypertension 19.36%, 23.31% CLT, TA 9.8% and obesity 14.47%; and in 2008 founded prevalences were 8.23% DM, hypertension 20.29%, 23.91% CLT, TA 9.64% and 15.19% Obesity. About incidence, cumulative incidence in studied 5 years (2004–2008) in case of DM was 0.754, 0.811, 0.59, 06.89 and 06.15, for HTA was 2.035, 1.329, 1.264, 1.324 and 1.19, for CLT was 2.676, 2.975, 1.942, 1.424 and 0.882, for TA to 0.0565, 0.205, 0.1245, 0.0822, 0.05 and for obesity, 1,72 1315, 1277, 0597 and 0.8735.
Conclusions: Similar results to the expected prevalence for studied population except for smoking and obesity. Suspected below registration of smoking and obesity (requires further study). Progressive increase in prevalence of all CVRF except smoking which has fallen. Decline in incidence of obesity and dislypemia from 2006 while rest of CVRF have increased.
Keywords: Cardiovascular Risk Factors Prevalence Incidence

Evolution prevalence/year



Evolution Incidence/year



P-117

Evolution in the prescription of antiaggregants in a healthcare region

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Introduction: Studies have demonstrated that administering acetylsalicylic acid(ASA) in small doses reduces the likelihood of death by heart attack and of cerebrovascular accident; clopidogrel may be used if contradiction.A study showed that up to 30% of white people belong to a genetic variety with a significant reduction in the levels of active clopidogrel metabolite, which increases the risk of cardiovascular incidents. **Objectives:** to assess the profile of antiaggregant prescriptions and ascertain whether the use of clopidogrel has increased.
Methodology: A retrospective descriptive study, patients receiving antiaggregant treatment in rural and urban healthcare regions 2002–2008. Data provided by the Pharmacology Service of the Catalan Health Institute. Variables: age, gender, individuals receiving antiaggregants distributed by years, type of antiaggregant: ASA, clopidogrel (Clop), trifusal (Trif), dipiridamol (Dip). Statistical analysis with Acces/Excel.
Results: Antiaggregants: 2002, 16.567 (5.45%); 2003, 17.836 (5.75%); 2004, 19.235 (6.09%); 2005, 20.248 (6.16%); 2006, 21.340(6.37%); 2007, 23.000 (6.77%); 2008, 24.000 (7.1%). Gender (M/F): 51.8%/48.2%. Averageage: 73.2 Type antiaggregant: 2002, 59.5% ASA, 7.6% Clop, 7.5% Trif, 1.4% Dip; 2003, 59.5% ASA, 7.6% Clop, 7.5% Trif, 1.4% Dip; 2004, 60.3% ASA, 9.8% Clop, 6.3% Trif, 1.2% Dip; 2005, 61.2% ASA, 10.6% Clop, 5.3% Trif, 0.89% Dip; 2006, 62.2% ASA, 11.8% Clop, 4.4% Trif, 0.6% Dip; 2007, 62.3% ASA, 11.6% Clop, 4.2% Trif, 0.57% Dip; 2008, 63.3% ASA, 11.5%, Clop 3.6% Trif, 0.54% Dip. RatioASA/clopidogrel: 2002, 0.88%; 2003, 0.86%; 2004, 0.74%; 2005, 0.85%; 2006, 0.84%; 2007, 0.84%; 2008, 0.84%.
Conclusions: We observed a progressive increase in the use of antiaggregants, principally with ASA and, to a lesser degree, with clopidogrel. However, the use of trifusal and dipiridamol has progressively decreased. The tendency to use ASA more than clopidogrel has remained stable and this has proved to be positive since we should bear in mind that there is a significant proportion of the population for whom clopidogrel is not active.

P-118

Association of aortic dilation and diastolic function of left ventricle in hypertensive patients

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Aims(s) and purpose: The aim of this study was to investigate for any association between loss of the elastic properties and aortic stiffness (according to increased augmentation index AIx) and the diastolic malfunction of the left ventricle as evaluated with mitral flow index E/A.
Design and methods: The sample of our study consisted of 139 patients with newly diagnosed arterial hypertension who were not under treatment and 98 randomized controls, adjusting for age, sex, smoking and serum cholesterol levels. All participants undertook ultrasound study of the heart in order to record the Left Ventricle Mass Index (LVMI), the relative thickness of Left Ventricle wall (RTLVW) and mitral flow index E/A. The Aix was estimated with carotid artery tonometry.
Results: Higher values of LVMI (95 ± 11 vs. 81.1 ± 10 g/m^2, p <0.005), RTLVW (0.49 ± 0.03 vs. 0.42 ± 0.02 p <0.001) E/A (0.86 ± 0.2 vs. 1.15 ± 0.2, p <0.001) and AIx (0.11 ± 0.05 vs. 0.37 ± 0.08, p <0.005) were reported in hypertensive than in normotensive participants, respectively. The ?/? ratio had a negative relationship with age (r = –0.61, p <0.05), pulse pressure (r = –0.28, p <0.05), LVMI (r = –0.45, p <0.001), RTLVW (r = –0.31, p <0.005) and AIx (r = –0.68, p <0.05).
Conclusions: It seems that the loss of elastic properties, as reported from the reduced aortic dilatation might correlate with a aggravation of the diastolic function of left ventricle, apart from the already proved effect on its systolic function, at least in patients with newly diagnosed arterial hypertension and normal left ventricle mass.

P-119

Metabolic syndrome and acute coronary syndrome

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Aim: The aim of this study was to evaluate and compare the prevalence of metabolic syndrome (MS) according to ATP-III and IDF definitions in a group of patients with acute coronary syndrome (ACS).
Methods: Prospective study of 133 patients consecutively admitted to Cardiology department with ACS. Height, weight and waist circumference were measured in all patients by the same observer. Blood lipids were done in the first 24 h after admission and in patients without known diabetes mellitus a 75 g OGTT was performed on days 4/5 after clinical stabilization. We used ATP-III (2002) and IDF (2005) criteria for the MS. Statistics was done by Student's test and results are expressed as mean ± DP.
Results: We evaluated 36 females (F) and 97 Males (M) with a mean age of 65.2 ± 12.4 years old respectively. Mean BMI of females was 29.1 ± 5.2 kg/m^2 and of men 27.8 ± 3.2 kg/m^2. According to ATP-III criteria the total prevalence of MS was 45.3%. being 62.5% in women and 38.9% in men. An increased waist was found in 48% of men and 93% of women. High blood pressure was the most frequent abnormality (M = 86.6%, f-88.8%). Using IDF definitions the prevalence of MS was 50.9% in the global group. 72.2% in female and 43% in males.
Conclusions: This series illustrates the high prevalence of MS in patients with coronary heart disease as expected. In our case prevalence in females was much higher than in males, what can be explained by a higher prevalence of central obesity in women.

P-120

Venous thrombosis and acute pulmonary embolism in elderly patients

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Introduction: Deep vein thrombosis is the formation of blood clots (thrombi) in the deep veins. A blood clot in a deep vein sometimes will break loose, becoming an embolus.
Aim: to investigate risk factors for venous thromboembolism (VTE) and to determine the prevalence of VTE in elderly patient in rural region incidence of symptomatic deep venous thrombosis (DVT) and pulmonary embolism (PE).
Methods: Data collection over three years in health center Amfikleia-Elateia, 25 patients were studies, 15 women (60%) and 10 men (40%) from 65 to 87 years of age. They visited our health center setting between May 2005 and May 2008 with several problems and after clinical examination founded patients with VTE. About half of the people with deep vein thrombosis have no symptoms at all. Doppler ultrasonography was done to check the legs for clots.
Results: The results showed that 10 (25%) from the patients were smokers. 8 (20%) from them receiving drugs(estrogens therapy, or drugs that act like estrogen-tamoxifen), 30 (75%) patients had body mass index (BMI) >25, 4 (5%) patients underwent total hip arthroplasty-(two patients passed away owing to PE).
Conclusions: The doctors are greatly concerned about every person who has deep vein thrombosis. When this disorder is suspected, Doppler ultrasonography can confirm the diagnosis Pharmacologic prophylaxis was employed in all the patients.

P-121

Obesity prevalence of children 1–5 years old in Prishtina region

Hashani V. (Pristina)

The genesis of obesity in most of the people runs in their childhood. Although the majority of infants are not obese, they run the risk of becoming so later in life. There is a tendency for becoming obese in adolescence and remaining so in adulthood.Kosovo population is young with more than 63% being under 30 years while with only 5% above 65 years old. Results show that, of 1478 respondents, 748 are male or 50.6% while 730 are female or 49.4%. Of the overall sample, 975 or 65.96% are from urban areas whereas 503 children or 34.04% are from rural areas. The highest number of respondents is from Prishtina (693 respondents or 46.89%). Of them, 357 or 47.73% are male whereas 336 or 46.03% are female. Out of them, 553 or 37.42% are from Prishtina city while 140 or 9.47% are from villages of Prishtina Municipality. For testing the hypothesis of this research, we employed (chi square) test as described in details in methodology. Specifically, this research tested whether 1. There is a difference between obesity of children of different gender? 2. There is a difference between obesity of children from rural and urban areas? 3. There is a correlation between child and parent obesity? 4. The birth sequence has an impact on obesity? 5. Is there a correlation between obesity and breastfeeding? 6. Is there a correlation between obesity mothers' age at birth? 7. Is there a correlation between obesity parents' level of education? 8. Is there a correlation between obesity smoking parents? All the hypothesis were accepted at conventional probability level (p <0.01.) except the correlation between obesity and parents' level of education. Results drawn from this research allowed the author to make policy recommendations for preventing this epidemic, which trends are worsening at the global level.

P-122

Screening for diabetic neuropathy and risk for diabetic foot

Popovic J. (Belgrade)

In diabetic neuropathy patients there is risk for diabetic foot, requiring the physician to actively search for this complication.
Goal: Early diabetic neuropathy detection and identification of persons at risk to develop diabetic foot, to undertake measures to prevent or postpone complication onset.
Method: Research was undertaken in Healthcare Center Vracar in Belgrade during 2008, on a sample of 77 Diabetes Type II patients. Early diabetic neuropathy diagnosis was made using Neuropad test to discover autonomous neuropathy even before the onset of sensory and motoric damage symptoms. Sensitivity and specificity of Neuropad test in diabetic neuropathy diagnosis is over 85%. Autonomous neuropathy affects small nerve fibers and causes damage of foot sweat glands functioning, leading to lower skin humidity. Relevant to quantity of produced sweat, 10 min after application to the foot skin, the cobalt salt in the reagent changes color from blue, to mosaic, to pink, indicating the level of small nerve damage. Autonomous neuropathy onset was analyzed relevant to sex, age, diabetes duration, and HbA1c.
Results: The study encompassed 77 patients, 24 men, and 53 women, with average age 65 ± 10 years, and average disease duration 15 ± 8 years. Neuropad test was negative (pink) in 46% patients with healthy feet, and positive in 54%, confirming neuropathy (blue) in 16%, and partially colored (mosaic) in 38%. Mosaic findings indicate that sole skin elasticity is marginal, the foot is at risk, and requires additional investigation. Research showed correlation between autonomous neuropathy and disease duration and glyco regulation. In the majority of autonomous neuropayhy patients, HbA1c was over 7%.
Conclusion: Early detection of autonomous neuropayhy patients using Neuropad test enables primary healthcare to identify persons at risk of developing diabetic foot, enabling the physician to undertake measures to prevent or postpone complications.

P-123

Study results early detection of kidney disease

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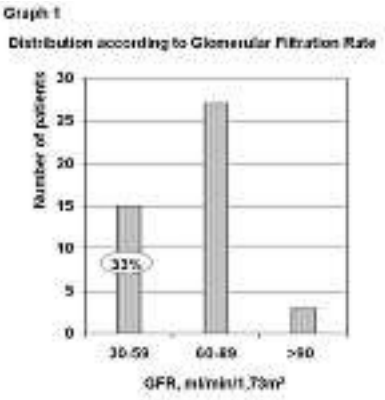
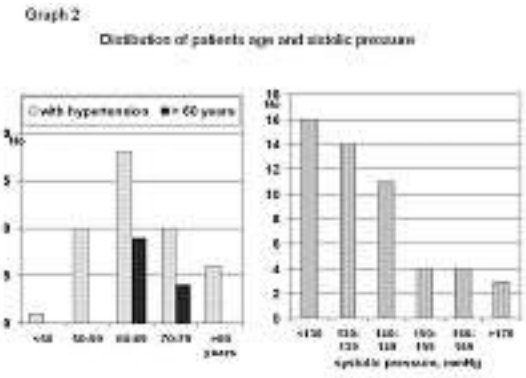
Summary: Chronic kidney disease (CDS) is defined as a reduction in glomerular filtration rate (GFR) to below 60 mL/min/1.73 m^2 regardless of duration. The last several years have seen a rise in the number of people suffering from chronic kidney disease. The disease, being progressive and substantially impacting the quality of life and increasing the overall death rate, requires early detection so as to slow down further dysfunctions and the progressive loss of kidney function.
The aim of the research was to determine the frequency of CDS in population at increased risks for the disease.
Design and Method: The research involved 69 patients (19 men and 50 women), aged 68 ± 9. 54 patients diagnosed with hypertension and 15 patients with no hypertension over 65 years of age were examined.
The results: 3% of the patients had proteinuria, 7% microalbuminuria, 28% pathological urine sediment, and 33% had GFR below 60 ml/min/1,73 m^2.
Conclusion: The high percentage of patients with impaired kidney function unambiguously indicates a justified call for regular testing of kidney function in patients who have increased risk of developing CDS. Only this can enable early detection of CDS and timely treatment.

Distibution according to GFR



Distribution of patient age and systolic pressure



P-124

Risk factors for diabetes mellitus

Miljkovic S. (Nis)

Aims: Presenting the most frequent risking factors with the patients of a Health Centre suffering from diabetes mellitus and with the ones having a high risk of getting it, as well as the influence on variable risking factors.
Methods: Data used in this study come from the files of the 114 patients suffering from diabetes with glycaemia >7 mmol/l and from the files of the 48 patients with a high risk of getting it, who had reduced tolerance to glucose before meal with glycaemia 6. 1–7 mmol/l. The study includes patients of both sexes, aged from 20 to 80 years old. Patients with reduced tolerance to glucose had their weight and height measured, their BMI calculated, and they were advised about their diet and physical activity.
Results: Out of 162 patients, 61,7% are women. Type 2 diabetes is the most frequent (90%) between the ages of 50 to 80. 8% of all the patients suffer from type 1 diabetes – those are people younger than 40. Abdominal obesity has been experienced by 68% of the patients with BMI >30 kg/m^2. A genetic predisposition has been established in 69%.
Conclusion: Diabetes mellitus is a multifarious disease. The main risking factors are obesity, hyperlipidaemia, hypertension, physical inactivity, genetic predisposition, stress, and smoking. In one patient there is the effect of several factors simultaneously. It is important to discover the risk for the development of diabetes on time by systematic preventive work – observing persons with the high risk and screening of the total population. Action measures should lead to reduction of risking factors that can be changed – obesity, hypertension, hyperlipidaemia, and smoking.

P-125

Metabolic syndrome, obesity and arterial hypertension, specific with ambulatory blood pressure monitoring

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Objectives: Analyze influence of metabolic syndrome (MS) and obesity on parameters control hypertension blood pressure (HBP) with ambulatory blood pressure monitoring (ABPM). Know the prevalence of MS, obesity and overweight.
Design and Methods: Cross descriptive study with ABPM. We include derivated patients during three years from different consultations of primary health, compile data of 480 patients (274 men) in hypertension programs due to white coat HBP suspicion, borderline/labile, high risk HBP and refractory, consecutively enrolled. Principal measurements: analytical general with lipid profie, circadian pattern and cardiovascular risk (CVR), weight, height, body mass index (BMI), waist circumference (WC), nº patients with criterion MS, stratification CVR. Means and/or percentages of the following variables were calculated: clinical and home SBP/DBP, family background of HBP and coronary disease, smoking, obesity, left ventricular hypertrophy.
Results: The prevalence of MS was 35.6%, obesity 34.4% and overweight 50%. Average age of 61.9 ± 11.8 years (57.1% male) and 5 years of evolution of their HBP. The 11.8% had associate clinical disease, after stratification 23.5% had high risk, 22.1% very high. Control grade consultation 16.7%, ABPM 24 hours 28.2%, activity 45.5%, repose 40.9%. The prevalence 4.58% mask HBP and 21.67% white coat HBP. Circadian pattern: 42.7% Dipper, 7.5% Extra Dipper, 40% Non Dipper, 9.8% Riser, BMI is 28.87 ± 4.29. WC 97.89 ± 11.5. Central obesity 50%. MS patients have statistically significant difference for clinical HBP, grade CVR, category HBP, risk type p 0.0001; women have more MS p 0.006, more BMI p 0,028, more WC p 0.0001; means of heart frequency/SBP/DBP p <0.05. WC had statistically significant for crcadian pattern p 0.002, CVR 0.0001, category HBP p 0.01 and risk type 0.0001.
Conclusions: High prevalence MS, obesity and overweight, but women have more prevalence and CVR and control hypertension are worse.

P-126

Control of our chronic renal insufficiency

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Detection of chronic renal insufficiency (CRI) is important to avoid fatal evolution of illness. With very evolutionated patients is necessary strict control of risc factors in order not to made worst illness. Determinate prevalence of CRI in our population and fix stadiage. Alive patients diagnostiqued of CRI in computarized clinical history in March 2008. Transversal and descriptive study, made within a population of 6253 patients of 2 Wealth centers.To determinate glomerular fíltrate we used ecuation of Cockcroft-Gault: (140-age) x weigh (Kg)/ 72 x Crpl (mg/dl); and modificated ecuation of MDRD study: 186 x Crp – 1.154 x (age) – 0.203 x (0.742 if women) wich classificates patients in five stages: I (more than 90), II (90-60), III (30-59), IV (15–29) and V (less than 15) Within population we found 23 patients (0.04%) with CRI; 14 (61%) men y 9 (39%) women. For ages, there were 3 (13%) less than 40 years; 2 (8.7%) between 40 and 69 and 18 (78.3%) with more than 70 years or more Stadiage were, with Cockcroft-Gault we found: stadiage I/II no patients; stage III, 7 (30.5%); stage IV, 8 (34.8%) and stage V, 5 (21.8%). With MDRD we found: stage I/II no patient; stage III, 9 (39.1%); stage IV, 6 (26%) and stage V, 5 (21.8%) We lost 3 patient, cause they follow controls in an external center. We can say now that this is an infradiagnosticated illness, in which population we should found a prevanence of 0.4?, and feature of and old man with more than 70 years. All patients presented a glomerular filtrate of less tan 49 (stage III).

P-127

Patients with hypertension and atrial fibrillation, remains to be done

Besa M. (Barcelona), Font A. (Barcelona), Alsina M. (Barcelona), De la Poza M. (Barcelona), Iglesias C. (Barcelona), Oller M. (Barcelona), Vila M. (Barcelona)

Aims and purpose: Knowing the degree of control of high blood pressure and prescribed drugs in hypertensive patients with atrial fibrillation.
Design and Methods: Descriptive study in an urban primary care center. Subjects: Patients visited in the past year with high blood pressure (hypertension) (code I 10) and atrial fibrillation (AF) (code 48 I) obtained according to the clinical history of our school, in an urban primary care centre Measures and interventions: We collected variables in sex, age, diabetes (DM), renal insufficiency (IR), heart failure (HF), the last blood pressure (BP) control (it was considered good control figures less than 130/80 for patients with DM, or IR IC, and less than 140/90 at rest), taking drugs for hypertension and for the FA. Statistical analysis: analyses were conducted using t-Student and Chi2 with the statistical package SPSS12.0.
Results: There were 194 patients with hypertension and FA, 60.8% of them were women. The mean age was 75'9 (DE8'3). The mean systolic BP was 132'53 (DE 18'4) and diastolic 73'78 (DE 10'82). The tension had good control 60.8%, with good control of the BP 62.3% systolic and diastolic of 89%. The treatment they was taking: 49% ACE inhibitors, ARBs 27.3%, 75.3% diuretics, beta-blockers 27.8% 7.2% alpha-blockers, calcium channel blockers 35.1%, or antiplatelet 100% anticoagulants, antiarrhythmics % 46.3, 32.1% digoxin.
Conclusions: The results of a 60% good control of blood pressure despite receiving, in many cases, multiple treatments shows the difficulty of managing these patients.

P-128

The educational role of a primary care staff (general practitioners and nurses) in a prophylaxis of the use of alcohol, tobacco and drugs among teenagers

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Introduction: The use of tobacco, alcohol and drugs is a serious problem among teenagers.
The aim of our study was to learn the burden of alcohol, tobacco and drug use among teenagers from one school of rural area. We also tried to learn teenagers' expectations concerning the role of a primary care staff (general practitioners and nurses) in health education and prophylaxis of drug, tobacco and alcohol use.
Material and methods: We analyzed 102 surveys which were self-fulfilled by teenagers (54 girls and 48 boys) aged 13–16 years. The survey contained questions concerning personal data, the use of alcohol, tobacco and drugs (time of first use, motivation, general knowledge about results of addictions).
Results: 33% of teens declared they tried smoking tobacco, 59% of responders answered they tried alcohol and most of them (47%) preferred drinking bear. 6% of teens declared they tried drugs. The main reasons of drinking alcohol, smoking tobacco or taking drugs were: curiosity (71%) and willing to demonstrate a consolidation with a group (14%). Most of responders correctly indicated possible results of smoking tobacco (lung cancer – 71%), drinking alcohol (liver damage – 69%) and usage of dugs (addiction and death – 24–40%). 57% of responders declared there were no educational activities at school as a form of prophylaxis of usage of alcohol, tobacco or drugs. Only 4% of teenagers would like to discuss this problem with a nurse, 12% – with a general practitioner, 22% – with a teacher, 23% – with parents, 24% – with nobody.
Conclusions: The use of alcohol tobacco or drugs among teenagers from a observed school should be estimated as too high. More efforts should be done to make wider educational activities of medical staff in a field of prophylaxis of tobacco, alcohol and drugs abuse among teenagers.

P-129

Central obesity is negatively associated with PSA level

Park J.H. (Seoul), Kwon H.T. (Seoul), Cho B.L. (Seoul)

Introduction: Central obesity affects androgen production and PSA production is also affected by androgen. PSA test is major tool for prostate cancer screening, so it is very important to know the effect of central obesity on PSA level.
Materials and Methods: Eligible subjects were men aged 30 to 79 years who received routine comprehensive health check up From March 2004 to June 2008 at the Healthcare system Gangnam center of Seoul National University Hospital in Korea. 39516 men who had BMI, WC, PSA data were included. Age was divided into 5 subgroups with 10 yr interval: 30-39, 40-49, 50-59, 60-69, 70-79. WC (cm) was categorized as follow: WC<80, 80<=WC<90, 90<=WC<100, WC>= 100. 90 cm is cut-off value defining abdominal obesity in Korea. ANOVA test in which WC was independent variable and PSA was dependent variable was performed according to 10 year age interval.
Results: From 20 year until 69 year, as WC increased, mean value of PSA decreased ($p < 0.05$). But in the age group: 70–79, there was no significant association between WC and PSA level ($p = 0.32$). The same pattern was observed between BMI and PSA.
Conclusion: Central obesity is associated with low PSA level but only in men younger than 70 years. It is not clear why men older than 70 years didn't show same pattern.

P-130

Assessment of the training for family doctors on the management of heart failure

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Aim of this study was to assess the influence of the cardiovascular prevention training on the knowledge, skills and attitudes of family doctors on the management of patients with heart failure.
Design and Method: It was included 180 family doctors. Training group (TG) contains 90 doctors who participated in the modules of the cardiovascular prevention training for family physicians. Control group (CG) contains 90 doctors that work in the same facilities who didn't participate in the training. The groups are gender-balanced with different age, length of the years of work. All doctors completed the special designed questionnaire with the selected quality criteria recommended in the international and national guidelines.
Results: It has been shown significant statistic differences between TG and CG for the followed criteria: recommended levels of blood pressure, lower than 140/90 mm Hg (72.4% from TG and 39.5% from CG, $p < 0.05$), blood glucose (71.8% of TG consider it as standard procedure and only 47.6% of CG, $p < 0.05$), full physical examination (74.4% from TG and 51% from CG, $p < 0.05$), using the complete set of laboratory tests (completely used by 85.2% of the doctors from TG compared with 39.8% from CG, $p < 0.01$). Most of the parameters about knowledge level, diet and exercise attitude of the training group have been improved after this training.
Conclusion: The family doctors who participated in the modules of the cardiovascular prevention training have the greatest progress in implementation the recommended standards for heart failure. Structured education program improves attitude, practice, knowledge level and results in family doctors.

P-131

The practice revision of HgA1C measurement in patients with type 2 diabetes mellitus after the five-year period of practicing family medicine in Prnjavor health center

Milosavljevic L. (Prnjavor)

Introduction: The national programme following Diabetes mellitus in the Republika of Srpska began its activity in 2002. The doctors were presented the HgA1C golden standard and the recommendation to do the tests every three months.
Aim: Comparing the HgA1C values in 2002/2003 and in 2008/2009i.e. after the five-year family medicine practice in Prnjavor Health Center.
Methods: The HgA1C values were entered into the form containing the patients name and HgA1C values every three monts. All the patients recommended to do HgA1C were included. HgA1C values were followed within four trimesters from 1st February, 2008 to 1st February 2009 and they were compared to the values from 1st September 2002 to 1st September 2003.
Results: All the 2DM Type patients registered with Prnjavor Health Center do their HgA1C every three months. Average HgA1C value The first trimester 2002/3-12,1% 2008-9,3% The second trimester 2002/3-9,5% 2008-8,5% The third trimester 2002/3-10,2% 2008-8,7% The fourth trimester 2002/3-11,8% 2008-9,3%
Discussion: The main achievement is to make all the patients measure their HgA1C reguralry. The results are not considerably better compared to the previous period. Conclusion: To continue the work and show the results after ten years of following HgA1C values.

P-132

Importance of targeted systematic examinations for early diagnosis of colorectal carcinoma

Kosojevic A. (Belgrade), Todorovic S. (Belgrade)

Colorectal carcinoma is the second leading malignant illness among men in Serbia and the third most frequent among women. As cause of death, colorectal carcinoma is in the fifth place with the overall frequency of 2,7%. The aim of the study is to show the importance of test for fecal occult blood as part of systematic examination of patients for early diagnosis of colorectal carcinoma. The study analyses results obtained by submitting patients over 50 years of age with average risks and no symptoms of this disease to immunochromatographic rapid testing for the detection of fecal occult blood. All patients who

tested positive were referred to further diagnostics in accordance with National Guidelines for Prevention of Malignant Illnesses. Data obtained were processed by descriptive statistical methods. This study is based on data obtained from 100 patients of Health Center "Novi Beograd", 65% of which were women and 35% were men. 51% were between 50 and 59 years of age, 36% were between 60 and 69, and 13% were between 70 and 79. 91% tested negative to fecal occult blood test, while 9% tested positive. After additional detailed diagnostic testing (colonoscopy) was carried out, 2 patients were diagnosed with colorectal carcinoma, 3 were diagnosed with adenomatous polyps, one patient was diagnosed with ulcerative colitis, one patient was diagnosed with diverticulosis coli, while one patient was diagnosed with irritable colon. The aim of such screening is to detect illness at an early, asymptomatic stage. Medical treatment is much more efficient at this stage, compared to the situation when symptoms of the illness are fully fledged. In preventing colorectal carcinoma, primary medical care has to be of essence. Sending patients to this type of testing early is of great importance for diagnosing colorectal carcinoma early and reducing mortality rate of this horrendous illness.

P-133

Risk factors and chronic non-infectious diseases

Todorovic S. (Belgrade), Kosojevic A. (Belgrade)

Chronic non-infectious diseases are the leading cause of morbidity and mortality, not only in this country, but worldwide. The aim of this study is to show the prevalence of risk factors that cause development of chronic non-infectious diseases in order to identify and reduce risk factors. Data used have been obtained from anamneses, physical examinations and laboratory results of patients during regular visits to their chosen general practitioners. The study included patients of both sexes, belonging to different age groups, healthy with risk factors, with hypertension but without damaged target organs. Results obtained in this way have been processed by descriptive statistical methods. The study includes 157 patients from Health Center "Novi Beograd", out of which 63.1% are women and 36.9% are men. 59,9% of them have hypertension, 59.3% have high level of cholesterol, 21% have high level of triglycerides, 38.2% are active smokers, 67.5% lead physically inactive lives, 45.2% are overweight, and 15.9% have high blood glucose. 12.7% of them have one risk factor, 17.2% have two, 22.3% have three, 27.4% have four, 10.2% have five, and 5.1% have six risk factors, while only 5.1% have no risk factors. The prevalence of risk factors among patients with chronic non-infectious diseases has shown without doubt that preventive measures are required in order to reduce the number of risk factors, the result of which would be reduced rate of morbidity and mortality from chronic non-infectious disease.

P-134

Factors determining for self-harm in patients attending in emergency department of Tribhuvan university teaching hospital, Kathmandu

Shakya Y.L. (Kathmandu)

Purpose: Self-harm form a significant proportion of patient attending in emergency departments, typically 10–30 per 100000 people commit suicide annually. The objectives of this study is to find out the factors responsible for self harm.
Method: This is a cross sectional study of 100 patients of self harm coming to Emergency Department of Tribhuvan University Teaching Hospital from 1st October 2007 to 31st March, 2008. Questionnaire was used to collect information and those patients were clinically examined and required investigations were done.
Result: The total number of patients with self harm was 100 (male – 71%; female- 29%). Most of the patients (45%) were teen age group belonging to 21–30 years, 26% with secondary level of education. Mean duration of arrival in emergency department was 3.08 hour. Metacid ingestion (29%) was found to be the most common cause for self harm. There is no difference of self harm for suicide and threat cause. Only 5% of patient with self harm has psychiatry illness in the past.
Conclusion: Self harm form a significant proportion of patient attending in Emergency department and the most common form of self harm used was metacid ingestion. There is compelling evidence for need to improve the delivery of care for patients who self harm.

P-135

The traveller and vaccine preventable diseases – the who, why, what and when

Brink G. (Durban), Wilder-Smith A. (Singapore)

Are patients appropriately vaccinated before travel? With the increase in travel and adventure travel (more than 800 million international journeys were undertaken in 2007), patients are at increased risk for contracting a variety of diseases. Vaccinations are important in reducing the risk of travelers contracting certain diseases yet many travelers are not receiving the appropriate advice regarding vaccine preventable diseases. The family physician is in an excellent position to advise patients on appropriate vaccinations for travel and to ensure that the patient is up-to-date with routine vaccinations. Vaccination for the immuno-compromised traveler is essential but a revised approach is needed to ensure adequate protection. This presentation will, by means of clinical scenarios, explore the commonly used vaccines for travel, the indications for vaccination; yellow fever vaccination, rabies vaccination, the vaccination schedules including booster dose administration and how to manage the patient who consults shortly before travel. The management of non-responders to Hepatitis B vaccination will also be dealt with. A list of appropriate resources will be provided.

P-136

A teenager has alerting symptoms of mental disorder: what should we do next?

Kähärä K. (Kauhajoki), Grönlund J. (Sastamala), Mattila K. (Tampere)

In Kauhajoki occurred an incident of school shooting on Sept 23 2008. A student killed nine of his fellow students, one teacher and himself. The aim of this study was to evaluate how a teenager with mental problems was able to achieve appropriate care in Kauhajoki before this tragic incident. A questionnaire was sent in April 2008 to 1200 inhabitants (age 15–84 years) in Kauhajoki area. The receivers were asked to tell their opinion on how they would help a person with different mental health problems and how urgently the person would need help. Considering the problems of a teenager the specific question was: "A friend of your son is a 15-year old teenager. His behavior has changed and he is not attending school regularly. His grades are clearly dropping. During weekends he is not spending time at home and you don't know about his companions. Probably he is using alcohol heavily. How do you evaluate the situation?"
Results: The response rate of the population was 45%. Of the responders there were 60% (n = 326) female persons and 38% (n = 205) male. The male inhabitants and the young inhabitants (born 1993–1961) responded less than the older and female inhabitants. Only 51% of the responders considered that the teenager would need help and intervention urgently. On an average the female responders were more worried of the symptoms than the male responders. If the responders suggested urgent intervention, they estimated that appropriate care would be provided by school health care system.
Conclusions: In this study only half of the responders representing Kauhajoki population were concerned about the mental problems of the teenager. This finding was most prominent among the young and male responders. In some cases mental disorders in young people increase the risk of severe behavioral disturbances such as violent behavior. What should we do next?

P-137

Health-related quality of life in nonagenarians

Megido M.J. (Barcelona), Fernandez C. (Barcelona), Villuendas L. (Barcelona), Prieto B. (Barcelona), Castillo N. (Barcelona), Lobato A. (Barcelona)

Aims: The oldest old are the fastest growing age group in the developed world. To describe health related quality of life in elderly subjects older than 89 year and to identify if its possible the relationship with the geriatrics variables.
Methods: A cross-sectional study realized at the third year of prospective study, with a population based cohort followed in primary health care centers. Basal assessments were of 186 participants. Sociodemographic data were collected, functional status was determined by Lawton-Brody (LI) and Barthel Index (BI) and cognition with the Spanish version of the Mental State Examination (MEC). Charlson score (CS) was used to measure global comorbidity. Euroqol- 5D (EQ-5D) to assess health related quality of life and Nutritional status was evaluated by the short version of the Mini Nutritional Assessment questionnaire (short-MNA).
Results: of all the subjects with MEC >=19 at the third year the final sample was composed by 37 subjects, 25 women (68%) and 12 men, with a mean age of 94.32 (2.9) years. The mean in the visual analogue self-rating scale (EQ-VAS) was 63. Although genre ($p < 0.036$), institutionalization ($p < 0.043$), BI ($p < 0.095$) , and short -MNA (0.027) were all health-related quality of life in bivariate analyses, only short-MNA persisted associated with mortality in multivariate analyses ($p = 0.001$; OR: 5,460; IC 95%: 4.02–6,00).
Conclusion: This study related a good health quality of life in the oldest old persons and suggests the importance of the nutritional risk in predicting health- related quality of life in nonagenarians in the primary health care.

P-138

Emergency services utilization by adolescents in Switzerland

Mach L. (Genève)

Purpose: To assess the utilization of emergency services (ES) by adolescents, and to evaluate the consultation pattern between paediatrics', adults' and gynaecologic/obstetrics' ES.
Methods: A retrospective study of 194'995 paediatric and adult patients admitted to the three ES of Geneva University Hospital (paediatric, adult and gynaecologic/obstetric) during a period of two years (2005–2006). Patients were considered adolescents when aged 10 to 24 years (OMS definition).
Results: Overall adolescents represented 17.4% of the total consultations. These patients represented 28% of paediatric, 17.6% adult and 28% GO ES admissions. Male were overrepresented among paediatric and adult ES admissions (paediatrics' ES: female 46%, male 54%; adult ES: female 46.8%, male 53.2%). However, when including females admitted to the GO ES, the percentages were reversed (total number of adolescents admitted urgently: female 54%, male 46%). Hospitalisations were three time more frequent after paediatric (28%) than adult ES admissions (9%). Return visits were frequent among adolescents, as more than a quarter of them came more than one time during the two years period (GO ES 34%, paediatrics' ES 30%, adults' ES 25%). Further analyses to describe the pattern of hospitalization and return visits to the ES will be presented.
Conclusions: The rate of adolescents admitted to the ES is elevated. Hospitalizations were more frequent after paediatrics compared to adults' ES admissions, suggesting that a large proportion of older adolescents might be treated through nonemergency, primary care sites. Reference to appropriate health services after ES admission has to be developed in order to avoid return visits.

P-139

Clinical benefit of point-of-care testing of acute coronary syndromes, heart failure and thromboembolic events in primary care

Tomonaga Y. (Zurich), Schwenkglenks M. (Basel), Szucs T.D. (Zurich)

Aims: To analyse the clinical benefit of point-of-care (POC) diagnosis for cardiovascular risk stratification. The combined analysis of cardiac troponin T (cTnT), N-terminal pro-brain natriuretic peptide (NT-proBNP) and D-dimer should improve the POC diagnosis of acute coronary syndromes (ACS), heart failure (HF) and thromboembolic events (TE, i.e. deep vein thrombosis or pulmonary embolism) in primary care.
Design and Methods: Prospective, multicenter cluster-randomized controlled trial with a POC diagnosed patient group (POC group) and a conventionally diagnosed control group (CG group) in Zurich County (Switzerland). All patients with chest pain, symptoms of dyspnea, or TE were consecutively included. After a baseline (BL) consultation and a working diagnosis, a follow-up (FU) analysis to control the correctness of the BL diagnosis was undertaken.
Results: 369 patients were included. The 218 POC patients and 151 CG patients had similar characteristics, symptoms, and pre-existing diagnoses, but were differently diagnosed at the BL: ACS was suspected in 15.1% POC patients and 29.1% CG patients ($p = 0.027$), HF in 20.6% POC patients and 9.9% CG patients ($p = 0.035$), and TE in 9.2% POC patients and 9.9% CG patients ($p = 0.805$). However, the FU diagnosis showed no statistical difference between the study groups: 8.7% POC patients and 9.3% CG patients had an ACS ($p = 0.871$), 17.9% POC patients and 7.9% CG patients had an HF ($p = 0.076$), and 6.4% POC patients and 6.6% CG patients had a TE ($p = 0.929$). The overall correctness of the working diagnoses was significantly higher in the POC group (75.7% vs. 59.6%, $p = 0.002$). 69.8% of the POC diagnoses and 45.2% of the CG diagnoses of ACS, HF, and TE were correct ($p = 0.002$). The biomarker tests showed good sensitivity and specificity.
Conclusion: The clinical benefit of the POC analysis in primary care is substantial: significantly more patients are correctly diagnosed.

P-140

Are the elderly people social and secure?

Oztora S. (Edirne), Oluc F. (Edirne), Dagdeviren N. (Edirne)

Aim: Aging is inevitable and the prevalence of chronic diseases rises with age. The prolonged life expectancy in the new millennium brings new issues for the elderly to work on. In this study we aimed to investigate the health problems of the elderly people in our city and the social security opportunities to support them.
Methods: According to the data acquired from Edirne Health Administration, the population of people 65 years of age and above was determined as 8863. A questionnaire was applied face-to-face to 884 people (10%) older than 65 years of age living in urban site of Edirne.
Results: The ages of the participants were between 65 and 97 years. 3.3% of them were 85 years old or older. 51% of the participants were men, and 49% were women. 24.2% of the participants were illiterate, while 13.3% had a high school or higher degree. 17.3% of the participants were living alone at home. 85.9% received some sort of monthly payment, while 7.8% needed support from their children and 3.1% of the participants did not have any income. As far as social security is concerned, 94.8% did have any kind of social security. 85.4% of our participants (n = 755) had a chronic disease.
Conclusion: Along with the high rate of chronic diseases, factors like living home alone, lack of a steady income and social security, and even being illiterate, can cause some serious damages for the elderly people. Therefore it is important to provide social security and support for them. The problems of elderly people should be a concern in a family physicians practice. Family physician should have a key role in providing support, counseling and treatment for the elderly and their families.

P-141

Experience of a smoking cessation program in rural primary care in Greece in urban, semi-urban and rural regions of western Greece

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Aim and purpose: This paper describes the experience of a program on smoking cessation in routine practice in a rural health center of Western Greece.
Design and Methods: All patients, who visited the health center in the period from June 2002 to December 2008, were asked to participate in the interventional smoking cessation program. This program was based on the guidelines according the 2000 Consensus Statement. All patients (647) who accepted to follow the smoking cessation program completed the Fagerström questionnaire at their first visit and a detailed counseling was performed through a physician. The most patients received medical support for smoking cessation. After 6 and 12 months the patients were followed up in order to record their smoking behavior.
Results: A total of 647 patients participated in the intervention program. Mean age was 55 years (range 18–77), males were 68.9%. All patients were smokers (mean smoking history was 49 ± 8.2 pack-years). The mean level of nicotine addiction assessed by Fagerström test was 7.6. Counseling only received 31 (4.8%) of the patients, whereas 95.2% received additionally medication: ?RT in 4.9%, Bouproprion and NRT in 48.6%), Bouproprion in 22.7% and Varenicline in 15%. From severe COPD suffered 19.7% of the patients and 23.8% from cardiovascular diseases. Smoking abstinence at 6 months was observed in 56.8% and at 12 months in 44.3% of all the patients.
Conclusions: The smoking cessation program implemented in this rural health center seems to be effective in daily practice. The GP, after being trained appropriately, can manage smoking cessation to his/her patients as their attendant physician. In this way he contributes in smoking cessation in the community.

P-142

Do our patients accept acupuncture as a treatment for diabetes mellitus?

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Aim: To discover whether our type II diabetes patients know alternative treatments (acupuncture) for their pathology and their predisposition towards being treated with them.
Design and Method: Descriptive cross study in a rural area with a random sample of 50 patients with type 2 Diabetes Mellitus (DM) that usually come to our medical rooms. Distribution by sex: Men 55%, Women: 45%. Age: older than 50 years old. Analytic parameters: Basal glucose >126 mg/dl and Hb A1c >7%. We make a validated survey consisting of 10 closed questions with three possible answers. These questions dealt with their pathology and alternative medicine.
Results: Opinion about alternative treatment: interested 44% (22/50); not interested 20% (10/50); do not know 36% (13/50). They know about acupuncture as a treatment for DM: yes 14% (7/50); no 86% (43/50). They would agree to treat their DM with acupuncture: Yes 72% (36/50), No 28% (14/50).
Conclusions: Although the most of those polled do not know the existence of a treatment for DM with acupuncture, most of them would agree to receive it with the aim of improving and reducing or avoiding taking medicines, what encourage us to try to introduce this practice in daily work. Taking into account this possibility we consider doing a subsequent study to assess the efficacy of acupuncture in DM.

P-143

A simplified physical activity questionnaire tailored for general practitioners

Schutz Y. (Lausanne)

General Practitioners (GP's) play a critical role in physical activity (PA) prescription. However, in Switzerland, their education and practice on the evaluation of PA is, at the present time, rather scanty.
Purpose: the aim was to develop a quick questionnaire in order to make aware the GP's about the different components of PA and to know which component could be enhanced in sedentary patients. 80 patients of normal to obese BMIs' were studied in a single general practice by the same physician (DS).
Methods: the patients were first interviewed by the GP, using a questionnaire. The duration of the interview lasted 3 to 5 min. The questionnaire was based on 8 items, selectively exploring the components of daily PA (occupational, non-occupational, transport, leisure, sports) and inactivity (TV, computer, sitting activities). It used a simple scoring system, which allows combining inactivity factors (– points, malus) with activity factors (+ points, bonus) to get a global picture of habitual PA. The scoring system used only 3 categories of PA: Low (L), Medium (M) and high (H) PA. The validity of the questionnaire was checked using an objective estimate of PA (electronic pedometers), which was given to the patient subsequently. The latter assessed the total number of movements (steps/day) over one consecutive week.
Results: L level corresponded to an average of 3'460 steps/d, M to 7'210 steps/d and H to 10'320 steps/d, with a significant difference among groups (ANOVA, $p < 0.001$). This global PA assessment allowed distinguishing between 3 broad categories of PA.
Conclusion: Acceptance of this questionnaire by GPs' remains to be further determined. It could improve the awareness of GP's on the importance of physical activity in disease prevention. It may provide some help for the diagnosis and prescription of PA in inactive overweight and obese patients.

P-144

"I want the HPV vaccination and …": HPV vaccination as a health promotion opportunity

Narring F. (Genève), Cellard Du Sordet O. (Genève), Gal-Duding C. (Genève), Meynard A. (Genève)

Purpose: All 11–14 year old Geneva region schoolgirls are routinely offered free quadrivalent HPV vaccine in a large immunisation campaign that also includes free catch up immunisation for 15–19 year old girls. Such large campaigns are an opportunity for sexual health promotion and catch-up for delayed immunisations (eg measles). Primary care physicians are key actors in this field and have to be prepared to address sexual health issues with young patients and their families.
Objectives: To describe interventions conducted at Geneva youth clinic (primary care facility for adolescents and young adults) who is a key actor in this campaign.
Methods: Nurses at the youth clinic register all cases and offer general catch up immunisations if lacking. They also systematically include counselling time about sexual health issues in a confidential environment. Physicians also raise these issues during general consultations.
Results: During 5 months, 128 young patients have asked for HPV vaccine. The young girls and their families have many questions (risky behaviours, sexual health and contraceptive methods, false beliefs about immunisations,…) and are willing to discuss them with nurses or physicians. A systematic intervention including questions and counselling before the vaccine administration needs some basic conditions: adapting discussion to developmental stage of adolescents, discussing confidentiality issues with young people and parents and having a private environment.
Conclusions: Young patients are willing to discuss sexual health issues in primary care visits given appropriate conditions. HPV vaccination provides a unique opportunity for information, screening and preventive health care counselling.

P-145

ADOS: an educational primary prevention program for preventing excess body weight in adolescents

Durrer Y. (Lausanne), Schutz Y. (Lausanne)

Today, prevention of obesity using various comprehensive programmes appears to be very promising. Holistic programmes including nutritional education combined with promotion of physical activity and behaviour modification constitute the key factors in the prevention of childhood and adolescent obesity.
Purpose: The purpose of this programme was to incorporate nutrition/physical education as well as psychological aspects in selected secondary schools (9th grade, 14–17 years).
Methods: the educational strategy was based on the development of a series of 13 practical workshops covering wide areas such as physical inactivity, body composition, sugar, energy density, invisible lipids. Questions such as "how to read food labels?", "is meal duration important", "Do you eat with pleasure or not?", "Do you eat because you are hungry?". were discussed. For teachers specific education, a highly illustrated guide was developed as a companion booklet to the workshops. These materials were first validated by biology, physical education, dietician and psychologist teachers as well as school medical officers.
Results: teachers considered the practical educational materials innovative and useful, motivational and easy to understand. Up to now (early 2009), the programme has been implemented in more than 50 classes from schools originating from 3 areas in the French part of Switzerland. Evaluation of the change in physical activity behaviour was based on one-week accelerometer recording, assessed before and after the one school-year programme. The evaluation indicated that overall physical lifestyle activity was substantially increased as evidenced by a significant rise in the number of steps per day from 10'200 to 12'300 i.e. an increase averaging 21%.
Conclusion: extension of ADOS to other regions requires longer term objective evaluation of the educational program, in particular to better assess its effectiveness.

P-146

Tobacco usage among youth in communities of North Bosnia

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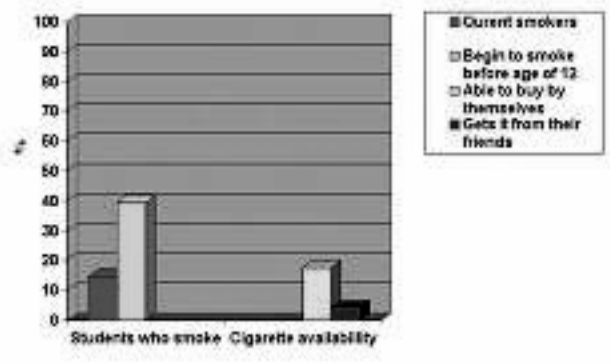
Introduction: Tobacco is traditionally brought up in Bosnia end Herzegovina for centuries, and smoking is a socialy accepted habit. Factors related with tobacco usage among youth include: low socioeconomic status, usage end approval among their colleagues, parents smoking, or teachers and educators, accessibility, availability and price of tobacco products.
Aims and purpose: To discover prevalence and factors related with tobacco usage among students of 7-th and 8-th grade of elementary schools in towns of Kalesija, Sapna and Celic, with goal of planning to improve efficiency of preventive end educational programs for youth, adjusting habits, behaviours and attitudes of young people towards smoking.
Design and methods: Filling in questionaries that have been given to the students in 7-th and 8-th grade, attendants of 7 elementary schools in mentioned communities of North Bosnia. Standardized questionary, modified by familly-medicine physician, held 34 questions with offered answers, with total respect of students privacy, and it was anonymous.
Results: It has been filled in 1475 questionaries from students aged 13–15. 14.6% are qurent smokers, 45.8% have been experimenting (ever tried in their lives). Age of beginning to smoke: 39.3% had smoking experience before age of 12. Gravity of smoking habit: 13.5% smokes or enjoy smoking cigarette first thing in the morning. Cigarette availability: 17.5% is able to buy by themselves, 4% gets it from their friends. Attitudes towards smoking: 21% believes that smoking improves mood and increases self-esteam or popularity among their friends.
Conclusions: Relatively high prevalence of smokers found among youth suggests that educational and preventive programs in schools should and must be more efficient and beneficial. Television and newspaper, parents and teachers should be encouraged to adopt more responsible attitudes towards smoking inside the house, around the school and inside the school building.

Smoking prevalence at youth in North Bosnia



Smoking prevalence at youth in North Bosnia

Public campaigns against smoking, and smoking presence and visibility in school and around the school

Public campaigns against smoking

	Students who have seen their colleagues to smoke around the school	Inside the school building	Professors have been seen smoking around the school	Inside the school building
(%)	65.4%	20%	36.3%	40%

Smoking presence and visibility in school and around the school

P-147

Animal-assisted therapy applied to persons with mental disabilities

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Introduction: Patients with psychic disabled have problems in comprehension and oral expression, which difficulties with speech, communication and social relations. Animal-Assisted Therapy (AAS) complements conventional therapies, the animal adopts a motivating role.
Objectives: To assess the effectiveness of AAS programme in patients with psychic disorders and communication problems. To determine degree of variation in verbal and non-verbal communication. To assess the improvement in functional vocabulary established.
Methodology: Before-and-after intervention study. Sample obtained from Occupational Therapy Service. Inclusion criteria: >18 years, diagnosed psychic disabled associated communication problem. Animal: dog.11 weekly 1-hour group sessions; October–December 2008. Variables: age; gender; pathological history; communication problem; photos-test + Isaac-test before/after programme; assessment of spontaneous verbal communication(SVC) +non-verbal communication(NVC),through direct observation with video-recording of first-last sessions.
Results: 12 patients, 83% males. Average age 38 years (SD ± 12) History: 33% cerebral paralysis,17% hemiparesis, 8% blindness, 8% autism, 8% Down.Communication problems 75% severe expression problem, 25% low comprehension level,17% aphasia. Average results(pre/post): Photos 15/16 (SD ± 6.7/6.8) Isaac 21.8/22.4 (SD ± 10.7) SVC 4.8/5.2 (SD ± 3.8/3.6) NVC 16.7/17.5 (SD ± 4.8).
Conclusions: Most patients have severe expression and comprehension problems with repetitive language. Test results reveal differences, but these are not significant and are attributed to the fact that it is difficult to quantify communication and to the lack of a test with which to do so. However, on assessing the sessions, the psychologist observed higher degree of concentration and attention in the patients and increase in verbal and non-verbal communication. Besides, patients explain to their companions the activity performed with the animal, which enhances social interaction.

P-148

Relationship between pulse pressure, cardiovascular risk and blood pressure control in a cohort of hypertensive patients treated at a health care center

Ortin J.M. (Alquerias), Delsors E. (Murcia), Ruiz de Aguirre S. (Altorreal), Hernandez M.J. (Murcia), Sanchez V. (Murcia), Bañon G. (Murcia)

Aim and purpose: Describe cardiovascular risk factors (RCV) in hypertensive patients treated at a health care center. Analyzing the evolution of the pulse pressure (PP), proving their relationship with the change in cardiovascular risk. And control of blood pressure (BP).
Design and methods: Design: Retrospective cohort without control group. Field: Area Urban Health. Subjects: Cohort of 338 patients. Sampling table of random numbers (Confidence = 95%, 5% accuracy) among the total of 3860 patients. We evaluated age, sex, smoking, diabetes, total cholesterol, HDL-cholesterol, blood pressure, pulse pressure and cardiovascular risk (REGICOR). Data were collected for the same patients at the beginning and end of the range (2003–2008). We analyzed the evolution of pulse pressure and its relationship to cardiovascular risk. Descriptive statistical surveys, t-Student for paired samples and linear correlation.
Results: The average age in 2003 was 59.46 ± 12.36 years. (42.6% males). The number of associated cardiovascular risk factors in 2008 were zero (18%), one (40%), two (27%), three (14%), four (1%). BP control was 27.6% in 2003 and 49.1% in 2008. 47.6% had a pulse pressure >60, 28.5% between 50 and 59 and 23.8% <50. The PP and the RCV fell between 2003-2008: PP (63.18 ± 0.25 to 57.84 ± 0.82, p <0.0001) and REGICOR (5.59 ± 0.25 to 5.03 ± 0.23, p <0.0001). The correlation between PP and cardiovascular risk was high in 2003 and 2008 (p <0.001). Among the well-controlled hypertension in 2008, the PP fell 9.49 mmHg (p <0.0001). However, among patients who had previously been controlled isolated systolic hypertension, there was increasing pressure pulse 1.31 (not significant).
Conclusions: High proportion of patients with high pulse pressure. By controlling blood pressure, decreasing the PP. The RCV measured REGICOR declined along with the PP in the range studied. There is a high correlation between PP and RCV.

P-149

Do teenagers' demanding reasons match up their basic health needs?

Antón Sanz M.D.C. (Cercedilla [Madrid]), Sánchez Calso A. (Galapagar [Madrid])

Aims and purpose: 1. Analyze teenagers' reasons for visiting physicians. 2. Evaluate preventive activities.
Design and methods: Study setting: Descriptive cross-sectional study
Subjects: Teenagers between 14 and 19 years old, who visited physicians in a rural health care basic area, from 1st January 2008 to 31st December 2008. Diagnosis of intervention: Simple random sampling. Variables studied: age, sex, number of reason for medical consultations, preventive activities performed: anti-alcohol and anti-tobacco advice, contraceptive methods, sexually transmitted diseases (STD), eating habits, teeth decay prevention and psychological problems prevention approaching.
Statistical analysis: Analysis using Statistics Program SPSS 14.0
Results: N = 166. Average Age: 16.34 ± 1.73. Sex: 53% Women (N = 88). Number of reasons for medical consultations 2.30 ± 2.14, sorted by frequency: 46.4% (77) upper respiratory infection, 16.3% (27) abdominal pain, 12% (20) injuries, 10% (16) headaches, 8% (14) acne, 6% (10) ophthalmic pathology, 1.3% others. The following preventive actions were performed: 70% (116) anti-tobacco-alcohol advice; 15.7% (26) contraceptive methods; 10% (17) STD; 61% (102) eating habits; 65% (108) teeth decay prevention; 9.6% (16) psychological problems identification.
Conclusions: 1. Teenagers are not family physicians usual visitors, being mostly for trivial pathologies. 2. General practitioners highly insist on anti-tobacco-alcohol advice, bucco and teeth health and nutritional habits; but hardly ever approach contraceptive methods, STD and psychological problems, so crucial in this transitional stage. 3. We should approach teenagers by increasing activities related to health encouraging and prevention.

P-150

Illness perception and cardiovascular risk factors in myocardial infarction patients: is there any relation?

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Aims and purpose: To investigate illness perception of myocardial infarction (MI) patients and its association with the patients' cardiovascular risk (CVR) factors.
Design and Methods: Cross-sectional study was carried out in 94 MI patients in three Croatian family medicine practices. Patients filled two questionnaires: on patients' general data and the brief illness perception questionnaire (IPQ-B). Included CVR factors data were: fasting blood glucose, total, LDL and HDL cholesterol, and blood preassure. Statistic analysis was done using Statistika, version 7.1 statistic program, and values P <0.05 were considered statistically significant.
Results: Distribution of patients illness representation scores (on 0-10 Thurston scale) showed high scores for timeline (9.0 ± 1.9), treatment control (7.5 ± 2.1) and illness coherence (6.9 ± 2.9), and moderately high scores for personal control (6.4 ± 2.4), consequences (6.0 ± 2.8), concern (5.7 ± 3.1), emotional response (5.5 ± 3.1), and illness identity (5.2 ± 2.9). Patients who scored high on personal control significantly had lower values of fasting blood glucose, total and LDL cholesterol, and systolic and diastolic blood pressure. Patients who scored high on treatment control significantly had lower values of fasting blood glucose, total cholesterol, systolic and diastolic blood pressure. Patients who scored higher on illness coherence had significantly lower values of LDL cholesterol, and systolic and diastolic blood pressure.
Conclusions: The usage of the IPQ instrument in MI patients has shown that people who had higher scores on personal and treatment control as well on illness coherence, had better values of some CVR factors from MI patients who scored lower. This implies a need for developing specific educational procedures for individuals who could be, on the basis of illness perceptions scale considered as patients at risk for inadequate self-care behavior.

P-151

Food allergy in children – how to manage?

De Carvalho I. (Coimbra), Freitas Martins C. (Coimbra)

Food allergic disorders affect about 6% of children, mainly in the first three years of life, and its appearance is importantly associated to food introduction. It is a worldwide problem, but it seems to be increasing in westernized countries. Food allergy has various target organs. Most sites affected are skin and gastrointestinal and respiratory tracts. Multiorgan reaction – anaphylaxis, is rare but the most severe reaction. Cow's milk, egg, peanut and seafood are the most prevalent cause of allergic reactions. IgE-mediated reactions are usually immediate in onset, but other important reactions have different immunological mechanisms, leading to apparent reaction fairly later than the food contact moment. Also, there is other sort of food allergens not easily assessed, making this diagnostic procedure to be a real challenge.
Aims(s) and purpose: To create an algorithm of food allergy management in children.
Design and Methods: Systematic review of the recent medic literature, using the key words "Food allergy", "children" and "major allergens".
Results: A complete medical history is the most important step in diagnosing food allergy. Before a suspected food, patient should initiate an elimination diet. IgE mediated disorders can be easily assessed using in vitro tests for specific IgE. These exams are an easy way for screening food allergy in the primary care. Skin prick tests are the next step, used to detect sensitivity to specific foods, generally in collaboration with the secondary care specialist. An elimination diet is the main therapeutic process. However, in case of reaction, oral antihistamine is useful to alleviate symptoms. Epinephrine is life-saving in case of anaphylaxis.
Conclusions: Food allergy in children can be assessed easily by the general practitioner. One of the most reliable reasons is the proximity relation to the patient in its own ambiance.

P-152

Nutrition in elderly

Tavares A.S. (Coimbra), Fonseca G. (Lousã), Silva M. (Cantanhede)

Aims and Purpose: Malnutrition is a common problem in the elderly. Loneliness, lack of support, weakness, poor oral health, limited income and mental disorders are some of the various factors that may contribute to inadequate nutrition. The family physician must assess the nutritional status of all elderly patients. The restoration and maintenance of adequate nutrition is essential for healthy aging. This study aims at reviewing and systematizing the information published on nutrition in the elderly.
Design and methods: Literature review, based on consultation of manuals and periodicals, in search of articles published in the database Pubmed/Medline between 1999 and 2009 in English and Portuguese.
Results: Old people tend to eat poorly balanced meals, consisting of food that requires little preparation. Loneliness and sedentary lifestyle can lead to weakness and decreased appetite. Mental disorders and poor oral health may contribute to the poor state of nutrition. Income limits may restrict the purchase of a sufficient quantity of suitable food. The correction of some of these problems can reduce the nutritional deficiencies in senior patients. Some principles for healthy nutrition among the elderly include: increased intake of protein (15–20%), decreased intake of fat (30%), sufficient carbohydrates (50–60%), sufficient vitamins and minerals, adequate water intake, and a fiber-rich diet. It is essential to assess the overall status of the elderly, their mental status and their levels of physical activity. Objective examination is important since it may unearth evidence of significant nutritional deficits. Clinical and laboratory examinations can help define the disturbances and the nutritional consequences of these problems.
Conclusions: The family physician should properly assess the nutritional status of their elderly patients to restore adequate nutrition and healthy aging.

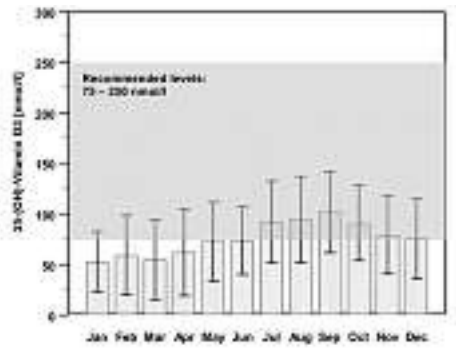
P-153

Prevalence of 25-(OH)-vitamin D3-deficiency in general practice

Walter P. (Olten), Rothen J.P. (Olten)

Aims and purpose: Prevalence of 25-(OH)-Vitamin D3 (Cholecalciferol) deficiency in patient samples sent from general practitioners in Switzerland during one year.
Design and Methods: 25-(OH)-Vitamin D3 in serum was measured by HPLC using an assay from Chromsystems Instruments (Munich, Germany). Results were analyzed using the MedCalc software.
Results: 25-(OH)-Vitamin D3 levels were put in relation to recently published recommendations (Am J Clin Nutr. 2006;84:18–28). In 2300 continuous samples collected during one year, 53% of all 25-(OH)-Vitamin D3 results were below the recommended limit of 75 nmol/l, while only 0.2% (n = 5) were above the upper limit of 250 nmol/l. Mean 25-(OH)-Vitamin D3 values in subjects >75 years were significantly lower (66.7 ± 41.1 nmol/l) than the overall mean (76.4 ± 41.6 nmol/l). This finding is in accordance with a previous observation, that the mean 25-(OH)-Vitamin D3 value from patients admitted to an acute geriatric hospital was 32.3 ± 23.6 nmol/l (n = 11, not published). No significant sex difference was observed. 25-(OH)-Vitamin D3 levels displayed seasonal variability with significantly higher levels in summer with a maximum in September (mean 101.7 ± 40.5 nmol/l) than in winter with a minimum in January (mean 52.5 ± 29.7 nmol/l).
Conclusions: 25-(OH)-Vitamin D3 deficiency is very common in the general population, particularly in elderly people. Values in winter are significantly lower than in summer.

Figure



P-154

Pharmacotherapy of metabolic syndrome

Radisavljevic N. (Belgrade), Dimitrijevic D. (Belgrade)

Introduction: According to the newest definition of metabolic syndrome (Msy) suggested by the International Diabetes Federation (IDF), the person must have central obesity plus any two of the following four factors: fasting plasma glucose (FPG)>= 5.6 mmol/L; triglycerides ³1.7mmol/L; BP ³130/85 mm Hg and HDL <1,03 mmol/L in males and HDL<1.29 mmol/L in females or treated any of these disorders. Pharmacological treatment of one risk factor may aggravate the others (beta-blockers and thiazide diuretics) or may have positive metabolic effects (metformin and ACE inhibitors).
Aim: To quantify the patients with metabolic syndrome and its pharmacotherapy.
Method: We made random 20% sample of patients examined in the general practitioners office during first 30 working days of the year 2008. and studied their medical documentation.
Results: Among inspected medical documents there were 135 with valid data, 56% were females of the average age 64.13 (sd = 16.03) and 44% were males of the average age 65.77 (sd = 12.25). According the IDF, 64% of all females and 66% of males had Msy. Males with Msy mostly were hypertensive (90%) and 69% had hyperglycaemia. Hypertension in men was treated with ACE inhibitors in 77%, 50% with beta-blockers, but 33% of them used ultraselective beta-blockers and only 17% was treated with diuretics. 33% of hyperglycaemic persons used metformin. 80% of females with Msy suffered from hypertension and a half of them used ACE inhibiors. 22% was treated with beta-blockers, but 14% of them used ultraselective beta-blockers and 16% of hypertensive females used diuretics. Hyperglycaemia in women in 33% was treated with metformin.
Conclusion: More than 50% of the patients had increased risk of cardiovascular disease, but high rate of the patients was treated with ACE inhibitors according the evidences that they had positive effects on metabolic state in obesity.

P-155

Live Walking: a physical activity promotion program

Rubio V. (Spain), Iturrioz I. (Spain), González De Arriba I. (Spain), Iturrioz P. (Spain)

Aims: We want to present a Program for the Promotion of Physical Activity as a healthy habit promoted by the Basque Health Service, using pedometers as motivation and follow-up tool and training Primary Care Health Professionals for the prescription of physical activity.
Design and methods: 1. Study Population: Sedentary and Chronic Patients who can benefit from physical activity. 2. Training Plan for Professionals: Two professionals (1 doctor and 1 nurse) for each Health Area (6 areas) were trained during a 6 hours workshop. After,

each couple doctor-nurse gave a one-day course and 3 hour workshop in every Health Area to interested Health Professionals. 3. Action Plan: Patients were included in the program by doctors or nurses in the Health Centres of the Basque Country. Initially, each patient had an evaluation on his practice of physical activity and their capacity, preferences and attitudes towards the change using the Prochaska-Di Clemente model. Patients in Preparation Attitude received a brief advice, a pedometer and a leaflet about healthy physical activity information. Three later follow-up checking (15 days, 3 months, 1 year) will be made in the health Centre.
Results: Divulgative campaign: The program started (2007) with a Popular Healthy Walk in Bilbao where more than 5.000 people participated, in 2008 were 8000.
Participation: 588 Health Professionals received training and worked in the program.
Patients incorporation: 2212 patients have been included in the Program (2008)
Conclusions: High participation of professionals and patients. High acceptance of the pedometers by the patients.We had problems with the reliability and validity of the first pedometers, but now we have good pedometers.

P-156

Population profile of Karsiyaka 20th Fatma Kutlay family health center in Izmir – Turkey

Demirci A. (Izmir), Dikici M.F. (Samsun)

Aim: Population based family health centers were constituted in March 2007 in Izmir Turkey. Our center is in the residential area of middle economical status in Izmir. In this study, we aimed to present our population data to enhance the quality of health service.
Methods: We investigated all the recorded patient portfolio and guest cases between February 1st 2008 and January 31st 2009.
Results: We provide primary health care to 4439 patients. Of those 3674 are recorded patients and 765 are guest cases who live in Izmir temporarily and whose family doctors are in other cities. Of 3674 recorded cases 1660 (45.2%) were male, 2014 (54.8%) were female. Total 253 (33.1%) were male, 512 (66.9%) were female in the guest group. Mean age of the men was 42.31 ± 20.90 and 43.07 ± 21.0 in the women, 14.50% is over 65 years (14.74% female group and 14.18% male group). Total 64.22% of the patients visited our center. Referral rate was 2.45 per year regarding whole population, and it was 3.81 (1–38) in the group who came to visit. In the whole group, 2852 cases were provided health care with electronic data of 10879 interviews. The most common causes and diagnoses of visits were 2157 (19.8%) upper respiratory tract infections, 1384 (12.7%) hypertension, 670 (6.2%) anxiety/ depression, 520 (4.8%) arthritis, 476 (4.4%) (gastro-esophagial reflux/peptic ulcus), 411 (3.%) diabetes, 364 (3.3%) myalgias, 335 (3.1%) dyslipidemias, 227 (2,1%) fonctional bowel disease, 153 (1.4%) benign prostatic hyperplasia, 138 (1.2%) diarrhea, 133 (1.2%) uriner tract infections, 129 (1.2%) chronic iskemic heart disease .
Conclusion: Our population is relatively old. Chronic diseases are common after respiratory tract infections in our population. In primary care we need to know our population to plan better preventive care and health service to the cases.

P-157

Care of type 2 diabetes mellitus patients has improved in the Finnish health centres during the new millennium

Winell K. (Espoo), Soveri P. (Porvoo)

Aims and purposes: The aim of the quality network is to collect annually data about the state of care of patients with type 2 diabetes mellitus (T2DM) and to better care if it is not at the standard level. The purpose of this presentation is to show the development during this millennium.
Design and methods: The GPs and nurses in the participating health centres collect data on process quality and intermediate outcomes during a fortnight every September. The data is collected over all T2DM patients they meet during this period. The sum of samples collected from the participating health centres are compared for each year.
Results: 51 health centres participated in 2008. Information was gathered about 5689 patients with T2DM. The proportion of T2DM patients keeping HbA1c level at 7.5% or under has risen from 53% to 82%. The proportion of those having LDL cholesterol at 2.6 mmol/l or under has risen from 23% to 66%. There is hardly any change in the number of daily smokers.
Discussion: Yearly quality measurements show a positive development in many indicators of care. It has also revealed slow decline in some indicators. Lessons learned about the necessity of systematic follow up will be demonstrated in oral presentation.

P-158

Accomplishment of pain management in primary health care

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Aim and Purpose: Management of acute pain in patients with musculoskeletal disorders (muscle injuries, joint pain, lumbar pain, pleuritic pain etc) as well as after minor surgical interventions. We examined main causes of ineffective analgesia and the multiple complications induced by the inadequate therapeutic approach of this symptom.
Design and Methods: The study was based on a series of 828 patients who presented to the Health Center suffering from acute pain. Medical intervention was consistent of administration of analgesic agents either orally (516 patients), intramuscular (252 patients), or intravenously (60 patients), in order to compromise the pain. In addition, coexisting patient pathology was taken under consideration, as to avoid potential harmful complications.
Results: Most of the patients (72%) appear to require analgesia after pain establishment, resulting in a reduced capacity to limit this symptom. In the opposite, a small number of patients (24%) requires medical attention for pain management prior to initiation of acute pain establishment.
Conclusions: Effective management of acute pain remains an issue of critical importance, since ineffective management of the latter may lead to severe unpleasant complications. Several analgesic drugs and different routes of administration are at the disposal of the doctors in relation with the nature and intensity of every incident. Unfortunately, a number of cases are noted in which the danger of excessive drug administration is underestimated. Determining parameters for proper medical care of the patients in pain constitute the nature of the injury, the type of operation, the coexisting patient pathology, the patients individual tolerance to pain and the education and clinical experience of the medical and nursing staff.

P-159

Physical exercise in pediatric ages

Samarão J. (Braga), Dias A. (Braga)

Aims(s) and purpose: Physical exercise (PE) and physical activity (PA) are good for the healthy development of the musculoskeletal tissues, the neuromuscular awareness and the cardiovascular system. There's also an important contribution to maintain the body weight and to the social and psychological development. Despite the multiple advantages of PE in children and adolescents, not all of the exercises are suitable for all children and adolescents. So the activities and exercises should be individualized. Our main purpose was to know how and when to recommend PE in the children and adolescents.
Design and Methods: Systematic research on the Medline database between 1998 and 2008, with the keywords Physical exercise, Physical activity, Children and Adolescent.
Results: The authors have found diverse recommendations referring to the aims, the time and type of PE. With this we have gathered specific information about the type, the length of exercise and there main goals for different age brackets (0–12 months; 12–36 months; 3–6 years; 7–10 years e more than 10 years).
Conclusions: The authors didn't find any exact orientation, probably because of the lack of investigation studies in this area and because of ethical considerations in studying children. In spite of this, we draw specific information for different age brackets that could work as guidelines for physicians and parents, keeping in our minds that PE in children should be direct to each subject and based on his maturity, on his skills and on previous experiences. The main target for the PE should be all about the acquisition of the basic motor skills and coordination, the raise of the levels of PA, the development of social skills and having fun.

P-160

Stop smoking – is healthy life style in?

Nenadic D. (Belgrade), Terzic-Mrkalj A. (Belgrade)

Smoking is widely acknowledged as one of the most harming life-style choices, contributing to death of millions of people around the world, in particular in developing countries. As much as half of these deaths occur in middle age. In this study we assessed how wide-spread smoking was among urban patients in a transition country. We used questionnaires to collect the data from three patient categories (125 subjects): police students, active and retired public sector employees. The subjects completed the questionnaires with guidance from their GPs. The data was analysed taking into account sex, age and educational background. 38% of subjects smoke regularly and 44% are non-smokers; 18% have smoked in the past. 42% of male subjects smoke, compared to 1/3 of female patients. Almost 3/4 of smokers smoke between 20 and 30 cigarettes every day. Furthermore, 27% of non-smokers have tried smoking in the past (73% are female). It is interesting that 60% of current and ex-smokers have stated that the main reason why they have started smoking is

socialising, since the majority of their immediate environment smokes. As opposed to many other studies (in particular in the Western world) which have claimed that around 70% of smokers would like to quit, our study shows that, surprisingly, even 56% of active smokers do not want to stop smoking. As the main reason behind this choice, the subjects have specified stress of the everyday life and that smoking makes them less anxious. On the other hand, more than two thirds have virtually no physical exercise. The study has shown extremely low awareness of smoking risks and its effects on health. It is obvious that more aggressive campaigns are needed to point to healthier habits. Given the main reasons for non-quitting, the key target should be changing the attitude towards healthy life-style and social smoking, and developing individual abilities to recognise and refuse to accept smoking expectations from the community.

P-161

Pets and elderly people: single company or something else?!?

Rodrigo Claverol M.D. (Lleida), Ortega Bravo M. (Lleida), Sarmiento Cruz M. (Lleida), Rodrigo Claverol E. (Lleida), Capdevila Andreu M. (Lleida), Nadal Braque N. (Lleida)

Objective: Caring for an animal can motivate an individual to face up to life, enhance inter-personal relations and lead to improvements in mood and feelings of loneliness. Our objective is to determine the degree to which pets influence health in elderly people.
Methodology: A transversal descriptive study. Population >65 years old, attending surgery at an urban Primary Care Clinic. The physicians were provided with an individualised questionnaire during January–May 2008. Variables: Age. Gender. Ownership of an animal, and which animal; animal taken for a walk, how often; owner responsible for animal's hygiene/feeding; whether it is the owner's first animal. Cardiovascular risk factors (CRF). Whether patient is receiving anti-depressant treatment.
Results: 154 patients, average age 74.5 years (SD ± 7.1), 91 (59%) females. Those currently owning an animal account for 38.6% of the total (dog only 46.7%, bird 28.3%, cat only 13.3%, dog+cat 6.7%, fish 3.3%). Take animal for walks: 73.5% (85.7% between 2–4 times a day). Responsible for feeding: 78%, and for hygiene: 64%. For 35.6% the animal is their first ever pet. CRF: hypertension 46.5%, dyslipidemia 13.2%, diabetes 4.4%, >1 CRF 35%. Taking anti-depressants: 27% (CI of 95%: 18–37%) of those with no animal and 24% (CI of 95%: 14–37%) of those who possess an animal.
Conclusions: Nearly 40% of the people surveyed currently own a pet. Those elderly people who own a pet take fewer anti-depressants, although not to a statistically significant degree, and those who own a dog get regular daily exercise through walking their pet. In conclusion, animals can provide social support and a feeling of well-being, and thus may constitute a powerful ally for the primary care physician.

P-162

Physical activity promotion in primary health care with pedometers to count steps

Rubio V. (Spain), Iturrioz I. (Spain), Gonzalez de Arriba I. (Spain), Iturrioz P. (Spain), Iguiñiz J. (Spain), López I. (Spain), Aldazabal P. (Spain)

Aims: Walking as physical activity is recommended to prevent sedentary life and to treat different illnesses. The use of pedometers can help to know their capacity and objectives. This study want to determine, before recommending their use in a program to improve physical activity (Live Walking), the reliability and validity of 3 different pedometers to count steps.
Methodology: 1. Pedometers: We evaluated 3 models of pedometers to conduct this study: YAMAX SW200, SILVA Step Counter and OMRON HJ-109-E. Eight units of each MODEL were evaluated. 2. Subjects: A total of 6 people (4 male and 2 female) participated voluntarily in the study as evaluators. 3. Measurements: Each person made a total of 12.800 steps around a close circuit of 200 meters wearing 4 pedometers in each round (2 on each side). At the end of the each round, an investigator noted down the number of steps displayed in the pedometer and introduced them in a database. Measurements were repeated twice with each pedometer at each position. 4. Method of analysis: We made an analysis of the Variability INTER and INTRA-DEVICE (ANOVA and T-TEST of repeated measures for each of the evaluated MODELS), analysis of VALIDITY INTER-MODELS (ANOVA), and test of SCHEFFÉ. 5. Results: We found no differences in the variability INTER-DEVICES YAMAX ($p = 0.038$) and SILVA ($p = 0.124$), but there were significant differences in the OMRON, ($p < 0.001$). No differences in the variability INTRA-DEVICES YAMAX ($P = 0.142$) SILVA ($p = 1$) OMRON ($P = 0.082$). Finally, we found variability INTER-MODELS differences between YAMAX and SILVA with respect to OMRON ($F = 92.241$ $p < 0.001$).
Conclusions: 1. Most reliable and valid pedometers: YAMAX and SILVA. 2. We recommend the SILVA pedometer due to its lower cost and similar performance compared to the YAMAX.

P-163

Effective treatment of accidental injuries of the elderly in primary care

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Aim of the study was examined the effectiveness of primary care in the confrontation of injuries caused by accidents at the third age.
Design and Method: This is a retrospective analysis. We used the records at the Emergency Department in a Primary Health Center in Greece. We analyzed the mechanism, the kind and the severity of every injury recorded (according to International Classification of Diseases, 10th revision) between January and December 2008. T-test, chi-squared test and logistic regression were used for the statistical analysis.
Results: Three hundred fifty seven accidents were recorded, representing 1.9% of total amount of the cases (95% CI 0.017; 0.022). Elderly patients were 217 males and 140 females with mean age 70 ± 7.8 years. The monthly frequency of accidents was uneven ($p < 0.001$) with highest frequencies during the summer and month October. The percentage of trauma of upper limbs (S40-S49), head and neck (S00-S19) and of lower limbs was 40%, 26.9% and 18.2% respectively. The most often mechanisms were falls and mechanical powers from objects (W20-W49). 61.5% of the patients were fully treated at the health center, 20.8% was advised to undergo more examinations in a regular basis and the rest 17.7% was referred to the nearest hospital. From the injuries that needed hospital treatment, more often were abdominal and lumbar traumas and from the injury mechanisms more often were falls and car/bike accidents (OR = 3.3 and OR = 3.6 respectively).
Conclusions: Our results suggest that the treatment of accidental injuries of elderly patients was satisfactory in primary care despite the luck of adequate medical equipment.

P-164

Influence of primary care patients knowledge of antibiotics on the level of discontinuation of antibiotic therapies in Poland

Matyjaszczyk M. (Lodz), Karauda A. (Lodz), Glowacz A. (Lodz)

Background/aim: It is well known that antibiotic therapies are much less effective than they tend to be under the conditions of clinical trials. One of the reasons of that situation is discontinuation of therapy. The main aim of our trial was to find out whether the level of knowledge of antibiotic therapies among primary care patients has influence on the continuation of the therapy up to the time it was prescribed by the physician.
Methods: This was a questionnaire-based study. Specially prepared questionnaires were distributed among 500 primary care patients in Lodz (central Poland). In this questionnaire we asked patients about their knowledge of antibiotics, sources of that knowledge, as well as reasons why patients are not obtaining drugs as prescribed, their reasons for discontinuation of therapies and related issues.
Results: Our study revealed that the most important reasons for the ineffectiveness of antibiotic therapies were: insufficient knowledge among patients (incorrect, non-reliable sources), insufficient levels of information delivered to the patients by their physicians, the effect of the information regarding side effects contained in the medication leaflets (patients are not using the drug because of them, but they are not informing their physicians about that fact). Improvement of the state of health after 3–4 days of therapy is very important cause for discontinuation of therapy.
Conclusion: The results of this study suggest that in order to improve the outcome of the antibiotic therapies, physicians should put much more attention on educating their patients about medications they are prescribing. Physicians should also inform patients about possible side effects of the therapy as well as taking under consideration its costs.

P-165

Assessment of alcohol consumption in students in northern Portugal

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Recent international studies predict that 72.8% of the students with 16 or more years of age have already consumed alcoholic beverages. Earlier consumption is related to alcohol dependence and abuse, therefore there is an urging need to evaluate this problem and

implement preventive measures. There's a lack of recent data regarding alcohol consumption in Portuguese students before the age of 16. This study aims to determine the prevalence of alcohol consumption and its pattern among 13 to 15 years old students, and to verify its association to age and gender. A cross-sectional observational analytic study was performed on a proportionally stratified convenience sample of 721 students. The Alcohol Adolescent Involvement Scale was applied and four variables were collected: age, gender, prevalence and patterns of consumption. Bivariate analysis assessed the relationship between prevalence of consumption, its pattern, age and gender. 707 students answered correctly to the questionnaire (50.8% male). 65.3% have consumed alcohol at least once in their lifetime. Among these, 52.1% were frequent consumers without problems and 9.9% irregular drinkers. The rates of regular drinkers with problems and alcoholic-like were 3.5 and 3%, respectively. Bivariate analysis showed that males presented a 10% higher prevalence of consumption ($p = 0.009$). Males were related to more regular patterns of consumption ($p = 0.002$), and 6% were regular consumers with problems (females 1%). With increasing age, there was a decrease in the number of non-consumers and an increase in the frequency of consumption. However, the higher rate of regular consumers with problems was among 13 years old students. A high prevalence of alcohol consumption was found, similar to studies with older teenagers. The differences in gender and age are comparable to international data. Although the rate of regular consumers increased with age, the highest prevalence of alcohol-related problems was in the youngest group.

P-166

Addressing alcohol abuse with a community oriented primary care approach: mission impossible?

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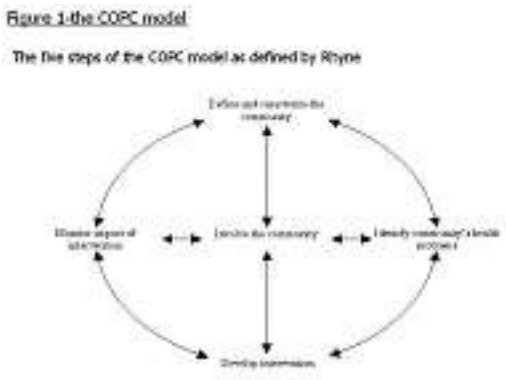
Aims and purpose: In Switzerland, approximately 10% of the population suffers from alcohol problems. However, only 10–30% of people with alcohol problems seek treatment, most of these being the severest cases. For this reason, we aimed to address the alcohol problem in the community, using a bottom-up, non-stigmatising approach. The goal of our project was to increase knowledge and improve care regarding the management of alcohol problems by actively engaging the community itself. The objectives were to identify people in a defined community with an alcohol problem who had never sought professional help, to understand their current needs and to assist them in reducing their alcohol consumption.
Design and methods: We used the Community Oriented Primary Care (COPC) method, a five-step process, by which a defined population's health problems are identified and addressed with their active participation. The community targeted was a neighbourhood of Lausanne, Switzerland, with 21350 inhabitants. The community was characterized by epidemiological data and through key informants. We recruited the people with an alcohol problem with an article in the local newspaper, with posters and flyers. Those agreeing to participate were to undergo an audio-taped, semi-structured interview and to complete a questionnaire with the aim to define the most common problems encountered by this population and to develop an intervention.
Results: Community organization working in the neighbourhood participated actively, but we failed to recruit people with an alcohol problem.
Conclusions: Several hypotheses may be advanced regarding the failure of this project: insufficient effort towards recruitment; social representations and taboos regarding alcohol dependency; factors linked to the setting and insufficient funds.
We nevertheless need a more holistic approach to people suffering from alcohol problems at an early stage and community approaches seem most adequate.

COPC model



P-167

Primary care services provided to adolescents in detention

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Purpose: Little is known on the primary care needs of young offenders. The aim of this study was to identify the range of problems for which primary care was provided in a juvenile detention facility in order to inform the development of future primary care services in detention.
Methods: We reviewed the medical files of all adolescents detained in a pre-adjudication and educational detention center in Switzerland in 2007. The health problems for which services were provided were coded using the International Classification for Primary Care codes (ICPC).
Results: Of 315 adolescents aged 11–19 years admitted to the facility in 2007, 60% (143 males, 45 females) had consultations with a primary care physician. Among these 188 adolescents, mental health problems were very prevalent (males 57%; females 76%). The most commonly managed physical health problems were dermatological (males: 50%, females: 49%), respiratory (males 22%, females 29%) musculoskeletal (males 13%, females 18%) and gynecological (females: 29%). 5 (11%) females were treated for STI, and 4 (9%) needed care for pregnancy. Tobacco use was common (males 66%, females 58%), as was cannabis abuse (males 34%, females 24%) and alcohol misuse (males 27%, female 22%). Acute dental problems occurred in 15 adolescents. Five detainees reported exposure to violence from the police during their arrest.
Conclusions: In addition to health problems known to be more prevalent among young offenders, such as mental health problems and STIs, these adolescent detainees frequently required care for more generic primary care problems. These problems were similar to those usually seen in adolescents visiting family doctors in the community. In Europe, primary care facilities are rarely available in juvenile detention centers. These data confirm that in addition to mental health services, primary care services should be part of the health services provided to adolescents in any juvenile detention facility.

P-168

Complementary skills in joint pathology in a health care center

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Aim: To know the practice and the effectiveness of local infiltrations with corticosteroid in a Health Care Center during 2008.
Design: descriptive observational study.
Method: The variables analysed are infiltrated pathology, results and referral to specialists.
Results: During 2008, 66 infiltrations were made in 52 patients. The most frequent infiltrated pathologies were shoulder which represents a 53% of the total infiltrations, and knee with a 27.2%. Other locations were epicondylitis, coccygodinia, bursitis pertrocanterea, calcaneus spur, pes anserinus and epitrocleytis. From all the infiltrations, only the 28.8% (15 patients) required a second one and from those, the 46'6% (7 patients) was referred to the specialists. The most derived pathology was gonarthrosis with 4 patients, followed by painful shoulder with 3 patients.
Conclusion: Local infiltrations with corticosteroid are an effective technique in a Health Care Center, because its easy use, low cost and few complications. With them, we can prevent most part of the referral to the specialists.

P-169

Health education in clinics with papers

Alonso Valles L. (Barcelona), Ribatallada Diez A.M. (Barcelona), Badia Casas R. (Barcelona)

A group of health professionals, with the support of a scientific society of primary medicine, have been working since 2002 to make information sheets for health education about many different health problems to be administered at the primary care clinics. These sheets can be consulted, both by professionals or patients, and obtained free from the scientific society web. They embrace many different pathologies, and are made to be useful, and with scientific strictness and based in the rules of health education. The sheets are periodically revised.
Aim: Provide information sheets to be used at the primary care clinics, with the aim of improve patients satisfaction, their understanding of their pathologies, their self caring and compliance of treatment.
Methods: Existing health education sheets used at the clinics have been revised, viewing their pedagogical and scientific abilities, iatrogenic size of writing, compressibility, inclusion of the date of publication, drawings with educational function, etc. Initiated edition of papers, following rules for health education. An editorial committee has

been developed with multidisciplinary health professionals (GPs, nurses, informatics, journalist and administrative). Also, they have been working together with experts of every health problem. Information is abridged at one only page, to facilitate copies and reading.
Results: At the moment there are 60 edited sheets, available at internet, free access, in Catalan and Spanish, edited at one page. Patients and health professionals use the sheets and inform us about their satisfaction in them.
Conclusions: This is a project in evolution, made by health professionals, based in the scientific consensus and in the rules of public health education. The project has great acceptation among professionals and patients. At the moment other sheets are being made or revised.

P-170

Diabetic patients with age superior to 65 years: do they present differences of the ankle brachial index (ABI)?

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Aims: The Index ankle Arm (ABI) detects the presence of atherothrombotic arterial pathology of the legs and allows to predict vascular complications in diabetic patients.
The aim of the study is to compare the results of the ABI in diabetic patients, differentiated two groups: Major and equal to 65 years and lower than 65 years.
Methods: Descriptive transversal study of 100 diabetic patients, from one urban primary heathcare center, who were referred by their physicians to assess the ABI.
Variables: age, sex, ABI, tobacco and atherothrombotic pathology (coronary disease and heart failure, cerebral vascular disease).
Results: Group with age major or superior to 65 years (63 patients, 60% men):
– values of normal ABI (76%), pathological (19%) and not assessable (5%). – smokers: 3 patients (5.2%). – atherothrombotic pathology: 12 patients (19%). Group with age lower than 65 years (37 patients, 64% men): – values of normal ABI (70%), pathological (20%) and not assessable (10%). – smokers: 7 patients (20%). – atherothrombotic pathology: 11 patients (29 %).
Conclusions: The group with major or equal age of 65 years presents better percentages of normal ABI (76% versus 70%) and similar percentages of pathological ABI (19% versus 20%) attributable probably to the minor number of active smokers in the group of major age (5,2% versus 20%), existing in this group fewer atherothrombotic pathology (19% versus 29%). We must insist on the importance of leaving the tobacco to lower the cardiovascular global risk and complications of diabetes.

P-171

Impact of smoking law

Roig Grau I. (Manresa), Rodriguez Sotillo D. (Manresa), Moya Hernandez M.J. (Manresa), Moratalla Gellida G. (Manresa), Sanchez Sanchez-Crespo A. (Manresa), González Pérez E. (Manresa)

Aim: Influence of the "anti-smoking" law in an active smoking population of a Health Care Center after 4 years of its introduction.
Design: Retrospective cross-sectional study.
Method: Different variables were analysed through a telephone survey: sex, age, smoking years, number of cigarettes, law application, acceptance of the law, smoking cessations, considerations to quit and if consumption is reduced.
Methodology: Bivariate analysis.
Results: 500 telephone surveys were collected during 2008. From these, 42% were women with 36 as the average age, 15 years of smoking and 13 cigarettes/day in average. On the other hand, 58% were men with an average age of 42, 21 years of smoking and 16 cigarettes/day. From the 500 respondents, 85% applied the law and 64% accepted it. Although only 2.2% quit smoking and 13.6% consider doing it, the consumption was reduced for 40% of the respondents. The main factor influencing was health (95%), followed by price (4.6%) and will power (0.6%).
Conclusions: More than 70% of men and women are in accordance with the law but have not quit because of it. The law has not influenced in considering to quit smoking just because they have considered it before, but it's true that more than half smoke less since the law.

P-172

Attitudes to preventive services in primary care: the views of patients. EUROPREVIEW patient study

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Aims and purpose: To assess patients' beliefs and attitudes regarding preventive services carried out at primary care level and to evaluate their impact on behaviour.
Design and methods: International survey. At least 10 practices (clusters) were randomly selected from each of the 22 participating countries (stratum). 40 patients from each practice were included in the study – randomly selected on different days during 2008. The study questionnaire was translated into the original language of each country using a method of translation and back-translation. The questionnaire was self-administered with the supervision of an investigator. Data was recorded in a custom designed database using a code-protected webpage (www.europrevstudy.net) in order to assure data confidentiality.
Results: To date, 4895 questionnaires have been recorded, 51.71% (95%CI 49.34–54.08) women. Mean age (SD) was 50.39 (95%CI 49.82–50.95) years, 76.09% of patients were married and 58.85% were employed. During the 12 last months prior to the survey 38.06% (95%CI 35.72–40.45) of respondents were diagnosed with, or treated for, hypertension, 29.98% (95%CI 27.81–32.25) for hypercholesterolemia and 14.28% (95%CI 12.67–16.07) for diabetes. 93.42% (95%CI 91.35–95.03) of these hypertensive patients thought it would be appropriate to check blood pressure at least yearly, 87.23% (95%CI 84.31–89.67) of the patients diagnosed with hypercholesterolemia thought it would be appropriate to check cholesterol levels at least yearly and 91.97% (95%CI 88.41–94.51) of the diabetic patients thought it would be appropriate to check blood sugar levels at least yearly.
Conclusions: Although most patients are aware of the importance of controlling cardiovascular risk factors, an important goal would be for 100% of patients attending primary care to be aware of the corresponding preventive services.

P-173

The accuracy of resting metabolic rates estimated using fat free mass and equations in obese women

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Purpose: The accurate assessment of the resting metabolic rate [RMR] is important for primary care physicians in managing obese patients. However, the method of measuring the RMR directly requires expensive equipment and complicated conditions. Therefore, it is commonly estimated using several equations in clinics. In addition, it can be estimated using fat free mass. The present study purposed to examine which is more accurate among the estimation method using fat free mass and those using equations.
Methods: The subjects of this study were 36 Korean adult women who visited the Department of Family Medicine, Chungnam National University Hospitalfor obesity. Fat free mass was measured by InBody 3.0 (Biospace, Seoul, Korea), which is bioelectric impedance analysis. In addition, the RMR was estimated using 4 equations (Harris Benedict equation, FAO/WHO/UNU equation, Mifflin equation, and Schofield equation). The actual RMR was measured by MedGem (Microlife USA, Dunedin, FL, USA). Using the actual RMR as reference, accuracy was compared among the RMR estimated with fat free mass and those estimated with equations.
Results: The estimation method using fat free mass showed highest correlation ($r = 0.680$, $P = 0.000$) with the actual RMR. Among the equations, Harris Benedict equation ($r = 0.616$, $P = 0.000$) and Mifflin equation ($r = 0.608$, $P = 0.000$) showed relatively high correlations with the actual RMR. The error was smallest in the estimation method using fat free mass. Among the equations, Harris Benedict equation and Mifflin equation showed a smaller error than the others.
Conclusions: The estimation using fat free mass may be helpful for family physicians to estimate the RMR in managing obese patients.

P-174

Investigation of factors influencing breastfeeding duration

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Aim: Factors influencing duration of breastfeeding are investigated.
Design and Methods: A questionnaire consisting of 32 questions about demographic data and breastfeeding attitudes is performed in mothers with children between 2 to 4 years of age who applied to outpatient pediatrics clinics of the Hospitals of Fatih University, School of Medicine. We performed the questionary to 182 subjects.
Results: Total duration of breastfeeding is found to be correlated with the duration of the stay of the child's in the same room with mother (at night) and father's support for the breastfeeding. It is also found to be inversely correlated with employment of the mother. Total duration of the breastfeeding was independent from breastfeeding education by health staff, mother's education level, gender of the children and regular follow-up during pregnancy, pacifier using, interval between the birth and starting breastfeeding, gestation week, and mode of delivery and birth weight of the children.
Conclusions: Our findings suggest that in order to increase the duration of the breastfeeding, education of fathers during education of mothers and promoting the stay of the children with mother in the same room for 2 years at nights can help. Measures allowing mothers with their children in working hours would be helpful. Mothers can be recommended for more frequent breastfeeding at night.

P-175

Smoking habits among academic personnel in Trakya university

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Aim: We aimed to investigate the smoking habits among lecturers in Trakya University, Edirne, Turkey.
Methods: Between October 2007 and January 2008, 560 lecturers of the Trakya University were reached and enrolled in the study. A questionnaire comprising questions on smoking habits and Fagerström nicotine dependence test was applied to the participants.
Results: Ages of the participants ranged from 20 to 72 years (mean age: 33.86 ± 7.33). 58.4% of the participants did not smoke at any time. Among 41.6% (n = 233), who smoke or smoked, the mean age to start smoking was 20.62 ± 3.33 years (min: 13, max: 37 years). The percentage of participants who stopped smoking was 15.2% (n = 85) and the mean age to stop smoking was 30.9 ± 6.39 (min: 21, max: 55 years). Among participants who smoke or smoked, the daily cigarette consumption was 13.96 ± 7.63 (min: 3, max: 40). The average Fagerström test scores calculated from the answers of 148 smoker participants were 2.67 ± 2.55 (ranging from 0 to 10). 7 lecturers (4.7%) were found to be very high dependant. 41.7% of the male participants (n = 35) and 75% of the female participants (n = 48) had a very low nicotine dependence. There was a significant relationship between gender and nicotine dependence (p = 0.001).
Conclusions: Being legal and easy to reach, nicotine dependence is one of the most frequent and important substance addictions. Even among qualified people it has a high rate. To be the role-models for the forthcoming generations, lecturers should reconsider their attitudes towards nicotine consumption.

P-176

Patient profile of a primary care physician – Izmir, Turkey

Zeytinoglu I.Y. (Izmir), Discigil G. (Aydin), Tekin N. (Izmir)

Aim: System of primary health care services is under revision in Turkey. Izmir is one of the three metropols in Turkey with a population of 2 million and is the first metropol taking place in the new system. Determining the current situation is the first step of needs assessment which is an important tool while building or revising training programs for family physicians. Patient profile of a primary care physician was evaluated in this study.
Methods: Electronic patient records of a primary care physician practicing in Izmir were reviewed. Data was statistically analysed by using SPSS 14.0 program.
Results: There was 4000 registered patients. Mean visits per day was 67. Age range was between 0–102 years. There was 2498 (62.4%) female and 1512 (37.8%) male patients. Of the 2498 female patients 810 (32.4%) were between 15–49 years old which was stated as reproductive age group. Of the total patients 24 (0.6%) were 0-12 months, 110 (2.7%) were 1–13 years, 1746 (43.6%) were 14-49 years and 2254 (56.3%) were 50–102 years of age. Hypertension, type 2 diabetes mellitus, coronary artey disease were the first 3 diseases diagnosed in older age group (50-102 years old).
Conclusion: Majority of registered patients in a primary care practice in Izmir, Turkey were over 50 years old. In addition approximately 2/3 of the female patients were over 50 years old. On the contrary only 3.3% of registered patients were children. This study shows that majority of health care service is given to older age group even though Turkey has younger population compared to many European countries.

P-177

Predetermined goals achievement and cardiovascular disease risk estimation in hypertension patients in four regions of Thessaly, Greece

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Aims and purpose: The purpose of this study is to record patients with hypertension in order to define the effectiveness of treatment by estimating the achievement of predetermined goals of blood pressure levels and degree of cardiovascular disease (CVD) risk.
Design and methods: A 2 months randomized registration of hypertension patients was simultaneously performed in four regions of Thessaly, Greece. Age and gender, personal medical history (year of onset, administrated therapy, blood pressure levels, presence of risk factors, coexistence of chronic diseases), achievement of predetermined goals and degree of CVD risk, based on 2007 ESH/ESC guidelines for Hypertension management were recorded and tabulated.
Results: 182 hypertension patients were registered, 52.2% male, 47.8% female, 73.1% over 65 years old, with 10+ years of hypertension in 33.5% and coexisting chronic diseases in 55%. Presence of at least 3 risk factors was registered in 59.3%: age (79.7%), hyperlipidemia (54.4%), obesity (45%), physical inactivity (44%), diabetes mellitus (30.1%). One out of three had high normal, 28.6% stage 1 hypertension, while 40.1% were on fixed combination of antihypertensive drugs. 30.2% had high, 27.5% very high added CVD risk. Non achievement of predetermined therapeutic goals was recorded in 55% of patients (29.7% with diabetes mellitus, renal disorder and/or at high risk).
Conclusions: Low achievement of predetermined goals, according to 2007 ESH/ESC guidelines for management of Hypertension for the majority of our patients may indicate insufficient effectiveness of antihypertensive therapy. The substantial presence of numerous strong risk factors sustains total risk for cardiovascular disease at high levels. Therefore, close follow up of patients and systematic revisal of antihypertensive pharmaceutical therapy must be combined with enhanced supplementary therapeutic strategies targeted to reduce the negative impact of reversible risk factors.

P-178

Knowledge of generic drugs among Polish primary care doctors

Lewek P. (Lodz), Gawlowska J. (Lodz)

Background/aim: Generic drugs according to their definition ought to be bioequivalent to original drugs. However, many doctors are not willing to prescribe generics, due to opinion that cheaper drugs must be less effective. The aim of this study was to check the opinion of primary care doctors on generic medicines.
Methods: This was a questionnaire-based study. Especially prepared questionnaire was distributed among doctors of primary care. In this questionnaire, doctors were asked about the knowledge of generic drugs, beliefs related to their definition, preference and effectiveness, whether these drugs are advised by doctors, are they experienced with their use, etc.
Results: The study results confirm that primary care doctors are familiar with the term 'generic drug'. Pharmaceutical companies representatives and medical literature are the main sources of information about generic medicines for doctors. Almost all doctors consider generics when they decide which drug they should prescribe. Half of survey participants claim that their patients may not buy prescribed drug due to the lack of money. Most of primary care doctors inform their patients about the possibility of buying cheaper equivalent of original drug. However, half of survey participants claim that generic drugs are worse than brand name drugs.
Conclusion: The results of this study suggest that medical doctors have good knowledge on generic drugs. However, their knowledge mostly rely on information from pharmaceutical companies representatives, and thus, might be seriously biased. Moreover, doctors claim that generic drugs are worse than reference products although there is no scientific proof of that. In order to promote more frequent generic drugs use, primary care doctors should be informed about the benefits of generic drugs' use from unbiased sources.

P-179

How to prescribe physical activity

Rodrigues Pereira M. (Setúbal), Eugénio D. (Setúbal)

Introduction: Regular physical activity benefits life quality, productivity and reduces healthcare costs. But how can the Family Physician establish effectively an Exercise Plan for his Patients?
Aims and Purpose: Incentivize and give the colleagues the tools necessary for prescription of exercise and follow-up of their Patients.
Design and Methods: Search in International Entities, review articles, methanalysis, guidelines in MEDLINE, EMBASE and EBM sites, published in English and Portuguese in the past 10 years. Keywords: "Physical Activity", "Guidelines" and "Primary Care".
Results: When prescribing physical activity you must have in mind intensity, frequency, duration and method. In intensity, we can divide the activity into low, moderate and high intensity, being that during moderate exercise we will verify more intense breathing and a discrete raise in body temperature, which equals a walk about 5–6 Km/h. In duration, for a period between 30 to 50 min., you should dedicate the first 5–10 min. warming-up, 20–30 min. for stimulation and 5–10 min. cooling-down. As to frequency, the American College of Sports Medicine recommends at least 30 min. of Physical Activity of moderate intensity most of days. Therefore, ideally, one should exercise 7 days a week, being acceptable 5 or a minimum of 3 days. For method is presented the "Physical Activity Pyramid". The "2008 Physical Activity Guidelines for Americans", released recently by U.S. Department of Health and Human Services, are presented in a structured manner, followed by some smart strategies.
Conclusions: Besides setting the example, the Family Physician should have an educational role to his Patients, reinforcing the benefits of Physical Activity and clarifying the correct way to practice. The Family Physician should follow-up closely and actively his Patients' Exercise, working together with his Community to obtain better conditions and infra-structures.

P-180

Smoking cessation – an attack on all fronts in an area of Barcelona

Byram A. (Barcelona), Vidal S.M. (Barcelona), Hernandez I.R. (Barcelona), Serrano M.C. (Barcelona), Gimeno A.E. (Barcelona), Garcia L.M. (Barcelona)

Aims: To promote smoking cessation among our primary health care population both through a clinic and by promoting actively the message in the community.
Design and Methods: Phase 1 – Training of the health care professionals in charge of the clinic. Bibliographical update of current knowledge in smoking cessation techniques. Study of resources available.
Phase 2 – Basic smoking cessation intervention training of other health care professionals in our centre and explanation of how the clinic will work. Publicity campaign both in our centre and in the community. Patient recruitment.
Phase 3 – Start of smoking cessation program.
First visit: Nurse triage of suitability of patients for this program according to motivation and exclusion criteria. Physical check-up including carbon monoxide monitor, blood pressure and weight. Chest x-ray and blood test. Patient data added to database. Pro-quitting information and methods given to patients.
Second visit: Doctor evaluation of test results. Joint decision with patient on smoking cessation technique to be used. Choice of D day.
Following visits: Doctor and/or nurse. Weekly then monthly according to patient needs. Confirmation of abstinence. Physical check-up. Support and positive message linked to stage of abstinence: euphoria, grieving, normalization, consolidation. Help with weight control and smoking withdrawal symptoms.
Phase 4 – Self audit of program successes and failures. Study of data. New publicity campaign for world non-smoking day.
Expected results: Decrease in smoking in our local population. Improvement in health in those patients with smoking-related illness. Identification of medication side-effects.
Conclusion: This program will promote a smoking cessation message among the local community whilst giving them an immediate option for them to carry it out. It will increase health professionals confidence as to how to tackle smoking cessation in their daily clinics.

P-181

A multicenter study to know the risk factors for metabolic syndrome in psychotics

Gonzalez Medina M. (Barcelona), Viña L. (Barcelona)

Aim: To know the frequency of risk factors for metabolic syndrome in psychotic patients or with antipsychotic treatment.
Material and methods: Type of study: Descriptive cross sectional. Multicenter. Area of study: Primary care. Urban neighbourhood with 150.536 assigned population. Seven Primary care centre. Subjects: Patient between 15 and 64 years attended in 2.007. Sample size: 102.530. Measurements: Records are obtained from computer system. We analyzed the records of sex, age, smoker, CV risk, HTA, DM, Hyperlipaemia, obesity, BMI and records needed for Metabolic Syndrome (NCEP ATPIII 2004): Abdominal perimeter, HDL Cholesterol, TG, Glycaemia. Statistical analysis with SPSS program.
Results: 1.549 psychotics or with treatment, prevalence 1. 5%. 57.9% male, average age 43.32 yr. Hyperlipaemia 31.4% TGD>150: 42.1% cholesterol> 200:48,5% HDL<50 F or <40 M: 47.3%. Diabetes 23,2% glucose >110: 25.8%. Abdominal perimeter Register: 5, 3% AP >88F or >102 M: 68.3%. Hypertension 40, 9%, systolic BP>130: 37.7% and diastolic BP >85: 22.9%. Smoker Register: 32.5% frequency 66.6%. Body mass index 25–29: 35.3% and >30 (obesity): 44.3%. Cardiovascular risk Register 8.9%, CVR>10%: 3.4%.
Conclusions: In psychotics patients or with antipsychotic treatment we observe important frequency of smokers, Hyperlipaemia, obesity and records for Metabolic Syndrome. We need to improve measurement of Abdominal Perimeter and CV risk. The relevancy of these RCV Factors raises the need to improve his control in this population. This is a pilot study to start collaboration activities with the psyquiatric hospital department to decrease the CV Risk factors of these patients.

P-182

Comparing results of college students in two different universities with their preference regarding health-related subjects

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Objective: To compare preference of college students in different universities regarding health-related topics.
Material and Method: One hundred eighty-one (119 from private; 62 from public) college students of two universities were asked during their general education class ("Medicine and Life") to give their preference of health-related topics on September 2008. Students had the freedom to have several preferences. There were 19 health-related topics to choose from.
Results: The top 5 choices of college students in the private school were as follows: sun blocking and skin whiting processes; metabolic syndrome; diabetes mellitus; weight reduction; and asthma. For those in public school: diabetes mellitus; asthma; liver diseases; metabolic syndrome; and general psychiatry. There was no significant difference in preference between the 2 schools ($Z = -0.34$). Three topics (diabetes mellitus, metabolic syndrome, asthma) were the same in both public and private schools.
Conclusion: Diabetes mellitus, metabolic syndrome and asthma are very common medical problems existing in society. These college students may have more than passing acquaintance with these medical terms, thus their interest in these topics. Another possibility is that these medical problems can be found among their relatives and friends. Among college students of public school, liver diseases and general psychiatry were among the top 5 choices. Liver diseases and general psychiatry are more common public health-related issues. College students in the public school may be more exposed to government initiated or media-initiated diseases and information dissemination techniques. Among college students in private schools, weight reduction and sun blocking and skin whiting processes were among their top 5 choices. These students may not be accustomed to information dissemination initiated by the government and/or media. Thus, their primary concern may be more their personal health and hygiene issues.

P-183

Identifying evidence-based tools to assess quality of preventive health care for primary care practice

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Aims: After a major health care reform in 2001, Thai government has implemented the universal health care coverage policy which emphasizes on "how to improve people's heath at lower cost". This leads to the development of primary care infrastructure to improve accessibility to high-quality health care services across the country. Considering health promotion and disease prevention as the key strategies for health development, there is an urgent need for good quality assessment tools in responding to growing public demands. The purpose of this study is to review current performance indicators for measuring the quality of preventive health care in primary care setting.
Design and methods: We identified current performance indicators focusing on preventive health care in primary care settings through a systematic review of published literatures. The electronic database (MEDLINE) was searched from 1960 to December 2008. The articles were reviewed and data was extracted by two reviewers independently.
Results: We extracted data from 19 studies that satisfied the inclusion criteria. 73 performance indicators for measuring preventive care and

health promotion were identified. We also classified the indicators into 3 major categories.
1. Clinical assessment: 33 indicators assessing history taking, physical examination and investigations. 2. Preventive care intervention: 35 indicators assessing immunization and health education.
3. Preventive care Plan: 5 indicators assessing care plan.
Conclusions: This study has demonstrated the significant preventive care performance indicators in primary care. However, their feasibilities in other different health care settings are still questionable. Given the fact that most of the reviewed studies come from Western countries, we emphasize the necessity of performing further study to confirm the validity and reliability of these indicators before their implementations in Thailand.

P-184

Do Royal Air Force support helicopter aircrew experience higher levels of operational stress than other UK military personnel?

Withnall R. (London)

Aim: All military conflicts since the Boer War have led to complex medical symptoms, with unexplained variations in terms of who will become affected, when and with what. Contemporary manifestations of military Operational Stress (op stress) include non-specific physical symptoms, PTSD, depression and alcohol misuse. Although veterans with post-combat syndromes neither develop more diagnosable diseases, nor die younger than their unaffected colleagues, op stress challenges military General Practitioners by causing significant morbidity and reducing individuals' military effectiveness. RAF Support Helicopter Aircrew (RAF SHA) may be at increased risk of op stress as they are amongst the UK military's most frequently deployed personnel. This study aims to provide the first quantitative analysis of RAF SHA op stress by testing the null hypothesis that there is no statistically significant difference in the levels of op stress experienced by RAF SHA and other RAF personnel.
Design: All 450 RAF SHA were invited to complete an anonymised questionnaire including pre-validated measurable markers for op stress (Multiple Physical Symptoms checklist; General Health Questionnaire; PTSD and AUDIT checklists). The response rate of 60% exceeded that usually achieved in military studies. Levels of RAF SHA op stress were statistically compared with a matched control group of RAF non-helicopter personnel, and RAF SHA pilots' and non-pilots' op stress levels were also compared.
Results: Although RAF SHA had deployed to conflict zones more often and for longer than the controls, no statistical difference was measured in op stress, consultation rates or the need for follow-up between RAF SHA and the controls, or between pilots and non-pilots.
Conclusion: This study statistically demonstrates the complexity of post-combat syndromes by failing to demonstrate an association between conflict exposure and the development of op stress.

P-185

Injuries in children and adolescents in the town of Lavrion

Garopoulou A. (Kalymnos), Athanasopoulos D. (Athens), Kolokythas D. (Athens), Papageorgaki P. (Lavrio), Kamaratos A. (Athens), Chelioti E. (Athens)

Aim of the study was to develop a general profile of injuries in children and adolescents in the town of Lavrion, a suburban area.
Method and Material: It was conducted a descriptive study. Children and adolescents aged 0-18 attending the emergency ward of the Health Center of Lavrion in Greece were recruited for the study. Attendance records were used as our source of data, between January and December of 2008. The following fields on the attendance records were analyzed: age, gender, admission time, date, kind and mechanism of injury and outcome. Injuries were classified after International Classification of Diseases, 10th revision. Statistical analysis was performed using t-test and chi-squared test.
Results: We recorded 609 injuries (417 males/192 females), representing 3.4% (95%CI 0.031; 0.036) of the total emergency cases. Sixty six per cent (400/609) were faced completely in Health Center, 17% (104/609) were reexamined in second time for follow up and the rest 17% (105/609) were sent to the nearest hospital for further assessment and treatment. The most common consequences of external causes were the injuries to the shoulder and upper limb (S40-S49), to the head and neck (S00-S19) and to the hip and lower limb (S70-S99) (33.8%, 28.6% and 22.8% respectively). The most common external causes of morbidity and mortality were the falls (W00-W19), the exposure to inanimate mechanical forces (W20-W49) and the transport accidents (V01-V99) (27.5%, 25% and 15.7% respectively). The highest frequencies of injuries were recorded during summer.
Conclusions: The results suggest that this profile permit to local health professionals involved in injury prevention to identify their promotional targets.

P-186

Injuries caused by dog bites

Garopoulou A. (Kalymnos), Athanasopoulos D. (Athens), Androutsos O. (Athens), Lisikatou A. (Athens), Klokythas D. (Athens), Kamaratos A. (Athens), Chelioti E. (Athens)

Aim: To analyze the annual distribution, the kind of injuries and the severity of dog bites injuries in a suburban area of Athens, Greece
Method and Material: It was carried out a retrospective study. Records from a suburban Primary Care Center were used as data source, between January and December of 2008. The following fields were analyzed: gender, age, month, bite location and severity. For statistical analysis was used t-test and chi-squared test.
Results: One hundred and forty five victims were recorded, representing 0.8% (95%CI 0.007; 0.0095) of the total emergency cases during 2008. The percentage of males was greater than of females (59.3% vs 40.7%, p = 0.025). The mean age of the victims was 35.3 ± 20 (SD) years. It was observed a correlation between months and frequencies of bites (p <0.001) with the highest frequencies during summer. Injuries were located at upper limbs (51.9%), at lower limbs (37%) and at neck and head (6.2%). Seven cases (4.8%, 95%CI 0.02; 0.10) were considered severe and they were transferred to the nearest hospital.
Conclusions: Dog bites represent a serious problem of public health in this area. Professionals involved in public health and injury prevention must cooperate with the local community to identify their promotional targets for this problem.

P-187

The annual distribution of gastroenteritis in a suburban health center

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The aim of this study was examined the annual distribution of gastroenteritis symptoms in an Urban Health Center.
Design and Method: This is a retrospective study. We recorded 444 gastroenteritis cases which were examined in a Health Center (HC) over a 12 month-period. In all cases were recorded the sex and age of patients, the month which appearance of symptoms and time of arrival on HC. Statistical analysis was performed using t-test and chi-squared test.
Results: Four hundred forty four cases with gastroenteritis symptoms were observed, representing 2.40% of the total amount of the cases (95% CI 2.19; 2.63). 48.6% were males and 51.4% females (p = 0.569). The average age of the patients was 36.5 ± 20.1 (Mean ± SD). As far as the average age of both sexes is concerned (p = 0.055), no differences were noticed (p = 0.055). The monthly incidence was uneven (p <0.001) with May, April and February being the months with the highest unevenness (14%, 11% and 10.8% respectively). During 24 hours unevenness was noticed in the frequency of visits with the lowest recorded between 00:00 am and 06:00 am. A higher frequency was noticed in the ages 20–30 (23.2%), whereas the ages 30–40 (16.4%) and 10–20 (14.2%) followed.
Conclusion: Despite the fact that gastroenteritis constitutes a common case in general population annually, remains with a low morbidity even though the months with high percentage of appearance.

P-188

Smoking in Prizren municipality – prevalence, knowledge and attitudes (points of view) about smoking

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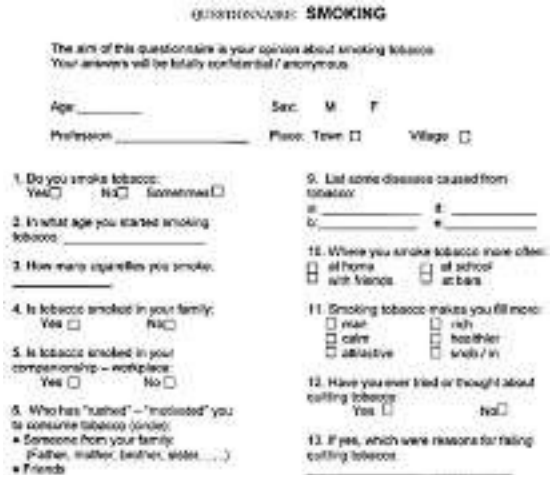
Aim: Measurement of 4 parameters: 1 the smoking prevalence; 2 Knowledge on tobacco; 3 point of view on smoking; 4 smoking during pregnancy.
Used material and the methodology: The questionnaire is used for this research. The number of questioned is 350.The selection of questioned was done in the random way.8 different categories of population were questioned
Results: 1 The prevalence of smoking: 37.5%. Sex: M-48% F-27%. <18 yrs: 17%, >18yrs: 44%. Dwelling place: town 35%, village 32%. Profession: members of Kosovo Protection Corps (86%), policeman's (80%), education employees (59%).The tobacco is smoked in 56% of families and 67% of the social-working places. 2) Knowledge: 98% declare that they are conscious that smoking seriously damages their health; 36% don't have any knowledge on the tobacco components. Relating to sicknesses caused from smoking: 56% of the questioned think about cancer. 3) Points of view: 47% have thought/tried of quitting smoking. The reasons for their failing to do so were mostly: the nervousness caused when the tobacco is not smoked-50% as well as the indecisivenes-36%. Beginning of the smoking habit: 85% of the smokers have started to smoke in their

early ages (15–20 yrs). Smoking in public areas: 64% think that there should be special places for smoking. 4) Smoking during pregnancy: 30% of them smoke during pregnancy. In their families: in 80% of the cases their family members smoke, whereas in the social-working places, it was smoked in 73% of the cases.
Conclusion: In the municipality of Prizren it is smoked a lot. The knowledges on the damages caused from smoking are not sufficient. The smoking usually starts in the early ages (under 20 years). Most of the questioned think that there should be special places destined for smoking. Even during pregnancy it is smoking in quite a significant percentage. Also in the environments were the pregnant women lives, works-it is smoked a lot(passive smoking).

Questionnaire-smoking


QUESTIONNAIRE: SMOKING

The aim of this questionnaire is your opinion about smoking tobacco
Your answers will be totally confidential / anonymous

Age:_____ Sex: M F

Profession _____ Place: Town ☐ Village ☐

1. Do you smoke tobacco:
Yes☐ No☐ Sometimes☐

2. In what age you started smoking tobacco _____

3. How many cigarettes you smoke.
_____

4. Is tobacco smoked in your family:
Yes ☐ No☐

5. Is tobacco smoked in your companionship – workplace
Yes ☐ No☐

6. Who has "rushed" – "motivated" you to consume tobacco (circle):
• Someone from your family:
(Father, mother, brother, sister, ...)
• Friends

9. List some diseases caused from tobacco:
a: _____ d: _____
b: _____ e: _____

10. Where you smoke tobacco more often:
☐ at home ☐ at school
☐ with friends ☐ at bars

11. Smoking tobacco makes you fill more:
☐ man ☐ rich
☐ calm ☐ healthier
☐ attractive ☐ snob / in

12. Have you ever tried or thought about cutting tobacco
Yes ☐ No☐

13. If yes, which were reasons for risking cutting tobacco
_____

P-189

Usage of legal narcotics among students in Poland

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Background/Aim: In the last few years, we have noticed a dramatic increase of the problem of the so-called "legal drugs". Due to a specific legal loophole, these drugs are widely accessible and can be easily bought over the internet and in selected stores. A non-scientific term is used to describe all substances with psychoactive properties, not listed as illegal, but still possibly leading to serious health hazards. Due to their availability they are gaining a vast number of young consumers. The younger generation, including students, is extremely vulnerable. The aim of this study was to show a real scale of this problem among students in Poland.
Methods and Materials: Our method of approach was a questionnaire-based study in which we investigated common knowledge about "legal narcotics", their use, motives, awareness of their side effects and, first of all, personal experiences. The targeted group was composed of students from Polish Universities.
Results: "Legal narcotics" represent extreme danger because they are widely known and commonly used among young people who are unaware of their high risk and detrimental consequences on their health.
Conclusion: The studied problem proves to be important and is worth further analysis. The prevalence of using this kind of substances is high and constantly increases. Most of participants have insufficient knowledge about the risks connected with using them. There is an obvious need for adequate education of society in this area and more restrict legal regulations.

P-190

Smoking cessation counselling: impact of structured training and chart stickers

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Aim: Physicians are in the unique position to promote smoking cessation, a key task for every single health care provider. The aim of the study was to assess the appropriateness of medical advice for smoking cessation provided by physicians following a smoking cessation training program and the introduction of chart stickers.
Design and methods: Prospective observational study. One month before the start of the study, a compulsory half-day training session on smoking cessation for all physicians working at the Basel University Hospital Medical Outpatient Department was performed (first intervention). Additionally, current smokers' medical records were systematically labeled by a "smoker"-sticker (second intervention). In total, 456 consecutive outpatients were contacted by phone within 24 hours after their initial consultation. Information concerning questions asked about smoking and/or cessation advice provided by the resident to patients was collected. To determine the effect of the interventions, the data of the present study was compared to a historic sample (pre-intervention) assessed one year prior to the present study, using an identical study design, setting, and questionnaire.
Results: Eleven physicians (45% females) were working at our Department during the study period. Of 272 patients included, 39% were current, 123 45% never, and 16% former smokers. Mean age was 43 ± 11 (range 16–87) and 49% were male. Physicians queried 82% (pre-intervention 81%) of the patients about smoking and inquired about smoking duration in 71% (pre-intervention 44%) of the patients. Forty-six percent (pre-intervention 28%) of the patients received information about risks related to smoking, whereas cessation was discussed with 32% (pre-intervention 10%) and offered to 23% (pre-intervention 9%) of the patients.
Conclusion: Compared with a historic pre-interventional cohort, the percentage of patients receiving an appropriate counseling doubled following the introduction of systematic training and chart labels.

P-191

Can we improve the quality of life of our fibromyalgia patients?

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Objective: To demonstrate that the sanitary intervention improves the quality of life of the affected ones. To determine social demographic and sanitary profile.
Material and methods: Design: Experimental interventionist study "before – after", urban primary care. We obtain patients whose history has been computerized by means of diagnose (M79.0). We create questionnaire data form: Demographic variables (age, sex, civil state, job situation), Sanitary (physical activity, time to disease diagnose, present treatment) Quantification of symptomatic level: Fibromyalgia Impact Questionnaire (FIQ). Criteria of selection: Patients score =/ > 75 FIQ. We preselect a sample of 30 in order of demonstrating a difference of 20% percentage FIQ before – after, power of test 80% IC 95%. EPIDATIntervention: 3 visits of individual sanitary educators. 6 months. No quits.
Results: 124 patients, women 117 (94.4%), men 7 (5.7%). Prevalence 4.7%. Intervention: 29 women/ 1 man, average age 52.9, rank 35–72. 80% Married. Job activity: 8 employed, 5 unemployed, 5 ILT, 5 retired, 7 housewives. 23% physical activity. Average year to diagnose 4.93, rank 1–15 years. Drug consumption 4.03, rank 3–6, simultaneous consumption of analgesics and anti-depressant 87%. FIQ 85.86, rank 75 – 97.67. Revaluation FIQ 81.79, ranks 64 – 91.34. 47% improve FIQ, difference 8.70, rank 2. 8 – 14.33 Physical activity 54%, consumes drugs 3.46, rank 2–5.
Conclusions: High prevalence in our center. (primary care) The drug consumption rises when increasing the time of disease, to expense of antidepressants and anxiolytics. Sanitary education can modify the perception of the quality of life, 47% objective diminution FIQ and increase of physical activity, reducing the drug consumption.

P-192

Audit test in Southamerican workers in Spain

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Aim and purpose: The relation between alcohol, work and the immigrant proccess is complex and it is not clear enough. To valorate the necessity of a screening of alcohol consumption in Southamerican workers and to define a profile of risky drinker population.
Design and methods: Descriptive, cross-sectional study. Randomly selection of Southamerican workers (N = 112) going to a medical examination in a Health and Safety Service. Clinical interview is done, with sociodemographic variables collection and the AUDIT test.
Results: 66% are men, married (64%), aged 32.05 years (SD 7.6), 63% come from a town, living in Spain for 61.29 months (SD 27.80) and the 57.1% are catholics. They are unskilled agricultural worker (64.3%) and 70,5% send part of their wage to their countries. The 61.6% of them deny drinking alcohol. Beer (59.8%) and whisky (19.6%) are the most drunk beverages. When talking about AUDIT, the 73.2% don´t drink or do it less than once in a month, but in a consumption day the 67.9% drink one or two alcoholic drinks, 62.5% never drink more than 6 beverages. The 93.8% of them are able to stop drinking once they have started and 8% failed to do what was expected from them. Just 0.9% needed a first drink in the morning to get themselves going. The 81.3% had never have a feeling of guilt although 9% had been suggested by a friend or health worker to cut down. Only 8% of the sample weren't able to remember what

happened the night before. Nobody was injured as a result of drinking. The 10.8% are consider risky drinkers.
Conclusions: Alcohol disorders are similar both in Southamericans and Spaniards. It is necessary to know patterns of consumption to create preventive programs not only for this generation but for next ones.

P-193

Why did the workers of the centers of primary attention of health continue smoking?

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Aims: – detect prevalence of smoking; – know the attitude of health personnel regarding variables; – to define the interest of staff on the cease-smoking habit.
Material and methods: Sample: the staff of in our ABS; first week in November 2008. Cross-sectional descriptive study on prevalence/attitude of the staff on Tobacco-Dependence.
Smoker = smokes daily; ex-smoker = smoker over six months and do not smoke for more than six months. Non-smoker rest.; study history and smoking habit. Total privacy and anonymity in surveys. Analysis of statistical data:test-chi-2.
Results: a) 64 surveys were collected from 71 (= 90.1% response), 29 males (45.3%) 35 females (55.7%). b) 19 physicians (11 females), Nursing 24 (18 females), 11 administrative staff (7 females), 8-medical transportation (6 men), 2 cleaners women. c) 73% of males are grouped into 31–50 years, 81.4% women 26–50 years. d) 17 smokers (prevalence = 26.5%), 22 ex-smoker (34.4%), 25 non-smokers (39.1%). e) Prevalence by segments: Administrative = 51.6% (45.6% women/72.4% males); Nursing = 21.1%; doctors = 20.61%. Transportation-health = 12.5%. No differences by sex/staff. f) Increased prevalence in 31–40 years (56.2% of smokers). g) Smokers: average consumption = 13.6 cigarettes / day (11 women, men 16). h) Prime cigarette = 16.8 years (16.21-in ex-smokers); reach 5 cigarette/day = 19.9 years 18.8. ex-smoker). i) Percentage parents-smokers = 82.4% (smokers) –69.58% (ex-smokers) – 44.33% (non-smoking). j) Tobacco dependence: high = 21.7%; mean = 6.4% = 71.9% low. k) Intent-cessation = 65.2% (56 females/72 men). Intents average.= 2.6 times. 36% used any aid. l) The 95.35% of smokers want a program of treatment in centre.
Conclusions: – Smoking is significantly smaller in our medical and nursing according Survey / Tobacco / 2006 / Spain. – The administrative staff has prevalence very high. –The antecedent parent-smokers smoking are associated with smoker. – The desire of treatment program (95%) isn't associated to intention to attend the program (61%).

P-194

What kind of devices are available in French GPs' offices to promote health education in general practice?

Gallais J.L. (Paris), Dumont F. (Dijon), Mercier P. (Dijon), Morel G. (Dijon)

Background: Health education and chronic disease management in primary care require specific devices to promote patients' autonomy, competences and skills.
Aim: To describe what kind of devices or tools are available in French GPs' offices to promote patients health education.
Methods: A self electronic questionnaire about office equipment was filled out by a sample of 400 French general practitioners participating in a national network. Among 60 tools or devices, we studied the reported presence in waiting rooms of leaflets to take away, list of health websites for patients, list of support groups and consumers associations, and a specific disease explaining and/or health promoting Those data were matched with the urban or rural area type and population data of the GPs' office location. Uni- and multivariate analysis were performed.
Results: GPs' features were similar to national data for gender, mean age and activity level. Population distribution in urban and rural areas was the same as that of the French population. Main findings: 59.5% of GPs had a display shelf with leaflets, 52.0% had a list of addresses of health or specific disease associations, 22.0% a lists of websites and 22.8% a specific disease / health promoting folder in their waiting rooms. Variations associated with GPs' gender, office location or other devices and equipments will be presented during the conference.
Conclusion: This study enlightens the debates on health education in primary care and general practice by providing French data. Which devices do health providers need, and for which aims? That question concerns national health insurance, health agencies, general practitioners and patients organisations in most European countries.

P-195

Satisfaction and compliance to drug treatment of patients suffering from migraine attacks

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Objectives: To quantify the satisfaction and compliance of patients treated for migraine, in Thira Medical Centre (TMC).
Methods: Population based sample of participants suffering from migraine attacks that was prescribed medication at Thira Medical Centre, during the period of September 2007 and August 2008. The satisfaction and compliance to therapy admitted was quantified over a telephone survey that was conducted 90 days after the prescription of the medication. The participants were all diagnosed with migraine for at least 1 year and had at least one migraine attack/month, no other exclusion criteria. Satisfaction to treatment was measured using a 5-point scale (1 very good – 5 unsatisfactory).
Results: 114 patients participated in the survey (88% female, 12% male patients). 98.3% were given non-specific Analgesic Drugs and/or Non Steroid Anti-Inflammatory Drugs (NSAIDs), 54% were given Triptans, both as monotherapy and as an additional drug to NSAID, 12.4% were given ergotamines. In NSAIDs users, the highest satisfaction was found in ASA and Paracetamol users. In Triptan users, Sumatriptan (1.6) and Almotriptan (1.84) had the best scores followed by Rizatriptan (1.90) and Zolmitriptan (1.98). 28% didn't follow prescriptions (50% because of lack of effect and/or adverse signs and 33% because of not having a migraine attack or had mild migraine attacks during the study). Compliance in patients who were given Triptans was higher than in patients who were only given NSAIDs.
Conclusions: When Triptans are used as part of the treatment, satisfaction improves –Sumatriptan and Almotriptan being the most effective Triptans. Most of the patients follow prescription recommendations. Patients with no compliance, usually refer to lack of treatment efficacy and/or intolerance of the given medication.

P-196

Primary care employees' opinions on vaccinations among young people

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Background/aim: Vaccinations were introduced by Pasteur in 1881 and are mostly used to prevent common childhood diseases which can lead to serious complications. Vaccination of Polish children aged 7–18 by the year 2008 was performed obligatory at school. Nowadays, it is performed in primary care settings. The aim of this study is to check whether the settings of performance and availability of vaccination changed the number of vaccinated kids.
Methods and Materials: It was a questionnaire based study. The especially prepared, anonymous and voluntary survey was distributed among doctors and nurses of primary care units. In our questionnaire we asked about where and how often children are vaccinated, whether the percentage of vaccinated children changed and what are the opinions of survey participants about localisation of vaccinations in primary care.
Results: Percentage of children vaccinated in primary care units is lower than in previous years according to the number of patients qualified for vaccination. Nowadays a vast majority of young people is vaccinated in primary care. Children aged 7 to 12 are more often vaccinated than older ones.
Conclusion: Lack of vaccinations among young people can result in higher incidence of infections and occurrence of severe complications. Greater prevalence of vaccinations among younger children can be explained by the fact that they are accompanied to primary care by their tutors.

P-197

Habits and communication: the children's point of view

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Background: Last year a poster titled "Habits and Communication: What do parents know about their sons and daughters?" was presented at Istanbul Wonca Europe Conference. This year we adapted the interview to the children, to continue the study and compare results and point of view.
Aims: To know life style of children between 15 and 25 years old than remain at home. What kind of communication they have and if values ant healthy habits have been transmitted by their parents.
Methods: Descriptive observational study in the urban area of Barcelona and Zaragoza. Data were collected from auto administrated interview to children.

Results: Sample 113 people: 54 boys and 59 girls. Mean age 18 years old. Most of families share 2 meals/day with a varied and balance diet. 62% talk about sex with their parents. 58% practice sex and 42% say parents are aware of it. Boys and girls older than 21 years old study & work. 43% of the boys and girls smoke. 16% take other drugs. 55% drink alcohol during the week end. Most of the children say to have a good communication, to be on intimate terms with their parents and that good values have been transferred. Children think parents are worried about drug and alcohol consume, friends they do not reliance on and labor future.
Conclusions: When we compare last year's study to this one, we observe that not significance difference are appreciated, what probably means that both of them, parents and children have the same perception about their habits and communication. Children have a healthy nutrition and the families share at least two meals every day.

P-198

Positive aspect of accreditation process: to a patient oriented health care

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Aims: The aim of this study was to emphasize positive impact of accreditation process to a patient oriented health care. During 2007, a process of improving quality of services in health care system started in Bosnia and Hercegovina. Under supervision of the State Agency for Improving Quality in Health care (AKAZ) several teams of family medicine were selected. They went through the pilot project and were included into process of accreditation. The work of selected teams was supposed to get close to quality standards that were determined by AKAZ. One of the selected teams was Team No. 15 from rural area of the Tuzla city.
Design and methods: During December 2007 the team members made research on frequency of PAP smears in their female patients. The same analysis was done in December 2008. Patients were divided in two groups: 50 in experimental and 50 in control group, both groups were in age between 17 and 70. Data were taken from medical records, processed and analysed with ARCUS statistic method, for control group in December 2007 and for experimental group in December 2008.
Results: The results of the study showed that there is statistically significant difference in number of women who have had records about PAP smear analysis in their medical recordin experimental group compared to control group (P = 0.0003). There were no statistically significant difference in number of normal/abnormal PAP smears (P = 0.38).
Conclusions: Process of accreditation contributed in improving quality of the family medicine team work. The team members improved care of the patient. Their work was adjusted to the quality standards determined by AKAZ.

P-199

Usage of intrauterine dispositive as the contraceptive method at the women welfare centre in Prizren

Skeraj F. (Prizren), Gashi M. (Prizren), Muja G. (Prizren), Mazreku F. (Prizren)

DIU is reversible contraceptive measure with efficiency up to 99.4%.
Aim of workshop: 1. To be identified women who are using the DIU as the contraceptive method at the Women Welfare Centre in Prizren. 2.To be conducted the comparison between two women groups in this centre, of that group A(urban) and that one of the group B (rural)who are using DIU as the contraceptive method. 3.To be checked by which ages is more used DIU as the contraceptive method.
Methodology and Material: It was used the retrospective method of research and were used the medical records the Women Welfare Centre in Prizren in the period of January 2003 to December 2008.
Results and discussions: At the first aim by 8555 visited women, the outcome is that the DIU as the contraceptive method at the Women Welfare Centre in Prizren is used by 466 women or 5% of the cases. As it belongs to the second aim this centre is visited by a great number of women from villages' area of Prizren Municipalities who are using DIU as the contraceptive method-309 women or 6% of the cases. While,the women percentage in town who are using the DIU is 157 women or 4% of the cases.I think that this higher percentage at the women from villages is understandable having into consideration the advantages of DIU as aforementioned at preamble. While, regarding the second aim, the age that are mostly using DIU contraceptive method is that one between 30 to 39 years and those one from 48% (2003) to 65% (2005) of the cases, so I think that this one again is related to the priorities that DIU have got especially for this age where many of the women in this age completed their deliver or family planning. As well as at this age the women from villages for 1–2% are using more DIU that those one from the urban.
Key words: The Intrauterine Device, the contraceptive method, Women welfare Centre – Prizren, rural women and urban women.

P-200

Usage of mind boosters among students in Poland

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Background/Aim: "Mind boosters" is the name for all kinds of substances that have stimulating effect on the nervous system. They causes a secretion of neurotransmitters such as epinephrine and dopamine. Those two are able to cause euphoria and enhance physical and mental capacity. Some of them have significant side effects if misused. The level of side effects depends on kind of substance. Because of their effects, "mind boosters" are widely known among young generation, especially students. They are using them in order to cope with stress and tiredness, as well as "just for fun". The aim of this study was to show a real scale of this problem among students in Poland.
Methods and Materials: Our method of approach was a questionnaire based study in which we investigated common knowledge about "mind boosters", their use, motives, awareness of their side effects and mostly, above all, personal experiences. The group we targeted was composed of students from Polish Universities.
Results: "Mind boosters" we asked for are frequently used to stimulate mind effectiveness or psychological endurance during stress. More and more often students are using prescription drugs even to improve their level of concentration or to reduce their psychological tension.
Conclusion: The frequency of using this kind of substances is high and still increases. Most of participants have insufficient knowledge about the risk connected with using them. There is an obvious need for adequate education of society in this area and more restrict legal regulations. The studied mentioned problem is worth further analysis.

P-201

Service portfolio in primary care team: levels of resolution, organization and implementation strategies

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Introduction: The definition of the Service Portfolio (SP) in primary care team (PCT) is an essential tool to improve service provision for both community and individual health.
Objectives: Develop a structured portfolio document which will help PCT to perform a self assessment process. Identify the PS level of achievement in the territory. Improve the standard of every PCT.
Material and methods: 1) Instrument: Preparation of a Service Portfolio Document includes: a) Identification of the services provided in the portfolio classified under the headings: 1) Support Services, procedures and management; 2) Attention to care demand and diagnostic and therapeutic procedures; 3) Preventive activities; 4) Social and family care; 5) Community activities; 6) Continuity of care. b) Description of the organization and the strategy in the PCT's for the SP achievement in the areas: 7) Continuous education; 8) Training programs; 9) Research; 10) Quality management. c) Rankinf of each service in 3 levels: basic, optimal, excellent. 2) Scope of the study: 52 PCT: Coverage 1.387.314 habitants. 3) Structured questionnaire in 10 paragraphs (from SP Document): Interview with PCT management teams. Reflects the responses to items from a qualitative and quantitative composition (% of population which benefits from the service). 4) Summary of the results of interviews with health care quality indicators: 52 indicators of the management contracts of the PCT.
Expected results and conclusions: The portfolio document as such is a useful tool for reflection and consensus of the reorganization processes of care. The definition of PCT in the portfolio is linked to specific needs and resources. It is aimed that most PCT achieve the basic level. In addition most PCT's should go forward to improve their standard PCT's. Those PCT's achieving better results in the indicators of quality assistance are those assuming more services at different levels.

P-202

Intervention to know smoking prevalence and physical activity in adolescents

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Aim: Study smoking habit and physical exercise in adolescents.POPULATION2 High school of Primary Care area.
Methods: Student participation was voluntary. Questionnaire includes 11 questions, meanwhile the official week without smoke (last week in

May-08). Data base of Acces and descriptive statistics used SppS 15.0, making descriptive statistics and chi- tests.
Results: We have a n = 279. The distribution; girls 48.02% / boys 51.97%, a middle ages of 14.2 years (girls 14.29 / boys14.42). 17% relates that they do not practice any sport, and 83% ussually practice physical activity. Prevail football 24.6%, basket 17,6% and dance 7.3%. 57% have experimented at least one time with tobacco and 23% are regular smokers. 14.3% smoke occasionally; less than 5 cig/ day 9,7%, 5-10 cig/day 5.7% and more than 10 cig/day 6%. There's not signifficant differences between boys and girls in regular smokers with a p = 0.233, and not with those who have tested tobacco at least one time with a p = 0.182. Students smoke more in ESO (obligatory secondary studies, from 12 to 16 years old) than pre-universitary studies (from 16 to 18 years old) with p <0.002. Boys practice more physical activity than girls with p <0.0001. Non smokers practice more physical activity than somokers with p <0.001.
Conclusions: – Tobacco is present in High School, 23% are ususal smokers. – Pre-universitary students reduce physical activity. – Smoker adolescents make less physical activity than non smokers. – It's necessary to improve strategies to aviod tobacco in inexperienced grades.

P-203

Associations between alcohol consumption and insulin resistance in Koreans

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Purpose: Facial flushing reaction after drinking due to intolerance to alcohol is frequently found among Asian people. Authors tried to find the relationship between drinking amount and insulin resistance [IR] according to the flushing reaction among Koreans.
Methods: Subjects were 624 male (80 non-drinkers, 306 non-flushers and 238 flushers) without history of taking drugs for a recent month. The flushing reaction in drinking, drinking amount at a time, and drinking frequency were investigated. A drink was defined as 14 g of alcohol. IR was defined as 2.34 or more in the value of the Homeostasis Model Assessment [HOMA-IR]. On the basis of non-drinkers, the risk of IR according to weekly drinking amount was analyzed in non-flushers and flushers.
Results: In non-flushers, the HOMA-IR for persons drinking 4 drinks or less weekly was notably lower (P = 0.014) than non-drinkers, whereas it was notably higher (P = 0.001) for persons drinking larger than 20 drinks weekly. On the other hand, in flushers, the drinking amount that HOMA-IR decreased was not detected and HOMA-IR started to increase notably in case of over 4 drinks weekly. After adjustment for the baseline characteristics, the risk of IR in non-flushers was decreased in case of 4 drinks or less weekly (OR 0.300, 95% CI 0.105~0.857), whereas it was notably increased in case of over 20 drinks weekly (OR 3.477, 95% CI 1.436~8.418). On the other hand, for flushers, it was notably increased in case of over 12 drinks weekly (12-20 drinks OR 4.660, 95% CI 1.801~12.055; over 20 drinks OR 3.505, 95% CI 1.019~12.060).
Conclusions: There was difference in the relationship between drinking amount and IR according to the existence or non-existence of flushing reaction. Physicians should take flushing reaction into consideration in drinking-related counseling with their patients.

P-204

Assessing alcohol misuse among adolescents in Greece and Italy

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Aim: To evaluate alcohol misuse in adolescent students between Italy and Greece.
Methods: 208 students from Secondary and High Schools in Italy and 363 respectively from Greece (ages 14–16 years) completed anonymously a questionnaire about lifestyle, smoking and alcohol intake, the parameters of which were examined using both open-ended and multiple-choice questions.
Results: The two countries did not differ in overall alcohol intake consumed on the last occasion. Nonetheless, there were differences in both frequency of beer, alcopops and wine consumption and in quantity of alcopops, wine and spirits consumption (all ps <0.05). A significantly lower age of first time consumption in presence of parents was noted for Italian male adolescents (Mdn = 10.0 years) compared to Greek ones (Mdn = 13.0, U = 3117.50, p <0.001). Earlier initiation in presence of parents was correlated with more frequent consumption of beer in Greek males (p = 0.002) and of wine in Italian females (p = 0.008). 27 adolescents from Italy and 34 from Greece reported consuming 4 or more drinks in a day. Weekly consumers seemed to drink more alcohol per hour in both countries (r = –0.45, p <0.001 in Italy; r = –0.27, p <0.001 in Greece) and they were 3.43 times more likely (95% CI: 1.82–6.47) to be binge drinkers. Logistic regression showed that weekly consumption of alcohol and smoking regularly increased the odds of reporting inebriety episodes by a factor of 4.20 (95% CI: 2.61– 6.77) and 4.63 (95% CI: 1.41– 15.16) respectively, while living in Greece increased such odds by a factor of 2.27 (95% CI: 1.23– 4.19).
Conclusions: Diffusion of alcohol consumption in the adolescent environment, despite differences in patterns of drinking between the two countries, may lead to misuse. Further studying of the etiology internationally could help identify protective factors.

P-205

Cigarette smoking among students from university of Lodz

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Background: Nowadays, cigarette smoking become a serious problem. More and more women and adolescents are smoking now. Smoking provokes even more diseases which cause premature death than AIDS, accidents and murders taken together. It is proven that 20 cigarettes smoked each day make one's life shorter for about 5 years. Epidemiological researches revealed that one person dies every 8 seconds because of the diseases caused by cigarette smoke. There are over 4000 different substances in cigarette smoke. Many of these have toxic, mutagenic, carcinogenic and teratogenic influence on tissues. Harmfulness of cigarette smoke depends on many factors such as amount of smoked cigarettes and age when addiction has begun. That is why it is especially harmful for young people. Passive smoking is also a serious problem.
Aim: The aim of our research was to estimate the problem of cigarette smoking among students from University of Lodz. We also wanted to check the level of knowledge of harmful effect of smoking among these students.
Materials and methods: An especially prepared questionnaire was distributed among students to examine the problem. Almost 150 students from University of Lodz participated in the study. All collected data were analyzed.The results and conclusions will be presented on the conference.

P-206

The media: health system, the complexity and the non conventional medicine

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Background: physicians, nurses, psychologist… patients tensions will increase. Employer-health plan and Public Health Systems tensions will increase.
Methodology: Databases PUB MED, LILACS, Cochrane,
Results: The non-conventional provider movement (integrative medicine) will be pitted against the conventional. Offshore resources will compete against high-cost domestics. The under-insured will compete with employers for funding and services. Biologics developers will attempt to fend off traditional pharmacy to capture the high ground in diagnostics and therapeutics. Tension, anxiety, power and money will heat up, but so, too, will opportunities to change. One theme in globalization and media ERA: in social networking, the individual is seen as a node and the tools are designed to connect nodes together. This makes sense, but lacks the personal feeling that is the true driver in social networking, but it helps from an IT perspective. We believe it is that individual's need to connect is what drives nodes to other nodes. It was also suggested that social networking can be used in medical education to allow students to "experience" health events by following patients who are using social networking to cope with their care. The key message here was, patients are feeling increasingly empowered to access their patient information, another kind of healing and the greater liability may come from those who are not embracing these technologies. Sharing information with patients is no longer an option, but a requirement and databases show the integrative research and treatment increase recently. On one hand, we think it is important that the patient has access to as much of their information as possible, to become a good "self leader" as Edington, PhD calls them, "A good self leader will share their health information with their health professionals and take an active role in their own well care" and choose integrative medicine!!!

P-207

Characteristics about the consumption of tobacco in applicants for information on smoking

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Aim: To describe the characteristics about the consumption of tobacco in applicants for information on smoking.
Design and methods: As part of activities on World Day without Tobacco (May 31, 2008) in Valencian Community (Spain) we carried out a survey using a questionnaire to those who demand information about tobacco in the specific points of attention. Previously we validated the questionnaire and we recorded all filled questionnaires.
Results: We collected 1,200 questionnaires, 46.4% completed by men and 53.6% by women. Furthermore, 67.3% were young people between 9 to 17 years old, and the remaining 32.7% were people between 18 and 70 years old. Overall, 29.5% of respondents were smokers, 12.9% were ex-smokers. Among smokers, 26.6% did not intend to quit in the future. Only 24% thought trying to abandon the consumption in the next month. Children under 18 smoked less than those above this age (14% and 56% respectively). Among the group under 18 years, a greater proportion of smokers were women (55.7%). Regarding the desire to abandon, the young people have less desire (16%) than the old people (28%).
Conclusions: The proportion of smokers is slightly higher than in general population in Valencian Community. This fact may be explained by the difference in age composition and collection system of the interviewees. Of particular concern is the pattern of change with respect to the gender distribution among young and low intention to abandon the consumption of tobacco, both youth and adults.

P-208

To be a doctor in a complex world: coping with medical errors

Brigatti M. (Milano), Frosali L. (Milano), Mangiagalli A. (Pioltello)

There is well known evidence that paradox, tension and anxiety are by-products of complex systems. Uncertainty is an everyday characteristic of any GP's work which often leads to the risk of burnout and mental distress. The counseling programs to help doctor to solve these problems and minimize the risk of consequent medical errors and improve bad doctor-patient relationships are usually based on long and difficult instruments, like MBI. We agree that a questionnaire could be a tool to investigate doctor attitudes but think a brief self investigation would be better received by GP's and would let them to realize their mental situation and risk of distress. To achieve this goal, we asked 36 GP's in our Sanitary District, mean age 53 ± 3 yrs, to complete a simple questionnaire according to Dr. Donini's specifications. It had seven questions referring to: empathy, concerns about the patient's disease, types of communication, holistic approaches, bias conditioning, environmental conditions and emotional involvement. Each item had a different score on a 0–4 scale. The totals indicated: 0–9, inadequate professional activity, a need for self criticism and help to grow. 10–15, sufficient doctor-patient relationship, baseline for medical activity and starting point for progressive improvement. 16–20, professional satisfaction, beware of uncritical self evaluation. Our results: 6% scored <9; 59% scored 10–15 and 36% scored >15. These findings suggest that only 36% were able to manage the typical uncertainty of the complexity using capability: their risk of error is low. 59% have good self perception of personal satisfaction but should realize that a few changes according to the questionnaire, could improve their attitude to patients and lower their errors. The 6% whose capability is too low should avoid a rigid and prescriptive content leading to high risk of burnout, loss of empathy and increased risk of major errors.

P-209

How do patients feel when coming to the doctor's appointment in our health center

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Aim: to know the patient's feelings and fears when they come to be visited by the doctor/nurse.
Methods: questionnaires were left outside the doctors' and nurses' rooms all around the waiting rooms of the Health Center. Patients were free to take them and put them back in special boxes left to that purpose. It was a close questionnaire where patients were asked about their feelings and fears, like being worried about the gender of the professional, being diagnosed with a serious illness or with something that could change their lifestyle or being attended by a different professional that the usual one. Furthermore,not following the doctors'/nurses' prescription or recommendation, not understanding what the doctor/nurse says and the personality of the professional were asked.
Results: For the middle-age men (41 to 65 years old), what bother them the most was not being attended by their usual doctor (25,6%); the oldest ones (>65 years old) weren't really worried about being diagnosed with something serious or that could make them change their lifestyle (52.6%).Women more than men (48.8% compared to 38.7%) were really worried about being diagnosed with something serious.For women of all ages the personality was really important,as well as the treat and the mood the professional uses during consulting time (<20 years old 70%, 20–30 years old 68.4%, 31–40 years old 77.1%, 41–65 years old 73.2% and >65 years old 50%). Surprisingly men and women of all ages didn't mind not understanding the doctors'/nurses' prescription or recommendations (64.3% and 54.4% respectively).
Conclusion: what patients bother the most is not being attended by their usual doctor/nurse. People is worried about serious illnesses or changing their lifestyle but not as much as we could have expected, so people's health beliefs could explain why they don't follow our prescriptions or recommendations.

P-210

Working as physicians in a Brazilian family medicine government program – gratification, difficulties and concerns

Castro A. (São Paulo)

Purpose: In Brazil, we have a government program called Family's Health Program (PSF) which was created in 1998 as a primary care strategy. Currently we have 27.324 teams. Each team, which is composed by one doctor, one nurse, two nurse assistants and six community health assistants, is in charge of 1000 families (4000 people). The purpose of this study is to evaluate, in a qualitative way, the professional gratification, concerns and difficulties of working as physicians at PSF in São Paulo – Brazil.
Methods: Data were collected through in-depth interviews performed by the authors. The interviewees were doctors of three PSF areas and the questions had been previously elaborated. The interviews were recorded and collected data were analyzed through qualitative methods.
Results: The majority of the interviewed physicians works less than six years in PSF. Half of them has no residence of family medicine. Most of PSF doctors do not see themselves as PSF doctors within the next decade. Physician's goals are assembled in the following categories: idealism, personal achievement and promoting health instead of focusing in disease. Among Family Physicians, some of them have chosen to follow an academic career. Doctors feel very tired because of the amount of work demanded by the quantity of families to each team. However, they keep on hoping and working for improvements in the PSF system. The suggestions for improving PSF were assembled in these categories: opportunity to enrich academic knowledge; improvement of work conditions through practical actions; improving relationship between PSF doctors and other specialists; choosing the managers responsible for administrative decisions between people that had had previous experience in practical settings of the PSF.
Conclusion: Doctor's opinions and wills about PSF are very important to visualize family medicine context and to understand the difficulties of the development of family medicine in Brazil.

P-211

The impact of a communication curriculum on self – reported communication skills on GP trainees

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Background: communication skills, which are linked to important health outcomes, are rarely formally taught during the VTGP.
Aims: to determine whether a 12-hours communication curriculum is effective in changing self-reported communication skills and communicating confidence among GP trainees.
Methods: self assessment validated questionnaire were administered to the GP-trainees of Liguria Region, before and after completion of this curriculum, in 2007–2008. They were asked to say: how often used 14 specific communication strategies; their comfort in patients' interviewing; how much they improved their overall communication skills. A 4-points Likert scale (1: minimum; 4: maximum) was used as an evaluation tool. Analyses compared 23 responses (4 of 27 trainees have given up VTGP), controlling for age, gender and previous clinical experience. Moreover, an open question was used to identify their main training needs in the field of doctor-patient communication.
Results: Trainees identified several complex communication skills for which they felt unprepared, the priorities are: delivering bad news and discussing end-of-life wishes. A trainees' majority (78.26%) reported a greater frequency using of at least 7 of the 14 specific communication strategies. As a result of the curriculum trainees were more likely to report feeling comfortable in obtaining history from patients (increased from 2.65 to 3.13 out of 4 points) and improved their overall

communication skills (from 2.65 to 3.04). We found little variation by gender, age and prior clinical experience.
Conclusions: implementation of a communication curriculum improves Gp trainees' self-reported communication skills and communicating confidence. Further evaluation of these findings in other training programs is needed.

P-212

The doctor-patient relationship is like an interaction between two systems: how to manage complexity

Brigatti M. (Milano), Frosali L. (Milano), Mangiagalli A. (Pioltello)

The patient and his disease could be considered a complex system which has resulted from the effects of many different situations converging on him from the outside world. Even doctors can be considered a system, influenced by external factors which lead through an internal elaborating activity, to non-linear outputs, most of these directed to patients. We can say that the "doctor-system" and "patient-system" condition each other following non linear interactions. We also know that small events could cause great earthquakes (the butterfly effect), therefore one of these two systems should be as stable as possible to reduce its influence on the other and avoid conflicts. When the doctor gets satisfaction from his work, the doctor-system stabilizes its complexity level, condition the patient-system in a positive way and the doctor-patient relationship is optimised. In this situation, even the complexity of the patient-system is stable and the agreement level becomes higher. In accordance with the Stacey diagram, although uncertainty levels may be high, we remain distanced from chaos in the complexity/rationality area. We argue that if a doctor rationally knows he has a high professional satisfaction level and proper empathy, he can better negotiate with his patients and shift the attractor from "disease" to "health". To reach this goal we used a "self assessed" professional satisfaction questionnaire consisting of seven questions (according to: G.Donini). It leads to a score where the "satisfaction level" is 16 to 20 points. We submitted this instrument to 36 GP's in our Sanitary District. Their mean score was 14,2 indicating a need to improve their patient relationship through further introspective analysis.This would lead to better empathy and negotiation rather than following a simple comportamental model which is impossible to plan because of the non linear course of events.

P-213

Nursing in primary care: more that treat wounds

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Aims and purpose: Although that historically the nursing is related with treatment of wounds, nowadays these only are a small part of the tasks of the nurses of primary care in Catalan Public Health Services.
Design and Methods: Information gathered from the review of clinical DWH diagnoses related to wounds registered by nurses of Primary care Center Sanllehy, in Barcelona, during 2008. Descriptive analysis of the types of cutaneous injuries attended during 2008 by the team of nursing of Primary Care Center Sanllehy.
Results: The analysis shows that the treatment of wounds is a small part of the total task of the nurses, less than 10%. Most of attended wounds was acute traumatism (55.7%) caused by surgery, falls, cuts or burns, whereas the ones produced for vascular problems (35%) and immobility (10.17%) were appearing in minor number.
Conclusions: The injuries in which we can take preventions are in less number than each other. The new role of the nurses as proactive elements of health, does that the most important intervention on the wounds become before these appear. We have to think that may be one of the reasons of that exists fewer chronic wounds owes to the action of the nurses and their new role, taking prevention in the offices and at patient's home. It's evident that the nurses' roles are changing in our daily practice. Something is changing since the tasks of primary and secondary prevention help to anticipate the appearance of cutaneous injuries.

P-214

Home care. Reality and prospects

Iannantuoni L. (Foggia)

Home care was defined by WHO as "the possibility of providing the patient at home with those services and tools that contribute to keep the highest level of welfare, health and function". The rise in the average age and the increasingly aging population make and will make the development of home care more and more "convenient". In the latest Central Statistics Institute report on Italy's population, the data, updated to December 2006, show that the index of old age (the ratio between people over 65 and under 15) is 141.5% and that the percentage of those over 80 has increased by 5%, while the percentage of those over 65 has passed from 15% to 20%. Moreover the incidence of various pathologies increases in an aging population. Respiratory diseases are steadily increasing with human and financial costs in exponential growth. According to the data of the RADIA (Respiratory Apparatus Disease Italian Association), 5 million Italians, about 9% of the population, suffer from bronchopneumonia. This percentage is bound to increase for various reasons, including generational senescence, smoking and pollutants. Likewise cardio-cerebrovascular diseases are on the rise. Also these pathologies are caused by generational senescence and smoking, as well as sedentariness, diabetes, hypercholesterolemia, obesity and arterial hypertension. These issues pose two alternatives: – developing and improving sanitary facilities; – developing home care. The latter is definitely more advisable since it presents a number of convenient factors: – low costs – humanization of care – bedspace
Levels of home care
First level – Second level (low-medium intensity) – Third level (high intensity)
The following categories of patients can also benefit from home care: – disabled patients, patients suffering from more than one disease and/or chronic-degenerative diseases limiting self-sufficiency; – patients discharged from hospitals in need of nursing and medical care. Role of the family doctor – He takes care of the quality of life, meant as physical and mental welfare in the context of human relationships. Considerations the new realities must be faced together with responsibility, seriousness, confrontation and dedication in order to guarantee our patients' health and quality of life.

P-215

War, terrorism, ethical challenges and family physician education

Carelli F. (Milan), Karaoglu N. (Selcuk)

Although we are in a time of progress and civilization, uncountable natural and man made disasters are going on all over the world. We can not be able to avoid terrorism, wars and violence and sometimes feel that we are captured between humanity, personal feelings, national policies and medical ethics. In 1978, in Alma Ata conference and Declaration, World Health Organization (WHO) pointed primary health care as the key for achieving an acceptable level of health throughout the world. Besides the technical and scientific skills in the family medicine, family physicians' education, political, ethical, and communicative competencies are very important for the humanity for the democracy and multi professional approach of a family physician as defined also in the European Definition and EURACT Educational Agenda. A successful humanitarian work depends on historical and ethical consciousness, knowledge in international laws and international humanitarian laws and, culturally sensitive health care with social and communicative competencies. A family physician (every one of them) should have the spirit of peace, humanity and ethics at the end of education.

P-216

Experience and evaluation of spirometry in central city family medicine physician office

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Aim: The evaluation of pre and post bronchodilatation spirometry, as a basic instrument in a primary medical care family office in an central city area with free opportunity of patients to visit the plenty of specialists (pneumonologists) with the same cost.
Design and method: We study prospectivy from June of 2003 until the December of 2008, 367 (299 females and 68 males) patients who came in our office in central Athens. We separate the purpose of spirometry in 3 major categories. The first was to evaluate the need of emergency medical assistance. The second was to define the diagnosis and treat the patients after that. The third was to evaluate the response to the therapy in already diagnosed patients with pulmonary diseases such Asthma and COPD.
Results: 9 (2.45%) were evaluated for emergency assistance, 353 (96.18%) were to define the diagnosis, 5 (1.36%) to evaluate the response to the therapy in already diagnosed diseases. In a metanalysis we separate them in 3 categories. The first were the patients who came only once in our office. The second were the patients who continue therapy in our office. The third were the patients who have been referred in hospitals and specialists from us.
15 patients (4.08%) were in first category, 311 (84.74%) in second, 41 (11.17%) in the third.
Conclusions/Discussion: Spirometry in family physician central city office is more often an examination for define diagnosis. The most of the patients prefer to continue treatment in the "non specialist" General Medicine Physician office than to visit a "specialist", fact very interesting for further discussion.

P-217

Developing and testing quality indicators of professional home care in Switzerland

Burla L. (Winterthur)

Aims and purpose: Quality of home care plays a key role in primary care since there is a traditionally close collaboration between general practitioners and home care professionals. The present study developed and examined empirically quality indicators of home care in Switzerland using the Swiss version of the RAI-HomeCare instrument.
Design and methods: The study consisted in four steps examining the suitability of home care quality indicators based on scientific and practical considerations. First, a set of potential quality indicators was operationalized. For this purpose, existing indicators based on the North American version of RAI-HC were adopted as well as additional indicators based on the Swiss RAI-HC were developed. In a second step, applying a group consensus method (nominal group technique) these indicators were judged by home care professionals with regard to changeability, practicability and relevance. Third, based on data of 1'808 clients from a total of 45 home care organisations, the quality indicators were empirically tested with regard to sample-frequencies (incidences and prevalences) and between-group variance. Fourth, the interraterreliability of the quality indicators was assessed. Finally, different methods of risk-adjustement were evaluated.
Results: A total of 29 potential home care quality indicators were developed. Based on the results of the three sub-studies (rating by experts, frequencies/variation and interraterreliability) a core-set of 19 quality indicators was defined which can be recommended for quality measurement in real home care settings of Switzerland.
Conclusions: The Swiss version of RAI-HC provides a viable instrument for measuring quality of home care. The quality indicators can support providers of home care to improve their services and to meet the legal obligation of quality assurance. Furthermore, the use of a well acknowledged instrument supports the acceptance of quality measurement in practice.

P-218

Characteristics and determinants of publication output in general practice in Europe

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Aims and purpose: General Practice (GP) has still to fight for academic recognition and attempts have been made to document its scientific productivity. It was the aim of our study, therefore, to assess the publication output in Europe for the field, to characterize its pattern over time and to identify possible correlations with certain indicators.
Design and Methods: The number of publications indexed in the ISI- database was determined for 1992–2006 using a comprehensive search query recently developed in our Department. The publication output of countries was standardised and related to the values of their respective Essential Science Indicators (ESI; all publications in Clinical Medicine), population size, Gross Domestic Product (GDP), Total Health Expenditure, Gross Domestic Expenditure on Research and Development (GERD), number of General Practitioners per 100000 and Share of Research and Development Personnel. Pearson's Correlation Coefficients were calculated and repeated measures analysis of variance was performed.
Results: Across European countries, the number of publications varied between less than 10 and more than 15000. A rising pattern for the number of publications over time is a common feature of all countries; they are highly correlated to ESI ($p < 0.0001$) and are influenced by GDP whether standardised to population size ($p < 0.0001$) or ESI ($p = 0.013$) and by GERD ($p = 0.012$). No other significant relation could be found.
Conclusions: There is a marked difference in GP-research output in individual European countries. Overall, the field is developing as shown by increasing numbers of publications over time. The progress of GP-research is closely correlated to that of the Clinical Medicine in general. Countries with a higher GDP have significantly more GP publications suggesting that the economy of a country influences the development of research in the field.

P-219

The indicators for measuring «the acute illness» performance of family medicine setting: systematic review

Horsakulchai S. (Bangkok), Poonpetcharat P. (Bangkok)

Aims and purpose: In 2003, Thai government changed the health policy and constructed universal coverage system. Therefore, the development of family medicine setting is needed to support it. The indicators that can be use to assess the quality of performance are important. The purpose of this study is to develop the evidence-based indicators for measuring the performance of family medicine setting in 'the acute illness' aspect.
Design and methods: The electronic database of MEDLINE was searched for published literature from 1960 to 2008. The published articles focused on developing and using the indicators to measure the performance of family medicine setting in 'the acute illness' aspect were included. The published papers were chosen by consensus process. Two reviewers reviewed and extracted data independently then the data were discussed in the second-round consensus.
Results: There were seven published papers in this aspect which included fifteen Indicators in eight conditions (UTI, URI, diarrhea, heart failure, asthma, headache and low back pain) for assessing the performance. These indicators fit into history taking, physical examination and management domain.
Conclusions: All of the indicators were potential part for measuring "the acute illness" performance because it continue to be an important tool for quality improvement and research challenging in Thailand. Further study will be required to support the development and testing of performance indicators.

P-220

The design of pragmatic trials with a "usual care" control group: results of a systematic review

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Background: Because pragmatic trials are performed to determine if an intervention can improve current practice, they often have a control group receiving "usual care". The behavior of caregivers and patients in this control group should be influenced by the actions of researchers as little as possible. Guidelines for describing the composition and management of a usual care control group are lacking.
Aim: Explore the variety of approaches to the usual care concept in pragmatic trials, and evaluate influences of the study design on the behaviour of caregivers and patients in a usual care control group.
Methods: Review of 55 pragmatic trials in primary care with a usual care control group published between January 2003 and July 2007 in the British Medical Journal, the British Journal of General Practice and Family Practice. We assessed how researchers applied the concept of usual careand evaluated the risks of behavioural change for caregivers and patients in the control group.
Results: We included 32 individually randomized trials and 23 cluster randomized trials. In most trials caregivers could treat control patients according to their own insight; in two studies treatment options were restricted. Possible influences on the behaviour of control caregivers and control patients were often identified in individually randomized trials, but these influences were also present in cluster randomized trials.
Conclusions: Researchers in primary care medicine should carefully consider the design of a usual care control group, to minimise the risk of study-induced behavioural change. Cluster randomization often not sufficiently solves the problem of behavioural change of caregivers. We recommend an adequate description of the information provided to control caregivers and control patients. The CONSORT statement for pragmatic trials should be expanded, requiring authors to specify details of thecontrol group.

P-221

Research training: professionals' autoperception about needs

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The main aim of medical centres is to provide health care, and moreover the medical centres that pursue the excellence, combine health care training and research.
Aims: To determine the health care professionals' perception of the needs for research training, and to analyse the differential characteristics between groups according to their work place, their academic training and their experience.
Design and Methods: A questionnaire was drawn up and distributed to physicians and nurses of a tertiary hospital: eight primary care centres and two health care centres for the elderly.
Results: Coefficient? Cronbach = 0.915. 534 professionals (38%) answered the questionnaire; the 69% of them were women and the average age was 37 years old. 52% were physicians and 21% were nurses. The need for training received an average score of >8 points. There was a greater demand for general skill courses. Different groups showed specific needs. The work place was especially influential in

physicians' priorities. Researchers stood out for giving higher scores and for following different criteria. Advanced epidemiology was considered the greatest priority by highly qualified scientists, however this course was ranked in last position in the total sample. On average, all professional groups, except researchers, assessed their own training and satisfaction with their own research at <5 points.
Conclusions: A high degree of motivation towards research training was detected and they also noticed insatisfaction with their own scientific output. The work place, the training and the experience influenced the perception of their needs. The researchers considered epidemiological and statistical training as a priority, as opposed to the beginners who preferred training in general skills such as public speaking.

P-222

Health care professional view on biomedical research

Arteaga S.C. (Terrassa), Giménez G.N. (Terrassa), Jodar H.E. (Terrassa), Torres L.M. (Terrassa), Dalmau J.D. (Terrassa), Casagran B.A. (Terrassa)

Biomedical research is a needed subject and enjoys social prestige.
Aims: To ascertain the views and expectations of health care professionals about research, analyzing the influence of their academic training and according workplace level care.
Design and methods: An anonymous questionnaire was distributed to physicians and qualified nurses working at a tertiary hospital, seven primary care centres and two nursing homes (health care centres for the elderly).
Results: Coefficient? Cronbach's = 0.817. Response rate: 64% (432 out of 682 questionnaires distributed). Women: 71%. Mean age: 37 years. Mean years involved in health care: 14 years. 79% of people considered research as a part of their job, although in practice only 43% were doing it. Overall participation in activities was: Conferences (71%), education (42%), publications (34%) and ongoing projects (17%). Physicians dedicated more off duty time (37%) in research than qualified nurses (CI95%: 28 to 46%). The majority of physicians having their doctoral thesis would like to carry out research activities, 84% did so in their free time and 74% had active research projects in progress. They identified physician workload as the main factor that impede perfoming research. Proposals to increase research activities were focused on improving resources.
Conclusions: The majority of health care professionals expressed a great motivation. The perception of research varies depending upon professional qualification. Physicians having their doctoral thesis were more involved and had a different perception of research, being more critical about available resources. Overall research perception was more positive among those with less academic training as well as among those centres with less research activities.

P-223

Studying medication appropriateness in general practice: what measurement instrument to use? A scoping exercise

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Aims and purpose: Polypharmacy is a relevant risk factor for adverse events which could lead to unnecessary hospital admissions or even death but also significantly limit adherence and compliance. Thus, optimising medication use has gained momentum in primary care but its effectiveness needs to be thoroughly researched. Measuring optimised care might include summary measures of polypharmacy, measures of medication appropriateness or complexity of medication. All of these measures have certain strengths and limitation, particularly when applied in research in general practice.
Method: We conducted a formal scoping exercise to evaluate existing measures for polypharmacy and medication appropriateness and critically appraised their usefulness and potential limitation for research in primary care.
Results: Several measurement instruments (Medication Appropriateness Index, Medication Complexity Index, Polypharmacy Index, etc.) will be explained and critically appraised for different research questions and research contexts within primary care. The instruments measure dimensions like indication, and effectiveness of medication, instructions given with the drug, number of drugs, complexity of drug regimen, etc.
Discussion: When choosing a measurement instrument of polypharmacy and medication appropriateness one has to bear in mind the background of the instrument (pharmacological, psychometric, etc.) and the efforts and costs which are attached to the instruments. None of the instruments includes the patient perspective as to what constitutes the subjective appropriateness for patients.

P-224

Improving clinical reasoning through online teaching for medical residents of family medicine

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Education of family physicians has put the emphasis in recent years on improving the quality of care using tools such as clinical practice guidelines, clinical pathways, process management, patient safety, among others. However, the diagnostic process is a preliminary meeting point of any of these efforts and an inevitable determinant of the quality of the process later. This is a complex process which determines the patient's care in different circuits. At the faculty of medicine of the University of Zaragoza, there is course in this issue.
Objectives: 1. To describe the process of clinical reasoning. 2. To provide tools to improve it. 3. To practice through clinical cases.
Material and methods: An on-line doctoral course for family doctors (residents and junior doctors) with 5 theoretical modules is designed in the Digital Teaching Ring of the University of Zaragoza. There are 7 compulsory cases to perform. A course evaluation survey is passed at the end to collect information regarding the adequacy of contents, cases, online format and receive suggestions for future editions.
Results: There has been 5 editions from February to May of 2006 to 2009 (figure 1 and 2). Number of students is growing in each edition from 13 to 30 last year. Clinical cases are listed as the most useful activity to improve their clinical reasoning. The assessment of on-line format has been very good. Students proposed to create a repository of clinical cases. All participants accepted to offer their cases.
Discussion: The course has met the expectations of the doctoral students. They all considered that clinical reasoning was the most important medical technology to the family doctor. Online training is well considered mainly for compatibility time issues, course is open 24 hours and from anywhere an internet connection is available. We have to rewrite module 2 to facilitate comprehension and reduce extension. A repository of clinical cases of final work is going to be prepared for next.

Doctoral course website

doctoral course test and chat

P-225

"Difficult case in primary care": the innovative teaching topic in medical curriculum

Hathirat S. (Bangkok), Chumpol J. (Bangkok)

Aims and purpose: To analyze student satisfaction on a new teaching topic for senior medical students.
Design and Methods: Newly innovative program on medical education. Originated from student complaints and consultation on *"the very complex patients"* in community hospitals. Class has been run from 2005 until now. While working in a community hospital, the senior medical students present their most difficult cases in primary care. The class was set as case-based discussion. Faculty family physicians facilitate the discussion and help students to find out how to care the complexity of biopsychosocial health issues of the individual patient. Student satisfaction was measured by the 13-component rating scale and student's written feedback.
Results: All sessions have gained the excellent student satisfaction scores on 13 components consistently throughout 4 years since the project started. The fascinating teaching style can stimulate student learning, open-up their holistic minds, help the better patient care plans and be benefit for their future practices. After the session, the student can apply the knowledge to their real practices in the rural community. Additionally, most students asked for longer time to discuss and would like to continue this kind of teaching topic.
Conclusions: "Difficult case in primary care" is a newly student-oriented teaching topic that can be taught regularly in medical curriculum. This innovative session can help medical students to deal with the uncertainty in primary care cases with more confidence.

P-226

Attitudes towards and conceptions of a GP's work among 5th year medical students in Helsinki, Finland

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Aims: To assess medical students' attitudes towards and concepts related to a GP's work and their potential interest in family medicine in the future.
Design and Methods: A survey was performed to the 5th year medical students prior their main course of general practicse in the medical school. Demographic variables and students' experiences of working as a doctor were inquired. Their ideas about the aims and contents of GP's work were assessed as well as their conceptions on what they thought are the most fascinating and negative features of GP's work.
Results: During the year 2008 168/190 medical students responded. Mean age of respondents was 25.5 y, 65% were females. Their average experience mean time to have worked as a substitute doctor was 2.5 months. Students considered by far the most important aim of GPs' work is to identify serious diseases from their patients in order to admit them to specialized care. The work in the field of primary or secondary prevention or responding to the patients' health concerns came only as the second and third important tasks of GP. The students considered the most fascinating features of GPs' work to be as follows: versatile, challenging work, long-lasting doctor-patient relationships, and the possibility to meet people from all age groups. The most important negative features were considered to be lonely work compared with the hospital doctors' work, and that the content of the work is too similar to social work, and other than working with diseases. Students had fairly vague ideas of the prevalence of population-based chronic illnesses and the possibilities of GP to intervene and treat these diseases.
Conclusions: The students mistakenly think that GP's main aim of the work is to admit patients to the specialized care. Hidden curriculum of medical education has impact on the students' ideas of GP's work and its aims and contents.

P-227

Study about the knowledge level of English language in the Spanish GP trainees

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Aim: To know the importance that Spanish family medicine trainees give to knowledge of English language in developing their work and training. To determine whether trainees in family medicine in Spain is used to read literature in English, and if they are able to present a paper at an international conference or presenting a workshop.
Design and method: Descriptive cross-sectional study conducted through a survey to 350 residents from various Spanish provinces during the month of September 2008.
Results: 92% of trainees believed it was important or very important knowledge of English, although 82.1% believe that the general level of family doctors is not acceptable. 79% of trainees believed that their level of English is medium or low. 45% of the trainees is not considered able to care for a patient in english. 83% of trainees believed to have an appropriate level for reading scientific literature in English, but usually only 52% read literature and 68% is not able to present a communication or clinical session in English. 97% of residents believed that the administration does not encourage health professionals to properly have a correct knowledge of English and the same percentage believes that should increase efforts to improve the English level of health professionals.
Conclusions: The Spanish trainees of Family Medicine majority feel that their knowledge of English is medium-low, but believe it is an important aspect for the performance of their work. Most residents feel that your English is not adequate and that the administration should promote activities to improve it.

P-228

Teaching students in the complex setting of ambulatory primary care – how can we motivate GPs for this task and enhance their satisfaction in their role as teacher?

Schaufelberger M. (Bern), Trachsel S. (Bern), Frey P. (Bern)

The Swiss Medical School of Berne had to establish 670 traineeships in general practitioners' offices in order to implement its new primary care clerkships.
Aim and purpose: What can we do to motivate GPs to become involved as preceptors, and how can we enhance their satisfaction in their role as teacher? The purpose of this paper is to demonstrate the way we inform, communicate and reward preceptors.
Method: The needs and requirements of general practitioners acting as preceptors in a medical school are already well-known. During a meeting with a group of general practitioners, an assessment of further needs was conducted. In implementing our new clerkships, we addressed the following needs: – Training and appropriate preparation of preceptors for the new task – this also included drawing up a set of written practical guidelines
– A reward/incentive system
– Appropriate financial compensation
– Regular information via a newsletter
– An exchange of ideas
At the end of the first year of implementation, an evaluation of the programme was conducted to assess the satisfaction of the preceptors.
Findings/results: Under the conditions specified above we were able to recruit the required 670 traineeships in general practitioners' offices within 18 months. The programme evaluation showed that 95% of preceptors were satisfied and personally enriched by their teaching of students. A year after the implementation of the new clerkships, only one of the 510 preceptors has withdrawn from his position on the grounds of dissatisfaction.
Conclusion: We hope that the enthusiasm shown by our preceptors in their interaction with students will continue and that further evaluations will identify problems and additional requirements.

P-229

Use of antibiotics in acute respiratory infections in primary care

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Aims: To determine if attendance at a single clinical session, which presented the recommendations of clinical practice guidelines on the use of antibiotics in acute respiratory tract infections above (ARTI), it is useful to change prescribing habits.
Designs and methods: We designed a clinical session addressed to the medical staff at a health center (7 family doctors and 5 residents). It was advertised and convened at which we showed the results of the evaluation of the habit of prescribing individualized for each of the physicians during the previous month, and also we revised and gave as a paper summary of the clinical practice guidelines and consensus documents indications of antibiotic in the tables of ARTI. Previously, they were asked to complete a questionnaire on clinical cases of ARTI. We determined the use of antibiotics in ARTI one month before and after the intervention. We included 386 cases in the group before the intervention and 408 in the postintervention group, being comparable in age, gender and distribution of diagnoses. Before we have tested a microsample of 50 ARTI to estimate the size of definitive sample.
Results: In the intervention group before intervention, antibiotics were used in 36.3% of cases, dropping to 23.5% after the intervention.

Additional consultations have increased (from 0.23 to 0.34 per episode), but not the use of other drugs.
Conclusions: A simple clinical session at the health center is able to change antibiotic prescribing patterns in tables ARTI, reducing its use.

P-230

Strained doctors as facilitators in the medical curriculum – experiences of an Early Professional Contact course in the undergraduate medical education

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Aims and purpose: Today, medical students are introduced early to patient contact in the clinical context. General Practitioners are frequently engaged as facilitators. These courses are often evaluated from the student perspective but reports from the facilitator perspective are scarce. In 2001, a new "Early Professional Contact" course through term 1–4 was introduced at the Sahlgrenska Academy, University of Gothenburg, Sweden, with General Practitioners and hospital specialists as facilitators. The aim of this study was to assess, analyse and compare clinical facilitators' and students' experiences of this new course and to illuminate facilitators' working conditions.
Design and Methods: A questionnaire with 28 items was constructed. In 2003, on the completion of the first course, a student and a facilitator version was distributed to the attending 86 students and 21 facilitators. In the analysis, Chi-square and the Mann-Whitney tests were used.
Results: Fifteen facilitators (71%) and 60 students (70%) completed the questionnaire. Both facilitators and students were satisfied with the course. However, differences in attitudes were found. Facilitators experienced a greater workload ($p < 0.0001$), less reasonable demands ($p = 0.017$) and less encouragement ($p = 0.016$), than students. Students reported gaining inspiration for their future work as doctors.
Conclusions: In this study of a new Early Professional Contact course, both students' and facilitators' experiences were analysed. Despite thorough preparatory education, clinical facilitators – the doctors – often experienced a heavy workload and lack of support opposed to the students. The students reported a reasonable workload and were satisfied with the course. A possible conflict between the doctor's task as educator and clinician is suggested. More research is needed on how physicians combine their clinical work with work as facilitators.

P-231

Blended learning in a course on practice management in GP-training

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Background: GP-practices in Switzerland usually are privately owned and require an important financial investment. Postgraduate GP-training mainly takes place in hospital-settings leaving little opportunity to train the duties of practice-management (PM). Courses on PM are offered by firms and trustees, but independent courses are rare. To offer GP-trainees a well designed, independent course the Swiss College of Primary Care Medicine set up an optional course on PM.
Course-method: To make the course accessible to trainees from all over Switzerland and to allow adaptation to individual needs a hybrid course ("blended learning") was opted for with 2 meetings of 1½ days and a 5 months phase of self-& group-learning in between with coaching and contacts by web-platform, e-mail as well as trainee-initiated meetings in subgroups.
Evaluation: The first course (2004/05) with 21 participants was evaluated by self-assessment of the PM skills before and 5 months after the course, and by questionnaires at the end of the 2 main meetings and 3 months after the beginning of the self-& group-learning phase.
Results: Ten participants (48%) dropped out of the course at different stages mainly due to personal reasons like divorce, death in the family and work overload; 11 attended the second meeting and 16 filled in the final evaluation. The self-assessments before and after the course showed important initial deficiencies followed by substantial improvements, e.g. in the ability to search for, select and train ancillary staff, or to write a business plan and keep the accounts. 75% found the learning process worth the effort, 88% recommended the course to their peers and 75% assessed the didactic concept suitable for courses with other topics too.
Conclusions: GP-trainees see important deficiencies in their training in PM. The "blended" course-method is feasible and attractive. However, the professional and private context affects the impact of the course.

P-232

Defining goals and learning objectives for a longitudinal clerkship in the complex context of primary health care

Schaufelberger M. (Bern), Rothenbühler A. (Bern), Trachsel S. (Bern), Frey P. (Bern)

In autumn 2007 the Swiss Medical School of Berne (Switzerland) implemented mandatory short-term clerkships in primary health care for all undergraduate medical students. Students studying for a Bachelor degree complete 8 half-days per year in the office of a general practitioner, while students studying for a Masters complete a three-week clerkship. Every student completes his clerkships in the same GP office during his four years of study. The purpose of this paper is to show how the goals and learning objectives were developed and evaluated.
Method: A working group of general practitioners and faculty had the task of defining goals and learning objectives for a specific training program within the complex context of primary health care. The group based its work on various national and international publications. An evaluation of the program, a list of minimum requirements for the clerkships, an oral exam in the first year and an OSCE assignment in the third year assessed achievement of the learning objectives.
Results: The findings present the goals and principal learning objectives for these clerkships, the results of the evaluation and the achievement of minimum requirements. Most of the defined learning objectives were taught and duly learned by students. Some learning objectives proved to be incompatible in the context of ambulatory primary care and had to be adjusted accordingly.
Discussion: The learning objectives were evaluated and adapted to address students' and teachers' needs and the requirements of the medical school. The achievement of minimum requirements (and hence of the learning objectives) for clerkships has been mandatory since 2008. Further evaluations will show whether additional learning objectives need to be adopted.

P-233

Patient satisfaction with primary care: a comparison between conventional care and traditional Chinese medicine

Ausfeld B. (Bern), Michlig M. (Bern), Busato A. (Bern)

Aim and Purpose: Evaluation of patient satisfaction in Traditional Chinese Medicine (TCM) versus Conventional Medicine (COM) in primary care in Switzerland.
Design and Methods: A cross-sectional observational study was performed with questionnaires aimed at fulfillment of expectations, perceived treatment effects and patient satisfaction. Participants were 51 certificated TCM-Physicians, 71 COM-Physicians and 2530 adult patients.
Results: Patients in Switzerland who choose as primary care a conventional physician with additional certification in TCM have a higher chance to be completely satisfied with their treatment compared to patients who choose as primary care a physician only educated in conventional medicine. The significant findings in favor of TCM were in the rubric "relation and communication" but self-reported relief and resolution of symptoms was better in COM.
Conclusion: Physicians who supply TCM additionally to COM are able to satisfy the needs of their patients more completely compared to only COM practicing physicians. As explanation for that difference are to be seen the less frequent occurring side effects of TCM, a better physician-patient interaction with longer duration of consultation and different treatment expectations of patients in TCM.

P-234

Quality of GP vocational training in Swiss hospitals: the view of heads of internal and surgeon departments

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Aims: In Switzerland GPs vocational training lasts 5 years. The trainees spend most of this time working in hospital departments, not in practices. The Swiss Medical Association (FMH) and the Swiss GP Association (SGAM) started in 2006 to emphasize more outpatient settings, but adequate options are rather difficult to find. Several Cantons started financing practice -programs for GP trainees, so the choice might improve in near future. At present nevertheless approximately 80 to 90% of the vocational training are completed in hospital conditions rather far from primary care setting. So the research question is: how do the heads of departments for surgery and internal medicine in two Swiss cantons perceive the quality of the GP vocational training? How do they try to improve it?
Design and Methods: In January 2009 we send a 21-item semi quantitative questionnaire to the heads of departments for internal medicine and for surgery, 34 in the Canton of Bern and 25 in the Canton of Zurich, 28 of them surgeons and 31 internists. The questionnaire includes personal aspects, information about the

department, learning targets in primary care, specific education for GP trainees, characteristics of their work in the department and the contact to the GPs.
Results and Conclusion: The results are in work in progress.

P-235

Patients' opinion on family medicine

Oberknezev T. (Belgrade), Maric V. (Belgrade), Trifunovic T. (Belgrade)

Family medicine is an academic and a scientific discipline with educational content, research, database and clinical activities, i.e. a specialty focusing on primary protection. Health systems of developed countries are based on successful primary protection with highly qualified doctors of family medicine, so the development of family medicine is necessary in our health system. The authors wanted to see how the patients would receive the initiative so they conducted the research on 104 patients. The purpose of this research was to see whether the patients know what family medicine is, whether they find it useful and whether they want it. 104 patients of primary health care center Vozdovac was surveyed in November, 2008. There were 65% of women and 35% of men over 25 years old. The results showed that 69% of the patients feel that there should be family doctors in our society. 63% think that the best family doctor would be their selected doctor, and 26% that the family doctor should be specially educated. Those 26% of the patients are younger people suffering from chronic, hereditary or other diseases that require regular check-ups by the doctors with other specialties. 40% of the patients feel that their selected doctor possesses enough medical knowledge and knows them and their family best. The results show that the patients are aware of what family medicine is in general, but that they do not know all its elements and benefits. Patients mostly consider that it can be useful and in most cases want a family doctor. Possible additional education of specialists of general medicine as it is the closest to this field should be considered. The conclusion is optimistic because the initiative of developing family medicine will be accepted by most of the population but they should be additionally informed and educated.
Key words: patient-family; medicine-family; doctor-a specialist in general-family medicine

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P-236

Teacher's continuous professional development (CPD) of the Spanish society of family medicine (Semfyc)

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Aim: To establish a CDP individualised for Semfyc members with a teaching activity that includes an evaluation area based on portfolio methodology and a training area, both areas linked in a competence Management model.
Methods: Creation of educational expert groups. Meetings to generate ideas and consensus with the following phases: Setting the Competences Map of teachers Design a portfolio for self-evaluation: definition of indicators, design of assessment tasks on their teaching performance, creating help documents, introduction of all these data into an e-learning platform that already includes other portfolios. Creating a group of tutors who are experts in teaching methodology. Design of training activities assigned to each of the competences of teachers.
Results: This produces a 16 Competences Map, related to knowledge (3), skills (7) and attitudes (6). We obtained a Portfolio to self-evaluate own teaching performances with 9 tasks (including peer-review, analysis of video recordings, critical incident reports, self-audit and others...) It offers 1 general training in teaching methodology and 6 specific training activities, everyone related to different teaching skills. All this is included in an online platform where teachers can self-asses their competence and, after analyzing their needs, can design their own Personalized Training Plan.

P-237

The rural medicine practical period for family medicine trainees in Spain

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Aims and Purpose: Spain has one of the oldest Family Medicine Training Programmes in Europe. This scheme is based on the "Family and Community Training Programme", which is carried out and revised periodically by the National Commission for Family and Community Medicine, the Ministry of Health and Consumer Affairs and the Ministry of Education and Science. During its last update, in 2005, the length of this Training period was extended from 3 to 4 years including for the first time a compulsory Rural Medicine Practical Period for trainees. The purpose of this communication is to describe and clarify the main goals and difficulties in this Rural Period for Family Medicine Trainees in Spain.
Methods: The opinions from the different parts involved in this process have been collected by means of personal interviews and questionnaires. At the same time, we revise and summarise diverse statements and recommendations about the execution of this Rural Training Period.
Results: All parts involved in this new Rural Period see it as a very important interval. At the same time, some of them describe specific needs and difficulties to overcome: lack of rural centres for practicing and big expenses of hosting and transport for trainees are the most important ones. A real improvement in all this procedure is expected during the next years.
Conclusions: The complexity in the implementation of the Rural Medicine Practical Period for Family Medicine Trainees in Spain can be addressed by sharing and discussing the different experiences on rural training in Europe.

P-238

Teaching evidence-based medicine in primary care

Wanvarie S. (Bangkok)

Aims and purpose: To establish an appropriate teaching method for evidence-based medicine (EBM) in primary care.
Design and methods: The faculty met to determine the extent of EBM to be taught and explored new strategies for instruction and evaluation. Each group of ten to twelve 5th year medical students rotating to the Department of Community and Family Medicine attended three 4-hour sessions of EBM; therapy, prognosis, and harm/etiology. The process of EBM was exercised by each student by using his/her patient encounter from the OPD/IPD service under close supervision. A computer lab was set up with notebook computer available for searching medical literature. They critically appraised the retrieved article as the assignment according to the checklist.
Results: Students were able to complete the EBM process and the homework assignment showed that they critically appraised the articles very well. The average mark was 3.44 + 0.41 (4.00 scale). They also outperformed in the epidemiology section of the National Medical Licensing Examination with a mean score of 76.9 percent (versus 56.1 nationwide).
Conclusion: Small group instruction with patient encounter stimulated students' attention and proved to be an effective way of teaching EBM in primary care.

P-239

First phase family medicine courses for the primary care doctors in the north provinces of Turkey

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Aim: In Turkey, after graduation from medical school, a doctor may choose to work in a primary health care setting without becoming specialized, or may choose to specialize in family medicine or another specialty. The physicians working in the National Primary Health Care System without any postgraduate professional training are referred to as "practitioners" rather than general practitioners or family physicians. There is an ongoing primary health care reform within the framework of the health transition project of MoHealth aiming to improve quality of care and leading to an increase in prestige and status of primary care physicians by teaching programs. We aimed to share our teaching experience in the North provinces of Turkey.
Methods: The pilot program was first started in 2005. First phase of this program is a course continuing seven days of curriculum including basic principles, history, clinical approach, undifferentiated patients, research in family medicine and patient-doctor communication. This course is composed of small group practices and presentations. Second phase is one year course that will start in 2009.
Results: We started as teaching coordinator with Gumushane and Samsun in June 2006, continued with Sinop, Amasya, Corum in 2007. In 2008, we coordinated the courses of Trabzon, Rize, Sakarya and six neighbor provinces' participants were also educated in those three provinces. Total 2687 doctors participated the courses, 702 participated in 2006, 444 in 2007 and 1461 in 2008. To share experiences with others, we also continued as teachers in some other provinces' courses (Izmir, Denizli, Bolu, Duzce) whose participants were around 1000 doctors. Feed-back scores with South East Thames Scale were generally high. After the courses, the participants were aware of family medicine as a unique discipline.
Conclusion: The courses seem beneficial for the doctors. More research is necessary to see how the courses affected the daily practice.

P-240

Dealing with diabetes mellitus type II: a training experience

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Aims: Standard practice in Italy for family medicine is to work in an opportunity way; the National Health Service (SSN) on the other hand wants to improve the system, bringing into the family medicine an initiative way of working. For this reason it was decided to include the teaching on how to manage initiative medicine in the vocational training.
Methods: Diabetes mellitus type II was chosen as pathology to deal with and following three tasks were given to our trainees: 1. Find the gold standard for DMII; 2. Organize the practice, 3. Research.
Results: Our trainees found guidelines for DMII issued by the Associazione Italiana Diabetologi, which they used as basis for discussion with the nurses so as to determine the necessary equipment for the implementation. Timeline and proper layout for the equipment were also discussed. On the research side, beyond classical research like monitoring BMI, glycaemia and so on, a survey was launched, asking the patients their satisfaction for this new service. With our supervision trainees have then started a follow-up program for patients suffering DMII along with a research program.
Conclusions: Trainees in our practice learn to deal with chronicity as well as with acute during the vocational training. They also acquire organizational skills and they learn to manage research tasks within family medicine.

P-241

Practicum in primary care: a new introduction to the medical university education

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Objective: Traditionally in our context medical students don't contact primary care settings until the last year of university, carrying out their first practice sessions at the hospital. In 2004 we started a new teaching experience, introducing first year students to the reality in Primary Care, before starting their academic year. That new programme was called "Practicum" and represented the first contact with our health system. We present data related to the first five years of experience.
Material and methods: Practicum was performed between 2004–2009. Number of students, type of rotation and tutorial subjects were described.
Results: Every year, between 260 and 350 medical students from the University were placed in different primary care centres (PCC). 8 came to our PCC. They were put in two tutorial groups. The two groups came for 3 days in September before they started their university classes, in December and February. Each day they sat in with a doctor or nurse for a 2 hour session, followed by another 2 tutorial hours. The first tutorial was related to sharing their experiences, a brainstorming of ideas about primary care and the selection of a topic to be discussed which took place at a seminar room booked at the university. In the next tutorial there was a consensus about their general ideas and those aspects that needed more work were pinpointed, with some definite conclusions. In the last three years the portfolio was used as extra material. The selected subjects were: patient-doctor models of relationship, verbal and non verbal communication, health advocates, how to communicate bad news and patient autonomy law.
Conclusions: "Practicum" transfers to primary care settings, rather that the traditional hospital ones, the first contact between students and the health system. Subjects selected by medical students to expand their knowledge were the ones regarding doctor-patient communication.

P-242

New family medicine training-programme of 4 years and implementation of tutorial units in Spain

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Aims and purposes: *Knowing the practical aspects of the new Family Medicine training-programme (FMtp) of 4 years, two years after beginning. *Find out if there are any differences between our tutorial unit (TU) and the other ones in Spain.
Design and method: Descriptive study about the different tutorial periods and training places referred to the year 2007. We developed a survey, which refer to the 93 TU in Spain. Self-made survey sent, seven times (5 by e-mail and 2 by telephone contact) since 31/07/2006 to 31/08/2007. It was made up of 3 opened questions concerning formation periods (duration, year of formation, and proper names of the tutorial times, as options and compulsories). Description of the quantitative factors (time: number of months) and qualitative description (period of tutorials) and analysis by using CHI-CUADRADO statistic.
Results: Rate of response was 76.34% and all the Regions were represented. Health Center (HC): all TUs programmed 5 months of HC formation during the 1st year, and 11 months in the 4th year. In the 2nd and 3rd one, there are more differences. In our case, interns don't work out of hospital but 2 months in a rural HC. FMtp strong recommends 3 months formation-period in a rural HC, but only 24 TUs do it. 21 TUs do 2 months, 10 do 1 month, 13 don't make it and 3 without answer. There aren't any statistic differences about formation periods between in-hospital formation-periods. The complementary formation period – 1 month – implicates some differences. 18 TUs offers Hospice Care and 20 radiology. In the others, they are core subjects. ER, geriatics, rehabilitation and nephrology. In our unit, we offer Hospice Care, radiology, vascular surgergy and nephrology.
Conclusions: Our TU is very similar to others in Spain. With a good performance of the speciality-programme and a good collaboration among all of them. Only 24 present a 3 month rural HC formation period.

P-243

Problem based learning scenarios for multidisciplinary team work education beginning from undergraduates

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Aim: Multidisciplinary team work is essential especially in some challenging patients and chronic conditions. The first step of multidisciplinary team work self-awareness that is to know that you have some limitations; your abilities and your knowledge have some limitations. Second step is to know to get help in necessity, to know how to get this help and from where. The third one is the ability of working with others as a part of a team. In undergraduate education we have a PBL integrated curriculum and we are writing scenarios related to the academic year of education. The aim of this presentation is to show a way to teach multidisciplinary working by problem based learning scenarios with examples from our experiences.
Design: A retrospective analysis of PBL scenarios of 2007–2008 academic years.
Results: During this period we had eight scenarios for the first three year students of medical faculty. The main problems of scenarios were about hypertension, crush syndrome, cardiac failure, cataract, pelvic fracture etc. From the beginning of writing period of these scenarios a multidisciplinary team work established and all the scenarios were not limited to one discipline or specialty. Generally beginning with a general practitioner as the first contact of the patient scenarios go ahead with contribution of different specialties as consultants or second contacts of the patients. By this way students learn that medical practice is not limited to one physician, it is a team work and they begin to learn how to be a part of a team.
Conclusion: We believe that problem based learning scenarios is an effective way of teaching students multidisciplinary team work. Of course we are at the beginning and the effect of these scenarios in practice must be assessed prospectively.

P-244

The effects of doctor-patient interaction on outcomes of treatment in patients with epilepsy

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Background: The importance of effective communication in medicine is often overlooked. Yet, different studies showed the connection between doctor-patient relationship and treatment outcomes.
Aim: The objective of the study was the analyses of correlation between the type of doctor-patient interaction and physiological/behavioral outcomes of treatment in the patients with epilepsy.
Design and method: The research comprised of 60 patients with epilepsy. The experimental group comprised of 30 questioners aged between 25 and 75, treated by four family physicians that used mutuality interaction type. Controlled group comprised of 30 questioners of the same age groups treated by four general practitioners who used paternalism interaction type. The treatment outcomes have been measured at the beginning and after nine months: according to Quality of life index Epilepsy version III and Modified functional status questionnaire. The research was conducted during 2006.
Results: The difference in physiological parameters after nine months was statistically significant between two groups ($p < 0.001$). The difference in basic, intermediar, social activities, mental health and working ability after nine months was statistically significant between two groups ($p < 0.001$). The difference in patient's adherence was not statistically significant between the groups. The difference in patient's satisfaction was statistically significant between the groups.

Conclusion: It has been established that the patients treated by physician who use mutuality type of doctor-patient interaction have by far better functional and behavioral outcomes of the treatment against controlled group. Education in a field of medical communication influences the doctor-patient interaction and should be implemented continuously.

P-245

Students' expectations of their general practitioners teaching competencies – results of a focus group study in the reformed medical track at the Charité-Universitätsmedizin Berlin, Germany

Pruskil S. (Berlin), Rolle D. (Berlin), Schwantes U. (Berlin)

Introduction: In the reformed medical curriculum teaching in general practise starts in the first year with 200 hours per semester. Students spend one day per week in a primary care practise. The main aim of the training is to give students the chance to practise, improve and deepen their cognitive and practical skills. With the help of a log book the participation in practical procedures could be enhanced. Upon reviewing the feedback concerning students' learning progress it was evident that students were still dissatisfied.
Research Question: Do general practitioner (GP) teachers have a definite approach (criteria, materials, work orders etc.) on how they introduce students to a patient-centred consultation? Do GP teachers have a concept of how to teach basic clinical skills to students and of how to apply them in practise? What ideas do GP teachers have about giving feedback to students? How do GP teachers give feedback to the students about their learning progress?
Method: We organised two focus group discussions with 12 GPs and another two with 12 students from years 1–3 of a 6-year undergraduate medical curriculum. Questions focused on the above mentioned research questions. All focus groups were audio-taped and the tapes subsequently transcribed. Each transcript was read independently by each researcher as part of an inductive process to discover the categories.
Result: The results of this study show that students and GP teachers have similar difficulties. Both groups mention the lack of discussion time at the beginning and end of the training, however both also cite defined learning objectives and aims throughout the placement as well as clear teaching methods for basic clinical skills. A workshop with GP teachers was conducted and teaching material developed. The results of the focus groups and the workshop will be presented at the conference.

P-246

Methods of continuous education of specialists in family medicine

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Introduction: Continuous education is an obligation and professional necessity. After specialization, doctors resume their knowledge and skills in different methods and ways. They have a variety of options but some of them are easier and some of them are harder to accomplish.
Methods: There were 52 specialists in family medicine included in this study in order to review their methods of continuous education. Researched time period was one year (2008) during which doctors had to assemble annual number of points to assure restitution of licence in Croatian Medical Chamber.
Results: From average 20 points required for restitution of licence doctors included in this study accomplished their points as followed: 1. Specialized meetings in institutions of Primary Health Care 46.38%; 2. Conferences in Croatia – active participant 5,18%; 3. Conferences in Croatia – passive participant 24.37%; 4. International conferences – active participant 1.07%; 5. Internationalconferences – passive participant 4.62%. 6. Courses of continuous education 13.52% 7. Post- graduate study 4.86%.
Conclusion: Out of 52 specialists in family medicine included in this study, 46.38% of them mostly attend specialized meetings in institutions of Primary Health Care as a methods of continuous education and that speaks a lot about very good organization in institutions of Primary Health Care. 5.69% of specialistsattend international conferences as active or passive participants. Reason for that is mainly financial. Only 5.18% specialists are active participants on conferences in Croatia, and 1.07% are active participants on international conferences. Main reason is a very small number of specialists that are active and work in scientific field. We suggest that reading professional papers and articles also becomes a way to assure points to restitution of licence.

P-247

Formation in vital basic support in family medicine

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Aims and purpose: Analyze the efficiency of the training in cardiopulmonary basic paediatric rehabilitation and of the adult by means of theoretical and practical courses (years) in family medicine.
Design and Methods: Design: observable market research. Emplacement: Health Department in rural area. Participants: 180 people (nurses: 58 people; doctors / doctors: 82 people). Interventions: During the year 2008 there have been imparted 9 courses about prevention and performance in accidents to 180 people who belonged to the sanitary personnel assigned to the Department. There have been realized theoretical classes about prevention in cardiorespiratory attack and maneuvers of basic RCP and practical classes of basic RCP with DEA in groups of 6–8 pupils with maniquís of nursing and adult.
Main measurements: it was realized a theoretical evaluation at the beginning and at the end of the course, besides a practical evaluation of the basic RCP with the 100 % of the participants. At the end of the course all the pupils completed an anonymous survey of satisfaction.
Results: In the theoretical initial evaluation the average punctuation was 5.5 (on a maximum of 10) and in the final evaluation was 19.25 (on a maximum of 25). In the practical evaluation 82.14 % of the participants reached a pass practical preparation. In the survey the participants considered the course very useful for both professional and daily life and felt more qualified to act.
Conclusions: The courses of basic RCP in collaboration with family medicine are a useful method of theoretical and practical training and achieve that the sanitary personnel improve his/her aptitude to act in a correct way and to solve emergency situations.

P-248

Descriptive analysis of minor surgery program in a primary care centre

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Objective: Evaluation of a pilot program of minor surgery in a urban primary care centre, started one year ago by two family doctors team one day a week.
Design and methods: A descriptive, transversal study with Access database and later SPSS analysis to know the characteristics of patients, conditions and techniques used in the minor surgery clinic.
Results: Since we have started the program 119 patients have been treated. The average age of the patients was 54 years old. 58% of them were women and 42% were men. The conditions treated were seborrhoeic keratosis (15.1%), viral warts (13%), tendonitis of the rotator cuff (11.8%), epidermoid cysts (10.1%). The techniques used were surgery (37.8%), cryotherapy (23.5%), infiltration (20.2%), medical treatment (8%), electrocoagulation (3.4%), and punch biopsy (5%). Of the 119 patients, 100 (84%) were discharged, 7 (5.9%) were sent to a specialist for further treatment, and 12 (10.1%) needed additional nursing attention. The most successful techniques used (100% discharged) are cryotherapy and curettage. The maximum number of visits made by the same patient was six, and the minimum number of visits was one.
Conclusions: Since the program was started in our centre, there have been fewer referals for surgery, traumatology and dermatology. The project will expand by increasing the number of visits per week according the good results achieved. The program shows that minor surgery are suitable and feasible in primary care.

P-249

Residents assesment: ambiguity in clinical practice situations and the SCRIPT as instrument

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Aims: Comparing by SCRIPT with ambiguos situations of clinical practice the mean of answer between family physician and residents. To quantify in the decision-making process the mean of experience, use of clinical guides and tutor imitation of all the subjects.
Design and Methods: Observational descriptive research. Subjects: 14 family physicians (panel)-3 residents Instruments (completed by all the subjects): SCRIPT's cases: 3 diagnosis, 2 investigation, 2 treatment. All with 2 hypothesis and Likert scale (–2 to +2). Self-administered questionnaire to asses in every case the reasons for choice one option.
Statistical analysis: Mean of answers.
Results: Considering the answers in extremes and assuming the 0 as positive the residents agreement with the panel in: 83% of diagnosis cases, 50% of investigation cases, 100% of treatment cases. For selecting answer: *In diagnosis cases* the residents basis on books:

60% and the panel on their experience and books: 85%. *In investigation cases* the residents basis on guides: 60% and the panel on their experience: 69% on guides: 46% on tutor imitation: 20%. *In treatment cases* the residents basis on guides: 40% on their experience: 33% on tutor imitation: 15% and the panel on their experience and guides: 90%.
Conclusions: If grouping the extremes of SCRIPT it have concordance between panel and residents. The panel basis on their experience and guides for decision-making process, while the residents do it basing on guides or books. It looks as if the reason for decision-making is "it must to do". The limitations for this research are: the number of residents; the SCRIPT is not evaluated for coefficients of difficulty and discrimination; we assume just 3 reasons for decision-making process. This research confirms that the SCRIPT is an useful instrument to assessment ambiguos situations in clinical practice, but it is necessary more investigations to fortify conclusions.

P-250

Web-based learning in teaching family medicine

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Aims and purpose: The introductory course of family medicine is taught to second-year medical students. The innovated course consists of lectures and practical work, besides there is web-based learning: WebCT (Web Course Tools). The aim of this study was to analyse the students' evaluation of the web-based learning used.
Design and methods: The study-group formed of second-year medical students (N = 142). Within the last course we asked the students to evaluate the WebCT used. The employed questionnaire was anonymous and included questions about registration for WebCT, finding relevant information, course design and importance of WebCT in learning family medicine.
Results: Altogether 124 (87%) students completed the evaluation. Previously had attended some course using web-based learning 14 (12%) of the students. Of the students 61 (55%) reported that registration was easy and 65 (59%) reported that finding necessary information from WebCT was easy. Of the students 53 (48%) liked the design of WebCT and 60 (56%) evaluated that WebCT worked well technically. The use of WebCT made learning family medicine easier reported 66% of the students.
Conclusions: Previous knowledge of web-based courses among the students was low. This could be related to the fact that half the students reported that it had been difficult to register for the course and to find relevant information. Multifunctionality and the possibility to learn at different time points and places make web-based learning probably even more attractive in the future. As most of the students said, WebCT supports learning of family medicine.

P-251

Simulated patient: a holistic approach like a bridge between theory and practice in medical education

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Aim: Simulated Patient is a methodology used by the GP School of Trento (Italy) since several years with some specific features which want to develop an holistic approach useful to give ability and experience, not only in relationship between patient and doctor, but also to face the complexity, the uncertainty and the turbulence typical of the GP's setting. This aim is searched out also stimulating the awareness of the existence of the protagonist's emotional reactions which often act in the consultation, sometimes with negative relapses also on clinical aspects.
Methods: The training course starts the first year with 2 or 3 preparatory role play sessions, which are followed by 5 sessions yearly, which last each 3 hours for a total of 45 hours. The acted stories come from real cases and face common problems of the daily practice of the General Medicine and sometimes are very complex. During last year the trainees use the Simulated Patient as moment of consulting group for problematic cases which happened really to them during their practice.
Results: Although the first difficulties showed by many trainees, with the passing of time the method facilitates significant changes in the consulting practice. With the time the trainees, the teachers and the simulators learn to use this instrument also as method of personal growing. The teachers have an useful feedback in their room's didactic courses.
Conclusion: The complexity of the daily GP's job becomes particularly evident in the training area when the challenge is to train a doctor able to practice an holistic approach to the patient and to do his work without forgetting the importance of the clinic and of the organization. The simulated patient can be an important instrument helpful to join this aim, mainly if it is proposed with a setting not excessively structured and predictable as it is the setting of the GP.

P-252

Multi-cultural knowledge and perception of neonatal jaundice in Singapore

Shi Hui Sharon W. (Singapore)

Background: Neonatal jaundice is one of the most common conditions seen in newborns. In Singapore, though our national screening programmes have successfully reduced the incidence of kernicterus, a small proportion of parents are still excluding their children from screening.
Objectives: To explore parental knowledge of neonatal jaundice and to identify cultural beliefs regarding neonatal jaundice in Singapore.
Method: We conducted an anonymous survey inviting participants included parents with children four years or younger.
Results/Key Message: Parental knowledge regarding neonatal jaundice was lower than expected for such a common neonatal condition. Many also subscribed to common misconceptions such as breastfeeding should be ceased in neonatal jaundice and sun tanning was an effective treatment modality today. Parents preferred to be educated and corrected of their misconceptions through medical consultations.
Conclusion: Parental knowledge regarding neonatal jaundice can be enhanced through better education. Doctors such as family physicians can play a more active role in identifying concerns as well as dispelling misconceptions regarding neonatal jaundice.

P-253

Design and implantation of a training plan in gender violence for professionals of the health service of Castile and Leon, Spain

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Aim: To design and to implement a training plan in Gender Violence (GV) for the professionals of the Health Services of Castile and Leon.
Methodology: Phases: Previous analysis: 4 studies were developed to know the needs of the professionals, attitudes, knowledge, and barriers or elements facilitators, and the opinion of the women about the attention received, effectiveness of the formative interventions, and specific needs according to the context.
Aimed population: 13.500 health professionals, establishing priorities of intervention and based on 2 criteria: role of professionals dealing with VG and contexts of performance.
Design of training intervention: Types: basic and advanced, adapted in content and methodology to the different contexts and professionals.
Implantation and development: Phases: 1. Design of the training plan and initiation of planned workshops, raising awareness, diffusion, workshops for directive teams. 2. Recruitment and training of trainers: basic training for teachers, modular training advanced by thematic areas with an expert, creation of an on-line group of work of trainers, participation in support teams. Training for staff according to priorities. 3. Creation of Teams of Support and Supervision. 4. Follow up and evaluation.
Results: Most of the professionals already have received some formative activities. During the last 3 years we have done 152 activities with 3467 participants. At this moment we keep developing activities with the aim to achieve the projected population.
Conclusions: Need of training in GV and the implication of the personnel of the devices of action. To rely on a team of trainers that could bring the training over to the places of work. Feasibility, accessibility and adjustment to the contexts are aspects to have presents in the design of any intervention that improve the acceptability and effectiveness We consider necessary to evaluate efficiency and impact in the professionals and the organization.

P-254

Funduscopy in the headache differential diagnosis: a case report

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Pseudotumor cerebrii is a syndrome characterized by the rise of the intracranial pressure without clinical, laboratory or radiological evidence of intracranial pathology. Therefore is a diagnosis by exclusion according to the Dandy criteria. Its morbidity lies in the possibility of vision loss, due to the degeneration of the optic nerve, what together with headache represent the most common reason for consultation. Its phisiopathology it's still unknown, but it\'s been demonstrated in several studies a relation between this pathology and obesity or the weight gain on the previous months. With a minor evidence it's been related to other processes like coagulation disorders, vitamine A excess, lupus, steroids therapy, antibiotics or contraceptives.We present a case report of a young and obese woman, in psychiatric treatment because of a depressive syndrome,

with a pulsatil headache and visual loss episodes.The aim of this poster is to reflect the importance of the funduscopy in the primary health center when a differential diagnosis of the drug-resistant headache is needed. It\'s a simple, bloodless and inexpensive test and it has a very high positive predictive value in the diagnosis of cephalea by intracranial hypertension. However it is a very unknown technique in the primary health assistance.

P-255

Psychosocial effects of adaptation training of family practice in Bursa; pilot survey study on 442 physicians

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Objective: In this study, our aim was to determine the psychosocial situations of the physicians, undergoing training for Family Practice transition period primary care adaptation in Bursa, related to training, and to develop a scale that is determined to be effective and reliable that could perform measurements during their next training processes training.
Materials and Methods: We applied pilot test via survey method to physicians (442 people) who were admitted Family Practice Primary Stage Adaptation Training in Bursa. We determined the factors as follows: A-Adaptation to the program, B-Professional Self-confidence and C-Not being exhausted. We determined 10-11 questions in each factor. We measured the answers with 5 point Likert scale. (I. I do not agree completely II. I do not agree III. I am indecisive IV. I agree to a certain point V. I agree absolutely). We performed confidence analysis of the first 31 questions. After the questions lowering the reliability are excluded, we applied Factor analysis (with Quartimax method) in the SPSS program to the remaining 17 questions (Crohnbach Alpha = 0.771). By this way, we gathered these 17 questions under 3 factors.
Results: 271 male (61.3 percent) and 171 female (38.7 percent) physicians participated in the survey. Age and profession averages were higher in males than in females. Though majority of the participants (72%) were thinking that the training that they received was mere an activity that would improve their adaptations, a small percent (7.9%) thinks that it would provide professional competence. We calculated the averages of factor scores of the scale. The averages of all three factors post-training were higher than the averages before the training (p = 0.001, <0.001, <0.001).
Conclusion: Family practice transition period adaptation trainings provide a positive start and psychosocial improvement to the general practitioners at the primary care.

P-256

Introducing the Rajakumar movement

Harris N. (Warrnambool)

Aim and Purpose: At the 2008 Wonca Asia-Pacific regional conference held in Melbourne, a meeting was held to gauge interest in forming The Rajakumar Movement. Vasco de Gama has been a successful working party for new and young general practitioners with Wonca Europe for a number of years. The Rajakumar Movement has been launched in the Wonca Asia-Pacific region with the expectation that similar collegiality may be fostered in our region.
Design and Methods: At Wonca Asia-Pacific 2008, a meeting was held to begin forming The Rajakumar Movement – a working party for young and future general practitioners. The background work has been completed by Doctor Naomi Harris, and a successful launch was held in Hong Kong at the Wonca Asia-Pacific regional conference in June 2009. All Asia-Pacific member organisations are involved, and planning is under way for incorporation of The Rajakumar Movement into Wonca Asia Pacific Conference in the Philippines in 2010. A number of focuses have been laid down by working party members; mentoring and trainee exchanges are two key areas of interest.
Conclusion: The Wonca Asia-Pacific region member organisations are very excited about fostering The Rajakumar Movement. It is hoped that like Vasco de Dama, the Rajakumar Movement will be successful into the future.

P-257

What are the general practitioners' attitudes and knowledges toward insomnia?

Metten A. (Strasbourg)

First step: a survey among 88 GPs in Alsace.
Background: Between 5 to 7% of the French population uses daily hypnotic drugs. 35% of the patients suffering from insomnia get illegal prescriptions in contradiction with the French guidelines (HAS) and the social insurance regulations. There is no medical education dealing with behavioural therapy for insomnia in post graduate education for GPs in France.
Research question: What are the General Practitioner's (GP) attitudes and expectations toward insomnia: interest, education and knowledges about behavioural therapy for insomnia?
Methods: A questionnaire including few specific questions for the GPs and the short DBAS-16 questionnaire reduced at 9 questions (validated in Québec) to asses the patient's attitudes to insomnia was send to all GPs in Alsace region via internet. In a second step, the same questionnaire will be physically given to all the attendants to a regional continuing education dealing with therapeutic education. The confidence interval was calculated.
Results of the first step: 88 GPs among 967 answered to the internet questionnaire. 25% (CI: 15-35%) of the GPs suffered from insomnia. 52% (CI: 42–62%) knew that behavioural therapy is used for insomnia. 78% (CI: 68–88%) were interested and 32% (IC: 22–42%) already participated to a continuing education dealing with that topic. The short DBAS-16 showed that 21% (CI: 11–31%) of the GPs had wrong attitudes and knowledges about insomnia.
Conclusion: Despite the weak response rate at the first step, insomnia seems to be a therapeutic problem for our patients and even for 1 GP out of 4! There is an urgent need for vocational education. 1) How to improve the response rate? 2) How insomnia treatment is managed in the other European countries?

P-258

Streptococcus pyogenes: a rare etiology of non-gonococcic urethritis and balanitis – diagnostic problems in the practice of family medicine and urology – a case study

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Background/Aim: Urinary tract infections are most common cause of consultation with family doctor for urological reason. These infections appear particularly often in young woman but are also prevalent among sexually active young men. Common causative pathogens are Candida, Trichomonas, Mycoplasma, Chlamydia, and Treponema pallidum. Less frequent agents are group A and B streptococci, human pappiloma virus and other anaerobic bacteria. Until now, only few cases of urethritis and balanitis due to Streptococcus pyogenes were reported.
Materials and Methods: This case report describes the problem of a 23 year-old patient with severe urethritis and balanitis. He reported to family doctor after few months of undiagnosed illness, treated with standard antibiotic therapy provided by his family physician.
Results: The smear test revealed causative pathogen: Streptococcus pyogenes. Targeted antibiotic therapy diminished symptoms, but after few weeks problem reoccurred even more severe.
Conclusion: The best way of diagnosing and treating properly the patient with rare cases of diseases is following the guidelines and reassuring publishing case reports and popularize this knowledge among other family doctors.

P-259

Quality of practice seen through eight years of peer-review

Billard M. (Montreal), Jacques A. (Montreal)

The College des medecins du Quebec is the regulatory body for physicians, family doctors and specialists. We have over 17000 physicians in Quebec, half of them are family physicians. We do around 160 peer-reviews every year to assess the quality of practice of these physicians. Through the last eight years, we did 968 peer-reviews of family physicians and 351 of specialists. We chose those physicians using risk indicators of problem with the quality of practice: complaints from patients, doctors, nurses, pharmacists, graduation from medical school for more than 40 years, questionable files seen through hospitals reviews, etc. During a peer-review, we are looking mainly for the quality of the practice, but also for other aspects of their medical practice. We found a strong association between the quality of practice and three factors: record keeping, quality of the continuing professional development and the age of the physicians. Some factors were not associated with any differences like being a specialist or a family physician. When the record keeping was judged satisfactory, the quality of practice was very good or good in 90% of the peer-reviews vs only 42% when the record keeping was judged unsatisfactory (p <0.001). When the professional continuing development activities were judged satisfactory, the quality of practice was very good or good in 73% vs 42% (p <0.001) when those activities were unsatisfactory. The relation with the quality of practice is linear (R2 = 0, 73) with the age of the doctors (25 to 96 years old). Some of these tendencies have been published earlier but we feel that our number of reviews give a clear message to physicians. They should be careful with their record keeping through all their career, they should invest in their professional continuing development and be conscious to carefully restrain their activities as they get older in order to maintain a good quality of care.

P-260

Portfolio as a part of GP's specialist's exam: inter-examiners differences?

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Introduction: Vocational training in General Practice / Family Medicine in Croatia lasts 3 years and consists of 3 parts: postgraduate course (7 months); hospital and outpatients (14 months) and practical work at GP's, trainers' practice (12 months). Specialist's exam consists of 2 parts: 1) preparatory part: portfolio, 8 written essays, trainer's assessment of clinical competence, trainer's progress report; 2) final: written test – 120 questions, 25 OSCE, 5' stations and oral exam in front of three members jury. Each portfolio is assessed by the members of this jury. The aim of this study was to see if there were any differences among the portfolio assessors.
Method: 380 portfolios were reviewed, each assessed by three assessors. We looked at the grades for quantity, the number of evidence and overall quality (scale from 1-fail to 5-excellent) and made comparison among the assessors.
Results: Nine assessors reviewed in between 30 and 80 portfolios. There were differences between the assessors. Average marks for quantity (number of evidence) varied in between 2, 69 and 4,06, and for overall quality in between 3,00 and 4,19. The biggest differences was seen within two assessors. There were no differences between another seven assessors.
Conclusion: Those differences were discussed within the group of assessors in order to improve a validity of the portfolio assessment.

P-261

Prediction of a complicated outcome in primary care patients with a lower respiratory tract infection: a prognostic study

Van Vugt S. (Utrecht)

Aims and purpose: For primary care patients two prognostic models are available to predict prognosis in patients with lower respiratory tract infections (LRTI). First the CRB-score, which is used to predict mortality in patients with pneumonia, and second the model of Bont et al. to predict complications in elderly with LRTI. However, for patients under 65 with an uncomplicated LRTI, a proper prognostic model is missing. Therefore we formulated the following research question: "Which patient characteristics and clinical criteria, easily obtained in primary care, are predictive for a complicated outcome in adult patients with LRTI?"
Design & methods: A complicated course was defined as a prolonged course >3 weeks, or hospital admission or death within 4 weeks after the start of the episode. Data retrieved from a prospective cohort (GRACE study, n = 3402) as collected in general practices from 14 European countries (2006/07) were used. In the 2690 complete cases of patients with acute cough (<= 28 days) univariate analysis was used to determine the significant ($p < 0.15$) predictors. Multilevel modeling was then used to determine which items of medical history and physical examination were independent predictors for a prolonged course of disease (>3 weeks).
Results: 212 patients (8.1%) had a prolonged disease duration. No hospital admissions or deaths were reported. Existing disease >5 days at 1st consultation, >1 other episode of cough in the previous year, history of smoking, use of bronchodilators and having diarrhoea were independent predictors of a prolonged disease duration.
Conclusions: Easily obtainable clinical information can help the primary care physician to identify adult patients with LRTI who are at risk of a prolonged course. As was to be expected these predictors differ from those that predict poor outcome in elderly patients with LRTI.

P-262

Developing a curriculum in basic biostatistics for family medicine residents

Simoyan O. (Lebanon, PA)

Clinical care should be based on research evidence. In order to provide such evidence-based care, medical professionals need to critically appraise the design, conduct and analysis of research studies. Several studies have shown that physicians have limited understanding of statistical tests, and lack the skills needed to interpret study results. In response to this need, a short training course in basic biostatistics and epidemiology was designed for family medicine residents in a community-based, university-affiliated residency program.
Methods: In order to assess baseline knowledge of and opinions regarding biostatistics, epidemiology and evidence-based medicine, a survey was distributed to residents and faculty within a community-based, university affiliated Family and Community Medicine Residency program. A lecture series was conducted, followed by a posttest.
Results: In the pretest survey, forty eight percent of the participants strongly agreed that an understanding of biostatistics and epidemiology was important for providing effective patient care, while 72% strongly agreed that an understanding of these concepts was important for reading the medical literature. The scores achieved for correct answers on the knowledge section ranged from 10% to 70%. Average pretestscores were 42.8% for faculty and residents combined, 53% for faculty alone and 37.4% for residents alone. Pre- and posttest comparisons will be presented.
Future Directions: It is anticipated that residents will apply knowledge acquired during this course as they conduct their scholarly projects during residency and beyond.

P-263

Problem of pain in general practice

Lysenko G. (Kyiv), Tkachenko V. (Kyiv)

Pain is an interdisciplinary problem, which takes grate importance in practice of different specialists, especially – in general (family) practice. A family doctor is the first who contacts with the pain syndrome and he must give its correct estimation, conduct differential diagnostics and appoint the nosotropic therapy. It is possible only if he has knowledges about the features of different conditions which cause the pain syndrome, mechanisms of its development and principles of its treatment. All these aspects were reflected in the manual of pain for family doctors, which we published. We gathered and generalized in it the theoretical and clinical aspects of pain syndrome of different localization, the most spreaded in family practice (headache, pharyngalgia, abdominal pain, stethalgia and other). We also gave results of own observations about the importance of estimation of psycho-emotional status and necessity of its correction in patients with chronic rheumatic pain. Also we gave our experience of treatment of joints pain, caused by different pathology (rheumatoid arthritis, osteoarthritis, hypothyroid arthropathy etc.). We made a conclusion about the necessity of interdisciplinary approach in treatment of patients with pain syndrome, the necessity of close contact of general practitioners and narrow specialists.

P-264

Family medicine courses in basic medical education of Fatih university faculty of medicine

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Aims and Purpose: Provide a Family Medicine conscious from basic medicine education according to the educational principles of EURACT.
Design and Methods: Fatih University Faculty of Medicine, beginned basic medicine training first time in 2008–2009 educational period with 30 students. In the first, second, third, forth and sixth half-years, we organized courses titled "Family Medicine and good doctor practices". Topics (Both theorical and practical) have been organized under core competencies (1. Primary care management, 2. Person-cendredness 3. Specific problem solving skills 4. Comprehensive approach 5. Community orientation and 6. Holistic approach)and in the shape of gradually increasing students' ability in time. We also added a selective "Family Medicine Internship" in the 6. Year.
Example: 1. Half-year: Family Medicine and good doctor practices -1
1. Week: Theorical-(Primary Care Management) General approach of Family Medicine (Person-cendredness) Generalist approach in clinical interview
2. Week: Practical -(Specific problem solving skills) Hand washing, Fitting mask
3. Week:Theorical- (Person-cendredness) Basics of communication concepts...
14. Week: Practical-(Specific problem solving skills) Measuring arterial pressure, counting pulse.
Results: Learning Objectives: Having knowledges and competencies in Primary Care Management, Specific problem solving skills, Holistic approach, Person-cendredness, comprehensive approach and community orientation.
Conclusions: If we provide a Family Medicine conscious from basic medicine education, we may obtain positive results in medical practic. Medical practices may be organised according to core competencies, and this may increase efficiency in primary care medicine. Furthermore, recognition of discipline in early period of education, may increase popularity of Family Medicine specialty in the future.

P-265

Leonardo Da Vinci project – continuing and postgraduate education of family physicians

Tomasik T. (Warszawa), Windak A. (Warszawa)

Aims and purpose: The Leonardo da Vinci project "Towards Development of the European Network of Education for Family Doctors" was running between 2003 and 2005. In 2007 new project started with the aim to transfer the results of previous project to new countries. The objectives of this study are: (1) to explore and evaluate

achievements of the first project, (2) to identify the problems in realization of the current project, (3) to identify key features needed for successful transition of education projects to another environment.
Design and Methods: (1) Analysis of data about the users of the internet courses for family doctors, (2) analysis of reports from national courses for teachers in family medicine, (3) an unstructured interview with leading person from each institution cooperating in the current project.
Results: Innovative teaching course for teachers in family medicine developed in cooperation with EURACT was implemented in 13 countries. The general aim of the course is to improve quality of General Practice/Family Medicine teaching in Europe. The interactive learning courses through internet for trainees in family medicine – "INTERKULMER" and for family physicians – "PROKUS On-line" (Polish version) are used by over 1000 doctors. Both courses consist of several educational modules and for each special tool for assessment of participants' knowledge and skills is prepared. The modules which are used most frequently are "Radiology and Imaging" and "Depression". The most difficult part of the current project is development of e-learning program for family physicians by using problem based learning modules.
Conclusion: Both projects support the process of postgraduate and continuous education of family doctors. The exploration of current state of the project will help future coordinators of similar project to plan activities in such a way that they can be successfully completed.

P-266

Could the undergraduate French and Belgian training program explain the shortage of GPs in both countries?

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Introduction: Shortage of manpower in GP/FM is a serious problem in Belgium and France. Despite the advertisement of some authorized voices, the evolution of the medical cursus in medicine has been oriented towards technology and specialties in the last 40 years and the low number of medical students attracted by the profession of GP is now a fact.
Aim: In a attempt to explain this shortage, the author try to identify the similarities and dissimilarities between the undergraduate cursus in France and Belgium.
Methods: – Exploring the training programs of the two structures one in Reims and one in Brussels (Univ of Louvain); – Participating to the vocational training sessions in both sites to meet the former undergraduate students; – Conducting an inquiry with trainees in GP/FM in both sites about their choice of career.
Results: Would be exposed during the congress.

P-267

Clinical training has improved prescription not routine investigation for hypertensive patients in Kazakhstan primary care

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Background: Arterial hypertension (AH) management in Kazakhstan needs to be more evidence-based and follow international standards. Kazakhstan Association of Family Physicians (KAFP) and USAID funded ZdravPlus Project provided survey in two small cities' Family Group Practices (FGPs) before and after clinical training.
Methods: Chart review was conducted in all 16 FGPs. At year 1 (566 charts) and 3 (513 charts) AH patients' charts were randomly selected to get 5 from each doctor. We developed assessment tables, which include indicators for patients management (follow-up visits, BP recording, tests' results) and treatment (diuretics, beta-blockers, and ACE-inhibitors). Intervention included 3-day AH clinical training in year 2.
Results: After intervention year has demonstrated that annual EKG records were not improved (50–53% of AH patients), creatinine measurement was dropped in Satpaev city from 24% to 3% (local lab didn't get enough budget for reagents in year 3), and increased in Zhezkazgan from 14 to 35%. After intervention doctors prescribed more diuretics (from 30 to 60%), beta-blockers (from 14 to 21%). Most popular were ACE-inhibitors (from 66% to 72.5%). Also there were fewer prescriptions of non-effective medications (adelfan, dibazol).
Conclusion: AH treatment in PHC was improved after training. There was less access to the EKG and creatinine tests. Drug prescriptions more doctor-sensitive indicator, whereas availability of EKG and serum tests are system dependent. Later same surveys were conducted in three other cities of Kazakhstan to compare the AH management quality.

P-268

How to heal traumatic world in 2009?

Steinmann A. (Ljubljana)

Aims: looking for traumas in our Patient-P, from conception on to death, from past lifes. Memories on trauma can come out later at any similar STRESS. In Slovenian population traumas are nearly from all nations which travelled along the country. Trauma let FEARS in P, later constiction of cells, organs can happen, disease can develope. When Family doctor- FD can find trauma memories, healing process are easier. Young generation has new age traumas: abuses, drugs, games, though internet, different media- subliminal messages, mobbing in jobs, etc. WORK: questionaries about patient's trauma: when it happened, what kind, how many times, looking for NEGATIVE FEELINGS at that trauma and later in life. Work includes individual, group discusions: P-FD, help of other medical specialists and for family therapy, with medications, surgery, other therapies. VIDEO with some most frequent traumas in our Ps!- presentation on congress!
Conclusions: during my 34 years work I saw people become ill after some trauma, esspetially people over 65 years old.. It let in them like "War". Understanding that trauma or politrauma is very important in healing processes. It is very important to find and to heal TRAUMA before you have your own children!!!Is trauma written on GENOME??? Or is FAMILY THINKING PATTERN???
SUMMARY: if our P feels inside KAOS, WAR, if he/she understands his/her problem, healing of any disease is much easier. COLLECTIVE FEARS are present all over the world!Dialog between RELIGIONS is very important for FUTURE OF HUMAN RACE, HUMANITY, MANKIND!!!ARE WEATHER CHANGES- END OF CIVILISATION??? Understanding these problems, we can make good PREVENTION OF WARS and terrorism in the world! The result is PEACE in OUR P and in the WORLD!

P-269

Family medicine certification in Canada: a review of an exam preparation workshop for practice eligible candidates

Noel K. (Ottawa)

Introduction: For years, International Medical Graduates have chosen Canada as their place to practice the art and science of medicine. Among the many steps necessary for those wishing to obtain their license, is the requirement they successfully complete the College of Family Physician of Canada's certification exam. While most departments of family medicine provide their residents with exam preparation workshops, there is currently little available to assist practice eligible candidates, including international medical graduates not enrolled in a residency program. We present a workshop designed to assist international graduates interested in practicing in Canada and challenging the College of Family Physicians of Canada\'s certification exam.
Goals: The poster presentation will provide an overview of the components of the certification exam and provide an opportunity for attendees to compare Canada\'s certification practices with that in other jurisdictions.

P-270

Evolution of the acupuncture, homeopathy and anthroposophic medicine program (PRHOAMA) implemented as part of the family health program of the Brazilian unified health system, Belo Horizonte, Brazil

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Objectives: to show the evolution of the practice of acupuncture, homeopathic and anthroposophic medicine in patient care in Belo Horizonte from the times of the assistance model until insertion of the Family Health Program (PSF).
Methods: Description of the program implementation and its evaluation from the patient care data.
Results: BH has 2.4 mi inhabitants and the Unified Health System (SUS) cares for 76% of the population, with 508 teams of Family Health Practitioners (ESF). PRHOAMA has 17 homeopathic doctors, 10 acupuncturists and 3 anthroposophic doctors and since 1994, these specialists started caring for patients through the SUS. In 2002, with the implementation of the PSF, these specialists started serving as a resource and reference to the ESF. Discussions of PRHOAMA with the other practitioners of the PSF take place, there are meetings for presentation of the philosophical bases, clinical recorder and discussion of indication, resources and possibility of treatment in these specialties. For spreading the information, publications, flyers, newsletters and posters were created. Number of patient care rose from 604 in 1994 to 23,193 in 2007. The main diagnoses were mental disorders, musculoskeletal pathologies and respiratory problems. This program adds the implantation of the Integrative and Complementariness Practices National Politic in 2006.

Conclusion: PRHOAMA started by practitioner's initiative and evolved with the support of health care administrators and patients interest. It adapted to the new model of patient care establishing its priorities in the Primary Health Care locus. It is recommended for patients who did not improve with conventional treatments, who personally seek these practices and patients with moderate psychic disorders related to family issues or psychosomatic symptoms. These specialties are low cost, require low need of additional exams and have high patient adhesion.

P-271

Statin prescribing for primary prevention in general practice

Campbell L. (Dublin)

Aim: (1) To audit current statin prescribing, for primary prevention, in general practice using the NICE guideline on Lipid Modification. (2) To audit how well individual risk factors are recorded for individuals prescribed a statin.
Design: this audit was conducted in a busy rural Irish general practice. The electronic patient record system 'Socrates' was used to perform a search of the prescriptions database. All patients prescribed a statin within the preceding 24 months were identified. Preliminary review of all records was conducted. Patients were excluded if they commenced a statin in the hospital setting or if their prescription was for secondary prevention. A more detailed review of records for the remaining primary prevention group was made. A spreadsheet was used to record whether individual risk factors had been documented in patient's notes. Additionally maximal cardiovascular risk was retrospectively calculated for each patient using an electronic risk calculator.
Results: A total of 232 patients had been prescribed a statin in the previous 24 months. Of those 111 were for primary prevention of which 61 had been started by one of the GPs at the practice. 52% met the NICE guideline for statin prescription. Smoking status had been documented in only 37% and BMI in 11%.
Conclusions: 52% of statin prescriptions met the NICE criteria for statin prescribing. There are many factors that influence prescribing in general practice. Guidelines are useful and can reduce variability in prescribing between different practitioners. Statins have been showed to reduce morbidity and mortality when used in primary prevention. However, prescriptions are generally life-long and carry significant financial and often psychological burden. It is important therefore that prescribing is carefully considered and clinically justified. Individual risk factors should be clearly documented in patient records and % cardiovascular risk estimated for all indivduals over 40 yrs of age.

P-272

ABC project – European initiative to improve patient compliance with medication

Kardas P. (Lodz)

Objectives: Medication non-compliance is highly prevalent across all conditions that every family physician faces every day. It represents a major barrier for realising the benefits of evidence-based therapies. A major surprise has been the finding that life-threatening diseases do not, ipso facto, enforce strict execution of prescribed regimens. Despite several decades of scientific research, effective policies to address medication non-compliance are still lacking, at both national, and European levels. Therefore, a number of European experts have gathered to design the ABC project, which aims to produce evidence-based policy recommendations for improving patient compliance and thus more effective use of medications by Europeans.
Methods and Results: The project intends to cover several crucial aspects of patient non-compliance. Its starting point was a consensus on terminology and taxonomy of non-compliance, which would enable reliable comparison of clinical trials' results and effective benchmarking of compliance-enhancing interventions. In further steps, the determinants of patient compliance will be identified by a systematic review of the available literature, and a survey across European countries, followed by the conduct of an aptly designed experiment. Current practices of compliance management by healthcare professionals and the pharmaceutical industry will be assessed, as well as educational programs in schools of medicine and pharmacy. Compliance-enhancing interventions will be compared in terms of practicality, clinical- and cost-effectiveness.
Conclusion: The ABC Project is a newly begun European initiative to produce policy recommendations on strategies to improve patient compliance with prescribed therapies. The Project's findings may help health policymakers to take right decisions in order to minimize the negative impact of non-compliance. They may also help European family physicians to improve adherence of their patients.
Funding: FP7

P-273

At what time do we take ASA? Is it related to changes in blood pressure levels?

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Aims: To describe administration schedule of acetylsalicylic acid (ASA) in hypertensive patients and evaluate its relationship with the intake of other drugs. To describe changes in systolic (SBP) and diastolic blood pressure (DBP) after ASA introduction in relation to its schedule.
Design and methods: Descriptive trial in primary care. *Population:* hypertensive patients who have initiated intake of ASA from 1/06/2001 to 1/06/2006 during a minimum of 3 months. Information was obtained by telephonic survey and review of medical records. *Variables:* age; sex; dyslipidemia; diabetes; smoking; number of antihypertensive drugs; total drugs; number of pills at awakening, midday and night, according to schedule of ASA's administration; SBP/DBP during the year before the beginning of ASA and the last year. For the comparative of SBP and DBPs differences between groups Scheffé's test and multiple linear regression model were used.
Results: 79 patients were included, 46.8% women, mean age 70 (SD11.7). Administration schedule of ASA was 36.7% awakening, 39.2% midday and 24.1% bedtime. Differences were not found in total number of drugs among ASA-awakening group (6[4-7]), midday (6[4-8]) and bedtime (5[4-7]). Neither in the number of antihypertensive drugs (awakening 2 [1,3], midday 2 [1,2], bedtime 2 [1,2]). Analysis of number of pills: in ASA-awakening group the median of pills was 3,1,2 (awakening, midday, bedtime), in ASA-midday group was 2,1,2 and in ASA-bedtime group the median was 2,0,2; not significant differences were observed between time groups. Levels of SBP and DBP did not differ significantly among schedule groups neither in the brute analysis nor in the exact one.
Conclusions: Most of the patients take ASA at awakening or midday. Significant differences were not observed in the distribution of pills by schedule or in the number of drugs (antihypertensive or total) among groups. Neither differences were observed in the change of SBP nor DBP among these groups.

P-274

The use of sedatives in adolescents

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Aim and purpose: Sedatives and tranquillizers can be taken as a medicine prescribed by a doctor, but the concern is the use of these drugs which are not prescribed by a doctor in adolescents. The aim of this study was to evaluate the use of sedatives or tranquillizers in adolescents in Tuzla municipality.
Methods and Design: The study included a random sample of 356 high school students, aged 16, from 15 different classes of 16 high schools in the Tuzla municipality. Data were obtained using a validated anonymous self-reporting questionnaire (on demographic structure, perception, and satisfaction with current health status, relationships with parents and use of sedatives or tranquillizers). The participation in the study was voluntary.
Results: Of a total of 356 tested students (193 girls and 163 boys), 75 (21.1%) students used sedative and tranquillizers and 47 (13.2%) students (34 girls v. 13 boys; P = 0,001) used these drugs without doctor's prescription. The most common reasons for taking these drugs without attending doctor's office were "to forget the problems" (23.4% students), and "because of pressure and obligations" (19.1% students). Out of 47 adolescents who had consumed drugs without prescription by doctors, 25 (53.2%) of them reported symptoms of depression and 21 (44.7%) of them reported sadness. There were a significant correlations between the consumption of drugs without prescription by doctors and poor relationships with parents (r = 0.28; P = 0.001), and the sense of dissatisfaction with themselves (r = 0.21; P = 0.001).
Conclusion: Results of this study showed a high prevalence of sedative or tranquillizers use among adolescents that indicates the need for increased supervision over prescription and issuance of these drugs.

P-275

Drug-treatment of children without prior medical advice

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Aim: Our study was centered on the 3 following questions: a. why do parents treat their children with drugs without having consulted with a physician first? b. how often does this phenomenon occur? and c. what kind of drugs do parents use for their children without medical advice?
Design and methods: 70 families participated our study by means of a questionnaire that was filled out by the parents.

Results: 85% of parents admitted treating their children with drugs without medical advice. A far as the reason for this type of behavior is concerned, 45% claimed that they had already had a similar experience in the past and the rest said that the drugs had been recommended to them either by the pharmacist (47%) or by friends (8%). Drugs most commonly used by parents without medical advice are: antipyretics 94%, bronchodilators 68%, antitussives 35%, creams and ointments 21% and antibiotics 12%.
Conclusions: Parents often circumvent the physician and treat their children with medicine on their own. It is of vital importance that pediatricians as well as Primary Care physicians alert parents to the dangers of uncontrollable use of medicine in children.

P-276

Improving antibiotic use in primary care: an inventory of quality assurance projects and behavioural studies (CHAMP)

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Antibiotic resistance is an urgent, progressive and worldwide public-health problem. The misuse of antibiotics for viral infections and the excessive use of broad spectrum antibiotics, have contributed to the emergence and spread of antibiotic resistant bacteria. The research question for this study was: "What is the effectiveness of behavioural interventions focused on the improvement of the prescription of antibiotics for respiratory tract infections (RTI) or urinary tract infections (UTI) in general practice?" We conducted a systematic review of studies aimed at optimizing the prescription of antibiotics. The search was carried out using three databases, searching between 1990 and 2007. The quality of studies included was assessed and data were extracted regarding the following domains: methods, diagnoses, interventions, outcomes and results (with regard to a decrease in prescriptions for all antibiotics and an increase in prescriptions for first choice antibiotics). We then analysed the effectiveness of interventions in combination with the characteristics of the study. Lastly we analysed the effectiveness of interventions in combination with the characteristics and intervention methods using multivariate logistic regression. The final 63 studies included, encompassed 93 interventions. Regarding the interventions aimed at RTIs and the reduction in prescriptions for all antibiotics, the most effective were shown to be interventions aimed at one diagnosis of RTI and the use of multiple intervention methods and interventions aimed at more targets. These characteristics did not seem to have an affect on the effectiveness of interventions aimed at the increase in prescriptions for first choice antibiotics. The number of studies included, aimed at UTIs, was too small to give clear results. For interventions aimed at the reduction of all antibiotics, some study characteristics seem to have positive impact on intervention effectiveness.

P-277

Is it possible to control oral anticoagulation in a rural primary care service?

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Aims and purpose: Describe and evaluate oral anticoagulation program quality ina ruralprimary care service
Design and methods: Study Setting: Descriptive cross-sectional study
Subjects: 268 patients included in the oral anticoagulation program of our primary care service in 2008.
Diagnosis or Intervention: studies variables: age, sex, main diagnosis, prescription scope and property, complications, treatment time, International Normalized Ratio (INR) value and pharmacological interactions.
Statistical Analysis: analysis using statistics program SPSS 14.0
Results: 268 patients were included: Male 48.13%, average 70.2 years old andfemale 51.86%, average 73.9 years old. 70.14% of anticoagulated patients showed auricular fibrillation. Other diagnosis: mitral valve disease 16.79%, valve prosthesis 12.68%, pulmonary tromboembolism 10.4%, aortic valve disease 7.46%, deep vein thrombosis 6.71%, others 8.57%. Accurate anticoagulation prescription in 100% of cases, property of long terms treatments in 98.8%. Scope of prescription: 67.16% at hospitals, 26.86% atoutpatient care services, 5.97% at primary care services. Complications found: hemorrhagic 20.84%, cardiovascular 13.8%. Average follow-up time in our primary care unit: 57.6 months (4.8 years). Average value registered for INR: 2.58 (range1–6.9). Accuracy value for last INR registered 75%. Pharmacological interactions found: omeprazole 33.2%, statines 22.12%, diclofenac 10.97%, dipyrones 10.82%.
Conclusions: It is possible to control oral anticoagulation treatments in a rural environment with proper means. Anticoagulated patient profile in our unit: user between 70–75 years old, anticoagulation prescription in specialised health cares, included in our program for 4.8 years, with auricular fibrillation as main diagnosis and needed to watch over interactions with omeprazole, statines and antiinflamatories.

P-278

Effects of osteopathic therapy on pain intensity and quality of life of migraine patients

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Purpose: Migraine stand to the 40 most frequently used diagnoses of the GP in Germany and influence quality of life of the patients. Purpose of this study was to analyse changes in pain intensity and health-related quality of life after an osteopathic treatment besides a medical treatment.
Methods: In this controlled intervention study there were 45 out of 65 migraine-patients of a physiotherapy-practice randomized chosen for the intervention or the control group. During ten weeks the intervention group (n = 20) received, besides a medical treatment, osteopathic therapies unlike the control group (n = 21), obtaining only medical treatment. Standardized questionnaires were employed for three particular points of time, respectively (t1, t2, t3).
Results: A significant decline of pain intensity in the intervention group from t1 to t3 was measured (70.00 to 51.67, $p < 0.01$ /0 = no pain to 100 = worst imaginable pain) in contrast to a non significant and smaller decline in the control group. Pain intensity differences between both groups were significant in t3 ($p < 0.05$). The duration of pain abated statistically significant in the intervention group (37.68 days to 24.00 days, $p < 0.05$), whereas the difference in the control group was small and not significant. Improvement was also significant in terms of vitality, increasing in the intervention group from 46.36 to 63.63 ($p <= 0.001$, on a scale from 0 = worst to 100 = best), while the control group did not show significant alteration from t1 to t3.
Conclusion: This pilot study showed a positive impact of osteopathic therapy related to individual diagnostic findings of the migraine patients on pain degree as well as quality of life. Further studies with bigger samples and longer treatment durations have to reiterate these results and measure possible positive long-term effects.

P-279

Primary care physicians' attitudes and treatment preferences for depression

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Aim: This study aims to determine the self-reported attitudes and treatment preferences for depression amongst primary care physicians in Singapore.
Methods: A self-administered, anonymously answered questionnaire was distributed to 138 physicians working in 9 community-based primary care clinics in Singapore during December 2007. The questionnaire assessed the physicians' confidence levels in treating chronic illnesses including diabetes, hypertension, asthma, congestive heart failure, depression, anxiety and psychosis, attitudes and treatment preferences for depression. Data was analyzed using SPSS.
Results: Response rate was 81.2%. 80% of respondents initiated antidepressant therapy in <20% of their patients with depression. Respondents were more confident in managing chronic conditions such as diabetes, hypertension and asthma then depression, anxiety and psychosis. 92% of respondents were highly confident in managing diabetes but only 24.1% for depression. Respondents with postgraduate family medicine training were more likely to be confident in treating asthma (OR 4.89 95%CI 1.04–23.00) and congestive heart failure (OR 2.90 95%CI 1.17–7.20) than those without postgraduate family medicine training. However, postgraduate family medicine training was not associated with any significant difference in the confidence levels in treating depression, anxiety and psychosis. Respondents with previous work experience in psychiatry were more likely to initiate antidepressant therapy compared to those without (OR 3.19, 95%CI 1.4–7.35). Respondents with higher confidence in managing depression, were more likely to initiate antidepressant therapy (OR 2.99 95%CI 1.22–7.35).
Conclusion: Many primary care physicians in Singapore are not confident in treating depression. Work experience in a psychiatry unit improves the management of patients with depression. Postgraduate family medicine training in the management of psychiatric disorders can be improved.

P-280

Cryotherapy results in primary care

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Introduction: Cryotherapy is a technology that allows the destruction of the superficial cutaneous lesions by means of a sudden, located and controlled freezing, with cryogenic products. It is a technique of high efficiency, simple, fast, easy learning, well accepted and tolerated by the patients, with good cosmetic results and slightly high-cost.
Aims and Purpose: To establish a circuit for the patients' attention with cutaneous benign injuries capables of cryotherapy, to inform the whole equipment and to realize its implantation.
Design and Method: Descriptive study in an urban population of 39000 inhabitants. Formation to the professionals who will realize the technology: workshop – theoretical & practical (3 hours) and a stay in the service of Dermatology of reference. Monthly meetings of follow-up with the dermatologist of reference. Material required: portable unit or pistol, container of liquid nitrogen, liquid nitrogen, protective gloves. Circuit: special agenda of 3 hours/week, 10 minutes/patient for morning's doctor and evening's doctor.
Results: 2007: 216 interventions: Common wart 70.8%, plantar wart 8.9%, acrocordoma 7.4%, seborreic keratosis 6.9%, molluscum 3.7%, others (actinic keratosis...) 2.3%. 36.5%. Without complications; 63.5% Complications (blisters 57.9%, erythema 24.3%, pain 17.8%). 2008: 404 interventions: Common wart 69.2%, acrocordoma 8.4%, plantar wart 7.9%, seborreic keratosis 6.9%, molluscum 4.2%, others 3.4%. 42.6% Without complications; 57.4% Complications (blisters 56.9%, erythema 24.2%, pain 18.9%).We do not observe any infections by use of preventive antibiotic topic.
Conclusions: The patients are very satisfied by this new service, because they avoids the displacement to the service of Dermatology of the hospital of reference, and for being a simple, fast, well accepted and well tolerated technique.

P-281

Potential drug interactions of inhibitors of angiotensin converting enzyme

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Aims and Purpose: Determine, in primary health care, the frequency of potential drug interactions of inhibitors of angiotensin converting enzyme (ACE inhibitors).
Design and Methods: Observational study conducted across a urban health center. 390 patients ACE inhibitors' consumers were selected by consecutive sampling from the long treatment card (confidence level of 95%, accuracy of ±5% and expected proportion of possible interactions unknown). The measures were: concomitant medication, presence of ACE inhibitors interactions (Spanish Agency of Medicines. Ministry of Health and Consumer Affairs) and sociodemographic variables.
Results: In 356 patients (91,3%) (95% CI, 88,0-93,9%)one of the ACE inhibitors interactions with the other drugs was checked, especially with diuretics (63.3%), non steroidal anti-inflammatory drugs (51.5%), anxiolytics (26.7%) and antidepressants (21.0%). Among patients with a potential interaction, the average number of other drugs was significantly higher (4.2 ± 2.1 versus 0.9 ± 1.1, p <0001). The number of potential interactions was significantly higher in women (2.3 ± 1.4 versus 1.9 ± 1.3, P = 0002). There was a weak correlation between age and number of potential interactions (r = 0334). Using a multiple linear regression model, both female sex (B = 0335, p <0001) and the number of drugs consumed (B = 0458, P <0 .001) remained as variables associated with the potential interactions. Variability explained by the regression model was 63.7%.
Conclusions: Potential drug interactions ACE inhibitors reach of most patients treated with these drugs, the risk being higher in women and patients with several drugs. Results dictate a more rational use of medication in patients treated concomitantly with ACE inhibitors.

P-282

Use of benzodiazepines among elderly population

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Aim: To represent the frequency of benzodiazepines usage among the people aged between 65 and 75.
Method: The research has included a free sample made of 1500 patients aged between 65–75, who are registered at Health Center 'Savski Venac'. The practicing physicians has interviewed all the patients, and the data gathered by inspection of medical documentation have been used as well.
Results: 12.40% of patients have replied to use benzodiazepines often, 82.22% use benzodiazepines sometimes and only 5.38% do not use benzodiazepines at all. Among the patients who often use benzodiazepines, 67.72% of them use the therapy recommended by a psychiatrist in order to treat psychiatric illnesses. Among the patients who sometimes use benzodiazepines, 86.22% of them use benzodiazepines for the treatment of sleeping disorders. The most frequently used benzodiazepines are: diazepam (29.49%), bromazepam (27.63%), lorazepam (19.92%), midazolam (11.62%), and alprazolam (11.33%).
Conclusion: Most of elderly patients use benzodiazepines because of their sleeping and sedational effect. Since there is a possibility of development of physical and psychical dependence, the chosen physician must be careful while prescribing benzodiazepines and must provide proper education of the patient regarding the usage of benzodiazepines.

P-283

Prescription of benzodiazepines in general practice unit

Popovic R. (Nis), Jankovic D. (Nis), Jankovic J. (Nis)

Introduction: High consumption of benzodiazepines occurs in populations exposed to stress. Last 15 years, population of Serbia was exposed to economic sanctions, civil war and air raids in 1999, hence, benzodiazepines became the most frequently prescribed drugs. Those years Serbia welcomed great number of refugees.
Objective: To give total and compared image of benzodiazepines prescription in native inhabitants and population of refugees.
Materials and methods: Retrospective analysis of written documentation from patients medical charts, obtained in one primary care unit at Health Center- Nis, during period January 2005 – December 2007. Statistical analysis was performed by using standard non-parametric tests.
Results: A total of 150 patients were prescribed benzodiazepines. Of these, 72 (48%) were male and 78 (52%) were female. Average age in male was 55.5 years and in female average age was 61 year. 37 of total number of patients were refugees from Kosovo and in that patient group, during three year fallow-up period, approx. 15 prescriptions of benzodiazepines were written a patient a year. In the group of native inhabitants, approx. 11 prescriptions of benzodiazepines were written a patient a year. The higher consumption of benzodiazepines in female patients is notable. Benzodiazepines were prescribed in 58% of cases as therapy given by GP and in 42% of cases as therapy given by consultant specialist. Of these, 12% were prescriptions of psychiatrists.
Conclusion: In years after war and strong economic crisis, utilisation of benzodiazepines is high in overall population in Serbia. There is slightly higher utilisation of benzodiazepines in the population of refugees and in women. Benzodiazepines were the most frequently prescribed drugs predominantly for non-psychiatric diagnoses.

P-284

Prevalence of chronic diseases and medicines consumption in population older than 65 years who is socially active

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Objectives: To know the chronic illnesses and the most frequent medication used by the aging population that, living in its homes, they goes to centres of third age, where they maintain a social active life. 2. To evaluate what measures they should be taken between the primary health care and these centres to improve the autonomy and care of the patients.
Method: population scope is 53.632 people of 65 and more. Stratified sample, confidence level: 95%; potency test of 90%. General variables, questionnaire of dependence, and related with number and type of illnesses and consumed drugs. Relationship among variables by means of chi-square. Analysis multivariante of logistical regression, and Odds ratio.
Results: women (55%), smaller than 75 years (52.3%), stable couple and widowers almost equally (43.4 and 43.7% respectively) without studies (61.0%), subjective health status like good (63.6%), they suffer in stocking 3.28 (IC: 3.07–3.49) chronic illnesses and they consume 3.27 (IC: 3.03–3.51) daily medicines; 94% refer some chronic illness; 41% of those takes 3 or more medicines. Woman suffer significantly (p <0.0001) bigger number of chronic illnesses and (3.66 vs 2.82) they take more medicines than man (3.71 vs 2.73). Only heart disease is more frequent in man (p <0.001). Woman refers to consume more medicines related to anxiety, sleeping, constipation, arthritis, pain and glaucoma.
Conclusions: 1. Great number of illnesses and consumption of drugs, in spite of a socially active population. 2. There are important differences as for sex, civil state and level of studies. 3. No coordination is detected with the health services, for the control and

pursuit of certain situations. 4. In consequence, it becomes advisable the coordination for preventive measures that impact on these pathologies, in order to improving, or to maintaining as much as possible, the activity and quality of life of this community.

P-285

The effect of Ezetimibe on plasma lipids and blood viscosity

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Aim: This study was designed to examine the changes in blood viscosity in patients with hyperlipidemia subjected to lipid lowering therapy with ezetimibe (10 mg/day).
Material and Methods: Twenty subjects were enrolled in this study. Both prior to and eight weeks following drug treatment blood lipids and viscosity were measured.
Results: The results were as follows: The mean age was 48.4 ± 12.6 years (male7/female 13). Total cholesterol before therapy was 250.5 ± 33.8 mg/dl and after therapy it was 210.1 ± 30.2 mg/dl. The difference was highly significant (p = 0.0001). HDL cholesterol was 41.9 ± 9.8 mg/dl before and 46.5 ± 10.8 mg/dl after therapy. The difference was highly significant (p = 0.003). LDL cholesterol was 179.6 ± 30.3 mg/dl before and 136.8 ± 25.4 mg/dl after therapy. The difference was highly significant (p = 0.0001). Plasma viscosity was 1.29 ± 0.15 before and 1.2 ± 0.12 after therapy. The difference was significant (p = 0.037).
Conclusion: Plasma viscosity which is an early atherosclerotic risk factor is significantly reduced in hyperlipidemic patients when treated with ezetimibe.

P-286

Medication for children with ADHD – how effective is this in improving educational achievement? A systematic review and meta-analysis

Brogan E. (Nottingham), Prasad V. (Nottingham)

Aims: Attention-deficit hyperactivity disorder (ADHD) is one of the world's most common childhood psychiatric disorders. Children with ADHD often present to primary care physicians, and require their ongoing review. ADHD impacts greatly on a child's quality of life, especially as symptoms cause poor achievement, behaviour and experiences at school, but effects of medication on educational success remain unclear. This study aimed to describe the effects of methylphenidate (MPH), dexamfetamine, atomoxetine, mixed amphetamine salts (MAS) and modafinil on children's classroom academic achievement and on-task behaviour, and to perform meta-analyses to quantify these effects.
Methods: Design comprised a systematic review and meta-analysis; searches were undertaken in MEDLINE, EMBASE, CINAHL, PsycINFO, Web of Knowledge, ERIC, British Educational Index and Australian Educational Index to identify randomized controlled trials. Participants were children with ADHD, aged 4–16 years, of any nationality, ethnicity, socioeconomic status or gender. A fixed data-collection form was used; analyses were performed in RevMan 5.0.
Results: 32 studies were included; these assessed effects of MPH, dexamfetamine, atomoxetine and MAS on on-task behaviour and completion and accuracy of seatwork, arithmetic, reading comprehension and spelling. MPH, dexamfetamine and MAS all significantly improved children's on-task behaviour and work completion; some studies also suggested they improved children's work accuracy. Atomoxetine, examined in only 1 study, was found to have no significant effects. No other between-drug differences were found.
Conclusions: Further research is required into effects of newer drugs and on data generated from primary care settings. However, medication for ADHD shows realistic potential to improve a child's quality of life through achievement and school experiences: this should be considered by any primary care physician involved in the care of a child with ADHD.

P-287

Use of antimicrobial medication in cases of skin lacerations (polycentric study)

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Aim: To investigate the necessity of using antimicrobial medication in patients with small (diameter <6cm) skin lacerations.
Material/method: In total, 146 cases of patients with skin lacerations were involved in the study, aged 12-78 years old. The way and the mean of causing the laceration, the extent, the presence/absence of foreign bodies, the involvement or not of underlying tissues, and the potential infection grade, were registered, while in those cases considered necessary, a cultivation of the wound material was held in the common nutrient media in the Microbiological Laboratory.
Results: Presence of foreign bodies was found in 14 cases. In 2 patients an injury of the underlying tissues co-existed. There was no case found with ischemic wound edge or necrotic tissues. Because of a potential infection in 12 cases, a cultivation of the wound material was asked, but only in 2 cases it was proved positive with the development of S. aureus. All the patients underwent the required wound cleaning, 67 cases were sewn and in 83 cases antitetanic serum was provided. As far as antimicrobial medication is concerned, except for the 2 cases proved with a microbial infection, 3 more patients, suffering from diabetes and having serious indications of peripheral angiopathy, received antimicrobial medication. It should be underlined that the evolution of all the cases was really good, while none of the patients presented any wound infection.
Conclusions: It is, therefore, proved that the use of prophylactic medication is not necessary in the common cases of small skin lacerations, and consequently, the reckless misuse of antibiotics, and particularly of the stronger ones, which is unfortunately frequent in the Primary Health Care Units and the Health Centers, should be finally eliminated.

P-288

"Missing a contraceptive pill" made easy: the new Dutch guideline

Boukes F. (Utrecht), Wiersma T. (Utrecht)

Background: Oral contraceptives are very reliable, when taken correctly. Guidelines on missed pills were formerly based on the "rule of seven". Emergency contraception (EC) should be considered in case of missing a pill in the first seven days after the pill-free interval (PFI). EC is available without prescription in the Netherlands since 2005. The guidelines of the Dutch College of General Practitioners (NHG) on EC in case of missed pills differed from those of the scientific organizations of pharmacists and gynaecologists. This was an undesirable situation.
Methods: In 2004 the WHO constructed new, simplified rules on missed pills. Action is needed only when 3 or more (sub50) or 2 or more (sub30) pills are missed,. In the Netherlands a multidisciplinary group (GP's, pharmacists, gynaecologists) agreed to take the WHO-advice as a starting point for the new Dutch guideline.
Results: We reached consensus on the following guideline: In case of one missed pill no extra precautions are needed. The group also reached consensus on the recommendation that EC is only indicated in case of two or more missed pills in the first week after PFI and unprotected sex in the last 72 hours.
Conclusions: The new guideline gives an simple recommendation for the most common situation: one missed pill. NHG is working hard on the implementation of that new rule, in collaboration with other Dutch organizations.

P-289

Psychotropic and anti-depressive drugs in family medicine practice

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Background: Various stresses, overwork, the need for fast and constant adaptation to changes in the surrounding world, increasing common health problems and a lack of time – all these problems affect the population and cause increasing levels of diseases connected with fear and depression. Moreover, in many cases, family physician is the only person who is in a position to be aware of these problems and address them adequately towards his patient.
Aim: Our study is designed to evaluate the level of awareness of this problem and present problems concerning those disease and pharmacotherapy with psychotic and anti-depressive drugs.
Materials and Method: Our study was based on the questionnaire method. Specially designed questionnaire was distributed among the family practitioners in Lodz voivodship (central Poland) to determinate the level of knowledge and approach to the problem.
Results/Conclusion: The level of self-confidence in using psychotropic drugs among family doctors is increasing in everyday practice. To further increase knowledge in this field among young doctors, especially family physicians, we have to put more pressure on their education by organizing more workshops and courses. That would give them easy and simple way of acquire necessary knowledge.

P-290

Post-marketing surveillance study on the safety and efficacy of phendimetrazine prescribed in primary care to obese patients

Kim Y.S. (Seoul), Ahn E.S. (Seoul), Kim B.S. (Incheon)

Aims: In Korea, phendimetrazine has been widely used for the treatment of obesity in primary care since 2001. However, there have been very few studies on the safety and efficacy of phentermine. In order to investigate the safety and efficacy of phendimetrazine prescribed in primary care, a.post-marketing surveillance study was undertaken.
Methods: A total of 1,015 (male 41, female 974) patients with obesity (BMI>=25) were enrolled from 28 primary care physicians (clinics??) in Korea from September 2006 to November 2007. The patients were regularly followed (observed?) to ascertain the safety and efficacy of phendimetrazine at intervals of 4, 8 and 12 weeks.
Results: Of the 1,015 patients enrolled, 916 (90.2%) returned for safety evaluation and 907 (89.4%) for efficacy assessment. A total of 437 adverse events (AEs) were reported from 298 patients (32.5%). The most prevalent adverse event was insomnia (9.0%), followed by dry mouth (8.6%), tachycardia (5.7%), headache (3.7%), dizziness (3.3%), palpitation (2.9%), constipation (2.4%), anxiety (2.0%), tremor (1.9%) and nausea (1.6%). Nineteen patients (4.4%) discontinued taking phendimetrazine as a direct result of AEs. No serious AEs were reported. In all, 555 (61.2%) of 907 patients had lost 5% or more of body weight. Mean weight loss was 5.0 kg (SD 4.0). During the 12 weeks of treatment, phendimetrazine was continued by 57.4% and discontinued by 42.6%. Male, old age, low education, monotherapy, discontinuation and no occurrence of AE were associated with poor efficacy (P <0.05).
Conclusions: The adverse events of phendimetrazine were common, even though phendimetrazine was quite effective for weight loss and well tolerated.

P-291

Ethical issues that concern primary care surgeries

Buil B. (Zaragoza), Altisent R. (Zaragoza), Martin N. (Zaragoza), Delgado M.T. (Zaragoza), Muñoz P. (Zaragoza)

Purpose: To know the ethical issues that arise in PCS's, classified by frequency and difficulty to solve them.
Design and methodology: Type of study: Descriptive and observational. Scope of the study: Region of Aragon, Spain.
Population: PCS in the public health service (SALUD)
Material: Survey with 14 situations of ethical concern or conflict to PCS. It's prepared according to the results from a first phase, where 24 PCS provide their own actual situations encountered in their surgeries, during 6 months. They collected 157 cases, which were classified into 29 types of situations. Afterwards, 14 were selected for the survey, which were validated by experts through a Delphi technique.
Design: The questionnaire was sent to 908 PCS in the public health service. The 14 items correspond to ethical situations occurring to PCS. They had to assess each situation according to frequency and difficulty to solve them, by means of a scale of 5 Likert type closed answers.
Results: 348 responses were received, making up 38.3% of the group. The most frequent ethical issues for PCS were the relationship between primary care and specialized care, the management of resources and the inadequate use of the Health Service by the patients. Ethical issues most difficult to solve were related to marginalization or abandon and lack of care by patients' families, the distribution of resources and the suspicion of a crime.
Conclusions: Previously mentioned issues are often not present in the education courses in ethics targeted to PCS, which focus on topics considered more typical. This fact would imply the need to revise the training offered and to adapt its contents.

P-292

Advance directive in primary care

Hoby G. (Rheineck), Harringer W. (Goldach)

Patientenverfügung in der hausärztlichen Praxis
The "PAVE" study
Do older people require an advance directive (AD) and to what extent?
We interviewed 300 patients, aged 65 and above, in 10 swiss primary care private practices and asked them to evaluate 3 different kind of AD templates. 25% of the patients already had an AD, 75% wanted to draw one up, and 19% were not interested and were asked for their reasons. Though palliative care organisations usually suggest detailed ADs, our patients definitely preferred the most simple AD template on one page only (81% of all new ADs, 77% of the existing ones). The main aim of most probands is to express the wish not to have their life prolonged unnecessarily in a hopeless condition. We discuss the results of our study, also in view of the ongoing public discussion and to some actual publications on the subject.

graphic 1

P-293

Elderly population: finish their days at their home

Martínez Andrés P. (Valencia), Martínez Lozan M.Á. (Valencia), Martínez Lozan J. (Banyeres De Mariola [Alicante]), Martínez Lozan C. (Albacete)

Purpose: We try to adequate our disponibility of the outdoor relief to the requirements of the elderly population, and to their respectable decision of not to go to the referency Hospital and finish their days at their home.
Design and methods: We have to report our outdoor relief planning assistance given by the own Primary Care not by Domiciliary Hospitalization making point in the very great respect of the human being to finish his/ her existence at home with his/ her family.
Results: We gather data from our files of our outdoor relief assistance for a period of time of 25 years.
Conclusions: 1) We have to accept the personal decision of the dying elderly person. 2) We have to take into account the importance of the saving of expenses within this kind of assistance. 3) We have to stand out the lost of strength and vigour of the sanitary staff.

P-294

Ethicals committees and uncertainty

Vicente García P.A. (Salamanca), Velasco A. (Salamanca), Sierra I. (Salamanca), Juanes J. (Salamanca)

Medical education and trainig prepare physicians to make clinical decisions, but nowadays in medical practice phycicians must also make some extremely difficult ethical decisions. Ethicals Committees can help physicians in this difficult situations. Our propopsal consists in describing the formation of Ethicals Committees in Spain, its function, composition and operation.

P-295

From monitoring to research – validating asthma data from the Swiss Sentinel Surveillance Network (SSSN), 1989–2005

Bollag U. (Bern), Frey P. (Bern)

Aims and Purpose: We report the findings from 17 years of monitoring of asthma. The aim is to show that the Swiss Sentinel Surveillance Network (SSSN) can be used as an instrument of research in practice.
Design and Methods: The organisational and administrative features of the SSSN are briefly described. The most essential methodological procedures applied to the study of the seasonal pattern of asthma, the practice incidence and time trends for allergic and non-allergic asthma are outlined.
Results: The seasonal pattern shows distinct peaks of asthma attacks in June and November. The peak in June is most pronounced in children aged 5 to 16 years, and the peak in November mainly involves children aged 0 to 4 years. Long-term trends show that consultations for first asthma episodes increased until 1999 and fell thereafter. Consultations for subsequent asthma episodes have fallen by a third since 1994. Short-term trends indicate a plateau from 1997 to 2000 before a steep decline. The separate analysis of allergic and non-allergic asthma shows that the decrease of asthma consultations is mainly due to the allergic component of asthma.
Conclusions: The findings by the SSSN are congruent with those from various studies and authors. Our inference is that the SSSN is able to generate valid scientific data and can be used as a research instrument for studies undertaken in PC practices.

P-296

Illness experiences and perspective of Karen people in Thailand who were diagnosed as hypertensive patients

Theppawong P. (Bangkok), Hathirat S. (Bangkok), Poonpetcharat P. (Bangkok)

Purpose: Karen people are ethnic minority who mostly live in the mountainous area of northern Thailand. Many of them seem to lose from medical appointment and come back when late complications happened. This study is to understand their illness experiences and health belief when they were diagnosed as hypertension.
Method: In-depth semi-structured interview on Karen hypertensive patients in northern Thailand. Purposeful and snowball sampling was used. The interview and transcription is performed by the researcher and the interpreter. Content is coded independently by two reviewers and the data triangulation process was done.
Results: The study shows that there is no "hypertension" in the Karen world view. When doctors told them about hypertension, they relate it with all kinds of non-specific symptoms they had. There are 3 groups of Karen health belief system on cause of hypertension. The largest group believes in the curse of spirits. Most of them prefer their traditional herbs and spiritual practice than conventional medicines. The second group is Christianity who believe that god has more power than ghost. They will pray for their illness. The last group is new generation who believe in conventional medicine. However all groups have poor access to the hospital due to difficult transportation. Huge communication gap was found between health care providers and the patient.
Conclusion: Karen people have different explanation for illness cause. They live their lives with the respect of nature. They show their connectedness in the family and the community when a person get sick. Although they need care from health care providers, they still need to know their doctors personally. Cross-cultural practice is in need for them.

Karen patient

Traditional herbal medicine

P-297

How contextual knowledge matters: decision-making in family medicine beyond numbers and standards

Abraham A. (Bern), Kissling B. (Bern), Neuenschwander S. (Bern), Hartmann H. (Bern)

Aims: Studies have illustrated that decision-making in family medicine implies more than the application of Evidence-based guidelines. Yet, only little is known about other knowledge resources general practitioners (GPs) rely on when treating patients. This medical anthropological study thus explores patterns GPs' decisions are based on and provides insight into the mechanisms of contextual knowledge (CK) in family medicine.
Methods: This Swiss study uses a qualitative design based on data from narratives, 20 interviews with GPs from different settings, and participant observation in practices and in a quality circle. Data collection and analysis are conducted in an iterative, permanently comparative process according to core principles of Grounded Theory.
Results: CK about patients profoundly influences diagnostic and treatment decisions of GPs and can be grouped in types such as working conditions, social environment, and cultural background. As GPs illustrate, CK can serve a) to adjust diagnoses and treatments to working, living, and socio-cultural conditions, b) as an explanatory link between somatic and psychosomatic disorders, c) to pattern patients, lifestyles and symptoms, d) to create a common understanding between patient and GP, e) for the typification of patient groups with similar socio-cultural backgrounds, and f) to put health related expectations into perspective. On the contrary, CK can also have ambiguous side-effects such as blind spots or misleading routines. Furthermore, acquiring CK is time consuming and can lead to difficult questions about intimacy/distance, loyalty, ethics, biased information and unclear roles in the patient-doctor relationship.
Conclusions: The study shows that GPs' knowledge resources are not only natural scientific facts but to a large extent contextual knowledge. Although ambiguous sometimes, CK assists GPs in making adequate clinical choices and in practicing patient-centred medicine not only as a slogan but for real.

P-298

Physical activity in patients with hypertension in general practice. The hypertension cohort Hc.cH

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Background and Methods: In GP practice the prevalence of arterial hypertension is about 50%. Target blood pressure values are often not reached. Lack of physical activity may be one reason. We report data on physical activity of 410 hypertensive patients obtained by 30 GPs of our GP hypertension cohort. Actual guidelines recommend 30 minutes moderate physical activity 3 or more times per week. Moderate activity is 1 to 2 times 30 minutes and low activity is <30 minutes per week.
Results: 228 (56%) are male and 182 female. 74 (18%) have diabetes mellitus, and 122 (30%) have a body mass index >30 kg/m^2. From all 410 hypertensive patients 128 (31%) have low, 105 (26%) have moderate, and 63 (15%) have high level of physical activity; 114 (28%) hypertensives had insufficient data in the chart at baseline. Male hypertensives have more often high level of physical activity than female hypertensives (20% vs. 9%). Office blood pressure is similar in all activity groups, but ambulatory blood pressure in males and females without diabetes mellitus and with BMI <30 kg/m^2 is lower in high physical activity than in low physical activity (142 ± 11/84 ± 10 vs. 130 ± 11/81 ± 10 mm Hg, n = 20). In 1-year follow-up (n = 112), information on physical activity was almost complete with 94%. Physical activity improved only in the moderate level (from 26% to 48%).
Conclusion: In our GP patients with hypertension only 15% have sufficient physical activity as recommended by standard actual guidelines. Their ambulatory blood pressure is lower than in those with insufficient physical activity. The data still have to be interpreted with caution since the number is small, and due to a possible selection bias.

P-299

The hypertension cohort Hc.cH: change in obesity and risk factors during 2-year follow-up

Martina B. (Basel), Tschurr G. (Basel), Bally K. (Basel), Panos A. (Basel), Weber J. (Basel), Tschudi P. (Basel)

Background and Methods: In GP practice the prevalence of arterial hypertension is about 50%. Careful risk stratification is important prior to treatment decisions. With focus on body mass index, we investigated how GP hypertensive patients' risk factors change over time. We report data of 463 adult hypertensive patients at baseline and of 210 and 101 patients after 1 and 2 years follow, respectively. All patients are GP patients of 40 GPs of our GP hypertension cohort.
Results: Mean age is 64 years, 57 % are male. At baseline (n = 463) 30.2% have a body mass index >30 cm/kg^2.18% have diabetes mellitus. 17% are smokers and 10% have coronary heart disease. Mean office blood pressure is 148 ± 16/87 ± 11 mm Hg, mean pulse is 73 ± 10 bpm. Mean total cholesterol is 5.3 mmol/l. 29% are in the very high risk cardiovascular event category, 22% in the high risk, 27% in the moderate risk and 22% in the low risk category. After one year and two years follow-up, percentage of patients with body mass index >30 cm/kg^2 decreases slightly from 30.2 to 28.7 and 27.7%, respectively. Percentage of smokers decreases to 15.7% and coronary heart disease increases to 12.8%.

Conclusion: In our GP patients with hypertension the prevalence of obesity (defined as body mass index >30 cm/kg^2) is 30.1%. This is almost as high as in the US 2004 NHANES data of a representative general population. However, in contrast to trends towards an increase in BMI during follow-up in the population, in our hypertensive GP patients the prevalence of obesity decreases. This may reflect the positive role of GPs participating actively in this cohort study with special attention to cardiovascular risk factors. Our data still have to be interpreted with caution since the number is small, and due to a possible though little selection bias.

P-300

The DN4 test to assess the prevalence of neuropathy in type 2 diabetes patients at the general practitioner

Morlion B. (Leuven)

Aims: The aims of this study were to evaluate neuropathy (NP) as well as to assess the prevalence of painful diabetic neuropathy (PDNP) in type 2 diabetes patients by using the DN4 test and to evaluate the usefulness and ease of use of this tool in primary care.
Methods: A prospective cross-sectional multi-centre study with type 2 diabetes mellitus (T2DM) patients visiting their general practitioner (GP) was initiated at a large representative group of Belgian GPs (N = 270). Each GP was requested to enrol 10 consecutive patients. Demographics and medical history were recorded. The DN4 [1] questionnaire, a 10-items clinician-administered diagnostic tool for NP was completed for all patients. The DN4 consists of 7 questions evaluating the pain characteristics and 3 questions based on clinical examination. A DN4 score of 4 positive items detects NP. The usefulness and ease of use of the test were investigated on a 10-point scale.
Results: Data were collected from 1966 T2DM patients. Patients were on average (±SD) 66.5 years old (±10.87), were mainly female (52.71%) and were diagnosed with T2DM 9.05 years ago (±7.5). Their mean (±SD) BMI was 29.96 ± 5.40 kg/m^2, HbA1c level 7.22 ± 1.25. Hypertension (78%), coronary artery disease (22.47%) and peripheral artery disease (16.81%) were the most prevalent comorbidities. The average (±SD) DN4 score of all patients, was 2.15 (±2.46). One out of 4 patients included in this study (n = 499) had a positive DN4 test, indicating the presence of NP. The DN4 was perceived as a useful (7.43/10) and easy to use tool (7.63/10).
Conclusions: In 25% of the T2DM patients consulting their GP, the presence of NP was detected with the assistance of the DN4 questionnaire. In general, the DN4 test was identified as a useful and easy to use test by the primary care physician.

P-301

Painful diabetic neuropathy and neuropathic pain in a primary care setting

Morlion B. (Leuven)

Aims: To screen type 2 diabetes mellitus (T2DM) patients for painful diabetic polyneuropathy (PDPN) in primary care; to identify predisposing factors for PDNP.
Methods: A prospective cross-sectional multi-centre study was initiated in a large (N = 270) representative sample of Belgian GPs. Adult T2DM patients, visiting their GP for a routine consult could be included in the study. Each GP was requested to collect data from 10 consecutive patients. A demographic and medical questionnaire oriented on cardiovascular risk factors and diabetic complications was completed. Patients were questioned about lower limb pain. The intensity of pain was assessed on a Visual Analogue Scale (VAS). The DN4 questionnaire, a clinician-administered diagnostic tool for NP, was completed. A stepwise logistic regression analysis was performed to identify the predisposing factors for NP.
Results: Data from 1966 T2DM patients were analysed. The average age (±SD) was 66.5 years (±10.87) and patients were predominantly female (52.71%). The mean (±SD) duration of T2DM was 9.05 years (±7.5), HbA1c level 7.22 (±1.25) and BMI 29.96 (±5.40) kg/m^2. The most prevalent comorbidities were hypertension (78% or n = 1520), coronary artery disease (22.47% or n = 433) and peripheral artery disease (16.81% or n = 323). Half of the patients (51% or n = 994) reported having lower limb pain. The average (±SD) VAS score was 20.63 (±27.46). Positive (^{3} 4) DN4 scores were found in 25% (n = 499) of patients, indicating the presence of NP. An exploratory analysis identified the presence of foot problems (odds ratio 6.820, p <0.001), peripheral artery disease (odds ratio 3.558, p <0.001), retinopathy (odds ratio 3.558, p <0.001) and the use of insulin (odds ratio 2.064, p <0.001) as predictors for a positive DN4 test.
Conclusions: Half of the T2DM patients visiting their GP for a routine consult reports having lower limb pain. One out of 4 patients suffers from NP.

P-302

Prevalence of multiresistant microorganisms in the ambulatory setting in the canton of Berne, Switzerland

Kronenberg A. (Bern), Droz S. (Bern), Koenig S. (Bern), Mühlemann K. (Bern)

Background: Prevalence of multiresistant microorganisms is increasing world-wide. This trend was first observed in hospitals but is now extending to the healthy community.
Aims: To determine the prevalence of Methicillin-resistant Staphylococcus aureus (MRSA) causing skin infections and extended-spectrum beta-lactamase (ESBL) producing Enterobacteriaceae in urinary tract infections in the ambulatory setting in the canton of Berne, Switzerland.
Methods: In August 2008 all primary care physicians residing in the canton of Berne (n = 1284) were asked to collect microbiologic samples of consecutive patients with newly diagnosed purulent skin infection or urinary tract infection. All samples were analyzed at the Institute of Infectious Diseases, University of Berne, following local laboratory standards.
Results: During the first 3 months 631 urinary samples were analyzed. In 12% no or <1000 cfu/ml microorganisms were cultured, polymicrobial infection was present in 318 urines. The most frequent microorganisms were E. coli (59.7%), Enterococcus spp. (12.4%), and S. saprophyticus (5.2%). Susceptibility rates for E. coli were amoxicillin-clavulanic acid 78%, cefuroxime 72%, norfloxacin 88%, and trimethoprim-sulfamethoxazole 76%. Multiresistance (resistance to >=3 antibiotics was 4.3%), 3 (0.9%) ESBL producers were identified. A total of 161 wound swabs were analyzed. In 74 samples (46%) skin flora or no microorganisms were detected, mixed infections were seen in 36 samples (22%). The most prevalent microorganism were Staphylococcus aureus (56%) and streptococci (16%). Susceptibility rates of S. aureus were clindamycin 96%, tetracyclin 92%, ciprofloxacin 83% and trimethoprim-sulfamethoxazol 100%.
Two (2.5%) MRSA were identified.
Conclusion: MRSA and ESBL are still rare in community-acquired infections in the canton of Berne, but rates are similar to the hospital setting in this region. Quinolone-resistance in ambulatory E. coli causing urinary tract infection is rising.

P-303

Experiences and first results of the colorectal cancer screening pilot programme (CCSPP) in a health area

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Aims and purposes: To evaluate the viability of the CCSPP and participation of the target population. Results obtained from two years experience.
Design and Methods: The target population included men and women aged 50-69 (35,771 people) from the Health Area composed of 13 Health Zones and 1 Hospital. The recruitment, per HZ, was performed by posting an invitation letter to each individual of the target population. Primary Care Teams/units, City Councils and collaborative Pharmacies were previously informed. Every 6 months a reminder letter was posted to those who didn't attend at initial invitation (72,092 letters). The letter is the supporting document to collect the screening test kit from the Health Centres or Pharmacies. Two trained nursing auxiliaries travelled to every HC, to inform about the programme, hand in the screening kits and collect the samples (2/person).The samples were daily sent to the hospital laboratory, with all biological samples collected by the HC using the same transportation. To determinate the presence of faecal occult blood, immunological methods (FOB-Gold©) were chosen. When one or both samples were positive, colonoscopy was chosen as confirmatory exam.One of the programme nurses would settle the colonoscopy date at hospital.
Results: The participation rate was 42.3%, similar and/or superior to other studies in Spain, with a 9.48% FOBT positive rate (11.8% male and 7.59% female). 51 invasive cancers were diagnosed, while 124 cases were non-invasive cancers (109 carcinomas in situ and 16 intramucosal).465 high risk adenomas were detected while low risk adenomas accounted for 303.
Conclusions: The proposed organisational model, which uses its own system resource, is considered adequate and viable. The professionals supporting the programme and the participant pharmacies help to avoid work overload in the PCT.The FOBT used in this programme determined high detection rates of cancers and pathologies treatable at an early stage.

P-304

War posttraumatic stress disorder and family

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PTSD is a very often problem in Primary Health Care in Bosnia and Herzegovina (BH) in the postwar period which is getting even worse because of the bad social-economic situation, unemployment and general dissatisfaction of the greater part of the population.
Aim: The purpose of this study was to research the frequencies of depression and anxiety in family whose head of family has had PTSD.
Methods: We interviewed 60 people with PTSD and their family members and the same number their "healthy" copies. The study was made from September 2005 till July 2006, with patients who are living in Mostar, BH. In this study, we have used: one questionnaire was specially designed for this study, HSQ-25 and QGH for children from 5 to 18 years of age.
Results: The largest number of the tested families (43.3%) has less than 500 KM of monthly income. Greater number respondents were unemployed than controls (?2 = 45,753; df = 4; p <0.050), and greater number of views have sings of depression (?2 = 21.099; df = 1; p <0.050). Any elements of depression we did not find in children.
Conclusion: more than 55% women in the tested group were positive on depression; older children have had fewer problems of behavior then younger children. The explanation would be in duration of staying with diseased. The importance of study is on earlier detection of depression in family members whose one member has PTSD. Key words: family, PTSD, war, family health, parent-child relations.

P-305

Utility of osteoporosis scales based on risk factors in primary health center

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Aims(s) and purpose: To study the indication in general population to do a bone densitometry (DEXA) using scales based on risk factors (RF) and the correlation between these and the subsequent calcaneus densitometry.
Design and Methods: Cross-sectional study of all patients (>18 years) attended in a rural primary health center during 2 weeks (January 2008). We have applied the criteria for indicating the density of World Health Organization (WHO) International Committee of clinical guidelines on Osteoporosis (CIGCO), Agency for the Evaluation of Medical Technology of Catalonia (AETM), National Osteoporosis Foundation (NOF), Age Body Size No Estrogen (subscribers) and Osteoporosis Index of Risk (OSIRIS).
Results: 165 subjects were analyzed (66.1% women) with a mean age of 62.84 (16.7) years. Indication of dexa with WHO criteria was 18.8%, with 0.2 (0.4) RF; with CIGCO criteria was 67.9% (RF 0.97 [0.8]); with AETM was 18.8% (RF high 0.53 and moderate 1.35; with NOF was 64.8% (RF 0.79 [0.7]); with ABONE was 58.2% (RF 0,86 [0,6]) and OSIRIS was 50.3% (RF 1,5 [4,5]. The t-score in calcaneus was –0.49 (23.6% with osteoporosis risk). Compared to scales, the concordance was poor for WHO (k = 0.01), CIGCO (k = 0.11), AETM (k = 0.06), NOF (k = 0.03) and ABONE (k = 0.18) and low for OSIRIS (k = 0.25).
Conclusions: There is a high variability in the selection of patients with osteoporosis risk according to the applied criteria; CIGCO, NOF and ABONE are less selectives and WHO and AETM are more restrictives. About 25% of patients attended in primary health center have osteoporosis risk by calcaneus densitometry, being concordance with scales very low.

P-306

Prevalence of diabetic retinopathy as a complication of diabetes mellitus in a family medicine

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Aims: Diabetic retinopathy, as a cause of blindness, is very serious public health and social and economic problem. It is very often seen as one of terminal complications of Diabetes mellitus (DM)in family practicioner's office. The aim of this retrospective study was to indicate and diagnose the number of diabetic patients with retinopathy, to check what was their therapy and to check if obesity is accompanying their disease asa risk factor.
Design and methods: The study was retrospective analysis based on data collected frommedical files and findings from ophtalmologist's. For this purpose we developed statistic evaluation list, and all data were collected and statistically processed.
Results: Out of 936 patients sent to ophtalmologist within three months,352 were men and 584 were women, of which 34 men and 66 women were with DM. Out of 34 men 26 were diagnosed retinopathy. Out of 66 women 46 were diagnosed retinopathy. Out of 26 men with retinopathy 7 were on insulin therapy and 19 on oral therapy. Out of 46 women, 11 were on insulin therapy and 55 on oraltherapy. We also found out that 18 men and 43 women were obese.
Conclusion: 9.2 patients which we referred to ophtalmologist were with DM. We also found out that 72% of patients with Diabetes Mellitus were diagnosed at some stage of diabetic retinopathy. 61% of patients with diabetic retinopathy is obese what makes us responsible to work more on education of our diabetic patients, their diet, physical activity and change of life-style. It is necessary to do regular annual ophtalmology check-ups. It is also very important to start with education on how to prevent retinopathy in all our diabetic patients timely, so less patients wouldhave serious complications.

P-307

Use of a new calprotectin fecal rapid-test in combination with clinical predictors to distinguish between inflammatory and irritable bowel syndrome in primary care

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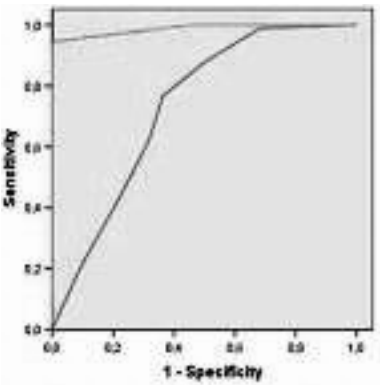
Introduction: Lower gastro-intestinal complaints are frequently presented in primary care. Adequate and early discrimination by the general practitioner (GP) between inflammatory bowel disease (IBD) and irritable bowel syndrome (IBS) is essential, to ensure timely referral and adequate treatment of the first group. The GP uses diagnostic criteria (Rome III) to distinguish between IBD and IBS, but the discriminative potential of symptoms alone in primary care practice is insufficient. We recently demonstrated that an in practice Faecal Rapid Test (FRT) of calprotectin, a biomarker of intestinal inflammation in the stool, adequately identifies IBD in primary care.
Aims and methods: To assess the additional diagnostic value of the calprotectin FRT to clinical information in distinguishing IBD from IBS. We used data from a cross-sectional study among 114 primary care patients with abdominal symptoms, suggestive for IBS or IBD, referred for endoscopy. Patients were asked to fill out a symptom questionnaire and bring a stool sample for the faecal rapid test. Endoscopic results were used as the reference standard. Two multivariable logistic regression models were developed, one using clinical predictors only (model 1) and a model that combines these predictors with the FRT (model 2). The discriminative ability of both models was determined by using ROC analysis, and expressed as area under the curve (AUC).
Results: Of the 114 patients, 23 had IBD (20.2%) and 91 (79.8%) IBS. The AUC of model 1 was 0.73 (95% 0.60-0.87). When the clinical predictors were combined with the calprotectin faecal rapid test, the only significant clinical predictor was blood in stool. The AUC of model 2 was 0.99 (95% 0.97–1.00).
Conclusion: Combining the calprotectin rapid test with clinical predictors is an efficient and effective method to distinguish IBS from IBD. Its application in primary care can reduce the number of redundant referrals to endoscopy facilities.

ROC curves of model 1 and 2



P-308

A cross-sectional study to evaluate post-acute myocardial infarction nitrates overuse

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Aims: 1. To evaluate the proper use of nitrates in post acute myocardial infarction. 2. To analyze if post AMI treatments fits to international accepted guidelines in our setting. 3. To estimate the prevalence of postAMI angina.
Design and methods: Multicentric descriptive transversal study. Three urban health care centers (62000 adults adscribed). Systematic selection into computerized clinical records (diagnosis of AMI). We

excluded patients with chronic heart failure receiving nitrates + hydralazine. Variables: Age, gender, cardiovascular risk factors, presence of post-AMI angina and treatments.
Results: 145 patients were selected (75% male, mean age 67 years old). 39% with diabetes, 61% hypercholesterolemia, 56% arterial hypertension, 63% active or former smokers. 56 (39%) under nitrates. Post AMI angina was present in 42 patients (29%). Among patients without angina, 27% were treated with nitrates. Co medication included beta blockers (68%), calcium channel blockers (26%), ACE inhibitors or Angiotensin receptor antagonists (55%), platelet anti aggregants (89%), statins (85%) and diuretics (30%). Patients under nitrates were not receiving betablockers in 41%, ACE inhibitors/ARA 39% and anti aggregants 14%. Overall, 40% of patients were considered to receive a non optimal treatment (beta blockers + platelet anti agreggant + statin). 32% of patients with optimal treatment and 48% with non optimal treatment received nitrates simultaneously (p = 0.038). A regression analysis identified post AMI angina (OR 6.7, CI 95% 2.8–15.7) and age (OR 1.07, CI 95% 1.03–1.11) as independent risk factors for treatment with nitrates post AMI.
Conclusions: The prevalence of postAMI angina in our area is similar to others studies. There was an overuse of nitrates postAMI in patients without angina, and the use of nitrates was higher in patients with non optimal treatment for post AMI. Independent risk factors for the use of nitrates were advanced age and post AMI angina.

P-309

Prevalence of osteoporosis in patients with prostate cancer on anti-androgen therapy

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Aims: The aim of the study was to assess the prevalence and severity of osteoporosis in men with prostate cancer on treatment with anti androgens when compared with those not on treatment.
Design and methods: This is a retrospective transverse study. Study group: men >50 years old in a urban Primary care centre, diagnosed with osteoporosis. Study variables included: densitometry results, presence and location of fractures. Osteoporosis was found in men above 50 years of age with or without hormonal treatment.
Results: There are 3.975 men above 50 years old in our area of which 44 were diagnosed with osteoporosis. 102 men suffered from prostate cancer. Of these 22 were on anti-androgen treatment and 4 were diagnosed of osteoporosis (18.1%) Prevalence of osteoporosis in men without hormonal treatment: 0,81. With treatment: 18.18%. Applying Fisher exact test showed statistically significant differences between both groups (p <0.001). 50% of the men on hormonal treatment suffered osteoporotic fractures (50% in femur and 50% in vertebral column). 46.87% of men with osteoporosis but not on treatment presented with fractures (13.33% in femur; 46.67% in vertebral column and 40% in other locations). There were no statistically significant differences between both groups in the incidence of fractures. Densitometries results were available in 36% of cases.
Conclusions: There is a significant increase in the prevalence of osteoporosis in patients with prostate cancer on hormonal treatment. These results suggest that it may be beneficial to routinely perform bone densitometries in this population group. There is a need to improve record keeping in patients undergoing densitometries in our centre.

P-310

Chronic obstructive pulmonary disease: impact of diagnosis on smoking habit

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In is a well known fact, that around one fourth of smokers develop chronic obstructive pulmonary disease (C.O.P.D), due to their dependence to tobacco.
Objective: To check if the use of Spirometry to diagnose the disease ha any influence in stopping the smoking habit.
Patients and methods: A spirometry was performed on 98 smokers randomly collected from a General Practice setting. Information on age, sex, and cigarette/year index was collected. They were all informed of the spirometry results and they were given a five minute session on antismoking advice. One year later, they were all contacted by phone, and quizzed on their current habit. The X2 test was used for the analysis of categorical variables.
Results: The sample is formed by 98 subjects with a mean age of 42.3 years. 54% were male. In 18 patients COPD was diagnosed (18, 34%).14 patients gave up smoking (33, 3% of COPD patients and 11.1% of those without the diagnosis (Odds Ratio = 4.6 IC 95% 1.13–9.82; p <0.05). The male sex was a variable significantly associated to greater incidence of giving up the habit.
Conclusions: COPD diagnosis by Spirometry in General Practice may contribute to giving up smoking. Therefore early diagnosis done in this way, may influence the outcome of the disease positively, if it results in helping to give up the habit, and results in improvement of their health.

P-311

Osteoporosis treatment: indication and prescription assessment in postmenopausal women

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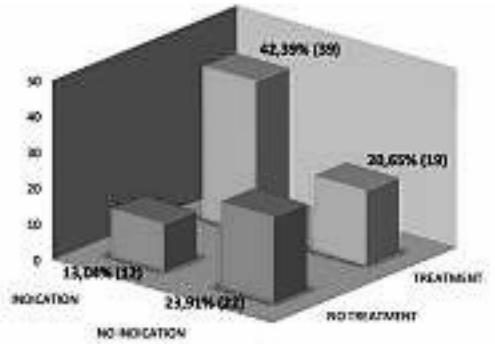
Aim an purposes: Principal: Assess osteoporosis management with medication therapy in postmenopausal women; indication and pharmacological prescription.
Specifics: Know about prescription pattern and their adequacy on Clinical Practice Guidelines (CPG) recommendations.
Design and methods: Design: Descriptive transversal study.
Location: Primary health care urban center.
Subjects: Women older than 55 years with active clinic history with dual-energy x-ray (DXA) screening or history of fragility fracture (FF), not including those confined to bed neither with cognition disorder.
Variables: age, weight, size, BMI, current smoke, family history of osteoporosis or FF, personal history of FF, osteoporosis-inducing conditions, DXA and DXA's T-score, osteoporosis medication.
Results: At last 92 women were included, around and average age of 48.84 years ± 4.66, 66.3% (95% CI 56.66–75.94) of them were right treated. Among those who required medication (39 patients), in 76.47% (95% CI 63.16–89.78) of cases a treatment was prescribed, and 64.34% (95% CI 49.31–79.37) with correct adjustment according to CPG recommendations. However in those patients who no treatment should be indicated, just a 53.63% (95% CI 49.31–79.37) of adequacy was observed (no statistic difference was shown; 95% CI p = 0.2). Women who required treatment according to CPG and this was prescribed, was suitable in 84.61%. Total adequacy for osteoporosis treatment was 58.99% (95% CI 48.94–69.04).
Conclusions: We should lead our effort in order to avoid overtreat those patient without indication of osteoporosis therapy preventing drug adverse effects and improving cost-efficiency prescription. Also our goal should be increasing therapy prescription adjustment.

OSTOPOROSIS TREATMENT. INDICATION ASSESSMENT



P-312

Alterations in BMI of male immigrants from Central Asia after a short time living in Greece

Karamagkiolis S. (Larissa), Simopoulou T. (Larissa), Georgiadi E. (Larissa), Chousi P. (Larissa), Markouti E. (Larissa), Lalos V. (Larissa)

Aims and Purpose: It has been suggested that migration is associated with an elevated risk of obesity mainly due to changes in nutritional behaviour. Our study evaluated the impact of residency in Greece in the body mass index (BMI) of male immigrants from Central Asia.
Design and Methods: Thirty seven male immigrants, aged from 19 to 44 years living in Greece permanently for at least 3 years constitute the sample of the study. BMI was measured within the first month after migration and after a period of 36 months. Data were analyzed by nonparametric paired t-test (Wilcoxon matched-pairs signed-ranks test) and the two-tailed P value had been taken into consideration.
Results: In thirty-three individuals (89.2%) a significant increase in BMI was observed, while in three of them (8.1%) it remained without alteration and only in one reduced. Even though in the beginning of the study the subjects with BMI >= 25 Kg/m^2 were 3, three years later the subjects increased to eight. The most important statistical data are presenting in the following table: (table1.jpg)

Wilcoxon matched-pairs signed-ranks test: The two-tailed P value is <0.0001, considered extremely significant. Nonparametric Spearman correlation coefficient (r) = 0.9077.
Conclusions: The present study provides evidence of a rise in BMI of immigrants from Central Asia after residency in a western industrialized country, high lightening the role of nutritional behaviour in changes of body weight.

table1

	ON ARRIVAL	TWO YEARS LATER	Difference
Sample size (N)	37	37	
Mean	22.165	23.345	- 1.159
Standard Deviation (SD)	1.902	2.176	0.644
Std. Error of Mean (SEM)	0.325	0.357	0.105
Lower 95% CI	21.525	22.620	- 1.374
Upper 95% CI	22.848	24.072	- 0.944
Minimum	20.00	20.40	- 3.700
Median	21.50	20.50	- 1.200
Maximum	27.20	28.70	0.200

P-313

Evaluating the factors which affect the visit rates of patients with anxiety disorder and depression

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Aim(s) and purpose: Although it is widely recognized that anxiety disorder and depression are among the most common reasons for visit to primary health care units, it seems that these patients are not so consistent to the pre-defined appointments with their physician. The aim of this study was to investigate the parameters which affect the visit rates in this special patient group.
Design and methods: The sample of our study consisted of 117 adults who were under treatment for depression, anxiety disorder and/or panic disorder according to DSM-IV. The patients were followed up for a cohort of 9 months in order to record the visit rate and influential factors.
Results: The response ratio was 89.74% (8 exits, 4 deaths). One hundred and five individuals finally participated to the study (43 men, 62 women, mean age 57.43 ± 7.77 years). The median of visits made during the study was 5 (iqr:9). Women were more frequent visitors than men [7 vs. 4 visits (median), p <0.001]. Bivariate correlations showed that female gender (r = 0.784), educational status (r = 0.562), married vs. single (r = 0.563) and number of children (r = 0.345) were positively related with increased visit rate. On the contrary, alcohol consumption (r = –0.322), BMI (r = –0.189) and financial status (r = –0.461) did not have a significant effect.
Conclusions: It seems that the visit rate of a patient suffering from emotional disorder to a primary health care unit is a multi-dependable variable. Female gender, educational and marital status are factors that should be thoroughly assessed when initiating treatment to those patients.

P-314

Smoking habits among health care workers in PHC units in Greece

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Aim(s) and purpose: The aim of our study was to estimate the prevalence of smoking habits among health care workers (HCW) of the health centres of Vyronas (HCOV), Athens (urban setting) and Kimi (HCOK), Evia island (Rural setting) as well as to estimate the impact of health care workers smoking status on high cardiovascular risk patients in terms of patient opinions.
Design & Methods: The material of our study consisted of 42 HCW (29 general practitioners, 9 nurses and 4 social workers) of the HCOV and 25 HCW (12 general practitioners/internists, 11 nurses and 2 social workers) of the HCOK, all interviewed about their smoking habits. The questions emphasised on the following issues: if ever smokers, smoking equivalence in cigarette packs per day, duration of habit and if ever attempted or thought to quit. The possible impact of the smoking status of the HCW on patients was assessed by another interview to 278 randomised elderly patients at high cardiovascular risk, who visited the health centres from January 2007 to December 2007.
Results: The study showed that 36 out of 67 (53.7%) HCW were currently active smokers, 7 (10.4%) were ex-smokers, and 21 (31.3%) reported themselves as being passive smokers. The majority of the participants (85.1%), reported starting smoking between 15–25 years of age, 23 (63.8%) of current smokers were motivated to stop smoking, while 15 (41.7%) had already tried to quit smoking unsuccessfully. On the other arm of the study, 229 (82.4%) of the participants declared that doctors should not be smokers, since such attitude results in mistrust on behalf of the patients towards their physician, while 106 (38.1%) affronted the smoking-physician's attempts in convincing them to quit with scepticism and suspicion.
Conclusions: There is an imperative need to promote antismoking campaigns in HCW, since such a habit may negatively influence patients and result in reduced compliance to treatment by posing an ambience of uncertainty and disbelief.

P-315

Study of reasons for requesting an electrocardiogram in family medicine

Santos P. (Oporto)

Introduction: The rest electrocardiogram of 12 derivations (ECG) represents an important complementary examination in the practice of the Family Medicine.
Objective: To quantify the reasons for requesting ECG in practice of an urban Health Center and to determine their predictors.
Methodology: A cross-sectional observational study of a consecutive sample consisting by the electrocardiograms requested in the context of the diary assistance in the period between 1/03/2007 and 29/02/2008 for nine doctors of family of the Centro de Saúde de S. João, Oporto, through the application of a structuralized grate filled by doctors during the act of requesting of exam and completed by manual revision of the individual clinical processes when incomplete. A model of multinominal logistic regression for determination of predictors of request was used.
Results: 466 orders of ECG had been analyzed, corresponding to 457 patients (43.1% males) with median of ages of 57 years (range 8 to 98 years). The average of order for doctor was of 51.7. The main reasons for the solicitation of the examination had been (1) control of patients with cardiovascular risk factors (24.5%); (2) global health examination (22.1%); (3) chest pain (18.4%); (4) palpitations (9.9%); (5) Change in cardiac rhythm (7.9%); and (6) Study of syncope or dizziness (4.1%). In the model of regression adjusted for age and sex, presence of symptoms (p <0.001), prior history of cardiac or vascular illness (p <0.001), arterial hypertension (p <0.001), type 2 Diabetes Mellitus (p <0.001) and dyslipidemia (p = 0.009) had been identified as significant predictors of requesting.
Conclusions: The solicitation of the ECG is strongly conditioned by cardiac or vascular illness, confirmed or suspected, and for the cardiovascular risk factors. However, about one fifth of requests were made for health examination of individuals without risk factors or known illness.
Key-words: Electrocardiography, Family Medicine; Clinical Practice

P-316

Depression as a cause for temporary unableness for work

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In Serbia, the assessment of temporary unableness for work longer than 30 days is carried out by a panel of three doctors specializing in different fields to the request of a general practitioner and it is financed by the National Health Institute.
The aim: To estimate the frequency of F32 and F33 diagnosis made by the panel of doctors of the Palilula Municipality in Belgrade.
Method: A retrospective, quantitative and descriptive assessment of the patients' medical records and the protocol carried out by the panel of doctors of the Palilula Municipality in 2008.
Results and comment: in 2008, the panel have made an assessment of 12 838 patients' medical condition. 1 380 (10.7%) patients were diagnosed with mental disorders, and 536 (4.1%) patients had F32 and F33 diagnosis. 380 (70.9%) of the patients were female, and 156 (29.1%) were male. Their unableness for work amounts to 52 945 days with an average of 98,7 days per patient that were hospitalised or treated in an out-patient department. That makes 1, 2% of all the unableness for work in Serbia in 2008. Patients' average age is 51.3 years. 6 patients had an acute form of depression with recorded suicidal attempts. 5 patients were diagnosed with complete unableness for work.
Conclusion: General practitioners should be allowed to prescribe antidepressants which would enable a faster beginning of the treatment and shorter period of patient's unableness for work. Neuropsychiatrists would therefore be able to devote more time to treating the moderate and acute forms of depression, and to psychotherapeutical care, for which they currently do not have enough time.

P-317

Insomnia and hypertension

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Aim and purpose: To find the relation between insomnia and hypertension (HTA) according to sex and age.
Design and methods: Cross-sectional study. The sample was formed by 100 people older than 18 years who are visited in our Primary Care Center. The variables were obtained by anonymous inquiry. These were: hypertension, insomnia, age and sex.
Results: The sample was formed by 38% men and 62% of women with average age of 52 ± 18 years. We obtained two groups: 36% had high blood pressure (hypertensive group), and 41% had insomnia (insomnia group). Average age in hypertensive group was 66 ± 13 years and in insomnia group 56 ± 16 years. Prevalence of insomnia in hypertensive group was 64% (CI 47–80%) and in non-hypertensive was 28% (CI 17–39%). The 78% of hypertensive and insomnia group and the 61% of non-hypertensive and insomnia group were women. The 70% of hypertensive and insomnia group was older than 65 years and the grate part of non-hypertensive and insomnia group was between 40–65 years (61%).
Conclusions: The prevalence of insomnia in hypertensive group was bigger than non-hypertensive. Women had more insomnia than men (independently of hypertension levels). The older than 65 years who were in the group of hypertension had more prevalence of insomnia; and in non-hypertensive group the grate part of them were between 40–65 years.

P-318

Evolution of screening, follow-up and control of hypertension in immigrant and native patients (2000–2008)

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Aims: To evaluate if differences exist in screening, follow-up and control of hypertension (HT) between immigrants (IM) and native patients (NA) and to compare these results with those of 2005.
Methods: Cross-sectional descriptive study (2008). Results are compared with those of 2005.
Population: assigned and attended people in a Primary Care Center from 2005 to 2008 of 15 years or more. The previous study was from 2000 to 2005.
Patients without origin's registration were excluded.
Variables included:
– origin country
– age, sex
– cardiovascular risk factors
– HT screening
– initial and final systolic and diastolic blood pressure
– annual blood test and biennal EKG
– prescribed drugs (therapeutic group)
The results between IN and AU in the same period were compared using Chi-Square test for discreet qualitative and quantitative variables and student test for continuous variables.
Results: 20841 patients were attended in 2005–2008, 13586 of them were included due to have registered the origin country; 39.5% of them were IN. Among 3138 hypertensive patients 2912 were included. In the first period 8420 patients were included of 21055 attended patients. 37.2% were IN. 12.6% had HT.
Population characteristics: see table 1. *Screening of HT:* There was 94,6% of HT screening among NA and 94.3% among IM ($p < 0.05$) in 2005. In 2008, these percentages were 71.2% and 76.7% respectively ($p < 0.05$). *Follow-up and treatment:* See table 2. *Control.* In 2005, 39.2% of NA and 25.0% of IM achieved a correct control ($p < 0.05$), differences disappeared when fitting by age and sex. In 2008 it was 49.7% and 46.7% ($p >= 0.05$).
Conclusions: An increase of follow-up tests in hypertensive IM is observed, especially EKG, disappearing significant differences. The proportion of hypertensive patients without treatment has decreased, becoming similar between NA and IM and has increased clearly those that take two or more hypertensive drugs. Control has increased clearly, becoming similar in both groups.

Table 1

POPULATION CHARACTERISTICS						
	2005			2008		
	NATIVE	IMMIGRANTS	p	NATIVE	IMMIGRANTS	p
Percentage of women	53.9%	46.5%	<0.05	53.2%	47.1%	<0.05
Average age	50.8% (50.4-51.2)	30.5% (30.2-30.8)	<0.05	54.4% (53.9-54.8)	37.3% (36.9-37.6)	<0.05
Hypertension	14.7%	4.2%	<0.05	30.5%	7.6%	<0.05

Table 2

FOLLOW-UP AND TREATMENT						
	2005			2008		
	NATIVE	IMMIGRANTS	p	NATIVE	IMMIGRANTS	p
Annual blood test	66.8%	69.1%	≥0.05	97.7%	99.9%	≥0.05
Biennal EKG	40.3%	20.8%	<0.05	65.6%	62.1%	≥0.05
No drugs	29.9%	38.6%	<0.05	19.6%	19.6%	≥0.05
One drug	31.5	33.3%	≥0.05	28.1%	33.5%	<0.05
Two or more drugs	38.7%	28.0%	<0.05	52.3%	47.0%	<0.05

P-319

Gram-negatives and urinary tract infections in our health area

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Objective: To know the antimicrobial's sensibility and resistances for adapt the empirical treatments that we execute every day in our primary care medical office.
Methods: 21% of the analyzed urine samples during two years were positive. 74% of them were coming from Primary Care. We realize a descriptive analysis of 5918 positive urine samples; we sent these samples to the Salamanca University Hospital Microbiology and Parasitology Lab from Primary Care Health Center. They identified the most frequent pathogenic and the antibiograms to determine the different antimicrobial's sensibility and resistances.
Results: In 90.87% it isolates gram-negative bacilli and Enterococcus faecalis. The most frequent E. coli 73.9%, followed by Klebsiella 8.6%, Proteus 8.6%, Enterococcus faecalis 3.4%. The global antibiotic sensibility is >90%: Meropenem, amikacine; 80%: Amox-clav, Cefoxitina, Tobramicine, Fosfomicine, nitrofurantoine, Gentamicine. By Pathogenic, E. coli and Proteus sensibility is 93% amox-clav; E coli sensitive to fosfomicine 96.67%, cefuroxime 81% and resistant to ciprofloxacino 32.9% and clotrimoxazol 45.8%. Klebsiella is sensitive too, except fosfomicine, cefuroxime and clotrimox. Proteus high resistance to amox, clotrimoxazol, fosfomicine and low resistance to amox.clav, cefuroxime and ciproflox.
Conclusions: The gram-negative bacilli, specially E. coli, is the most frequent uropathogen. The isolated stocks presents low sensibility to amox, cefalotine, ticarciline, nalidixic acid and clotrimox. The resistance is higher to 25% for ciproflox, cefurox, and colistine. Good treatment option is amox-clav and fosfomicine with high sensibility percentages. Comparing the sensibility Salamanca-Spain's pathogenic; it's observed frequency and sensibility, and shows similar values but more resistance to ciproflox 32.9% – 22.8% and clotrimox 45.88% – 30.8%, and less resistance foir amox 62.19% – 68.2% and amox-clav 6.32%–8.2%.

P-320

Follow-up and evaluation of early diagnosis colorectal cancer program in primary care

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Objective: Evaluate an early diagnosis of colorectal cancer (EDCC) program in a primary care center and its referral to hospital.
Design: Retrospective study. Setting: Urban health center. Allocated population: 32000 inhabitants.
Subjects: All patients included in an EDCC program and referred for colonoscopy by primary care physicians from January to December 2008. We review computerized medical history OMI-AP-database (Primary Care Center) and SAP-database (Hospital).
SPSS 14.0 statistical software was used.
Measurements: Age, sex, time between patient-request by primary care and colonoscopy practice at hospital, gastrointestinal symptoms, endoscopic findings, familiar history of colorectal cancer, colorectal cancer staging.
Results: The study group included 106 patients (56.6% female) and mean age was 64.82 years ±15.7. Time delay from patient-request until colonoscopy was 13.87 days ± 15.89. Indication for colonoscopy were change in bowel habits (61.32%), rectal bleeding (40.56%), anaemia (21.69%) and abdominal pain (14.15%). Thirteen patients (12.3%) had family history of colorectal cancer. Colonoscopies results were normal in 56 (52.83%), 29 (27.35%) hemorrhoids, 13 (12.26%) adenomatous polyps and 9 (8.49%) were malignant neoplasm. Mean age of diagnosis of colorectal cancer were 70.22 years ± 14.28. Alarm

features for colorectal cancer were rectal bleeding (6/9) and change in bowel habit (4/9). Metastatic colorectal cancer were in 2/9 patients.
Conclusion: EDCC program detect an important percentage of cancer, value that it is over the mean in the literature. Rectal bleeding and changes in bowel habits were the most frequently symptoms.

P-321

Complexity of glycemic control of diabetic patients in primary care in Thailand

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Aim and purpose: To evaluate the quality of glycemic control and related factors in patients with type 2 diabetes in primary care units in Thailand.
Design and Methods: Clinical information of diabetic patients in 70 primary care units in general hospitals, community hospitals and health care centers in Thailand in a cross-sectional survey was used. Blood samples were obtained for measurement of HbA1c, LDL-C, HDL-C, and triglyceride. Percentages of poor glycemic control (HbA1c >= 7%) and dyslipidemia were calculated across settings. Multiple logistic regression was used to examine clinical risk factors with poor glycemic control.
Results: A total of 4162 patients were included. The proportions of patients with HbA1c >= 7%, hypertension and abdominal obesity were 62.1%, 36.3% and 54.1% respectively. The prevalence of dyslipidemia, including those with LDL-C >= 100 mg/dL (73.3%) or triglyceride >= 150 mg/dL (57.0%), or low HDL-C (<40 mg/dL in men and < 50 mg/dL in women) (56.6%), was 77.6%. The odds of poor control were higher in community hospitals (adjusted OR, 1.4, 95% CI 1.01, 1.8) and health care centers (1.3, 95% CI 1.0, 1.7) compared to general hospitals where routine laboratory investigations were more available. Independent risk factors associated with poor glycemic control (HbA1c >= 7%) included duration of disease >= 5 years (adjusted OR 1.9, 95%CI 1.6, 2.2), triglyceride >= 150 mg/dL (1.5, 95% CI 1.3, 1.8) and LDL-C >= 160 mg/dL (1.3, 95%CI 1.03, 1.7). However, hypertension, low HDL-C and obesity appear to be not significantly associated with glycemic control.
Conclusion: The high proportions of suboptimal glycemic control and other metabolic factors across settings underscore the need to improve the diabetes management in primary care.

P-322

Socio-demographic factors related with postpartum depression

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Objective: To determine the socio-demographic factors related with postpartum depression.
Material and Method: A total of 141 women in 1-24th week of postpartum period admitted to the out-patient clinics of Ankara Training and Research Hospital Gynecology and Obstetrics included to the study. Edinburg Postpartum Depression Scale (EPDS) and a questionnaire that determined the socio-demographic, obstetric and medical characteristics of mothers were performed.
Results: The incidence of postpartum depression was determined as %35.5. Postpartum depression was seen more often among mothers >=25 years of age. If a person helps the mother tolook after baby, if it was an unwilling pregnancy postpartum depression was increased 2.2 and 5.8 fold, respectively. Having history of depression, having depression at previous pregnancy 5.6 and 12.7 fold increased the postpartum depression, respectively. It was statistically not significant but the probability of postpartum depression was high in mothers whose monthly income 500 TL and lower, who were between postpartum 3–6 months, married for 5 years and more, had caesarean section, had preterm labor, stayed in hospital at the last pregnancy, had a sick baby at pregnancy, smoked during pregnancy, did not breast feed, had 3 or more children, had a history of abortion, still born and voluntary abortion. No statistical significant relation was found between postpartum depression and mother's age, working status, educational status, health insurance, marriage with a relative.
Conclusion: Postpartum depression can not be diagnosed because of the symptoms appear late and mothers do not express their problems. Health staff who give health care to the mothers during pregnancy and at postpartum period must be educated about the risk factors and the symptoms of this disorder and mothers who have risk factors for postpartum depression should be followed closer.

P-323

Atrial fibrillation medical care in a rural primary care unit

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Aims and purpose: To investigate the GPs' medical practice in patients with atrial fibrillation (AF) in a rural primary care unit and to assess the personal health perception of these patients.
Design and Methods: During a four month period, 138 patients were diagnosed with first-detected, persistent or permanent AF (70 males, 68 females; mean age = 68.36; sd = 7.88). Demographics, habits, background regarding related chronic diseases, medicine treatment and the General Health Questionnaire – 12 (GHQ-12) to evaluate the personal health perception, were queried. Physical examination, auscultation and ECG were also performed. Finally, lab analysis or referrals were conducted when appropriate.
Results: In 105 patients with AF (76.1%), a proper interpretation of the ECG was not made by the GP and for 84 of them (80.0%) a referral was requested (chi-square = 14.78, p <0.001). 106 patients (75.8%) were diabetics, while anemia and valve defects seemed to be the most important causes of the arrhythmia for 17 and 28 patients respectively. 100 patients were receiving benzodiazepines (BZN), and their use seemed to be associated with first-detected AF (chi-square = 6.61, p = 0.038). First-detected AF patients referring anxiety symptoms who received BZNs had a significantly worse GHQ score (U = 133.00, p = 0.003). Females with permanent AF seemed to have a poorer GHQ score than males (U = 63.50, p = 0.002). From 35 patients with permanent AF, 11 were not in antithrombotic therapy and 6 did not take any antiarrhythmic or beta-blocker.
Conclusion: Our findings suggest that unsuccessful diagnosis and inappropriate therapy may be frequent in patients with AF examined by GPs. Further studies could focus on assessing the extent of this case in rural areas.

P-324

Acyclovir and chickenpox in healthy children: what does evidence have to say?

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Aims and Purpose: Chickenpox is a common benign disease that affects mostly children. Although being a self-limited disease, it is highly contagious and can have complications in 5–10% of all affected individuals. Acyclovir can be used in chickenpox treatment. The aim of this study is to review the existing evidence about the benefits (symptoms, duration and complications) of using acyclovir in varicela treatment in immunocompetent children.
Design and Methods: Search of systematic reviews (SR), meta-analysis (MA), randomized controlled trials (RCT) and guidelines (G), in Medline, sites of evidence based medicine, Índex Revistas Médicas Portuguesas and bibliographic references of the selected articles, using the key-words: chickenpox and acyclovir. Strength of recommendation taxonomy (SORT) was used to present the results.
Results: It was found 105 articles from which 11 were selected: two SR, three RCT and six G. SR and RCT analysis show that the use of oral acyclovir in chickenpox treatment is associated with a reduction of the number of days of fever and the maximum number of lesions. These are small effects and are only verified when the medication is started during the first 24h of rash. There are no clinically important differences in chickenpox complications between acyclovir and placebo treatment. Consequently, the use of oral acyclovir is not routinely recommended in immunocompetent children (Recommendation A). Guidelines are consistent with this recommendation.
Conclusions: Beyond the modest effects of acyclovir in symptoms improvement, the need of early administration of this medication and its dosage difficult its use. Further studies are needed to evaluate acyclovir cost-benefit relation, and safety and efficacy of other antivirals in children.
Keywords: acyclovir, chickenpox, children

P-325

Indication for proton pump inhibitor (PPI) therapy is often poorly documented in primary healthcare (PC) medical records in Sweden

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Aims: PPI costs form a considerable part of the total medicine cost in PC. Concerns have been raised regarding inappropriate prescription based on diagnosis or patient type. The aim of this study was to examine whether evidence supporting this concern exist.

Methods: In all, 18 Swedish PC centers conducted a medical records' review, as a sub-analysis of the RANGE study on management of GERD patients in primary health care. From April-July 2007, 2028 patients were identified as receiving PPIs, of which 540 (27%) had an unclear diagnosis for treatment (Tx). Of these, appr. 300 patients (0-30 per clinic) were asked to complete various questionnaires on health status and gastrointestinal symptoms (general demographic questions, EQ-5D, GSRS, GERD Impact Scale).
Results: In total, 171 patients with unclear diagnosis for PPI Tx completed the questionnaires (61% women; mean age 62 years; 54% retired; 38% employed). When asked to specify reasons for taking PPI, 69% had an acid-related condition that motivated PPI Tx, i.e. GERD symptoms (47%), history of peptic ulcer disease (8%) and other approved indications (16%). Patients in this sub-study assessed their symptoms as being more severe, showed a lower health-related quality of life, were generally older and had longer PPI Tx history (8.5 vs 6 years) compared with GERD patients in the main study. 129 (75%) patients stated the necessity of PPI to manage their symptoms. An estimation for the entire PPI population (n = 2028) showed that 9% (95% CI: 7.75–10.25) were receiving PPIs without clear evidence of an acid-related condition.
Discussion: Despite a comparatively large non-response rate, prescription of PPIs without a specific acid-related indication seems to be a relatively small problem in PC. Most PPI-treated patients seem to have an acid-related cause for treatment, however often not apparent in the medical records.

P-326

24 hour ambulatory blood pressure for the management of antihypertensive treatment: a randomized controlled trial

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The aim of this study was to assess whether the use of 24-hour blood pressure (BP) measurement in the management of antihypertensive therapy improves BP in patients with sustained hypertension. Patients with sustained hypertension (office BP >=140/90 mm Hg, and 24-hour systolic BP >=130/80 mm Hg) were randomly assigned to a strategy using 24-hour BP to manage antihypertensive treatment (target <130/80 mm Hg) or to a standard strategy using office BP (target <140/90 mm Hg). The primary endpoint was change in 24-hour systolic BP at 1 year of follow-up. We included 136 patients in the primary analysis. After one year of follow-up, the change in 24-hour systolic BP was significantly greater in the ambulatory BP group compared to the office BP group (mean difference [95% confidence interval] –3.6 [–7.0, –0.3], p = 0.03). Intention to treat analysis revealed essentially unchanged results. The mean number of antihypertensive drugs per participant at 1 year of follow-up was 1.76 ± 1.1 and 1.95 ± 0.9 in the ambulatory and office BP group, respectively (p = 0.049). The benefit of ambulatory BP monitoring was mainly seen in patients with previously known hypertension (mean difference –7.2 (–11.6, –2.8), p = 0.002), but not in those with newly detected hypertension (mean difference 0.2 [–4.9, 5.4], p = 0.93).
In conclusion, using 24-hour BP for the management of antihypertensive therapy in patients with sustained hypertension leads to a greater BP reduction compared to a standard treatment strategy using office BP, although fewer antihypertensive drugs were used in the ambulatory BP group.

P-327

Efficacy of an isotonic small droplet size nebulized DSCG on asthma control in children

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Background: In current therapeutic guidelines disodium cromoglycate (DSCG) is only regarded as an alternative controller treatment for children with mild persistent asthma and its use in childhood asthma management is in steep decline. The overall clinical efficacy assessment of DSCG is hampered by a major contribution of early clinical trial conduction with limited sample size and suboptimal design and unknown inhaler device performance.
Aims: The aim of the randomized open labelled study was to investigate the efficacy of an aqueous isotonic DSCG solution (IsoCrom®) on asthma control in children aged 6 to 16 years using a customized perforated vibrating membrane nebulizer (eFlow®) generating droplets with a MMAD of about 3.3 µm.
Methods: 28 children (aged 11.9 2.9 yrs; 12 girls). with stable atopic asthma from a private pediatric practice were included in the study. Children are randomized to either inhaled DSCG (IsoCrom) at a dose of 60 mg per day, administered in three inhalations of 2 mls using a customized eFlow® electronic nebulizer or inhaled corticosteroids (ICS) without dose adjustments administered in two inhalations using a pMDI over a period of six months. Fractional exhaled nitric oxide (FeNO) and symptom scores were assessed monthly, whereas clinical examination, lung function, blood eosinophil counts and serum cortisol level were measured at baseline, 3 and 6 months.
Results: Baseline characteristics were similar in both groups. Symptom scores, lung function and serum cortisol levels remained unchanged in both groups. FeNO levels were reduced in the ICS group but not in the DNCG group. Blood eosinophil counts were lower in the DSCG group at 3 and 6 month compared to baseline.
Discussion: Treatment with an aqueous isotonic 1% DSCG solution (IsoCrom®) inhaled via a small droplet size (MMAD ~3.3 µm) eFlow® electronic nebulizer has similar effects on asthma control, symptoms, lung function but not on FeNO levels as compared to ICS in children with allergic asthma.The isotonic DSCG solution (IsoCrom 20 mg/2 ml) was well tolerated in all children when administered via eFlow®.

P-328

Frequency and clinical characteristics of those suffering from arterial hypertension

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Arterial hypertension is the primary risk factor for cardiovascular diseases and the leading source of morbidity and mortality throughout the world.About 25% of grown up population suffers from hypertension.
Aim: Of this research was to examine the frequency and the clinical characteristics of those who suffer from arterial hypertension.
Method: The work represents a retrospective approach to the data analysis on the patients suffering from arterial hypertension who are being treated in an ambulance by a chosen doctor in the Health center of Krusevac.Clinical evaluation of the patients with hypertension consisted in evaluating whether it is about a primary or a secondary hypertension, presence or absence of some damage to the object organs and other risk factors for cardiovascular diseases.
Results: The research involved a group of 250 patients: 85 (34%) men and 165 (66%) women, at average age of 60.26 ± 12.63. Arterial hypertension was recorded in 145 (58%) patients, in 99 (68.28%) women and 46 (31.72%) men.The most often recorded was the essential hypertension of second degree,in 71 (48.96%) patients, while the hypertension of first degree was recorded in 65 (44.83%), and the hypertension of third degree in 9 (6.21%) patients. Enhanced values of blood lipid had 70 (48.72%) patients, and obesity was recorded in 27 (18.62%) patients.Most associated diseases with hypertension were:diabetes mellitus,recorded in 28 (19.3%), angina pectoris in 17 (11.72%), myocardial infarction in 6 (4.14%), heart insufficiency in 8 (5.52%), chronicle kidney insufficiency in 3 (2.07%) and cerebrovascular disease in 9 (6.20%) patients.
Conclusion: The results here represented show that the hypertension occurs in high percentage in a chosen population.The consequence of inadequate treatment of hypertension and other risk factors is co morbidity, above all, the cardiovascular one.

P-329

Detection of chronic kidney disease

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In persons older than 60 years of age, approximately 17% have an estimated GFR of less than 60 ml/min per 1.73 m^2. Fifty nine (21 male, 38 female) patients,not known to have kidney disease, nonsmokers, suffering from hypertenion lasting for more than 5 years, treated by an angiotensin-converting enzyme (ACE) or an angiotensin II-receptor blockers (ARB) were included in a cross-sectional, observational study. Glomerular filtration rate (GFR)represents the bestoverall index ofkidney function.GFR was estimated using the simplified Modification of Diet in Renal Disease study equation (eGFR). Patients (mean age 69.27 ± 7.95) older than 60 years of age were in the majority (84.7%). Body mass index (mean BMI 29.33 ± 5.03) indicated that 78% of all were overweight and 45.8% of all patients were obesy. Systolic blood pressure (mean systolic BP 140.25 ± 16.54) of more than 140 mm Hg was found in 37.3% and dyastlic BP (mean dyastolic BP 82.45 ± 9.07) of more than 80 mm Hg was found in 40.7% of patients. eGFR (mean 57.69 ± 15.97) of less than 60 ml/min per 1.73 m^2 was foud in 57.6% ofpatients. The Pearson correlation coefficient between patients age and theBMI (p = –0.452 ± 0.01), patients age and dyastolic BP (p = –0.364 ± 0.01), patients age and eGFR (p = –0.309 ± 0.05) were determined. Impaired kidney functionwas almost 3.4 times higher thaninguidelines. Elderly patients should be screenedearlier.

P-330

Prevalence and associated factors of microalbuminuria in non-diabetic hypertensive patients in the community of Koper

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Background: Microalbuminuria (MAU) is an independent marker of increased risk of cardiovascular (CV) and renal morbidity and mortality in subjects with diabetes, hypertension and also in general population. It is defined as urinary albumin excretion (UAE) 30–300 mg/day and is recognized as a marker of renal endothelial dysfunction. With the present study we wish to assess the prevalence of MAU among hypertensive subjects and evaluate the routine measurement of MAU for successful treatment of hypertension.
Methods: We have a random sample of 100 hypertensive subjects from GP's practice. Subjects with diabetes, renal disease, trauma or recent operation were excluded. UAE was measured with the Micral-Test. History was taken, blood pressure, pulse rate and UAE were measured at the first and at the follow-up visit 4 to 6 months later. Regarding the presence of MAU the doctor suggested therapy modification.
Results: Among 100 hypertensive subjects the prevalence of MAU was 38%. Hypertensive subjects with MAU had a 10 mm Hg higher systolic blood pressure (p 0.002) and a 6 mm Hg higher diastolic blood pressure (p 0.010). After aggressive therapeutic intervention there were an additional 12% of subjects with normal systolic blood pressure and 14.5% of subjects with normal diastolic blood pressure at the follow-up visit. In the present study we did not find any relationship between MAU and age, sex, BMI, duration of hypertension and other CVD. There were 38 subjects with MAU at the first visit, among those the value of MAU was 20 mg/l in 68.4% (26 subjects) and 50 mg/l in 31.6% (12 subjects). After 6 months treatment there were 21% of subjects with MAU value of 20 mg/l (8 subjects) and 5,3% with MAU value of 50 mg/l (2 subjects). At the follow-up visit there were 10% of hypertonic subjects with MAU.
Conclusions: Aggressive treatment of hypertension lowers the prevalence and value of MAU.

P-331

The addition of manidipine reduces both the need for insulinization and the insulin requirements in hypertensive patients with type 2 diabetes

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Aims and Purpose: The AMANDHA trial showed that the addition of Manidipine 20 mg vs. Amlodipine 10 mg in type 2 diabetic patients with uncontrolled hypertension and microalbuminuria in spite of full-dose treatment with an angiotensin-renin system blocker resulted in a greater reduction of albumin excretion while blood pressure control was similar. However, the insulin sensitivity was not estimated. We undertook a post-hoc analysis of the insulin dosages received by the patients.
Design and methods: 91 such patients were recruited, of which 74 completed a 2 year follow-up, maintaining full-dose blockade or the renin-angiotensin system with randomized addition of Manidipine 20 mg vs. Amlodipine 10 (PROBE design). The study protocol did not specify the hypoglycemic treatment, so in all cases standard clinical procedures were followed. The data on insulin treatment were obtained from the clinical records.
Results: The baseline HbA1c was 8.1 + 1.1% (Manidipine) and 8.2 + 1.0% (Amlodipine), and after 2 years 7.6 + 1.3% and 7.9% + 0.9% respectively (not significant). At baseline, 72.1% of the patients on Manidipine and 73.3% on Amlodipine were on insulin treatment; insulin dosages were 0.47 + 0.13 u/kg (Manidipine) and 0.44 + 0.16 u/kg (Amlodipine); after 2 years they were 0.36 + 0.11 u/kg and 0.51 + 0.17 u/kg, respectively (p = 0.031 Manidipine vs. baseline; p = 0.012 Manidipine vs. Amlodipine). Of the patients not on insulin treatment at baseline, 5.9% vs. 37.5% were on insulin after two years, respectively (p = 0.04, Fisher's exact test).
Conclusions: Treatment with Manidipine 20 mg for 2 years in a group of hypertensive type 2 diabetic patients with incipient nephropathy was associated with a significant reduction of 23.4% in the insulin requirements of the patients already on this treatment, while with Amlodipine they increased by 15.9%. On patients not yet on insulin treatment at baseline, the probability of requiring it was significantly hjgher (about sixfold) with Amlodipine.

P-332

Screening for peripheral arterial disease by means of the ankle-brachial index in type 2 diabetic patients in primary care

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Background: Peripheral arterial disease (PAD) has been demonstrated to be prevalent in Type 2 diabetic patients. Owing to the association with cardiovascular disease it is very important to screen these patients.
Aim: To evaluate the prevalence of PAD with the ankle-brachial index (ABI) among Type 2 diabetic patients in primary care.
Design and methods: Between March and May 2008 all Type 2 diabetic patients of three family doctors of the primary health center (except those already diagnosed of PAD and those with home cares) were quoted to mesure the ABI with a portable Doppler continuos-wave instrument. Additional assessments: years of evolution of the diabetes, their treatment, smoking, medication for hipertension and lipid disorders, complications of the diabetes, glycosylated haemoglobin in last year and the WHO questionnaire on intermittent claudication.
Results: A total of 202 diabetic patients were included, 54.2% males, mean age 65.3 years, the median disease duration was 6.8 years (range 1–35), treatment: only diet 29.1%, oral antidiabetic medication 52.2%, oral antidiabetic medication and insulin 13.3%, only insulin 4.9%, smokers 16.7%, exsmokers 31%, treatment with platelet aggregation inhibitorsor anticoagulantsdrugs 37.4%, antilipemic drugs 63.1% and antihypertensive drugs 67.5%. Complications: kidney disease 17.7%, retinopathy10.3%. Glycosylated haemoglobin <7: 57.6%. Claudication was present in 21 patients. ABI was positive in 13.3%, negative in 69.5%, and inconclusive in 17.2% . Patients with >5 years of evolution had more PAD (24.7% to 8.8%, p <0.005). The prevalence of PAD before our clinical trialwas 4.4% and "now" is 13.8%.
Conclusions: ABI is an easy screening method and a not invasive and cheaper way to make an early diagnosisof peripheral arterial disease in diabetic patients.

P-333

Changes in serum beta-endorphin levels during smoking cessation with 2 Hz electroacupuncture and nicotine patch

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Aims and purpose: The aim of this study is to investigate the effects of 2 Hz frequency electro acupuncture and nicotine patch therapy on smoking cessation and to perform changes in serum beta endorphin levels with smoking cessation.Design and Methods: This study consisted of 42 volunteer patients applying outpatient family medicine clinic at Selcuk University Meram Medical Faculty. Patients were divided in two groups as: 1- Electroacupuncture (EA) group (n = 21) and 2) Nicotine patch group (n = 21). The serum beta endorphin levels were measured before and after acupuncture and nicotine patch therapy.
Results: In the study group, there were 42 participants between the ages of 18–63 years (mean = 42.05 ± 11.44), 73.8% (n = 31) were male and 26.2% (n = 11) female and 81.0% (n = 34) were married. The level of nicotine addiction determined using the Fagerstrom score was regarded as very high in 35.7%, 31.0% low and 21.4% was moderate degree respectively. The mean value of beta endorphin was 0.16 ± 0.04 pg/ml before acupuncture and 0.24 ± 0.08 pg/ml after acupuncture, respectively (p = 0.008). The mean value of beta endorphin was 0.18 ± 0.07 pg/ml before nicotine patch and 0.20 ± 0.09 pg/ml after nicotine patch, respectively (p = 0.877). When we examined the serum beta endorphin levels in two groups, we found that the serum beta endorphin level was statistically higher in acupuncture group than nicotine patch group (X2 = 6.289, p = 0.012).
Conclusion: We can expect that by applying 2Hz EA, serum beta endorphin level can be kept high and thus prevents the signs of deprivation. We particularly observed that there is a strong relationship between EA and the existence of beta endorphin in brain tissues. We have thought that this high level of beta endorphin makes it easy to quit smoking.

P-334

Level of metabolic control among patients with diabetes mellitus type 2

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Background: The Ministry of Health of Republika Srpska (B&H) initiated this year an educational program on treating patient with Diabetes mellitus (DM) for family medicine doctors, based on the recommendations of the European Association for the Study of

Diabetes and European Society of Cardiology (2007) about the target levels of fasting blood glucose-FBG (<6.0 mmol/l), blood pressure-BP (<130/80 mm Hg), total cholesterol-TCH (<4.5 mmol/l), body mass index-BMI (<25 kg/m^2), and waist circumference-WC (females <80, males <94 cm) for patients with DM Type 2.
Aim: Examine how close family medicine DM Type 2 patients are close to reaching the recommendations.
Method: 91 patients with DM Type 2 that had all the parameters recorded of two family medicine teams in Doboj primary health care facility were taken as the sample.
Results: Out of 91 patients with DM (type 2) 33 were male (36.3%) and 58 female (63.7%); 18 (19.8%) were insulin dependent and 73 (80.2%) insulin independent; FBG <6.0 were 4 patients (4.4%); BP <130/80 were 22 patients (24.2%); TCH <4.5 were 21 patients (23.1%); BMI <25 were 22 patients (24.2%); WC for females <80 were 4 patients (6.9%) and for males <94 were 8 patients (24.2%).
Conclusion: These results show that the values of the measured parameters of DM Type 2 patients are far from the recommended values. There is an obvious need for family medicine doctors to invest more in patient education on non-pharmacological lifestyle therapy in order to improve metabolic and blood pressure control.

P-335

The most common diseases of elderly patients in family medicine

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Aim: To identify the most common diseases of the elderly people in the family medicine team in order to make plan of lessons for continuous medical education (CME).
Design and Method: A retrospective, descriptive study on a random sample of 109 patients over 65 years of age, 60% female and 40% male. The relevant data were taken from the patient's medical files, in one family medicine team of outpatient clinic in Sarajevo city, in the period January-March 2007. We analyzed the presence of following diseases: hypertension, diabetes mellitus, myocardial infarction, osteomuscular diseases, psychiatric disorders and cancer. Additionally we analyzed age and smoking status.
Results: Average age of subjects is 71,3 (SD 3.95), 76% age group 65–74 years, 2% of patients are over 80 years of age. 28% of the patients are smokers and 72% non smokers and ex smokers. Diagnosis of Hypertension have 77.9% of patients, osteomuscular diseases 32.9%; psychiatric diseases 19.2%, Myocardial infarction 8.2% and cancer 12%. There are 29.4% of diabetics in our sample, 13.7% in women vs. 15.7% in man and it is not statistically significant difference (p >0.05).
Conclusion: The most common diseases of the elderly patients in our sample are hypertension, osteomuscular diseases, diabetes and psychiatric disorders so these illnesses need to be priorities in CME of family medicine teams.

P-336

Prevalence of cardiovascular risk factors in overweight and obese patients in a community of Belo Horizonte, Brazil

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Purpose: To assess the occurrence of risk factors in a group of patients with overweight or obesity, consulted by a family healthcare team, in an outpatient health center in Belo Horizonte, Brazil.
Methods: Forty-eight patients, previously followed medically, were assessed at a first consultation to enter the obesity and overweight follow-up protocol. Data were collected regarding: antropometric parameters (weight, height and BMI), lifestyle, smoking habits, previous diseases and laboratory tests (total cholesterol, HDL, LDL, triglycerides, fasting serum glucose). The data were analyzed to determine metabolic alterations related to obesity (Triglycerides>=150, HDL<50 for men or <40 for women, fasting glucose >=110, hypertension and smoking habit).
Results: Among the 48 patients, 6 presented with overweight, 15 with class I obesity, 14 with class II obesity, and 13 with class III obesity. None were engaged on regular physical activity. Hypertension was the most common risk factor (29 patients, 60.4%), followed by low HDL-cholesterol levels (22 patients, 45.8%). High triglyceride levels were found in 22 patients (45.8%) and elevated fasting glucose in 10 (20.8%). Seven patients were smokers (14.6%). The patients presented 0 to 5 simultaneous risk factors (mean: 2.2 ± 1.02).
Conclusions: The prevalence of metabolic abnormalities among the patients studied was high, despite previous treatment. The lack of physical activity is worrisome. The diagnosis and treatment aiming at reducing risk factors should be systematic, in order to improve lifespan and quality of life.

P-337

Osteoporosis & fragility fractures in orthopaedic patients

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Aims and Purpose: The aim of this retrospective study was to investigate upon the prevalence of osteoporosis in patients who have experienced a fragility fracture and to assess the need of intervention and treatment of the underlying osteoporosis, preventing therefore fracture recurrence.
Design and Methods: During a period of 5-years 1160 patients (220 men and 940 women), older than 70 years were studied retrospectively, recruited from the clinical registry of our clinic. Thus, 420 women and 60 men sustained a subcapital fracture of the femur, 410 women and 130 men sustained a intertrocanteric fracture of the femur, 90 women and 20 men sustained a subtrochanteric fracture of the femur and 20 women and 10 men sustained a fracture of the anatomical neck of the femur. All subcapital fractures were treated surgically performing hemiarthroplasty of the affected hip, while 40% of pertrochanteric fractures were treated by Dynamic Hip Screw and the remaining 60% were treated by Intramedullary Nailing. All patients received assisted physiotherapy, following the second post-operation day and were asked to fill in a questionnaire. It was revealed that 32% of the patients were already under anti osteoporotic therapy by the time of admission,while 68% had never undergone any sort of therapy. The overall hospitalization was 10 ± 2 days and on discharge they were addressed to an Osteoporosis Centre for evaluation of initiation and reassessment of therapy.
Results: Referring to the group of patients not receiving therapy, 40% finally undergone pharmacological treatment. Based on the incidence of the fracture, a substantial percent of patients necessitating medical assistance was effectively referred for osteoporosis care.
Conclusions: Patients are properly diagnosed, treated and referred for caregiving. To accomplish this, a dedicated coordination and full cooperation of orthopaedic surgeons and allied health care professionals is required.

P-338

Type 2 diabetes care, in an urban Greek, primary care setting

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Purpose: We wanted to describe diabetes care provided by general practitioners (including cardiovascular risk factor control) in an urban, primary care setting.
Design and methods: random 309 of the established patients with type 2 diabetes (average age, 68.2 years, 144 men and 165 women) of our pracice. Medical records were reviewed for comorbidities, additional cardiovascular risk factors, treatments and diabetes control indicators (control targets as defined by 2008 ADA recommendations).
Results: Patients had an average body mass index of 29.9. 68% of patients had concurrent arterial hypertension, 55.3% dyslipidemia and 19.4% coronary heart disease. 24% of patients have quit follow up. Mean glycosylated hemoglobin (HbA1c) level was 6.92% and 68.9 % of the patients had values <7.0%. Only 36% of the patients had adequate blood pressure control (<130/80). Mean low-density lipoprotein cholesterol (LDL-C) level was 117mg/dl and 42.6% had levels <100 mg/dl. Only 11.6% of the patients met all 3 control targets. 93.2% of patients were treated with metformin. 81.5% of patients were prescribed at least one antihypertensive medication, and from them 9 in 10 ACE inhibitor or ARB. 48.5% of patients were taking aspirin and 41% statins.
Conclusions: Whereas the achieved glycemic control is considered satisfying, simultaneous control of cardiovascular risk factors remains a considerable challenge. Actions may be necessary for tighter blood pressure and better LDL-C control.

P-339

Investigating the biochemical profile of hypertensive patients with atrial fibrillation: are there any special issues?

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Aims(s) and purpose: The increased risk of thromboembolic events in patients with atrial fibrillation (AF) is already well documented. The control of arrhythmia, hypertension and blood coagulability are very important and should bother the General Practitioner. The aim of this study was to record and investigate the biochemical profile of hypertensive patients with or without AF.

Design and methods: A random sample of 87 patients with idiopathic hypertension (mean age 58.1 ± 7.3 years, 52.9% men, mean office BP 147/85 mm Hg), having history of paroxysmal AF (PAF), without any coherent disease and a control group of 88 hypertensive patients, without history or signs of PAF, adjusted for age, sex and BP were used. Tables of random numbers were used for random allocation to the two groups. All participants had sinus rhythm during the study.
Results: No significant differences were recorded in demographics and total cholesterol, LDL and TG. However, BNP and HDL levels were significantly higher in patients with history of PAF, compared with controls (33.5 ± 8.4 vs. 19.8 ± 7.2 pg/ml. and 52m5 ± 7.9 vs. 44.4 ± 7.2 mg/d, respectively, p <0.05 for both tests). In addition, fibrinogen levels were also lower in patients with PAF (2.6 ± 0.7 vs 3.4 ± 0.8 gr/l. p <0.05), while platelet count did not differ significantly between the two groups (249.734 vs. 244234/mm^3 in controls, p = NS)
Conclusions: The results of our study are rather paradox, as it seems that patients with history of PAF showed a better lipidemic profile and lower fibrinogen levels compared with controls, something that doesn't comport with increased risk for thromboembolic events. Further study with randomized clinical trials is suggested in order to fully investigate this phenomenon.

P-340

Prevalence estimates of multimorbidity: variation by setting and the number of diseases considered

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Aim(s) and purpose: 1) To compare estimates of the prevalence of multimorbidity in the general population and in a primary care population. 2) To analyze the effect of the number of diagnoses considered for estimating multimorbidity prevalence.
Design and methods: Prevalence of multimorbidity, defined as two or more chronic diseases was estimated in subjects age 20 years and older from two separate studies: 1) a 2005 survey of 26,000 respondents randomly selected from the general population of Quebec, Canada, and 2) a 2003 study of 980 patients from 21 primary care practices in Saguenay, Quebec. The estimates were compared by age group. We estimated prevalence based on co-occurrence among seven diseases elicited in the population survey. In the primary care patients, we additionally estimated multimorbidity prevalence using an open list of chronic diseases.
Results: Prevalence of multimorbidity increased with age in both settings. Prevalence estimates were considerably higher at each age-group in primary care than in population settings: (p <0.05) 25–44 yr (2.4% vs. 17.1%); 45–64 yr (14.8% vs. 47.3%); 65–79 yr (38.6% vs. 71.8%), and; 80+ yr (48.6% vs. 90.4%). In the primary care setting, multimorbidity prevalence estimated from the seven selected diseases was lower than when estimated from an open list of diagnoses at every age-group: 20–24 yr (0% vs. 75.9%); 25–44 yr (17.1% vs. 85.9%); 45–64 yr (47.3% vs. 98.2%); 65–79 yr, (71.8% vs. 98.7%); 80+ yr (90.4% vs. 100%).
Conclusions: Estimates of multimorbidity prevalence are substantially lower in the general population than primary care settings. The number of candidate chronic diseases taken into account for estimates results in even larger differences, especially at younger ages. The reference population and estimation method must be clearly specified to accurately interpret prevalence studies on multimorbidity.

P-341

Efficiency of pharmacological treatments in chronic venous insufficiency – an evidence-based review for primary care

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Introduction: According to epidemiological studies in several countries, 26–38% of women and 10–20% of men have varicose veins, with an increasing prevalence with increased age. Chronic venous insufficiency (CVI) may also manifest itself as itching, heavy legs, night cramps, oedema, skin changes and venous leg ulcers. Due to the impact of the pathology, its pharmacological treatment is widely used in primary care, but its effects remain uncertain. The aim of this study is to access the efficiency of the most commonly used drugs in the treatment of CVI.
Methods and materials: A systematic review was performed in the databases MedLine/Pubmed, Cochrane Library, National Guideline Clearinghouse, Clinical Knowledge Summaries and sites of evidence-based medicine, between 2000 and 2008, with the MESH keywords "venous insufficiency" and "drug therapy". The inclusion criteria were the relevance of the articles and their availability. There were included 13 randomized controlled trials and 8 systematic reviews.
Results: The substances most widely used for the treatment of CVI are rutosides, hidrosmine, diosmine, calcium dobesilate, centella asiatica and aescin. Several clinical trials demonstrated that they improve venous tone and vein elasticity, diminuish signs and symptoms related to CVI and decrease leg circumferences (SORT A). Some evidence was found for benefit on skin tropic disorders and acceleration of ulcer healing (SORT A). Nevertheless, there were where no consistent data on improvement of the quality of life.
Conclusion: There is some efficacy of phlebotonics on improvement of signs and symptoms of CVI, what favours its use as a treatment option for patients who discontinue compression after a short time (SORT A). Nevertheless, there is not enough evidence to globally support its efficacy for chronic venous disease (SORT A). Due to the limitations of current evidence, there is a need for further clinical trials with greater methodological quality.

P-342

Learning from our patients – cholesterol-lowering effect of oat bran in patients with hypercholesterolemia: observations in a general practice in Switzerland

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Background: In 2002, a patient with hypercholesterolemia refused to increase the daily dose of his statine because of side-effects. After seven weeks of eating oat bran every day, total cholesterol was lowered (17%) and HDL-cholesterol increased (16%).
Aim: To observe whether the cholesterol-lowering effect of oat bran can be reproduced in other patients with high cholesterol levels.
Method: Starting in June 2006, all patients with hypercholesterolemia and need for life style changes were recommended to add oat bran to their diet, starting with 2–5, maximum 9 tablespoons, daily. All patients received a sheet with different receipts for soups, salads, dishes and desserts. Serum lipid levels were tested every 3 or 6 months in the laboratory in our general practice.
Results: Mean serum baseline/optimal oat bran diet values of 14 patients (7 women, 7 men, aged 46–81 years) were: total cholesterol 7.11/6.36 mmol/l, HDL-cholesterol 1.18/1.41 mmol/l, Chol/HDL-quotient 6.23/4.76, LDL-cholesterol 5.10/4.50 mmol/l (calculated after Friedewald) and triglycerides 2.17/1.94 mmol/l. One patient stopped the diet after a few days because of abdominal pain and constipation.
Discussion: Serum lipid levels in patients with hypercholesterolemia were improved adding oat bran to their daily diet, but 6 patients stopped oat bran diet after several months and asked for another diet or therapy.
Conclusion: Oat bran seems to be an effective measure to improve serum lipid levels in patients with hypercholesterolemia. In general practice, a diet with oat bran often fails because of the large quantity (50 g) which must be eaten daily. Additionally, there are no study results which show that a diet with oat bran reduces the risk for vasculary diseases such as statines will.

P-343

Becker's nevus – clinical presentation

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Background: Becker's nevus is a melanocytic nevus that is not present at birth but usually becomes noticable at puberty.It is an asymptomatic clinical lesion that is characterised by an area of hyperpygmentation and often hypertrychosis and slightly elevated smooth verrucose surface, most commonly on the upper back, shoulder or chest of males. Histologicaly the pigmentation is related to an increased melanin in basal cells and it has no potential for malignant degeneration. It is a cosmetic issue only and treatment is not necessary.
Objective: Our purpose was to asses this benign melanocytic nevi to be recognised by a physician.
Methods: The diagnosis was made by the collection of clinical features with data callected from the patient.
Results: We are presenting a case of a 20 years old male with the clinical presentation of a macula light brown in color that has geographic pattern with sharply demarcated borders on the upper back. The lession appeared at puberty in the age of 16 years, extended for a year or more and then remained stable. Coarse hair developed and it started to affect the patient self esteem so he used to have them cut by scissors. Finaly he even deceided to have a tatoo done on his back drawing attention to it.
Conclusion: The appearance of any melanocytic lesion should be brought to the attention of a physician, not only a dermatologist but also a pediatric and a general medical practitionar.The present stady demonstrate that the lesions are a cosmetic issue only and the treatment is not neccessary unless it starts to affect the patient self esteem. The use of Q-switched lasers might be considered in the cosmetic appearance of these lesions.

P-344

Morbidity and mortality in the region of central Serbia and the city of Nis

Veljkovic N. (Nis)

The aim of this work was to show, by using the official data of the National Bureau of Statistics, how the number of citizens changed in the previous 20 years and more, i.e. what the population growth and mortality was in the area of central Serbia, the city of Nis and its neighbors. The results show that the number of citizens in central Serbia decreased for more than 240.000 in the period between 1981 and 2007. In the District of is only, the number of people is approximately the same. The number of new-born decreased i.e. mortality rate grew bigger which causes a negative population growth rate. The causes for increased mortality are numerous and complex. The most important causes of death are cardio-vascular diseases and tumors, while the third place take injuries, both accidental and on purpose. This order of reasons has not changed for over 20 years, but it is important to mention that the number of people who died of tumors is three times bigger, while the number of those who died due to undefined pathological conditions has enlarged for 2.5 times. We can conclude that these facts are worrying for new generations and civilization in general. Ecology is an important area in the healthy living culture. Although people advance in all spheres of life, they still live in an unhealthy environment, which leads to numerous diseases and mortality. In order to prevent this, we must change the scale of things we value and prioritize our own health and the health of our nearest and dearest and health of the mankind as a whole.

P-345

Researching of polyneuropathy in case of diabetics on preventive level in an ambulatory environment

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Introduction: The diabetic neuropathy is the primary disease of the peripheral nerve fiber with basic infrastructure's breakdown of accumulating lipoprotein complex at cytoplasm of Schwan's cells.
Aim: To point out to presence of polyneuropathy in case of diabetics as a consequence of prolong effect of bad glycoregulation.
Method: The research included 28 diabetic patients who were treated in an outpatients department (part of the Health Center of Nis). During the researche we use anamnestic data about the lenth of diabetic desease and the basic neuro symptoms of polyneuropathy, with total data neuro processing and electromyography tests were included.
Result: In 9 cases there were found indicated polyneuropathic changes in patients who had the diabetes up to 5 year. In 9 cases there were found temperate polyneuropathics changes in patients that have the diabetes from 5 to 10 years. Heavy progressive changes were found in patients that have diabetes for over 10 years.
Conclusion: 1) In all the patients there were verified less or more obvious marks of the peripheral polyneuropathic. 2) Subjective discomfort is in correlation with the length of diabetic diseases. 3) Electromyography treatment shows obvious correlation of the lengthy and severity of diabetes with the level of peripheral nerves damage.

P-346

The most frequent common symptom in palliative care patients

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Background: Palliative care by definition is the medical specialty focused on relief symptoms of serious illness. Palliative care aims to relieve symptoms such as pain, shortness of breath, fatigue, constipation, nausea and vomiting , loss of appetite and difficulty sleeping.
Aim: we try to reveal common symptom for different group of patients who need palliative home care.
Method: Retrospective case study from disease history records of the home care patients at the doctor first visit. The study was conducted at palliative home care Health center New Belgrade, during one year period, from January 2008 until January 2009. Examination encompass 313 patients. The largest number of examinees both gender had cancer 281 (181 or 57, 83% males and 132 or 42.17% females) or 89.78%. Rest of the patients had respectivly: cvd 8 . chf 10, dm 7, copd 7.
Results: We discover that the most of our patient sufferin pain. We used Numeric Pain Rating Scale (0-10) for assessing quantity of pain. On the first home visit, 256 or 81.79% reported pain as major disturbing symptom. Then follow n & v 31, dispnoea 16, fatigue 4 and other 6. There were just 43 patients who reported only one symptom, usually they complain on few.
Conclusion: most powerful tool for improving quality of life of our patients Is pain treatment. Certanly we mustn't forgot other palliative care methods.

P-347

Infectious diseases in primary care: prospective study carried out over one year

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Aims and purpose: To determine the frequency and seasonal variability of subjects who attend the primary care setting with infectious diseases.
Designs and methods: An observational prospective study was set out in 2007 in which all the subjects elder than 14 yr. with infectious diseases who were attended in two surgeries were recruited. We registered all the infectious diseases detected over the whole year by means of a template with the following variables: age and gender, present diagnosis, prescription of an antibiotic or not, rapid tests used, and referral or not.
Results: Out of 12,676 visits attended over the whole year, 4,214 presented at least one infectious disease (33.2%). A total of 4,353 infections were detected with a mean age of 44.1 yr (SD: 12.1 yr). The most frequent infectious diseases observed were respiratory (2,196; 50.4%), followed by skin infections (586; 13.5%) and urinary (452; 10.4%). Themost frequent infections were acute pharyngotonsillitis (14.1%), common cold (13.2%), acute bronchitis (9.4%), urinary tract infection (9.3%), infectious enteritis (6.8%) infectious conjunctivitis (5.4%), wound/ulcer infections (4.2%) and vaginal candidiasis (3.6%). The frequency of infections ranged between 39.8% in January and 30.7% in August. The greatest seasonal variation was found with respiratory tract infections, more frequent in winter (69.2%) and less common in summer (25.1%), while skin infections accounted for 22.6% of all the infectious diseases in summer. A total of 962 patients previously took antimicrobials (22.8%). The percentage of antimicrobials took previously by patients with respiratory tract infections was greater than the percentage of antimicrobials prescribed (22.2% vs. 14.7%, respectively).
Conclusions: Infectious diseases account for one third of the visits of a GP and a half of them correspond to respiratory tract infections. There is a seasonal variation in infections, mainly for respiratory tract infections.

P-348

Albuminuria is a useful tool to detect early stages of chronic kidney disease in patients with type 2 diabetes

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Aim and purpose: To estimate the prevalence of chronic kidney disease (CKD) in patients with type 2 diabetes.
Design and methods: Design: cross-sectional study.
Setting: primary health care.
Subjects: 232 type 2 diabetic patients attending our health area who had creatinine and albuminuria levels determined.
Intervention: demographic and laboratory parameters were obtained from the Electronic Patient Record. CKD prevalence was determined based on persistent albuminuria (>30 mg/g) and decrease estimated glomerular filtration rate (GFR). The GFR was estimated using the 4-variable Modification of Diet in Renal Disease (MDRD-4) formula. The US National Kidney Foundation's Kidney Disease Outcomes Quality Initiative (K/DOQI) classification was used to define the CKD stage.
Results: Mean age was 70.2 years (SD 11,9), and 50.4% were woman. The prevalence of CKD stages 3 to 5 (GFR <60 ml/min/ 1.73 m^2) was 26.72%. Specifically the prevalence for each stage of CKD was 23.27% for stage 3; 3.02% for stage 4; and 0.43% for stage 5. The prevalence for early stages of CKD (1-2), quantified using albuminuria, was 11.44%. CKD stages 3-5 were significantly associated with older age ($p < 0.001$).
Conclusions: The high prevalence of CKD observed in patients diagnosed with type 2 diabetes was similar to what is found in other western countries. Albuminuria is a useful tool to detect early stages of CKD.

P-349

Statins treatment in patients with type 2 diabetes mellitus

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Introduction: Type II Diabetes Mellitus (DM) is a global worldwide problem not only because of the expressive increase of prevalence, but the cardio-vascular complications, too. Diabetic patients have 2–4 times higher risk of CAD development, the reason for which 60% of diabetic patients die. Recent studies proved that statins treatment in Type II DM singificantly decreases frequency of major cardio-vascular diseases.
Aim: Examine the statins application in patients with Type II DM.

Methods: The study was conducted at family practices within Banja Luka Dom Zdravlja in the period 15th Sept – 15th Nov 2008. It consisted of surveying health files of Type II DM patients. Health files of Type II DM patients who had been treated, were used for analysis.
Results: The study included 232 Type II DM patients: 76 (32.76%) patients suffered from insulin-dependent and 156 (67.24%) from noninsulin-dependent DM. The analysed group consised of 80 (34.48%) female patients, and 152 (65.52%) male patients; 88 patients (37.93%) were under 65 and 144 (62.07%) over 65. Increased cholesterol values of over 6.5 mmol/L were found in 92 (39.65%) patients (36 insulin-dependent and 56 noninsulin-dependent), and cholesterol risk values between 5.0–6.5 mmol/L were found in 108 (46.55%) patients (28 insulin-dependent and 80 noninsulin-dependent). In the examined group, 64 (27.58%) diabetic patients were using statins (20 insulin-dependent and 44 noninsulin-dependent).
Conclusion/Discussion: In the analysed group, 200 (86.20%) patients have increased cholesterol values or at risk, while only 64 (27.58%) are on statins treatment. Statins application in the analysed patients' group is insufficient, and they are used mainly by the patients with extremely high cholesterol values or by those who suffered from an acute cardio-vascular disease. A high price of statins in BIH is the limiting factor for application of these drugs in most of the cases.

P-350

Depression and malignant diseases in family medicine

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Aim: Determine frequency of depression in patients diagnosed with malignant diseases Methods: The study was conducted in The Department of Family Medicine in "Health Care Center Mostar", from 1.01.2006. to 31.12.2008. It was designed as a "pair study".
Sample: patients were selected according to the chart number and presence or absence of the diagnosis of malignant disease. Every fifth patient with diagnosis of malignant disease was included in the study group. Matching criteria included sex and age of the patient from control group. Neither patients in study group, nor patients in control group were diagnosed with Depression before study was conducted. Standardized questionnaire, The Hamilton Rating Scale for Depression, designed to help diagnose Depression, was used as a tool in this study.
Results: Sample consisted of 120 patients divided in two groups. (1. patients with diagnosis of malignant disease; 2. patients without diagnosis of malignant disease). Obtained results: 1. Patients with diagnosis of malignant disease are more likely to be diagnosed with Depression then ones in the control group (p = 0.001); 2. Patients with 60 years and older are more likely to be diagnosed with Depression, while suffering from malignant disease; 3. There is no significant statistical difference between men and women in relation to diagnosis of depression and malignant disease (p = 0.152); 4. The elapsed time since the diagnosis of malignant disease did not influence the onset of Depression (p = 0.137). Summary: Realization of the existence of malignancy increases the probability of depression, regardless of sex. The length of time since the diagnosis of malignant disease does not influence the probability of diagnosis of Depression, which was not expected. The importance of this study is in early detection of signs and symptoms of Depression in patients with diagnosis of malignant disease.

P-351

Early detection of microalbuminuria in diabetic patients type 2

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Purpose: The first step in diagnosis of diabetic nephropathy is measuring levels of albumin contained in patient's urine. An early detection of microalbuminuria will give us possibility to intervene in order to postpone begining development of diabetic nephropathy (DN).
Methods: We have tested first early morning urine using microalbumin specific test tapes in 182 patients with confirmed diabetes type 2 diagnosis according to WHO criteria from 1999. albumin specific test tapes were used in this study. These test tapes were capable to measure albuminuria up to 30 µg/ml (20–300 mg/L). Quantitative test, urine probation for microalbuminuria using albumin specific test tapes, was confirmed by qualitative methodology measuring albumin/creatinine ratio (2.5–30 mg/mmol/L). Albumin/creatinine ratio was measured three times for each patient in period over three to six months.
Results: In total of 182 tested diabetes melitius type 2 patients, 22 (12.09%) patients were detected with micro-macroalbuminuria using albumin specific test tapes on their urine. 19 (10.44%) patients were detected with microalbuminuria and 2 (1.10%) with macroalbuminuria (>300 mg/L). During the test of statistically significant difference of proportions of albumin concentration in urine using albumin specific test tapes, proportional test Z test = 7.147 (p <0.0001) was used, there was found statistically significant difference to exist.
Conclusion: Measuring albumin concentration in patient's early morning urine using albumin specific test tapes in primary care is good diagnostic choice for screening for microalbuminuria in diabetic patients, it proved to be cost effective and accurate.

P-352

Statistical analysis of the emergency ophthalmology department

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Aim and Purpose: Statistical analysis of the patients of the emergency ophthalmology department.
Design and Methods: Retrospective study of 6728 patients who have been examined at the emergency department of the ophthalmology Clinic of General Hospital "Laiko" in Athens during the period 01/01/2008 – 01/01/2009.
Results: The majority of the patients were self referrals at a percent of 86%. Most cases involved diseases of the cornea (46.4%) followed by diseases of the conjuctiva (30.2%), diseases of the eye lids (11.3%), retinal diseases (7.3%), traumas (1.3%) and other diseases (3.5%). The cases of trauma included penetrating trauma, globe rupture and intraocular foreign bodies. A number of patients (38%) were discharged without recommendation for reexamination. A different percent (59%) were instructed for short or long term follow up according to the severity of their perspective disorder and the remaining 3% were admitted to the clinic.
Conclusions: A significant number of patients could be treated and followed up by General Practitioners, mainly the category that includes cornea, conjuctiva and eye lid diseases as well as traumatic injuries of foreign bodies of the cornea.

P-353

Management of type 2 diabetes patients in a Greek primary care setting: interventions and their results one year after the first visit

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Purpose: Evaluation of multiple therapeutic interventions in type 2 diabetes patients, towards glycemic control and management of cardiovascular risk factors, one year after their initial visit in our primary care unit.
Design and methods: The study included 156 patients with type 2 diabetes (average age, 68.5 years, 81 men and 75 women), who have visited us for the first time and were already known diabetics (n = 63) or newly diagnosed in that first visit (n = 93). Medical records were reviewed for medications used and diabetes control indicators (control targets as defined by 2008 ADA recommendations).
Results: Mean glycosylated hemoglobin (HbA1c) level was 8.3% in the first visit. After a year of follow up, HbA1c was 6.65% and 73% had values <7%. 98% were treated with metformin and 29% with sulfonylureas. Mean low-density lipoprotein cholesterol (LDL-C) level in the first visit was 144.3 mg/dl. After one year LDL-C was 105.6% and 52% had <100 mg/dl. Less striking was the reduction in triglycerides (from 157.1 to 140.3 mg/dl). A statin was given in 62% of patients. Initial mean blood arterial pressure was 153/88 mm Hg. After a year mean arterial pressure was 136/79 mm Hg and 36.5% of patients had adequate control (<130/80). ACE inhibitors or ARB were prescribed in 77%, diuretics in 37% and Ca-blockers in 27%. 13.5% of patients met all 3 control targets. 60% of patients were under aspirin.
Conclusions: Achieving target levels simultaneously for multiple risk factors in type 2 diabetes patients is hard. However the results of our study suggest that a patient-centered, population-based chronic care could be comparable with the care provided byspecializedpractices for diabetic patients.

P-354

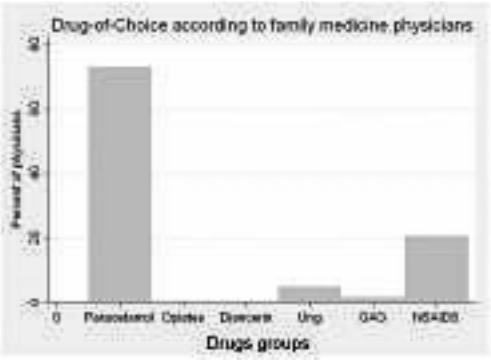
Best practice approach in osteoarthritis of the knee and glucosamine? A WEB 2.0 based survey of mentors in family medicine, members of the Maimonides network for family medicine research

Lev I. (Mevaseret Zion), Gur I. (Jerusalem)

Aims(s) and purpose: Osteoarthritis (OA) has no known definitive treatment. Recently the Cochrane collaboration recommended Glucosaminglycans (GAG) as a disease modifying drug for OA, but not without reservations about the evidence quality. We surveyed

academical family practitioners to find out their best-practice approach to OA of the knee and how they reacted to this confusing evidence.
Design and Methods: A short survey was conceived regarding the initial diagnosis and treatment of OA of the knee and physicians view of GAGs. The surveys link was sent to a 120 family practitioners research list server. Descriptive statistics was used to portray physicians behavior and multivariate logistic and linear regression analyzes for association and predictors of physicians behavior.
Results: 52.5% of the physicians completed the survey, with a mean number of patients with OA of the knee seen each week at 3.90 (SD = 2.480; 95% CI: 3.280, 4.529); the average number of referrals to an orthopedic consultation each week was 0.904 (SD = 1.187; 95%CI: 0.605, 1.203). When evaluating a patient with OA of the knee, 98.4% perform physical examination, 69.84% perform an x-ray of the knee, 93.65% prescribe an analgesic and most will recommend lifestyle modification, physiotherapy and education about OA. Most of the physicians (73%) perceive Paracetamol to be the drug of choice, or NSAIDS if this option fails. 92% thought GAG's are useless or minimally effecting the natural history of OA, and 82% that this medication is either useless or minimally analgesic. Certain predictors were isolated regarding a non holistic approach to patients with OA (Prescribing NSAIDs, GAG's, X-ray's).
Conclusions: Family practitioners who are academically inclined tend to practice evidence based medicine regarding diagnosis and treatment of OA of the knee and are not considering using GAGs as a treatment modality. Recommending GAG among others was a sign for a Non-Holistic approach to the physician's role.

Pharmaceutical treatment option preferred for Osteoarthritis of the knee by Academical Israeli family practitioners



P-355

The use of diagnostic tests in primary health care

Constantin M. (Bucharest), Mihaescu C. (Bucharest)

Aim: To evaluate the recommendation for diagnostic tests and referral to other specialists for establishing an accurate diagnosis and treatment in primary health care.
Objectives: – identification of symptom; – how often diagnostic tests were recommended; – symptom-recommended tests-diagnosis connections.
Design and methods: Retrospective study (January 2005-December 2008). Number of adult patients: 83 (45 men, 38 women). Primary care patients seeking medical attention for one symptom.
Results: 22 symptoms were identified; in 25.3% back pain, 15.6% chest pain, 8.4% painful shoulder, 4.8% headache, 4.8% dizziness, 41% other symptoms (<4% per symptom). For 75.9% of the patients were ordered investigations. 68.6% of the patients performed at least one diagnostic test and 24% were referred to a specialist. 43.4% of the patients had abnormal diagnostic tests which correlated with the diagnosis. The diagnosis was established for 53% of the patients (in 40% using tests and 8% were diagnosed clinically or after differential diagnosis). Investigations contributed to diagnose for the patients with: dizziness 100%, headache 70%, back pain 42.8%. For other symptoms (chest pain, left or right hemithorax pain) the recommended tests were normal, but they were useful for differential diagnosis. Diagnostic tests were essential to diagnose 6 medical emergencies.
Conclusions: Pain with different localization was the main symptom for the patients who visited general practicioner. Diagnostic tests and referral to other specialists were useful to establish the diagnosis for 48.2% (half of the patients). Medical history and physical examination could avoid recommendation for unnecessary investigations (for example chest x-ray). The fear of the doctor to misdiagnose the patient, but also the fear of the patient not to have a seriouse disease contribute to the recommendation of unnecessary tests.

P-356

Improving obesity-management? A controlled intervention study in urban Swiss general practitioners networks

Zoller M. (Zurich)

Background: General practitioners (GPs) play a key role in prevention and treatment of obesity, however, they often feel frustrated by the ineffective results of long-term treatment. The present intervention study aimed to improve GP's practice of obesity management.
Method: In the study participated 301 GPs of four urban networks (146 in intervention; 155 in control group, not randomized). It included a baseline survey followed by a 12-months intervention in intervention group and a follow-up survey. The 12-months intervention included 20 short info-letters, four workshops, an information website and specific practice Guidelines. The attitude, knowledge and practice of GPs' obesity-management were compared before and after intervention and between intervention and control groups. To evaluate the effect of intervention, GPs of the intervention group were classified into intensive, occasional or non-users according to their level of participation.
Results: The baseline questionnaire was answered by 188 (62%) GPs, the follow-up survey by 128 out of 186 GPs (70%), 68 were from intervention group. About 78% were men and 47% were over 55 years old. A score measuring the physician-related problems in obesity management improved at the follow-up in the intervention group only, especially in the subgroup of intensive users.

P-357

Body mass index of patients being ill from diabetes mellitus type 2

Radmila L. (Krusevac)

Introduction: Obesity is leading factor of risk for development of Diabetes Mellitus Type 2 (DM2) and therefore it is very often associated with it. It is measured by Body Mass Index (BMI). Persons with BMI = 19-24,9 have normal BMI, persons with BMI=25-29,9 have excessive body mass, while BMI>= 30 represents real obesity.
Goal of the work is to define presence degree of obesity, i.e. presence degree of excessive body mass of patients being ill from DM2. Method of work: The files of patients being ill from DM2 that are registered by selected doctor are reviewed by retrospective analysis.
Research results: Of 810 patients, 65 i.e. 8.1% are being treated from DM2.Average age of examined persons was 64.4 ± 9.7. The most people being ill, (38.5%) were in group of age 55–64. Among the examined persons there were 37 feminine (56.9%) and 28 masculine (43.1%). 72.3% of patients were under per oral therapy, while 18 persons (27.7%) were under insulin therapy. Average BMI was X = (29.2 ± 3.5) where as women have small increase of BMI = (29.5 ± 2.7) comparing to the men X = (28.9 ± 3.6). Also, patients using insulin, have increased average body mass X = (29.4 ± 3.3) comparing to the patients using per oral therapy X = (29.1 ± 3.7). Of 47 persons using per oral therapy, normal body mass have only 5 persons (10.6%), excessive body mass have 44.7% and also (44.7%), i.e. 21 persons have real obesity. 11.1% of persons using insulin therapy have normal body mass, 38.9% have excessive body mass, while every second person using insulin therapy has real obesity (50%). In total, value of normally fatten up patients being ill from DM2 was only 10.8%, while all others (89.2%) have excessive body mass or real obesity.
Conclusion: Obesity is in very high percentage present at people being ill from DM2. We have to give advice our patients about healthy food and increase physical activities, help them control their body mass by which Diabetes would be betterregulated.

P-358

Chronicle kidney diseases-influences of age and hypertension

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Introduction: In other countries, Diabetes And hypertension are two of the most frequent causes of chronicle kidney diseases, but in our country the number of sick people, who got terminal kidney insufficiency because of these two diseases, is continuously growing. At the same time, the number of old patients, who require dialysis treatment, is also growing. Amongst them, there is a great percentage of patients with hypertension as their elementary disease.
Aims and purpose: The goal of this research is to learn the frequency of chronicle kidney diseases in function of hypertension and age, and in such manor compare the influence each of them has in causing of this terrible disease.
Methods: In healthcare center "Vozdovac", as a part of EKDD (early kidney disease diagnosing) studies, 137 patients were examined (older than 60,with high blood pressure or younger than 60 with normal pressure, but with hypertension).
Results: When 3 groups of patients, different by age and blood pressure, were compared, the results showed that the group which

contained people older than 60 with hypertension, had the less clearance of creatinine and more percent of pathological substance in urine than the other two groups.
Conclusion: So, statistically significant correlation was confirmed only between the clearance of creatinine and the age of patients.

P-359

Glycoregulation and lipid metabolism disorders in diabetes mellitus: cumulative risk for coronary heart disease

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Coronary heart disease (CHD) is leading cause of death in diabetics of both gender and it is 2–4 time more common in non-insulin dependant diabetics.
The aim of this work was to explore relation between glicoregulation and lipid metabolism disorders and their role in genesis of CHD in non-insulin dependent diabetes mellitus.
Design and Methods: Sixty dislipidemic non-insulin dependent diabetics were divided in two groups according to CHD presence. Fasting plasma glucose (FPG), median blood glucose (MBG), lipid status and atherogenic indexes were measured in all patients.
Results: Values of fasting plasma glucose (10.08 ± 2.97 mmol/l) and MBG (9.77 ± 2.47 mmol/l), are significantly higher in patient with CHD comparing to those without CHD (FPG 8.15 ± 2.03 mmol/l and MBG 7.8 ± 1.74 mmol/l) ($p < 0.01$). Significant correlation was discovered between trigliceride values and FPG ($C = 0.45$) in diabetic patients with CHD. In diabetic patients without CHD, MBG values were in strong relation to trigliceride level $C = 0.48$ and total cholesterol $C = 0.54$ ($p < 0.05$). In the same group, HDL-cholesterol and MBG showed strong negative correlation ($C = 0.7$, $p = 0.05$). Increased risk lipid levels (high risk+borderline) of cholesterol confirmed in 90% of cases with CHD and 76% without CHD, are statistically significant ($Hi2 = 6.12$, $p < 0.05$). Significantly higher percent of patients with CHD showed higher risk trigliceride levels (70%) comparing to group without CHD 56.5% ($Hi2 = 4.36$, $p < 0.05$).
Conclusions: Association of dislipidemia and hyperglycemia indicate the same ethiopathogenesis for both disorders. Absence of this relation associated with poor glicoregulation and severe lipid metabolism disorders in diabetics with CHD, indicate autonomy of those factors and higher risk of further coronary complications.

P-360

A study of ethological factors of large leg joints arthrosis

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Introduce: arthrosis of large leg joints are evolutionary price which is paid straight man attitude and are present in the most expensive disease. Pathoanatomical lesions present chronic wear of the cartilage in a joint associated with an imbalance between the production and degradation of bone cells. Aim of this study is to determine and compare the most likely etiological factors in the group of 90 patients with gonarthrosis and 65 patients with coxarthrosis.
Method: Patients are reviewed; detailed history is taken and processed the available medical documentation. Statistical method was used for analysis of the observed criterions.
Results: In both examined groups dominated by women (54.45% in patients with gonarthrosis and 58.33% with coxarthrosis). Gonathrosis statistically starts earlier than coxarthrosis. Hereditary factor is distinct in patients with coxarthrosis (74.4%: 61.66%) causing bilateral osteopathy. Among examined patients were only a few astenic persons. Long term obesity which precedes the development of arthrosis and alcohol abuse are more common in patients with gonarthrosis, causing bilateral change, while risk factors work (forced position, frequent changes of position and carrying cargo) as well as the earlier injury often give one gonarthrosis. Diabetes type 2 occurs more frequently in patients with gonarthrosis (1:2.1) while in diabetes type 1 no statistically significant differences.
Conclusion: coxarthorosis and gonarthrosis develop under the influence of hereditary factors and mechanical effects of environments, as well as under the influence of complex metabolic factors in chronical diseases, but with a difference in the representation and the importance for pathogenesis.

P-361

Erysipelas – beta haemolytic streptococci bacteria: diagnostic issues

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Introduction: The disease is caused by Beta haemolytic streptococci bacteria. It is most frequently localised on the face. After the incubation period of 1–3 days, the disease starts suddenly accompanied by headache, fatigue, and high fever. The changes on the skin have all the characteristics of acute inflammation. The swelling has a sharply demarcated raised edge. It appears as a red, swollen, shiny, elastic, and painful rash, the lower edge of the rash extending to the nasolabial ridge. Aim: We aim to disentangle some of the diagnostic issues regarding the beta haemolytic streptococci bacteria.
Method: Case description Results: In this paper, we present the case of a female patient, aged 55, exhibiting atypical reaction to the infection with beta haemolytic streptococci bacteria. Initially, the condition was mistakenly diagnosed as an allergic reaction to metformin, which had been prescribed due to diabetes mellitus de novo one day before she reported to hospital. The patient exhibited pale, not clearly demarcated, elastic and painless swelling on the lips, nose, and eyelids. She did not exhibit high fever, fatigue, trembling, or lacerations on the skin. The initial treatment with synopen and dexason did not result in improvement, so a dermatologist and an infectologist were consulted. The final diagnosis was made based on the lab results, having previously excluded all types of dermatitis, nasal furuncle, and dacriocystitis. She was treated for 7 days with erythromycin, as she is allergic to penicillin.
Conclusion: Owing to the atypical symptoms, there was a dilemma in making the correct diagnosis.

P-362

Chronic obstructive pulmonary disease (COPD) among employees on petrol stations

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COPD is characterized by progressive airflow obstruction that is not fully reversible. COPD is growing health problem in world and in our environment. This disease produces a number of harmful effects, decreases quality and length of person's life and working ability.
Aim: The aim is to perceive a dimension of this problem in population of employees on petrol stations who are exposed to evaporation of petrol derivatives, researching importance of occupational risk factors in developing COPD and bringing proposal of preventive measures in control of disease.
Methods: Study included 150 workers on petrol stations during regular periodical examinations in 2008 where physical or functional disturbance were found. The average age of examined workers was 42 years, length of service was 12 years, and 12 years they were exposed to toxic conditions at working place.
Results: 9% had an easy form of chronic bronchitis, 16% had a cough and expectoration of secret, 4% of workers had chronic bronchitis with complications and 3% had dyspnea. The values of VC showed decrease in 15%, while the FEV1 values were decreased in 7% of wokers. 68% had no signs of ventilatory problems. Restrictive type of ventilatory insufficiency was found in 15%, obstructive type in 7%, and combined type in 3% of examined workers. Smoking is still the most important factor in developing of COPD. 32.3% of examined were smokers.
Conclusions: We can conclude that the prevalence of COPD represents the problem among the workers on petrol stations who are exposed to evaporation of petrol derivatives and it is necessary to determine some preventive measures such as regular examinations, changing life habits and more often working breaks.

P-363

Clinical differences in COPD patients in primary care vs pulmonology

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Introduction: The diagnosis, management and follow-up of COPD patients can vary, depending on if they are controlled by general practitioners (GP) or by chest physicians (CH). Our aim is to describe the clinical differences in patients with stable COPD controlled by GP, compared with patients controlled by CH.
Material and Methods: We evaluated stable COPD patients (no exacerbations in the last month). They were consecutively selected for the CH group during routine controls; in GP group they were also chosen on the basis of diagnostic codesora COPD compatible spirometry. We determined the parameters of BODE index and recorded smoking history, comorbidity, inhaled treatment and the number of exacerbations and admissions in the previous year. For statistical analysis we grouped the patients depending on COPD stage (according to GOLD), BODE index score (4 groups), and number of exacerbations and admissions.
Results: From October to December 2008 we evaluated 85 patients, 45 in the GP practice and 40 in CH practice. The table shows their most significant characteristics. Both groups of patients were similar in

terms of age, sex distribution, GOLD stage and BODE index score. The patients controlled by CH presented worse pulmonary function and minor BMI. In the other hand, GP patients presented a higher dispnea scale. We found a significant difference between both groups, in the percentage of patients receiving inhaled therapy. In addition, there was a better adherence to GOLD guidelines in the CH group. There were no differences in number of exacerbations between the groups, but the number of hospital admissions was greater in the patients controlled by CH.
Conclusions: – CH patients presented worse pulmonary function, and minor BMI. GP patients had more dispnea. – Inhaled treatments were more used by CH, and adapted better to GOLD guidelines. – The number of exacerbations was similar in both groups, but CH patients had needed more admissions.

P-364

Impaired fasting glucose: is it a cardiovascular risk factor? Cohort study

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Aim and purpose: Pre-diabetic states present with an increased cardiovascular risk. To study impaired fasting glucose (IFG) as an independent cardiovascular risk factor.
Design and Methods: A prospective cohort study was carried out in two urban primary care centres. 775 patients were selected by sample random sampling and had a 10 year follow-up. Aged >= 35 years old in primary prevention they all had a diagnosis of IFG (exposed cohort, American Diabetes Association 1997 criteria) and normoglycaemia (not exposed cohort). We used Cox models to study a first cardiovascular event (dependent variable): coronary heart disease (CHD), cerebrovascular disease (CD), peripheral arterial disease (PAD) and heart failure (HF). We analysed IFG and others cardiovascular risk factors (high blood pressure, hypercholesterolemia, tobacco consumption, age and sex) as an independent variable.
Results: The mean age was 56.5 years. 61% were women. We registered 116 cases of IFG and 659 of normoglycaemia. IFG was not associated with a CHD risk presenting an adjusted hazard ratio of 0.84 (95%CI: 0.35 to 2.03). We found a not statistically significant association in relation to CD (HR 1.43; 95%CI: 0.61 to 3.39) and PAD (HR 1.23; 95%CI: 0.25 to 6.13). However, we found significant association in relation to HF: crude hazard ratio: 3.44 (95%CI: 1.25 to 9.47) and adjusted hazard ratio of 2.68 (95%CI: 1.0 to 7.3).
Conclusions: IFG is an independent risk factor for HF. We need others cohort studies to confirm this hypothesis.

P-365

Use of frax tool and other scales for osteoporosis in primary health care

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Aims(s) and purpose: To study fracture risk in general population using the FRAX tool and the correlation between these and the subsequent calcaneus ultrasound and other scales based on risk factors (RF).
Design and Methods: Cross-sectional study of all patients (40 to 90 years) attended in a rural primary health center during 2 weeks (2008). We have applied the FRAX tool, WHO criteria, International Committee of clinical guidelines on Osteoporosis (CIGCO), Agency for the Evaluation of Medical Technology of Catalonia (AETM), National Osteoporosis Foundation (NOF) and a calcaneus ultrasound. The FRAX tool give the 10-year probability of fracture (hip and major osteoporotic fracture).
Results: We analyzed 144 subjects (64.6% women) with a mean age of 66,78 (13,1) years. Using FRAX tool 35.4% had risk of fracture (spine, hip, wrist, shoulder) and 36.1% of hip alone; using WHO criteria the osteoporosis risk was 18.8% (mainly RF was low calcium intake [7.3%] and loss of height [4.2%]); CIGCO was 72.9% (RF: age >65 years [50 9%] and thin constitution [11.5%]); AETM was 20.8% (RF female [66.1%], age [41.8%]); NOF was 65.3% (RF: age [47.9%]). The concordance of the hip fracture risk with FRAX was moderate for AETM (k = 0.47), weak for NOF (k = 0.33) and CIGCO (k = 0.29) and poor for WHO (k = 0.14) and ultrasound (k = 0.19) and for total fracture risk was good for CIGCO (k = 0.61), moderate for NOF (k = 0.46), weak for AETM (k = 0.22) and poor for ultrasound (k = 0.13) and WHO (k = 0.13).
Conclusions: One of each three patients in primary health center have a fracture risk according to FRAX tool. There is a high variability in osteoporosis risk according to the applied criteria.

P-366

Osteoporosis: how are we dealing with it?

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Objective: To analyze patients with antiosteoporotic therapy (PAT), origin, adaptation and total pharmacological annual cost (TPAC).
Methods: Cross-sectional analysis in an Urban Primary Health Centre, from January to May'08. Analysis of population sample of 203 PAT (37.8%). Variables: age, sex, associated diagnosis treatment (ADT), prescriptor doctor (PD), bone mineral density (BMD), bi-annual densitometry control (BDC), antiresorptive treatment (AT) and TPAC associated. Have considered adaptation, to the treatment and the cost associated for the non-adaptation.
Results: 92.6% women. Average age = 70.16 years (CI95% 68, 74-71,57), ADT: osteoporosis = 57.6%; serious osteoporosis (with fracture) = 8.9%; osteopenia = 11.5%; osteopenia with associated fracture = 1%; non associated diagnosis treatment = 18.9%.
PD: rheumatologist = 30%; general practitioner = 26.1%; traumatology = 22.2%; gynecologist = 9.8%; in the 8.86% of the cases no doctor assigned. According to the computerized medical history (MH) in 41.38% of TPAC's cases there was no-BMD, and where BMD was documented in 37.8% there was no bi-annual control. The most frequent AT is alendronate (58.62%). Calcium treatment (CT) = 82.75%.TPAC = 204.142,68 EUR. AverageTPAC (antiresorptive) = 432,64 (CI 95% 365,82-499,46). Average TPAC (antiresorptive +CT) = 44,11(CI 95% 474,51-613,71). According to MH, 44.8% of AT are not suitable (64.1% no diagnosis, 35.9% with correct diagnosis), prescribed by rheumatologist (34.06%), orthopedic (28.57%), family doctor (8.79%), gynecologist (7.69%), other (20.89%). Average TPAC for incorrect treatment = 487,09 (CI 95% 452,75-521,8).
Conclusion: The osteoporosis and its treatment is covered by different medical specialty but it not well treated, and controlled. Nearly half of our patients have not suitable medical treatment, with a high total pharmacological annual cost although general practitioner choose the best suitable treatment, from the rest of medical specialties, in our report.

P-367

Osteoporosis screening with accudexa and fracture index: impact in hip fracture incidence

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Aims: To assess the changes of incidence of hip fracture in a population screened through a pheripherical densitometrical equipment on medium phalanx (Accudexa) and FRACTURE questionnaire, compared with a non-screened population.
Design and methods: Randomized, poblational-based prospective study. Universe: women >65 years-old from an urban primary care center. A randomized screening of half of the population was done, by the assignation for half of family physician. A structurated questionnaire (FRACTURE) was done, including anthropometrical data, calcium intake, tobacco and alcohol habit, osteopenic drugs, age of menarchia and menopausia, and previous use of antiresorptive drugs. A densitometrical study of the second phallanx of the non-dominating hand was done. High risk of hip fracture: T-score<-2.5 SD or T-score<-1.6 SD and FRACTURE>4 units. Women with high risk started therapy with antiresorptive drugs. Patients with hip fractures being ingressed in the reference hospital were compiled. Statistica analysis with Chi-square was done.
Results: Screenig group:1.650 women, screenend 789. Denied to participate: 7%. Control group: 1990. Basal characteristics of both groups was similar. Number of women identified as hip fracture high risk: 284. Hip fracture in first year: 14 (3 in screened group and 11 in control group, p = 0.072). In second year: 13 (5 in screened group and 8 in control group, p = 0.62). Four of the 8 women with hip fracture in screened group declined his participation and was not screened.
Conclusions: The incidence of hip fracture in the screened population in the first year of following tends to be lower than the control group. This phenomenon disappears in the second year. Possibly, the change of incidence could be almost explained by a low compliance treatment. The Accudexa equipment, along with the FRACTURE questionnaire, seem to be useful tools to detect population with risk of hip fracture and to prescribe antiresorptive drugs.

P-368

Social support and depression in the elderly patient

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Aim: To determinate the prevalence of depression in elderly, the prevalence of social support to describe the socio demographic characteristics, functional and mental ability to study if it exists association between poor social support and depression, and between depression and functional status.
Material and methods: Observational, descriptive, cross-sectional study subjects older than 65 years assigned to general Moscardo Health Center with a sample of the population of 303 patients 8 obtained from the 12% prevalence of depression and add 20% loss) by simple random sampling. Measurements depression by the CES-D test. Sociodemographic data, social support by Duke-UNC-11 test, functional and mental data with the red cross scales.
Results: N44 (we are still in collect data period that will expand the sample for the congress) mean age 76.27 (SD 6.85), Gender: female 30 (68.2%), marital status: married 24 (54.5%), widowed: 15 (34.1%), income: < EUR 600: 11.4%, living alone: 36.4%, no studies: 15.9%, red cross functional 0: 84.1% and 9.1% walk with a cane. Red cross mental 0: 81.8%, prevalence of depression: 29.5% (13), confidence social support 97.7% (43), affective social support: 95.5% (42). We analyze whether there is an association between social support (yes/no) and depression (yes/no) using the Pearson X2 test or Fischer test. No association was found between social support and depression P >0.05. No association was found between depression and functional status (P = 0.9).
Conclusions: We fond prevalence rates of depression higher than expected according to literature. We emphasize the high number of patients with adequate social support and functional status. We found no association between depression and poor social support.

P-369

COPD current status in a primary care center. Strategies for detection

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Aims: Increase the detection of COPD in our primary care given the low prevalence of recorded diagnoses (1%).
Design and methods: Urban Primary Care Center of approximately 30.000 people (>40 years [55%] Design: Descriptive analysis will be realized of cigarette smokers or former smokers of long evolution >40 years, >10 packs per year, undiagnosed COPD) for conducting a spirometry screening in this population to estimate the cost-benefit to be the most appropriate target population with the highest risk of COPD. Intervention: send home patients risk newsletter about COPD and the possibility of make the spirometry in primary care center to detect the disease. The family doctor informs the patient concerned to go to consultation, and seek and interpret the results of the test.
Results: Variables: gender, age, symptomatic or asymptomatic patients, packs per year, lung function (FEV_1, FVC, FEV_1/FVC, FEF 25–75%, bronchodilator test). Analysis of new cases diagnosed, or impact on small track. Previous results: Population risk patients not diagnosed with COPD: Smoking: 40–69 years: 1783 (16.7%); >70 year: 297 (5.2%). Ex-smokers 40–69 years n: 487 (4.6%), >70 years 284 (4.9 %)
Conclusions: It is a predictable increase in the detection of the disease that will allow actions of health education and greater involvement and strengthening the anti-smoking advice and implementation of treatment for patients who require it. Early diagnosis with the abandonment of smoking and the initiation of appropriate therapeutic measures are the only means of preventing disease progression. Primary Care is important since early detection of this disease in which there is a long asymptomatic in early stages, in which there is already altering obstructive spirometric and of course the detection of patients who suffer from clinical signs of COPD.

P-370

Blood lead levels in a sample of Turkish women and affecting factors

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Objective: The aim of the study is to measure the blood lead levels in a pre-peri and post- menopausal sample of Turkish women and find out the affecting factors.
Material and Methods: The study patients were recruited randomly from women attending Family Medicine check-up policlinic in Istanbul University. A total of 91 women, of which 48 were post and 43 were pre or peri- menopausal were included in the study.
Results: The mean blood lead level in the whole group was 27.88 ± 11.7 µg/dl. It was 25.35 ± 11.57 µg/dl in the pre-peri menopausal group and 29.8 ± 11.58 µg/dl in the post-menopausal group. The difference between two groups did not reach a statistical significance (p = 0.071). Lead levels were significantly affected by age (p = 0.049). Most of the group (70%) had lead levels over the toxic limit of 20 µg/dl. High blood lead levels over this value were significantly affected by age (0.017), menopause (p = 0.029) and by lumbar vertebrae density (p = –0.028). The blood lead levels of the retired women were significantly higher than the housewives with the same mean age (p <0.05) and younger working women had the same lead levels as the housewives.
Conclusion: The results of the measurements display that blood lead levels are high in this population and affected by age, menopause, lumbar osteoporosis. Employment may effect blood lead levels through air pollution, passive smoking and other adverse work conditions. Osteoporosis therapy is effective in lowering lead levels. Other preventive measures such as not eating canned food, changing old leaded water pipes, using fuel, wall paint, cookware and make-up that do not contain lead should be adopted by women.

P-371

Acute coronary syndrom and chest pain

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Chest pain is one of the leading symptoms which is the reason of patients\' visits to doctors. In literature, there is not enough information about the structure, prevalence and the final result of health conditions of these patients.
Aim: Recognizing patients with acute coronary syndrome in group of patients with chest pain and reviewing frequency of risk factors.
Design and methods: The epidemiological study, during six months, included 250 patients, aged 18–70 years (100 women and 150 men). They came to their general practice doctors with chest pain. After finished diagnostic procedures all patients started treatments and following risk factors for coronary syndrome (hypertension, diabetes mellitus, cigarettes smoking and family history of early coronary syndrome).
Results: From 250 patients with chest pain, 100 (40%) of them had acute coronary syndrome (40 women and 60 men) with following clinical spectrum: stable angina (22 women and 14 men), unstable angina (10 women and 10 men), non-Q wave myocardial infarction (5 women and 8 men) and myocardial infarction (3 women, 7 men). Analyzing mentioned cardiac risk factors we saw that 52% has hypertension, 44% smokes cigarettes, 20% patients have diabetes mellitus, 24% have dyslipidemia and 18% have predispositions of family history of early coronary syndrome.
Conclusion: Current options for secondary prevention of cardiovascular events after acute coronary syndrome include lifestyle modifications such as smoking cessation, antihypertensive medications including β-adrenergic blockers and angiotensin-converting enzyme (ACE) inhibitors, management of diabetes, therapy for dyslipidemia, antiplatelet agents, treatment of depression, and patient education.

P-372

Casa da Trilha: a day care anthroposophical clinic for drug abuse and mental health in an area of poor financial resources

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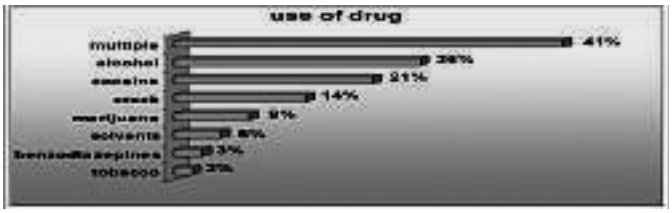
Aim and Purposes: Casa da Trilha – CT is a part of Monte Azul Communitarian Association, in the city of Sao Paulo, Brazil. It is a mental health program following Anthroposophical Principles.
CT extends attention, services, guidance and treatment for drug abuser/addicts and psychiatric patients from age 17 on, for a population with insufficient financial resources, being also a place for activities aiming social insertion. The main purpose of this work is building up or re-establishing abilities: personal (being), social (coexisting), productive (making) and cognitive (knowing).
Design and Methods: The CT offers individual treatment that involves clinical, psychiatric and psychological care, art therapy, rhythmic massage and therapeutic eurhythmy. For collective care it offers support groups, relapse prevention and guidance services to the patient's family. Therefore, by developing their ability to engage in activities, the patients are stimulated to get pleasure from being useful and beautiful, to have a better understanding of oneself, to respect each one's biography, to acknowledge their difficulties as well as their humanity, and to regain possibilities of taking their life in their own hands.

Results: Graphs.
Conclusions: Working with drug abuser and psychiatric patients at Primary Attention to Health in a poor community is extremely challenging. Nevertheless, the results show that it is possible to establish health recovery and promotion in a sustainable and harmonious way.

Indicators

Indicators	
consultation rate	240/month
minor age	12 years
major age	68 years
male sex	70%
female sex	30%
absence of drug > 6 months	62%
renewal with familiar bonds	69%
return to school activities	40%
return the professional activities	37%
reduction of personal risk's factors	78%
adhesion to the treatment-integral	41%
adhesion to the treatment-parcial	59%

Drug Use



P-373

To what extent does the cultural background influence the fever concepts in German and Turkish mothers in Germany? Results of a cross sectional survey

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Aim and Purpose: The patients' cultural background is increasingly recognized as an important factor influencing illness behaviour. We examine how perceptions, interpretations, fears and practices of German and Turkish mothers in childhood fever are influenced by their cultural background, their educational and socioeconomic status and family situation.
Design and Methods: We developed a questionnaire to study the fever concepts. It is combined with widely used survey items to determine educational and socio-economic status. The questionnaire was developed on the basis of scientific literature and 20 qualitative interviews with German and Turkish mothers. It was pilot-tested for validity and reliability in 50 face-to-face interviews and 40 re-interviews by telephone. Data collection will be finished by the end of March and consists of 400 face-to-face interviews which are held in 15 private paediatric practices and 2 hospital clinics. They represent an economically and culturally diverse spectrum.
Results: Hypothesises were developed on the basis of a qualitative interview study: – More German and higher educated mothers know "the correct" temperature value of fever. – Turkish mothers show a stronger concern towards complicated outcomes and use general antipyretic measures as rubbing with alcohol or vinegar more frequently. – German mothers and more integrated Turkish mothers are expected to share more responsibility with their partner when caring for their sick child. – Less integrated Turkish mothers will require the help of translating family members or friends when seeing a doctor.
Conclusion: We expect the cultural background to influence important aspects of the mothers' fever concepts. However this will be probably interrelated with the other independent variables as educational and socioeconomic status. Hence the cultural background should probably not be seen as an isolated factor but one that interrelates with several aspects of a patient's life.

P-374

A new tool for diagnosis of chronic systemic (autoimmune) diseases in primary care

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Objectives: Due to the low prevalence of chronic systemic diseases (CSD) in primary care, there is rather limited research in this area. The relevant findings suggest an underdiagnosis and treatment delays regarding rheumatoid arthritis and other CSD patients who are managed by general practitioners (GP). Our hypothesis is that GPs and trainees in family practice are not familiar with these rare diseases, the early diagnosis of which is sometimes crucial.
Methods: Taking into account the prevalence of CSD, we are developing a reminder including a listing of clinical symptoms with their positive and negative predictive value. This will lead the GP to make different hypothesis. This electronic tool will allow the GP to ask for the right screening test (X-rays, antibodies, hormones) when he's confronted to a potential CSD. This reminder will be validated by specialists in CSD.
This validated tool will be distributed via internet to all physicians in Alsace area, willing to answer a questionnaire about dealing with CSD before and after using the tool. An adapted questionnaire similar to the one mentioned above will be given to all our post graduate trainees in family practice.
Results: The questionnaire for the trainies will assess the need for medical education relevant to the CSD in a pre- and post- graduate level. The questionnaire for physicians before and after 3 months using the tool could give us an evaluation of the satisfaction using the tool. The rate of downloading will give an idea of their needs. It is expected that the use of this new tool will make GP more familiar with CSD diagnosis and improve CSD care.
Conclusion: There is a great requirement for an effective cooperation between GP and rheumatologists. The use of screening tools by GP, will enable an early recognition of CSD and timely referral to specialists.

P-375

Myositis in child with salmonella enteritis gastroenteritis – case report

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Introduction: Previously healthy children may suffer myositis as a complication of a viral, bacterial, parasitic or fungal infection. Salmonella species, which are gram (-) bacteria, can cause a wide range of symptoms and clinical syndromes, the most frequent of which is a gastroenteritis- like syndrome. S. enteritis is the most common of the salmonella species and in most cases it causes a self- limited infection of the gastrointestinal tract. As opposed to other salmonella species, such as S. typhi, very rarely does it cause complications and especially myositis.
Aim: We exhibit the case of a 9 year old boy, who was admitted into our clinic because of high fever (40 °C), diarrhea and vomiting and muscle weakness.
Case report: The symptoms started about 3 days before the time of admission. Laboratory testing revealed a mild elevation of AST (221 iu/l) and ALT (69 iu/l) and a remarkable elevation of CPK (6982 iu/l). CBC was normal and C- reactive protein was negative. Blood cultures were negative and Salmonella enteritis was isolated in the stool. The boy was treated with IV fluids and after 5 days he was discharged in very good general condition. The CPK value upon discharge was 172 iu/l and 10 days later CPK value was within normal range.

P-376

Breastfeeding in rural and remote northwest Peloponnese

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Introduction: The absolute superiority of maternal milk to any other kind of milk has already been firmly established. Both the mother as well as the infant benefit from breastfeeding in many aspects.
Aim: firstly the determination of breastfeeding frequency in our district; secondly the determination and evaluation of factors relevant to commencing and maintaining breastfeeding and thirdly the study of the correlation of breastfeeding to the mother's education level, residence, age, number of labors, population group and smoking habits.

Design and methods: The study, which took place in two remote Health Centers of Northwest Peloponesse, included 158 women in their puerperium, who had given birth to healthy children. Data was gathered by means of a questionnaire.
Results: The majority of the women who participated our study were aged 25–34, married (98.4%), with history of more than one labors (91%). 65.8% of them had had a natural labor. 78.4% of the infants were breastfed. Women who have C-sections breastfeed their children less frequently. Residence was a factor that influenced the frequency of breastfeeding. The duration of breastfeeding on the whole was 2–4 months (27.1%).
Conclusions: Appropriate preparation, proper education and support of the mother post partum are the three basic axons that enable us to help women breastfeed their children successfully.

P-377

Physical pathology in psychotic patients: a primary care perspective

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Aim and Purpose: Psychotic patients often present with significant medical co-morbidities, such as diabetes mellitus, dislipidemia and cerebrovascular events. Higher mortality rates of these patients than the general population have been reported. The aim of this study was to investigate the rates of physical co-morbidities in psychotic patients examined in a primary care setting.
Design and methods: Medical records and prescriptions of psychotic patients seen in three regional medical offices of central zone of Greece during one year period (2008) were retrospectively reviewed. All patients have been diagnosed as psychotic by a psychiatrist service and were or not currently engaged in follow up by such services.
Results: A total of 68 psychotic patients had been examined or prescribed antipsychotic medication during the study period. Physical co-morbidities were presented in 32 cases: the majority of them – 22 (68.75%) – did not regularly receive the prescribed medication for the co-morbid physical disease. A number of 24 (35, 29%) patients had a history of diabetes, 27 (40%) of dislipidemia and 23 (33, 82%) of arterial hypertension. All but five were heavy smokers. Further, 11 (16, 17%) were already suffering from coronary disease and 7 (10, 29%) from cerebrovascular lesion. 17 (25%) of the patients had more than one co-morbidities.
Conclusion: A large proportion of psychotic patients were found to present several medical co-morbidities. These patients were likely not to receive adequate treatment for their physical disease. Primary care physicians should bear in mind that psychotic patients are prone to develop physical morbidity and enhance follow up and treatment adherence for these patients.

P-378

Estimation of obesity in subjects with metabolic syndrom

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Background and aims: The obesity plays an important role in the pathogenesis of the metabolic syndrome (MS). The adipose tissue is an endocrine organ, which through the secretion of adipokines, influences in a significant way on metabolic processes in the human organism. The aim of the study was to estimate the obesity in subjects with MS.
Material and methods: The study included 290 subjects (107 male and 183 females). MS was diagnosed (on the basis of NCEP ATP III) in 104 individuals, aged 48.6 ± 7.9 years. The obesity in subjects with MS was diagnosed on the basis of: Body Mass Index (BMI) 30 kg/m^2, WHR index >0.9 for males and >0.85 for females, and on the basis of waist circumference measured at the level of the umbilicus: >102 cm for males and >88 cm for females.
Results: on the basis of waist circumference, the obesity was diagnosed in 87.5% of the subjects with MS. On the basis of WHR index, the obesity was diagnosed in 74.0% and on the basis of BMI in 63.5% of the subjects with MS. The positive correlation was proved between BMI plus waist circumference and fasting glucose concentration plus blood pressure.
Conclusions: In subjects with MS, the waist of circumference is an indicator defining central obesity the most frequently. Together with BMI, is most strongly defines the relationship between the obesity and the other components of metabolic syndrome.

P-379

Prevalence of menopausal symptoms among women in Sarawak, Malaysia

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Aims/Objectives: To determine both the age of menopause and the prevalence of menopausal symptoms experienced by Sarawakian women.
Methods: A cross sectional study using verified semi-structured questionnaire was conducted on 476 Sarawakian women aged 40–65 to determine the mean age of menopause and the prevalence of 11 symptoms (divided into somatic, psychological and urogenital groups) commonly associated with menopause.
Results: The mean age of menopause was 50.7 years (range 46–57 years). The most prevalent symptoms reported were joint and muscular discomfort (79.3%); physical and mental exhaustion (69.3%); and sleeping problems (49.9%). Followed by symptoms of hot flushes and sweating (40.7%); irritability (37.7%); dryness of vagina (37.4%); anxiety (35.7%); depressive mood (33.5%). Other complaints noted were sexual problems (33.1%); bladder problems (23.8%) and heart discomfort (18.3%). Perimenopausal women (n = 189) experienced higher prevalence of somatic and psychological symptoms compared to premenopausal (n = 104) and postmenopausal (n = 183) women. However urogenital symptoms mostly occur in the postmenopausal group of women.
Conclusions: The age of menopause in this study correspond with other studies on Asian or western women. The prevalence of menopausal symptoms in this study correspond to studies conducted on other Asian women but the prevalence of typical and classical menopausal symptoms was lower compared to studies on western women.

P-380

NT-proBNP in nursing home patients with and without heart failure

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Aims: Heart failure is prevalent among nursing home patients, and diagnostic accuracy is a prerequisite for providing appropriate drug therapy to these frail old patients with extensive co-morbidity. However, there is limited access to echocardiography, considered the diagnostic "gold standard". The aim of this study was to analyse the concentration of NT- proBNP (N-terminal pro brain [B-type] natriuretic peptide) in nursing home patients with and without heart failure, and to examine the predictive value as related to echocardiography.
Design and methods: Cross sectional descriptive study. Fifty patients from four Norwegian nursing homes (36 women, mean age 86 y) were included, 22 patients with a clinical diagnosis of heart failure and 28 patients without this diagnosis, respectively. Demographic and diagnostic information was provided by nursing home staff, and a blood sample was collected from each patient. Echocardiography was conducted at a local hospital ward.
Results: Mean NT-proBNP-levels were significantly higher in the heart failure group than in the group without heart failure (p = .024), but differences between genders were not significant. Eight heart failure patients, and two patients without heart failure, had NT-proBNP-levels above age-specific reference levels. Echocardiography was conducted in seven patients, but the results were unreliable due to technical problems and poor patient cooperation. Therefore the procedure was not extended to the remaining study participants, and comparisons with NT-proBNP could not be made.
Conclusion: The need of a simple diagnostic test for heart failure in nursing home patients was confirmed by the poor quality of echocardiographic examinations of these patients. High NT-proBNP-level in every third patient with heart failure probably indicates undertreatment. However, larger studies are needed to examine the importance of NT-proBNP for diagnosing and monitoring heart failure in nursing home patients.

P-381

Gastroesophageal reflux (GERD) symptom control needs to be improved: a pan-European study assessing the trends in symptoms and treatments of GERD in primary healthcare (RANGE – Sweden)

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Aims: GERD is common in primary care (PC). The beneficial effect of PPI treatment is well documented. This study aimed at evaluating GERD patient care and associated use of PPIs in PC.
Methods: PC sites were recruited in 6 European countries. Medical records were searched to identify patients who consulted for GERD-related symptoms on >= 1 occasion (index visit) during April-July 2007. In Sweden, 1100 patients were identified; 538 were randomly selected,

of which 438 accepted an invitation to complete a set of questionnaires on health status, sleep patterns, work situation, gastrointestinal symptoms and impact on well-being (EQ-5D, GERD Impact Scale, GSRS, WPAI-GERD, XQS and QOLRAD) (visit 1). Data on medication, alcohol, GERD symptoms and use of healthcare resources was collected.
Results: In Sweden, 18/21 clinics participated actively. In total, 368 patients with GERD-related symptoms came to visit 1 (61% females; mean 56 years; 52% employed; 38% retired). They had 9 years of symptoms and had received treatment for 6 years. Compared to a general Swedish population, GERD patients smoked less, drank less alcohol and had a higher Body Mass Index (BMI >30 kg/m^2 in 27% women; 18% men). 38% had undergone pre-study endoscopy; and 90% were prescribed PPIs at the index visit. Less symptoms were recorded at visit 1 vs. index visit, but 30% had persistent symptoms despite treatment. 38 patients (10%) made 73 additional GERD-related PC visits between index visit and visit 1 (mean 6 months). Health-related quality of life (HRQL) was decreased compared with that of a normal population. GERD-related reduced productivity corresponded to 7.7 working hours/week/employed patient. Severe sleep disturbances due to GERD symptoms were recorded in 13% of patients.
Conclusions: A proportion of patients in PC have GERD symptoms affecting their HRQL and productivity despite treatment. This study suggests that control of symptoms in GERD patients in PC needs to be improved.

P-382

Smoking cessation program combining brief individual-based counselling, pharmacotherapy and dental hygiene intervention. A pilot study

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Aims(s) and purpose: Physicians and oral health care professionals are in a unique position to advice smokers to quit by the ability to integrate the various aspects of information on tobacco-induced diseases into an effective counselling. Smokers having periodontal lesions have shown an increased smoking cessation rate when receiving treatment concomitantly to cessation aid (teachable moment).
Design and Methods: Smokers willing to quit received an 8-week smoking cessation intervention combining individual-based counseling and NRT and/or bupropion, provided by a general internist. In parallel, they received a dental intervention, provided by a dentist/oral professional, consisting in a dental exam, an oral hygiene treatment and information about effects of smoking on oral health. Outcomes were smoking abstinence at 6-month, as well as acceptability and global satisfaction of the dental intervention.
Results: Thirty-nine adult smokers were included, 27 (69%) completed the study. At the end of the intervention (week 8), 17 (44%) participants reported smoking abstinence. After 6 months, 6 (15%, 95% CI 3.5 to 27.2) reported a confirmed continuous abstinence. Considering a similar 15% abstinence rate among the participants lost during follow-up, we would have obtained 20% of abstinence at 6 months. Global satisfaction and acceptability of the dental intervention were high. Positive qualitative comments highlighted the motivational effect of explanations and the feeling of oral cleanliness and health that encourages smoking abstinence.
Conclusions: Interdisciplinary approach consisting in the addition of dental intervention to a smoking cessation intervention seems feasible, highly acceptable and promising regarding impact on the smoking abstinence rate. However, the 15% to 20% smoking abstinence rate should be confirmed in a large-scale RCT to quantitatively assess the benefit of oral health intervention in addition to smoking cessation intervention.

P-383

Depression among the patients in GP ambulance in health centre Obrenovac

Jankovic S. (Belgrade)

Background: The GP is the first doctor who has to recognize the symptoms of depression. The prevalence of depression in general population is 2–4%. The life-time risk for depression is 16.2% (7–12% for males, 20–25% for females). Incidence for depressive disorders in Serbia is 7.0 per 1.000 (5.19-males; 8.72-females), in Belgrade: 7.21 (5.14-males; 9.0-females). Up to 70% of cases are not recognized as depression. Many studies have shown correlation between depression and illness, thus elevating morbidity and mortality of the disease. Depression is a chronic recurrent disorder.
Aims: is to show the presence and degree of depression among the patients in GP ambulance and to emphasize the importance of treatment of depression.
Method: 320 patients (38.4% male, 61.6% female) have been tested in The Health Centre Obrenovac during December 2006. Those patients came to theirs GP-team with some illness, chronic or acute. Instrument for research of depression is Patient Health Questionnaire (PHQ-9).
Results: Our research shows that 37.8% of the patients as subjects in this research are without symptoms of depression, 18.4% of patients have sub-clinical depression, 23.8% have mild-depression, 13.4% have medial-depression and 6.6% have severe-depression. To summarize: 43.8% of our patients have some type of depression.
Conclusion: Based on our results we conclude that we observed high percentage of depression between patients in GP ambulance who have depression in Obrenovac Health Centre. It is very important to recognise depression among patients at the primary care level, start with the therapy and try to improve their life quality.

P-384

Dual-energy X-ray absorptiometry screening adjustment according to clinical practice guidelines

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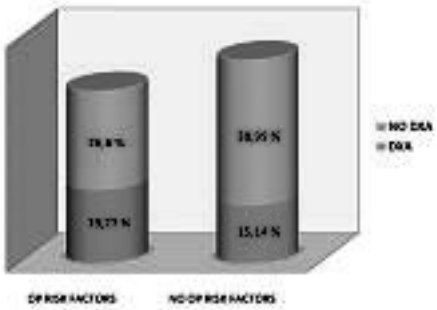
Aim and purposes: Principal: Know about the adequacy of the dual-energy x-ray absorptiometry (DXA) indication among postmenopausal women with higher risk of fragility fracture (FF) or low bone mass, using as a reference SEMFyC (Sociedad Española de Medicina Familiar y Comunitaria) osteoporosis Clinical Practice Guidelines (CPG).
Specifics: 1. Identify the prevalence of risk of osteoporosis in postmenopausal population by using CPG. 2. See the adequacy of DXA indication for each risk factor of osteoporosis in postmenopausal women.
Design and methods: Design: Transversal descriptive study.
Location: Primary health care urban center.
Subjects: Women older than 55 years with active clinic history in our center, without secondary osteoporosis diagnosis, cognition disorder neither confined in bed.
Variables: age, weight, size, BMI, smoking, family history of osteoporosis or FF. Personal history of FF, early menopause, osteoporosis-inducing conditions, DXA and DXA's T-score.
Results: Finally 218 women were included, with average age of 68.4 years ± 8.6, the risk prevalence using osteoporosis CPG standard was 45.87% (95% CI 33.4–57.27). The adequacy on DXA indication is 58.25% (95% CI 51.7–64.8). We noticed significant differences (p <0.002) in osteoporosis screening by DXA between patients with and without risk factors. There are significant statistic difference for the family history of fracture (p <0.0003) and personal history of FF (p <0.001), while no signification is shown for the rest of the risk factors.
Conclusions: We need improve in assessment and selection of those women with clinical risk factors whom would benefit from DXA screening, especially those who smokes, in early menopause, in osteoporosis-induced conditions, low weight and family history of osteoporosis, which no difference in screening with DXA was observed in comparison to those with no risk.

DXA SCREENING IN POSTMENOPAUSAL WOMEN



P-385

Shoulder pain, is always muscular the origin?

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The shoulder pain is a frequent cause of consultation in Primary Care and it is usually benign and musculoskeletal. But sometimes, it can be a manifestation of an underlying malignant disease, asit was the case we present. A 46 year-old male, smoker (20 cigarettes / day), with right shoulder pain of one month of evolution, without previous trauma and

which does not yield to usual analgesic treatment. The examination was normal and the radiography of the shoulder did not show any alteration, so the analgesic treatment was increased. A month later, the patient comes back because the pain persists, and also he feels paresthesia on the inner side of the right arm, with some loss of strength in that hand and ptosis of the right eye, that were confirmed during the physical examination. New radiography was done, and a mass at the right upper lobe of the lung is shown. The patient is derived to the Pneumology.
Consultations: The final diagnosis after different studies was Bronchogenic Carcinoma of non-small cell, stage T4 N2 M0withPancoast syndrome. The Pancoast Syndromeis secondary to infiltration of the brachial plexus by origin of apical lung tumor, but may also be secondary to tumors of the breast, esophagus, pleura, and lymphomas. This syndrome may be associated with Claude-Bernard-Horner and almost always carries a poor prognosis, as in our case, as our patient died five months later.

P-386

Neoplasm of the testis in primary care: from the common to the very uncommon

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Purpose: Although testis cancer is rare (incidence 3.7–6.7 per 100.000), constitutes the most common malignancy in males between the second and forth decade. It is also one of the most curable neoplasm in wich early diagnosis with multimodal treatment has contributed to a decrease in mortality from greater than 50% before 1.970 to less than 10% at the end of the last decade. To describe patients attended in a Primary Care office diagnosed of testis cancer.
Design and methods: Two patients were diagnosed of testis cancer in a Primary Care office during the last three years.
Results: A 30 year old male patient presented with pain and swelling of the right testis. Physicall exam showed a painfull enlarged irregular testis. A testicular ultrasound was performed, showing hypoechoic zones inside the right testes without clear delimitation between nonaffected parenchyma and negative serum markers (AFP and [BETA]-HCG). A right orchiectomy was performed and the final pathology report was seminoma. The second patient was a 47 year old patient with history of a nonpainful well circumscribed palpable nodule discovered 4 months previously with self-exploration. A testis ultrasound showed a well delimited 11 mm. hypoechoic zone in the inferior pole of the left testis. Serum markers were negative. A left orcchiectomy was performed and pathology report showed a Leydig tumor.
Conclusions: Allthough testicular neoplasms are rare, early diagnosis is neccesary to establish a timely treatment.

P-387

Clinical significance of pelvic floor muscle strength measurement – the correlation between pelvic floor muscle strength and clinical data for andropause

Kim C. (Busan)

Aims and purpose: Diagnoses for andropause are carried out with various examinations. Although there have been many studies on male hormones and other various examinations in diagnosing for andropause, it is true that studies are still lacking on the correlation between the pelvic floor muscle strength and andropause and the correlation between the pelvic floor muscle strength and other clinical data. Subsequently, this study has been carried out to identify the clinical significance of pelvic floor muscle strength measurement for andropause.
Design and Methods: 124 male adults were randomly selected in a range of age from 30 years or higher to 80 years or less who visited Health Promotion Center of Donga University Hospital for the health checkup for a period from August 2007 to September 2008. Studies were done with those subjects to identify the correlation of pelvic muscle strength with testosterone, IGF-I, BMI, body fat mass, muscle mass, waist, smoking habit, cholesterol (total cholesterol, triglyceride, low density lipoprotein, high density lipoprotein), HS-CRP, PSA, presence of diabetes or hypertension. The simple correlation analysis was adopted using Pearson's simple correlation coefficient, where the statistical significance was determined if P value was less than 0.05.
Results: The pelvic floor muscle strength had the correlation with age, testosterone, muscle mass, diabetes and smoking. It showed the positive correlation with testosterone (P = 0.005) and muscle mass (P = 0.012) while presenting the negative correlation with age (P = 0.003), diabetes (0.037) and smoking (P = 0.022).
Conclusions: The pelvic floor muscle strength measurement is thought to be the basic data applicable in diagnosing andropause for those patients who claim symptoms for andropause. It seems necessary to have additional studies on the usefulness of pelvic muscle strength measurement in diagnosing andropause for a large size of population in the future.

P-388

Factors that influence exacerbation of bronchial asthma and COPD (chronic obstructional pulmonary disease)

Sejranic I. (Tuzla)

COPD and Bronchial Asthma are frequent cause for paying visit to a physician. Besides a great improvements in diagnostic and treatment methods, exacerbations are happening quite often.
Purpose: Determine COPD and Bronchial Asthma exacerbation risk factors prevalence in order to make preventive efforts more successful.
Design and methods: The study conducted in 2008 has involved 45 examinees in period over six months. Questionary has been designed and it was used in day-to-day work with patients with respiratory disease. The patients were classified in three groups, as follows: patients with Bronchial Asthma-patients with COPD-previously declared healthy patients with acute bronchial inflammation.
Results: The most frequent exacerbations are indicated with patients that are over 40 years old, both genders, that fell into middle social-economy class. Significant disease exacerbation risk factors are present if patient is exposed to: polen of ambrosia and weeds, dust, tobacco, air polution and fog, increased physical activity, acute stress, viral infections.
Conclusion: Exacerbation preventions are primary objective in effort to efficiently treat and manage COPD and Bronchial Asthma. Preventive measures are eliminations or reduction of risk factors and education of patients about disease and treatment. Prevention needs to enclose overall society.

P-389

Homocysteine in angiographically defined coronary artery disease

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Aims and purpose: Aims of the research were: to establish the values of plasma homocysteine (HCY) for the patients with angiographically defined coronary artery disease (CAD); to establish the values of HCY in subjects that don't have CAD; to establish the correlation between the concentration of HCY with the values of total cholesterol, HDL and LDL-cholesterol, as well as with other risk factors for the onset of CAD; to establish the correlation of concentration of HCY and ejection fraction of the left ventricle.
Design and methods: The research included 200 subjects. Coronarography has done with AXIOM ARTIS DFC. Echocardiography has done with Acuson Segouja device. Plasma homocysteine was measured by AXYM device, lipoproteins by automatic analyser DIMENSION LxR.
Results: The average values of HCY in patients suffering with angiographically defined CAD was 13.86, and 10.65 µmol/L in the controls (P <0.0001). Student's test has proven that the average values of ejective fraction of the left ventricle of subjects with CAD were statistically significantly different in comparison with the values of ejective fraction of the subjects in the control group. In all the groups the negative values of coefficients of correlation (R) says that with the increase of HCY concentrations the ejective fractions of the left ventricle drop. Using logistical regressive analysis it was established that the following factors contribute the most to the development of CAD: increased concentration of plasma LDL-cholesterol, increased concentration of HCY, diabetes mellitus and hereditary factors. Combined action of the increased values of HCY concentrations and the increased values of LDL-cholesterol concentrations, increase the risk for occurrence of coronary disease by 33.9 times.
Conclusions: In all the different forms of angiographically defined CAD (one-vessel or multiple-vessels), the increased concentration of HCY was the significant risk factor for the development of CAD.

P-390

Saxagliptin improves glycaemic control either as add-on therapy to metformin or as initial combination therapy with metformin in patients with type 2 diabetes

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Aims: Saxagliptin (SAXA) is a potent, selective dipeptidyl peptidase-4 (DPP-4) inhibitor, specifically designed for extended inhibition of the DPP-4 enzyme. The efficacy and safety of SAXA was assessed in two Phase III trials (CV181014/Study 1 and CV181039/Study 2), either as add-on therapy in patients with type 2 diabetes mellitus (T2DM) inadequately controlled by metformin (MET) alone (HbA1c 7.0–10.0%) or as initial combination therapy with MET in drug-naïve T2DM patients (HbA1c 8.0–12.0%), respectively.

Methods: Following a placebo (PBO) run-in, patients (n = 743) on MET in Study 1 were randomised to receive once-daily SAXA 2.5, 5 or 10 mg, or PBO, plus their stable MET dose, and drug-naïve patients (n = 1306) in Study 2 were randomised to receive SAXA/MET 5/500 mg (S5/MET), 10/500 mg (S10/MET), SAXA 10 mg or MET 500 mg once-daily. In the MET treatment arms of Study 2, MET was up-titrated incrementally (Weeks 1–5) to a maximum of 2000 mg/day. Both studies' primary endpoint was HbA1c change from baseline at 24 weeks.
Results: Treatment groups were well balanced at baseline for HbA1c (Study 1, 8.0–8.1%; Study 2, 9.4–9.6%). At Week 24, significant ($p < 0.0001$) reductions in adjusted-mean HbA1c change from baseline were observed in Study 1 for SAXA 2.5, 5 and 10 mg (–0.59%, –0.69% and –0.58%, respectively), compared with PBO (0.13%), and in Study 2 for S5/MET (–2.53%) and S10/MET (–2.49%), compared with SAXA (–1.69%) or MET (–1.99%) alone. In each study, SAXA plus MET provided significant ($p < 0.001$) reductions in fasting plasma glucose and postprandial glucose, increased proportions of patients with therapeutic glycaemic response (HbA1c <7%), and was well tolerated with no increased incidence of hypoglycaemia compared with matched controls.
Conclusions: SAXA add-on or initial combination therapy with MET provided significant and clinically meaningful reductions in key parameters of glycaemic control and was well tolerated in patients with T2DM.

P-391

Lipid parameters: investigation in a hypothyroid patient

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Aim: Lipid disorders in hypothyroid patients were comparatively studied toward the general population.
Material-method: Total cholesterol (TC), HDL-Cholesterol (HDL-C), LDL-Cholesterol (LDL-C), and triglycerides (TG) values were measured in 217 individuals (63 men and 154 women, with means age 54,7 years) with hypothyroid (TSH >3.8 ?IU/ml). The corresponding parameters were studied in a random sample of 200 healthy individuals (56 men and 144 women) with similar average age (55.2 years) that came in the Microbiological Laboratory for check. The individuals who had diagnosed Diabetes, Coronary Illness, High Arterial pressure, Vascular of Cerebral Episode etc, were excluded from our study. All the examinations became with colorimetric method in biochemical analyst Targa 3000 (Menarini).
Results: Patients with hypothyroid: Men: 63, Women: 154
TC >200 mg%: Men: 41(65%), Women: 116 (75%)
LDL-C >160 mg/dl: Men: 31(49%), Women: 91 (59%)
TG >150 mg/dl: Men: 16(25%), Women: 51 (33%)
Random sample of healthy population: Sex: Men: 56, TC >200 mg%: 13 (23%), LDL-C >160 mg/dl: 12 (21%), TG >150 mg/dl: 5 (9%) Sex: Women:144, TC >200 mg%: 32 (22%), LDL-C >160 mg/dl: 29 (20%), TG>150 mg/dl: 12 (8%)
Conclusions: 1) The hypothyroid patients have multiple lipid disorders in contrast to the general population. 2) The lipid disorders are even observed in cases of hypoclinical hypothyroid. 3) The lipid disorders are retrieved with the euthyroidism achievement. 4) The thyroid hormones level should be examined before the hypolipid treatment especially in women. Thereby, hypoclinical or clinical hypothyroid should be revealed in order to be confronted.

P-392

Depressive mood and sleep disturbances in outpatient and inpatient women

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Aims and purpose: To examine the sleep quality and depressive mood of women visiting gynecological/maternity clinics in a regular basis or being treated as inpatients.
Design and methods: General practitioners interviewed all women visiting a Greek public clinic as outpatients or being inpatients for two constant weeks. Depressive symptoms were evaluated with the Centre for Epidemiologic Studies Depression (CES-D) scale and sleep with the Athens Insomnia Scale (AIS). All participants were asked about their basic demographics, medical history and medication.
Results: From a total of 60 women examined, with a mean age of 32 years, 53.3% were Greeks and 46.7% immigrants. 53.3% were outpatients and 46.7% inpatients. Moreover 26.7% were pregnant, 36.7% puerperal and 15% menopause. 3.4% had a medical history of Major Depressive Disorder, 3.4% used benzodiazepines, 1.7% benzodiazepines and antidepressants and another 1.7% used other medication influencing sleep as antihistaminic. 61% had elevated AIS scores and 37.3% elevated CES-D scores. Inpatients were more depressed ($p < .05$) and had worse sleep ($p < .05$) but outpatients still had a great ratio of disturbances; 55% had elevated AIS scores and 19% elevated CES-D scores. Immigrants had greater scores when asked if people are friendly with them (CES-D question 15, $p < .05$).
Conclusions: A great number of women treated in gynecological/maternity clinics feel depressed and even more have sleep disturbances, even if they are visiting the clinics as outpatients.

P-393

What a general practitioner needs to know about Friedreich ataxia

Kearney M. (Ireland)

Friedreich ataxia (FA) is a progressive neurological disorder presenting between 5–15 leaving sufferers whell-chiar bound within 5–10 years of diagnosis. It is the most common inherited recessive ataxia worldwide. It can be diagnosed genetically and since 1996 carriers can be identified. Heart abnormalities may cause premature death in 60 to 80% of sufferers. There is no approved treatment, but recent studies (Pineda 2008) have suggested that idebenone, an antioxidant, help cardiac hypertrophy and neurological abnormalities.
Objectives To examine the efficacy of antioxidants and other pharmacological treatments for FA.
Main results: There has only been 1 ramdon controlled clinical trial done to date. It showed that idebenone improved left ventricular mass significantly ($p = 0.007$) but suggested further evaluation was needed to assess clinical relevance of cardiac changes. Idebenone did not show any effect on neurological function.
Management of FA: Guidelines for the treatment of FA was initially published in Dutch has recently been updated and translated into English and is a useful guide for any practitioner who is treating a Friedreich ataxia sufferer.
Treatment: Many ataxia sufferers will want to take idebenone despite it showing no improvement in neurological function and currently some governments are paying significant amounts of money for idebenone for FA sufferers. It is costing the respective government significant money. As there are currently three clinical trials worldwide recruiting FA patients, it would be appropriate that if FA sufferers wish to take idebenone that they should be part of a clinical trial. FA cannot be assessed by an easily defined clinical or biochemical biomarker. A random controlled clinical trial of at least 12 months duration (as FA is slowly progressing condition) using the internationally accepted ataxia rating scale, ICARS, and assessing left ventricular mass is best way forward as shown by our recent cochrane review.

P-394

Capsule endoscopy in family doctor practice to reveal the reason of unclear etiology chronic anemia

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Background: One of the mayor indications for video capsule endoscopy (VCE) is unclear etiology chronic anemia. Latvian experience shows that this young diagnostic modality could help family doctor to put the right diagnosis and start proper treatment in time.
Aim of study: This study was designed to evaluate capsule endoscopy efficiency for revealing the cause of unclear chronic anemia.
Methods: All the patients that undergo capsule endoscopy procedure were either from the P. Stradin Clinical University hospital or Latvian Maritime Medical centre and had unclear etiology anemia. All the patients had upper or/and lower endoscopy before VCE, but the reason was still unclear. The capsule endoscopy was performed using three systems: Given Imaging, Olympus and OMOM capsule endoscope system.
Results: Total 20 capsule endoscopies were performed (15 females and 5 males). Patients age was from 17 to 78 (average 47,3 ± 20,38). Capsule worked ~8 hours. In total in every case we received ~50000 images. In all the cases the reason of anemia was revealed. Capsule endoscopy results were: angiodysplasia – 1, duodenopathy – 1, duodenojejunopathy – 3, celiac disease – 4, eritematous enteropathy – 2, erosive enteropathy – 1, hemorrhagic enteropathy – 1, hemorrhagically-erosive small bowel damage – 3, small bowel tumor – 1, NSAID enteropathy – 2, terminal ileitis – 1.
Conclusions: Latvian preliminary data shows that: 1) unclear etiology anemia is only one indication when family doctor can send the patient straight to the capsule endoscopy procedure with out gastroenterologist consulting; 2) capsule endoscopy system is safety, effective and well tolerated procedure for finding the cause of unclear anemia; 3) using capsule endoscopy family doctor could diagnose the cause of anemia in time very precisely and start the treatment immediately.

P-395

Gastrointestinal symptoms among young people with genetically confirmed type of hypolactasia

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Aim: To analyze the frequency of gastrointestinal complaints among young people with genetically confirmed type of hypolactasia and their connection with milk products consumption.
Methods: The 241 students aged 17 to 26 years were randomly selected from different faculties of Northern State Medical University. All subjects gave written informed consent and filled a questionnaire about their personal data, self-reported condition of health, milk consumption habits and gastrointestinal symptoms. We took blood samples from all of them for genotyping lactase activity defining C/T-13910 variant by polymerase chain reaction and direct sequencing.
Results: The prevalence of lactase non-persistence genotype was 35.6%. We found that there are not statistically significant differences between frequencies of gastrointestinal symptoms among healthy students with different genotypes. There were the differences in consumption of milk products and presence of symptoms connected with this consumption between students with persistence and non-persistence genotype.
Conclusion: One third of examining young people had lactase persistence genotype in our study. Although from 30 to 50% of them had different gastrointestinal symptoms we did not proved connection between symptoms and genotype. However in previous study conducted in other populations the influence of lactase non-persistence genotype was proved. Our results can be explained by the fact that northern people use relatively small quantity of milk which do not cause the complaints among subjects with genetically confirmed lactase intolerance.

P-396

Women with tiredness, sleeplessness, depression, headache, lack of concentration, hairloss or vertigo? Test the ferritin level!

Von Orelli F. (Basel)

Not anaemia but iron deficiency is at the base of headaches, tiredness, depressive symptoms, sleeping disorders, muscle tenderness, hair loss and nail breaking, dizziness, concentration and memory problems and restless legs of millions of women. Isolated or multiple, these symptoms should first suggest testing of the ferritin level. Since iron is an essential element of about 170 enzymes in the human body, lack of iron can provoke a multitude of deficiency signs. Reduction of the hemoglobin production and hemopoiesis are the last to appear. Only 10% of patients with symptoms responding to iron supplementation show hemoglobin below 120 g/l. Because of the bad absorption of oral iron supplements, the frequently needed amount of more than 1000 mg of iron to really fill up the reserve should be given i.v. if possible, with careful monitoring to avoid iron overload specially in hemochromatotic women. The observation of more than 800 symptomatic women treated by i.v. iron supplementation showed that only filling up the iron deficit until values of more than 100 ng/ml resulted in improving of the majority of the symptoms in 60–70%. Symptoms and results will be discussed. The complexity and the subjective character of symptomatology and the lack of specificity create an uncertainty of the diagnosis. New criteria for normal ferritin value in menstruating women and for the iron deficiency syndrome have to be found. Iron deficiency with and without anaemia is the most frequent and at the same time probably the most neglected deficiency illness of the planet. A word to the wise is enough!

P-397

Diabetes mellitus type 2 and risk factors

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Aims: To determine frequency of risk factors of diabetes mellitus 2 and measure effects appropriate treatment.
Design and methods: In period of six months, prospective research anticipated 120 patients witch were observed during four control examinations (70 males, 30 females); with already confirmed diagnosis of diabetes mellitus 2. By method of questionnaire based on anamnesis, finished physical examination and analyses of medical documentations, following risk factors were observed: hypertension, BMI, waist size and laboratory analyses (LDL cholesterol and triglycerides). Beside medicaments therapy all patients were advised to increase physical activity, to apply certain dietetic methods and quit smoking.
Results: The biggest frequency of disease is in the age above 50 (73%). It was noted that 85% of patients have diabetes for more than 5 years. All patients were obese, with average BMI 30.38 (women's waist size was 90.2 and men's 104.2). Percent of smokers was high (65%). 75% of patients had hypertension. Average value of triglycerides was 2,54 mmoll and LDL was 4.35. All patients (100%) in healing of diabetes mellitus 2 use medicaments. Recommendations related with hygienic-dietetic therapy gave bad results with smokers (only 25% quit smoking). On the end of the examined period systolic blood pressure was reduced for 13.9%, diastolic blood pressure for 10.9%, waist size for 3.99%, BMI for 4.25% (reduced on 29.11). We noticed significant reduction of triglycerides for 29.73% (on 1.79 mmoll). Value of LDL fraction was reduced for 16.02% (on 3.66)./p <0.05/
Conclusion: Our results show increase (in percents) of diabetes frequency with aging. Frequency of obesity and hypertension at diabetics with already present biochemical distraction confirms us importance of this factors in appearing of diabetes. Prevention activity should be direct on early diagnose of disease and removing influence of risk factors.

P-398

SPIRO project – COPD patients can live longer and with better quality

Bendova J. (Velky Biel), Vaverkova I. (Bratislava)

Aims and purpose: COPD prevalence is undervalued as many patients remain undiagnosed. General practitioners should play the crucial role in COPD diagnostics. This project emphasizes the necessity of spirometry in general practices, as spirometry is considered to be the golden standard in COPD diagnostics. Primary aim of this project is to achieve the slowdown of lung function progressive worsening via early diagnosis and good management of our COPD patients; thus improving the quality of their lives as well as prognosis. Secondary aims (e.g. to reduce number of smokers) are also determined and will be presented.
Design and Methods: This pilot project started in two general practices in Slovakia in January 2009. Patients aged 35 and over with the history of chronic smoking (defined as more than 5 years and more than 10 cigarettes a day) are included. At the baseline medical history is taken using Clinical COPD Questionnaire; physical examination and baseline spirometry are performed, followed by bronchodilatation test, if obstruction is detected. Once a diagnosis is made, disease severity is assessed and appropriate treatment started. Visits follow at least once a year, inclusive spirometry. As a part of the project help with smoking cessation is offered at baseline as well as during each visit.
Results: Partial results will be presented: number of screened and number of newly COPD diagnosed patients, severity at diagnosis, etc.
Conclusions: If the care is given to COPD patients by their general practitioner, who sees them often, and who is familiar to them, general practitioner has a better chance not only to check the patient regularly, but also to educate him. Thus the compliance is enhanced. The patient has to understand the connection between smoking and COPD, he has to comprehend that he is the one, who decides on his prognosis. Informed patient cooperates better.

P-399

Do any differences exist in minimum quality indicator compliance and blood pressure control in relation to the patient's genre?

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Aim: scientific publications reveal that a different treatment is given in diagnostic and treatment of cardiovascular diseases depending on the genre of the patient and the female genre is discriminated. We have studied if there are differences between minimum quality indicators(MQI) compliance in the first visit depending on the patient's genre, as well as optimum and suboptimum control of blood pressure in Primary Care (PC).
Method: Selected MQIs have been used by investigator group consensus taking into account the main national and international hypertension guidelines. We included 250 patients selected by means of systematic random sampling of the patients' file of the centre. T-test has been used to calculate differences between MQIs of both genres, and statistic test x 2 has been used to calculate the convergence 2x2 table in order to analyse the differences by genre in optimum control (SAP <140 mm Hg and DAP<90 mm Hg) and suboptimum (SAP 140–160 mm Hg or DAP 90–95 mm Hg), except for diabetic or renal impaired.
Results: Included Minimum Quality Indicators are: body mass index, cardiac examination, peripheral pulses, blood glucose, HDL, LDL, cholesterol and triglycerides, urine test, creatinine, uric acid, potassium, electrocardiogram, funuscopy, exercise advice and diet and

pharmacological treatment.173 women and 77 men have been included; the average MQI compliance on the first visit has been: women 2.89 (SD ± 3.01) and men 2.96 (SD ± 3.28) for a P = 0.9 There are not differences in optimum (P = 0.7) and suboptimum (P= 0.2) control of blood pressure. It has not been possible to stablish differences between individual MQIs because of the low compliance of them. Statistic pack SPSS 8.0 was used.
Conclusion: We couldn't find in our job discrimination in MQI compliance in relation to the patient's genre. There are no differences in the control of blood pressure neither.

P-400

Relations between use of contraception and voluntary termination of pregnancy (VTP)

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Aim: Knowing the profile of women seeking information on VTP (age, relationship stability, coexistence, no children, no previous abortions, source) Methods that have practiced before the unwanted pregnancy and its failure and specify the method AC VTP indicated after practicing a VTP.
Design: Retrospective analysis of cases of women seeking information to practice VTP in Health sexual and reproductive attention program (HSRAP) Mataró between 2002 and 2007 (1044 cases) using data recorded in the questionnaire designed for the registration centre.
Results: The profile of women seeking IVE CAD Mataró: Average age 25.15 + / - 6. 57% of couples do not share housing, despite stable relations declared on 47%. 64.8% of women have no children, had a 16.3% and 12.6% – two more than 1.8% 3. 74% er-1 practiced abortion and 7.1% a second abortion. 79.4% consulted before the 8th week of amenorrhea. 28% of women were foreign. 2.7%, 29 women, decided to continue with pregnancy. AC methods used condoms were 43% 24% coitus interrupts, oral contraceptives but only 15% 33% couples used their method correctly AC. AC methods post-vtp most recommended were: 55.8% hormonal contraception, condoms and IUDs 7.4% 10.4% 22.4% cases but is not specified. Our data are comparable with officials ones from Catalonia and Spain on legal VTP.
Conclusions: In our study shows that one third of women who used a contraceptive method became pregnant. In the remaining two thirds showed significant errors in their use. The VTP is a solution to these cases, but never a method of family planning.

P-401

Edcuation of type 2 diabetes management according to the 2006 ADA/EASD consensus in primary care

Barrionuevo M. (Madrid), Nunez A. (Madrid)

Aims and purpose: Analyze the adecuation of type 2 diabetes management (treatments and analytical controls) according to the 2006 ADA/EASD consensus, managed in our Primary care setting. Analyze the achievement of HbA1c target levels and cardiovascular risk factors control according to the ADA 2008 recommendations.
Desing and Methods: Retrospective, descriptive and transversal study. From 154 patients obtained from the computerized medical history and records from Sep 2006 to Dec 2007 with the new diagnosed episode of type 2 DM. 65 patients fullfil the elegibility criteria. Exclusion criteria: Treatment control made out of the Primary care setting. Variables: Age, weight, size, BMI, BP, Serum cholesterol, LDL-c, HDL-c, FERUM triglycerides, creatinine, HbA1c, microalbuminuria, micro/macrovascular disease, Glucose Lowering drugs, non medical treatment.
Results: Total patients N = 154; Fullfil elegibility criteria N = 65. 32 Men (49.2%), Mean Age: 65,85 (SD 12,512); HTA: 53.1%; DLP: 29.7%; Mean Systolic Blood pressure: 131,18(SD 16,319); Mean Diastolic blood pressure: 78.9 (DS 9,993); Mean Body Mass index: 30.67 (DS 5.24). Primary endpoint: adecuation of management according to consensus: 8 patients (12.3%). Secondary endpoints: CVRF control: HTA: 35.3%; HbA1c <7%: 26 (40%); LDL-c <100: 14 (11.1%); HDL-c men >= 40: 15 patients; HDL-c women >= 50: 26 patients ; TG <150: 33 patients. Microvascular/macrovascular disease frequency: neuropathy: 2 (3.1%); Retinopathy 2 (3.1%); Stroke 2 (3.1%); Ischemic Heart disease: 4 (6.2%) HbA1c (<7%): 26 (40%).
Conclusions: The fullfil of the ADA/EASD consensus in the clinical practice is inadequate. The CVRF control is insufficient. The prevalence of micro/macrovascular disease is similar to bibliographic. The proportion of diabetic patients with correct analytical control is beyond expected.

P-402

The under-considered cardiovascular risk factor: chronic kidney failure

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Objective: To analyze the profile, level of control and cardiovascular risk (CVR) in patients (p) with chronic kidney failure (CKF) without diabetes PCKFWD).
Methods: Cross-sectional analysis in an Urban Primary Health Centre. Random sample analysis of 140 PCKFWD (glomerular filtration rate(GFR) <60 at least 2 times in 3 months)of a total of 663PCKFWD (21%) through computerized medical history(MH). Variables: age, sex, hypertension (HTN), GFR, Blood Pressure (BP), kidney damage, ultrasound scan (US), proteinuria, lipid control, ACE inhibitor/angiotensin II receptor blocker (ARB) treatment, anemia, ionogran, CVR, NSAIDs consumption, derivation to nephrology.
Results: 103 women (73,6%). Average age±SD = 73.8 ± 12.9 years old. HTN = 69.3%; Registered CKF in MH = 45%; Average MDRD±SD = 49.3% ± 9.1; Kidney damage = 8.5%; US = 52% normal, 26% benign prostatic hyperplasia (BPH).31 males> = 60 y., 15 with US (53% BPH, 40% normal) PCKFWD with ACE inhibitor/ARB treatment = 52% of total PCKFWD. BP registered in MH = 95.7%. Wrong control of BP (BP >130/80): 52.1%.Patients with HTN diagnosis, correct controlled = 40%. Proteinuira = 5p,4 with with ACE inhibitor/ARB treatment and 1 of them, with optimum control (BP< = 125/75). Correct lipid control (LDL<100&HDL>40) =14.3%. Wrong lipid control = 85.7%.Without lipid modifying agents treatment = 65.8%. 30p presents anemia (50% with iron treatment) & 7p have ionogran alteration. Estimated CVR: 2% = 101p,4% = 1p,7% = 36p.94p (67%) don't receive antiaggregant treatment. NSAID consumption in last 6 months = 27p. Derivation to nephrology = 13p.
Conclusions: The CKF, that is independent and additive CVR, is under-considered in primary health care. According with the results of PCKFWD's control, we conclude that diagnosis, monitoring, control and associate complications must be optimized, through trainings for professionals and improving coordination with specialist trying to reach agreement and implementation of clinical medicine guides.

P-403

Insulin resistance and development of hypertension: a retrograde cohort study

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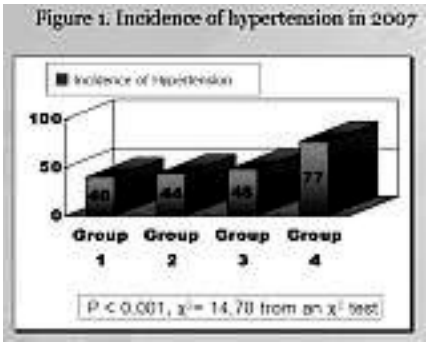
Background: Several cross sectional studies have shown a close association between insulin resistance and hypertension. But, there was a few longitudinal studies about this relationship and especially, no study about Korean people. The purpose of our study was to investigate the relationships between insulin resistance and development of hypertension.
Methods: As a retrograde cohot study design, a total of 1435 healthy subjects were selected for our study, who have visited Samsung Medical Center for routine health screening in 1997, and revisited in 2007. They were divided in quartiles according to HOMA-IR at 1997. At 2007, the incidence of hypertension by each HOMA-IR group was assessed.
Results: The incidence of hypertension was 40/358 (11.2%) in the lowest quartile (group 1), 77/359 (21.4%) in the highest quartile (group 4) and this difference was statistically significant. (X2 = 14.70, P <0.001) After adjusted for age, sex, BMI, triglyceride, HDL-cholesterol, incidence of hypertension in the highest quartile was significantly higher than the lowest quartile. (OR 1.61, 95% CI 1.01~2.57, P = 0.045).
Conclusion: Our study indicated that insulin resistance is linked with development of hypertension.

Incidence of hypertension in 2007



Multivariable logistic regression model

Table 2. Multivariable logistic regression model*

Groups of HOMA-IR	Odds ratio (95% CI)	P-value
Group 1	1	
Group 2	1.040 (0.631-1.664)	0.870
Group 3	1.619 (0.637-1.689)	0.938
Group 4	1.612 (1.012-2.570)	0.045

* Adjusted for age, sex, body mass index, triglyceride, HDL-cholesterol

P-404

Nordic walking for depressed patients in family practice

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Aim(s) and purpose: To study (1) physical activity (PA) of the depressed patient; (2) how motivated depressed patients are to exercise regularly; (3) how regular PA affects mood.
Design and methods: a cross-sectional study. Telephone calls were made three years after the PREDICT study to 178 patients who had had depression during the PREDICT study. We inquired whether they would be interested in starting a regular Nordic Walking (NW) programme lasting for one year and we also inquired about their previous PA during the past two years. The Composite International Diagnostic Interview (CIDI) was used to assess depression. Regular meetings were organized after 12 and 24 weeks of exercising. All participants had to fill in an exercise dairy.
Results: Altogether 106 patients were interviewed, 48 (45%) of them were depressed and 58 (55%) were non-depressed by the CIDI. Of the patients 55 (54%) said that they had not had regular PA during the past 2 years. Of the patients 21 (20%) were motivated to start NW, 16 of them were depressed by the CIDI. The main reasons for starting PA were the possibility to reduce depression and to improve health. Of the patients 18 completed the study. Only 3 of them were still depressed by the CIDI. During one year 7 patients had exercised NW regularly twice or more times a week, 5 had exercised once a week, 5 had exercised non-regularly, and 1 had not exercised at all. Of the participants 13 (72%) said that this programme had increased their PA.
Conclusions: Depressed patients in FP were physically inactive. About 20% of the patients were motivated to start regular PA. The main reasons for starting PA were the possibility to reduce depression and to improve health. The feedback of the patients to the programme was positive and regular PA had good influence on their mood.

P-405

Correlation regarding gonadotrop hormones and vasoactive menopausal symptoms

Manea M. (Craiova), Traistaru A.M. (Craiova), Comisel G. (Craiova)

Background: In menopause the pathogenic of vasoactive symptoms still is unknown. Even some of specialists consider the women psychology as determinant of the vasoactive troubles, the family doctor that know his patient could not agree with this.
Purpose: To identify the menopausal gonadotropin pattern and their possible association with vasoactive symptoms.
Material and method: The design study is cross-sectional. The study lot consist on 124 women aged between 40 and 60and provided from capitation list of the medicine family doctors. The blood tests for LH and FSH was performed in the same laboratory.
Results: The medium age is 47; in this lot 68% are on menopause and from these 56% describe vasoactive symptoms. High levels of LH is identify in 21% from cases and FSH in 85%.
Discussions: High LH level does not correlate with vasoactive symptoms but high FSH and ratio LH/FSH under 0.40 have good correlation (p-value 0,001). FSH high level suppress hypothalamic FRH produced in the same nuclei responsible with thermolyse.
Conclusions: Because of statistic correlation of high FSH level with vasoactive symptoms we consider this as trigger and suppose as mechanism the central thermolyse and not thermogenesis. If an extend lot confirm this hypothesis, an FRH-like substance could diminish vasoactive symptoms in menopause.

P-406

Renal failure prevalence and associated factors on diabetic patients type 2

Villaro M. (Terrassa), Mur T. (Terrassa), Porta N. (Terrassa), Perez E. (Terrassa)

Aims: Determine Renal Failure prevalence on DM2 patients through the estimating Glomerular Filtration Rate and prevalence of risk factors.
Design/methods: Cross-sectional observational study where a random sample 500 DM2 attended in "CAP Sud" BCN were selected by having a GFR during the year before. During 6/08-12/08: Clinic-demographic variables: Age, sex,race,years of DM, smoke habit, hypertension, renal lithiasis, dyslipemia, pharmacologic treatment with metformin and with IECA or ARAII.
Analytic: GFR (MDRD4), creatinine, microalbuminuria , urine sediment, cholesterol, HDL, LDL, and HbA1c.
Statistical analysis: Variables comparison on the bivariable analysis was done through chi2 test for the qualitative ones and student t for the quantitative ones. OR were fixed by the Mantel-Haenszel method. Multivariate analysis was done through multiple logistic regression. It was statistically relevant a p <0.05 or a CI which didn't include the unit. It was used the statistic program Stata version 9.
Results: From the 500 patients: average age 66,2,52,6% female; 474 Caucasic, 11 Latin, 13 north Africa and 1 sub-Saharian. Average of the DM years was 7,4. 70.4% HTA, and 55.4% showed a good control. 17.6% smokers. 67.6% dyslipemics 121 (24.2%) had RF (GF <60), from which 113 (22.6%) in stage 3 (GF = 30–59) and 8 (1.6%) in stage 4 (GF = 15–29). The RFpatients had an higher average age (72.2 vs 64.3), dominated on women (61.2%) a major duration of the DM (8.6 vs 7.41), higher creatinine figures (1.2 vs 0.9) and microalbuminuria (4.3 vs 2.7) and was associated with HTA and dyslipemia. There were no differences with the ICM and neither in the HbA1c, cholesterol, LDL or HDL. In the multivariate analysis, only persisted a significant association with age, female sex and dyslipemia.
Conclusions: IR prevalence with an estimated GF on our patients with DM2 is 24,2% and was associated with age, female sex and dyslipemia.

P-407

Project of improvement of the diagnosis of the chronic obstructive pulmonary disease (COPD) in primary care

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Aims: to validate a portable device of spirometry for the diagnosis of copd and knows the opinion of the doctors of primary care with regard to the use of the device.
Design and methods: multicentral, transverse study in patients diagnosed of copd slight or moderate. A conventional spirometry and a portable device spirometry was realized to compare the results and the quality of the diagnosis. We poll the doctors participants to know their opinion to concern the use of the new portable device.
Awaited Results: one expects to demonstrate that the use of a portable device to realize spirometry that calculates VC i FEV1 is valid equally that to use conventional spirometry device. One expects to demonstrate that the opinion of the professionals of the primary care is favorable to the use of the portable device. One expects to demonstrate that it is a use of the portable device allows a major number of diagnoses of copd in primary care.
Conclusions: 1. the accomplishment of conventional spirometry device in primary care continues being complicated. 2. Another devices exist probably equally of valid for the diagnosis of copd of more easy use. 3. It is possible to investigate new technologies to facilitate the diagnosis of copd.

P-408

The frequency of smoking and depression among the first and sixth grade students of medicine faculty

Kutlu R. (Konya), Civi S. (Konya)

Objective: The aim of this study was to investigate the frequency of smoking status and depression among the first and sixth grade students of medicine faculty.
Materials and Methods: This descriptive study was carried out between 10th January and 26th February 2008. The universe of this study consisted of all first and sixth grade students attending Meram Medicine Faculty of Selcuk University. We reached 79.09% of total students (242/306) during the research period. A questionnaire was applied in order to determine socio-demographic characteristics and smoking status. Depression status was evaluated with Beck Depression Inventory (BDI).
Results: The mean age of our study group was 21.2 ± 3.3. When the distribution of gender was evaluated, 50.4% (n = 122) of them were female and 49.6% (n = 120) were male. The rate of students who lived in a dormitory was 32.6%, 34.3% with their friends and 26.5% with their families, respectively. Of the mothers, 50.4% (n = 122) was primary school educated and 74.0% (n = 179) was housewives. Of the fathers, 47.6% (n = 115) was university educated and 29.8% (n = 72) was white collars. Smoking prevalence was found as 19.0% (46/242). Of the students, 76.0% (184/242) was non-smokers and 5.0% (12/242) was ex-smokers. When we asked the smoking status of the families, 50.4% (122/242) was smokers. Of the friends, 68.4% (164/242) was smokers. BDI score was found over 17 in 13.3% of the students (32/242). There was no difference between gender, depression, the smoking status of the families and the smoking habits statistically (p >0.05).

Conclusion: Although smoking prevalence among medical students is lower than general population, they are at risk. In order to bring up better healthy doctor candidates, providing this special group giving up smoking and supportive psychological counseling may be useful during their education.

P-409

Patient and alcohol in primary care: a qualitative study of general practitioner's personal experience and representations

Thierry V. (Nancy), Aubrège A. (Nancy), Paille F. (Nancy), Berbé C. (Nancy)

There is a huge contrast between general practitioners' views about the consequence of alcohol problems in France and the minimal implementations in the prevention and treatment of these problems in reality. This work studies personal experiences of general practitioners and aims to better understand challenges related to the alcoholic problem. A qualitative study of primary care physicians' experiences and views was carried out on eleven physicians. The alcohol problem is not an easy subject to treat for a GP; the alcohol as a product and as a disease or illness will be appreciated and interpreted with different representations. The character, the personal path and the professional background of the GPs influence the representations of these issues. The treatment is generally associated to a notion of incurability and fatalism. The GP are used to be prescribers and consequently they find difficult to treat the alcohol problems without a conventional method. They commonly believe that the healthcare politic is not supportive enough and could better accompany them. These different factors illustrate a disturbance by the GPs facing the alcohol problem. The GPs have feelings and representations which can influence at different level the development of these difficulties. There is a significant ambivalence in their speech and behavior. It is essential to reposition the primary care physicians as a mastermind in the screening and treatment of the alcohol misuse. Therefore they need to be convinced of the effectiveness of their interventions and tools in order to deliver a real help for the patient.

P-410

Vaccination against hepatitis A virus (HAV) among children in nursery schools in north west Peloponnese in Greece

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Introduction: Greece is not considered an endemic country for Hepatitis A. Vaccination against HAV is only recommended to high – risk groups, which include patients' with Hepatitis A families (24%), children who attend nursery school (18%), homosexual men (11%), individuals who are going to visit a country, where Hepatitis A is endemic (4%) and finally unidentified causes (40%).
Aim: The aim of our study was the evaluation of our ability to prevent HAV – related morbidity among children who attend nursery school by means of vaccination.
Design and methods: 200 children age 2.5 to 4 years old were checked upon their registration at nursery school in the district of northwest and central Peloponesse.
Results: Out of 200 children 52 had been properly vaccinated by receiving two doses of the vaccine, whereas 8 had been inadequately vaccinated (only one dose).
Conclusions: 20% of patients with Hepatitis A belong to the vulnerable pre – school age group. Vaccination of children before their entering nursery school is recommended and must always be advised to parents by Pediatricians and General Practitioners.

P-411

Thyroidea, disorder of its function is an autoimmune disease or/and the disease of modern age

Matic D. (Belgrade)

Aims: The thyroidea is a parenchymal organ which belongs to the group of glands with incretion, weighs 20 g, its hormones go directly into blood. Two basic hormones of thyroidea are thyroxin (T4) and triiodothyronine (T3). Their incretion is regulated by thyrotropin, a hormone produced by the pituitary gland.The thyroidea by its hormones influences almost all metabolic processes in human organism.
Methods: Working for 15 years as GP with about 1300 patients, I've noticed the increased number of new patients with disordered function of the thyroidea in past 8 years. The method is based on the analysis of the data from patient health files in Health center Vracar, Belgrade, Serbia.
Results: I've diagnosed 42 new patients with the functional disorder of thyroidea in period 2000–2008 (four times more than in period 1993–2000). There was only one man among them and 41 women, average age of 62. Decreased function – hypothyroidism was found with 26 patients, they are on substitutional therapy. Only 3 patients have increased function – hyperthyroidism. Nodi on parenchymal swollen gland were found with 13 patients with a regular thyroid function. Five of them had total thyroidectomy. With two malignacy was histologicaly confirmed. The average value of glycemia is 5.6 mmol/L, cholesterol 5.8 mmol/L, triglycerides 1.67 mmol/L, which can be considered as regulated metabolism.
Conclusions: The most frequent cause of hypothyroidism is Hashimoto's disease – chronic thyroiditis. It is an autoimmune disease which often occurs with some other autoimmune diseases (such as rheumatoid arthritis, lupus erymatosus, diabetes). Among my patients only one female has rheumatoid arthritis, the average age is higher than before and only two female patients have lipidosis.

P-412

Glomerular filtration estimated on DM2 patients: a possible predictor indicator of cardiovascular risk

Villaro M. (Terrassa), Porta N. (Terrassa), Mur T. (Terrassa), Perez E. (Terrassa)

Aims: Determine if GFR on DM2 is related with a higher risk of having cardiovascular disease.
Material and method: Cross-sectional observational study where random sample 500 DM2 inCAP Sud were selected by having a GFR the year before. Variables: age, sex, race, years of diabetes, smoke habit, HTA, antecedent CVD, ischaemic hearth, cerebrovascular and or vascular peripheral disease, renal lithyasy, dyslipemia, treatment with metformin and with IECA or ARAII. Analytic: GFR(MDRD4), creatinine, microalbuminuria, urine sediment, cholesterol, HDL, LDL,and HbA1c.
Statistical analysis: comparison on the bi-variable analysis was done through chi2 test for the qualitatives and student t for the quantitatives. OR fixed by the Mantel-Haenszel. Multivariated was done through multiple logistic regression. It was statistically relevant a $p < 0.05$ or confidence interval which didn't include the unit. It was used program Stata version 9.
Results: 24.2% RF (GF <60), 22.6%in stage 3 (GF = 30–59) and 1,6% in stage 4 (GF = 15–29).RF had an higher age, dominated on women a major duration of the DM, higher creatinine and microalbuminuria and associated with HTA, dyslipemia, CVD and IC. In the multivariate analysis, only persisted a significant association with age, female sex, dyslipemia and IC.There was found and association between CVD and CI on DM 2, OR: 1.9 (IC95%: 1.2–3.1) and 3,1 (IC95%: 1.6–5.9). Multivariable analysis adjusted by the CVD risk factor (age, sex, IMC, tabacism, dyslipemia, HTA) and duration and control or the DM, persisted a major risk of having CI (OR; 3.0; IC95%: 1.6–5.7) on the patients with IR. It has not been seen a major significant risk for the CVD OR: 1.4 (IC95%: 0.8–2.5).
Conclusions: The IR prevalence with an estimated GF on our patients with type II DM is 24.2% associated with age, female sex and dyslipemia. The DM2 with renal failure had three times higher risk or having ischemic cardiopaty than the ones who does not show it, regardless other cardiovascular risk factors.

P-413

Fetus characteristics in smoking and non-smoking pregnants and examination of five elements in umblical cord blood

Civi S. (Konya), Kutlu R. (Konya), Erdem Köroglu D. (Konya)

Aims and purpose: In this study, in umblical cord blood samples taken from 30 smoking and 30 non-smoking pregnants, cadmium (Cd), zinc (Zn), copper (Cu), lead (Pb) and iron (Fe) levels were measured and it was researched to what extent these heavy metals accumulated in cord blood and effects of it on fetus.
Design and Methods: This study was made on women giving birth in Konya Faruk Sükan Maternity and and Child Hospital between 1 June 2006 – 20 January 2007. 30 smoking and 30 non-smoking women were handled similarly in terms of age and birth number. Elements in umblical cord blood were evaluated in Selçuk University Agriculture Faculty Research Laboratory with Atomic Emission Spectrometer device.
Results: There wasn't difference in terms of smoking and non-smoking pregnants' age, education, pregnancy and birth numbers, occupations, smoking/non-smoking situation of their spouses, the place they accommodated, distance to the factory, bus terminal, train station. When we compared five elementsin both two groups, it could not found any amounts of Cd, Cu, Pb and Zn. In umblical cord blood, the mean value of Fe was 0.35 ± 0.12 in smoking ones. The mean value of Fe was 0.42 ± 0.16 in non-smoking ones There was not found statistically meaningful difference ($p > 0.05$). In smokers and non-smokers it wasn't found statistically meaningful difference in terms of birth weight ($p = 0.578$), height of baby ($p = 0.439$), head circle of baby ($p = 0.640$), placenta weight ($p = 0.727$), placental ratio = birth weight / placenta weight (gram) ($p = 0.878$) and APGAR score ($p = 0.717$). In

smokers the birth week was found statistically low in meaningful level according to non-smokers (p = 0.045).
Conclusions: Smoking in pregnancy or passive smoking negatively affect the development of fetus and especially new-born health by shortening the birth week.

P-414

Amsler grid eye test as a screening tool for maculopathy in general pratice

Klauser M. (Bolzano), Clerici M. (Trento)

Aims and purpose: maculopathy is a frequent disease among the elderly people. An early diagnosis is important as new treatment methods are introduced. The Amsler grid eye test is a simple and economic test for maculopathy. In this study we aimed at investigating the usefulness of the amsler grid as a screening test in general medicine.
Design and methods: a quantitative prospective study. Every patient over 40 years consulting a general medicine practice within 5 weeks is tested by the Amsler grid for maculopathy. If the test results positive the patient is sent to an ophthalmologist to confirm the maculopathy by standard ophthalmoscopy.
Results: we evaluate the Amsler test as a diagnostic method to detect maculopathy, – taking into account the possibility of including this method as a first-line tool in general medicine.

P-415

Congenital muscular torticollis: analysis of a clinical case

Marcelo S. (Porto), Soares L. (Porto), Pinto A. (Porto), Cândido R. (Porto)

Torcicollis, from the latin meaning twisted neck, is a cervical spine abnormality symptom. It´s differential diagnosis, might seem complicated at first glance, but can be simplified, just by determining whether the deformity is painful or not, and whether if it was present at birth or was acquired. Congenital muscular torticollis is the most common form of congenital painless torticollis. The diagnosis is made on physical examination by detecting a mass or a knot on the involved side of the neck. The etiology, not entirely known yet, seems to be related with malposition of the head in utero, trauma during birth delivery or intrauterine vascular lesions, factors that may be responsible for fibrosis with shortening of the sternocleidomastoid muscle and, subsequently, torticollis. Clinically, it may be absent by the time of birth and it typically develops by 2 to 4 weeks of age as a well-circumscribed, not painful and firm mass in the inferior one-third of the affected sternocleidomastoid muscle and associated to restriction of motion of the neck, tilting of the head toward the shortened SCM and rotation of the chin to the opposite side. Bilateral involvement is rare and makes the diagnosis more difficult. Musculoskeletal anomalies are, sometimes, associated. The authors describe the case of a 15 day old newborn, asymptomatic at birth, in who suddenly appeared a left cervical mass of about 8 days of development, not painful, firm and not mobile, associated to tilting of the head to the same side. The cervical ultrasonography revealed congenital muscular torticollis associated with an organized hematoma. By this analysis, we pretend to draw the attention towards the importance of early diagnosis, in order to exclude associated pathologies and/or underlying causes.

P-416

An evaluation of a hashish smoker group in Konya with Leeds addiction scale: a qualitative focal study

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Aims and purpose: It is hard to estimate the prevalence of drug use. In this study it was aimed to investigate the addiction level and the affecting factors in the group known as hashish smokers.
Design and Methods: In this descriptive study, socio-demographic variables, emotional state changes caused by hashish use, the cost of hashish use, individual and grants in aid in trying to give it up were questioned in 20 male subjects. LEEDS addiction scale was used to measure addiction level. These two information forms were completed face to face by a physician who had been working at a cottage hospital in the district for 12 years, and gained the confidence of public.
Results: Age Distribution: Mean 30.0 ± 11.96 Marital status: 90% married, 5% single, 5% divorced Age of starting to smoke: Mean 12.15 ± 1.92 Age of starting to hashish: Mean 15.85 ± 7.39. Educational level: 15% illiterate, 40% literate, 40% primary school (5 years) graduate, 5% secondary – high school graduate. Occupation: 20% tradesman, 60% laborers, 10% unemployed, 10% off-license. Medicine used: 60% used no medicine, the rest used painkiller, akineton, rivotril. Criminal record: 50% previously convicted. Other drugs use: 70% used no other drugs, 30% used cocaine, ecstasy, bally (a sniffed adhesive), heroin and alcohol. Motives of starting drug use: 90% friend inducement was at the most, merchandising drugs: 85% did not involve in, 15% involved in daily used amount (filled cigarette): 3–25 pieces/daily, 85% used fewer than 10 pieces a day thoughts about quitting: 70% did not think of giving it up.
Conclusions: Particularly, municipalities and first step health care units should be aware of these problematic focal districts and improve specific programs intended for those inhabitants.

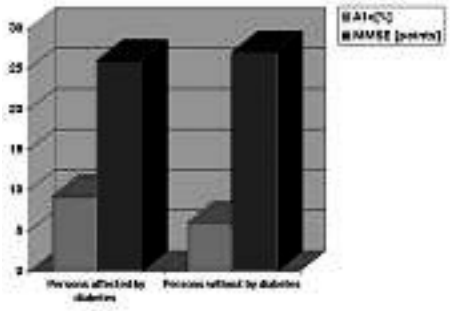
P-417

Cognitive functions in patients affected by diabetes mellitus type 2

Alibasic E. (Kalesija), Ljuca F. (Tuzla), Jaganjac E. (Tuzla)

Introduction: Diabetes is connected to premature mortality and it's a risk factor for mild cognitive disfunction, vascular dementions and Alzheimer disease. Persons affected by diabetes mellitus will more likely suffer from decrease of cognitive functions and dementions from those without diabetes. New evidence suggests that there is a link between level of glucosis and cognitive functions.
Aims and purpose: To examine the effects of diabetes on cognitive functions, namely, connection between A1C level with the results of mini mental status examination (MMSE) test.
Design and methods: 164 patients treated in Team 1 Family medicine DZ Kalesija divided in 2 groups, aged 50–80, 86 of them with the diagnosis of diabetes mellitus type 2, have been examined. Cognitive function assessment contained MMSE as a screening tool for cognitive ability change discoverage. A1C has been used as a rate of basic glykemic status. Both groups were balanced regarding factors which could affect connection between glycemic status and cognitive functions, including CVD, high blood pressure, hyperlipidemia, polyneuropathy, alcohol usage, depression, level of education, sex and age structure.
Results: Average ratio of A1C (%) in persons with diabetes group were 9,2, and MMSE score was 26. Patients without diabetes had A1C 5,9, and average MMSE score was 27. It's significant that 1% higher A1C level in persons with diabetes was connected with 0,32 points lower MMSE score.
Conclusions: Higher levels of A1C were connected with lower cognitive functions in patients affected by diabetes mellitus type 2. Although A1C level is not decisive factor for MMSE sore, because most of them are unchangeable, it can be changed with therapy. Importance of A1C effects on cognitive score can support the hypothesis that decrease of A1C level can effect cognitive disfunction and predemention development slowdown.

Effect of A1c on MMSE score



Effect of A1c on MMSE score

Effect of levels glucose on cognitive functions in patients affected by diabetes type 2

MMSE score =	0,32 points	0,96 points	1,056 points	1,28 points
Level A1C >	1%	3%	3,3%	4%

Effect of levels glucose on cognitive functions in patients affected by diabetes type 2

P-418

Prediction of health risk by combined body mass index and waist circumference

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Aims: Obesity is well-known risk factor of metabolic complications and CVD. Body mass index (BMI; in kg/m^2) is considered a poor indicator of overall and abdominal obesity. NIH Clinical Guidelines (1998) recommend the measurement of waist circumference (WC, centimeters) within body mass index categories as a screening tool for increased health risk. Our goal was to determine which simple anthropometric measurements [BMI or waist circumference (WC)] are most closely associated with metabolic risk factors.

Design and Methods: The sample included 164 participants ages 20 to 74 years who had complete data for WC, BMI, high-density lipoprotein-cholesterol, low-density lipoprotein-cholesterol, triglycerides, blood glucosa, and blood pressures. International Diabetes Federation are identify new criterion for the metabolic syndrome and associated risk factors. Logistic regression was used to test the hypothesis that WC improves the prediction of the metabolic syndrome, within normal weight (<25 kg/m^2), overweight (25 to 29.9 kg/m^2) and obese (>30 kg/m^2) BMI categories.
Results: The prevalence of the metabolic syndrome was 44.7% in men and 43.2% in women. The odds ratios (OR) for the prediction of the metabolic syndrome in the sample were elevated in elderly [OR, 1.07; 95% confidence interval (95%CI), 1.04 to 1.10], person with high BMI [OR, 1,34; 95%CI, 1,23 to 1,46] and high LDL [OR, 1.69; 95%CI, 1.17 to 2.45]. In women sample the best factor for the prediction of the metabolic syndrome is weist circumference.
Discussion: In women already at increased health risk because of an elevated BMI, the additional measurement of WC may help identify cardiovascular risk.
Conclusions: BMI and WC are the simple measures of adiposity most strongly associated with metabolic abnormalities. Our findings suggest that WC can be used as a complementary measurement to identify health risks in normal-weight and overweight persons. Key words: cardiovascular risk, anthropometry, metabolic syndrome

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P-419

Arterial hypertension and its complications among workers at the textile industry

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Objective: To establish the frequency of arterial hypertension and its complications among workers at the textile industry.
Methods: We analyzed 230 workers, of both sexes (m:f = 150:80), aged 43–60, average age 54 years (men) and 47 years (women), during regular periodical examinations in our GP outpatient department. We used anamnesis, physical examinations, lab analyses as well as medical documentation follow up.
Results: We found that severe hypertension (BP >180/110) had 22.6%, moderate hypertension (BP >160/100) had 53.91%, mild form had 18.69% and normal BP had 4.7%. From the total number of examined workers 18 patients (7.82%) had positive family history, 76 (33.04%) were active smokers, 97 (42.17%) were overweighted, 138 (60%) had elevated cholesterol and tryglicerides, 99 (43.04%) had elevated blood glucose level. From the total number of hypertensive patients 145 (66.21%) were treated with antihypertensive regularly, and 74 (33.78%) occasionally. The significant number of hypertensives (38.81%) developed different complications, and the most frequent complications were: changes in the retina (61.17%), angina pectoris (9.42%), TIA (9.41%), myocardial infarction (7.05%), renal disorders (8.23%), cerebral haemorrhage (4.7%).
Conclusions: Following the results of the study, the inference suggests not only high-risk factor among the textile workers, but also a huge number of hypertensive workers, especially those with not so well-controlled hypertension due to inadequate and occasional drug use. Among other things, these results came from very poor health education about the hypertension and health-related behavior patterns among textile workers. So, industry should be encouraged to promote the prevention and treatment of high blood pressure among its employees, in order to improve quality of life, working productivity and to reduce the frequency of possible complications and disabilities.

P-420

Osteonecrosis of the bilateral femoral head following short-course corticosteroid therapy due to head injury. Report of two cases

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We report two unusual cases of osteonecrosis of the bilateral femoral head in two men aged 20 and 26 years old following short-course corticosteroid therapy due to head injury. Their symptoms occurred at six and eight months respectively after discharge. The duration of corticosteroid therapy was nineteen days. Radiographs and magnetic resonance imaging (MRI) revealed avascular necrosis of the both femoral heads. Work-up and further history excluded the other known causes of avascular necrosis. Although the patients were young a cementless total hip arthroplasty was decided. The dose of steroid necessary to cause osteonecrosis is not known, but the mean daily or peak dose rather than cumulative or duration of therapy appears to be implicated; higher doses, even of short duration, present greater risks. Patients should be informed of the potential risk of osteonecrosis following the use of steroid medication. Complaints of hip pain in people who have previously been prescribed steroids should produce a high index of suspicion for underlying osteonecrosis of the femoral head. Early detection of this condition is necessary in order to prevent irreversible bone and joint destruction.

P-421

Is liver damage in patients with type 2 diabetes mellitus properly aproached? Primary study results

Santigosa A. (Reus), Jove J. (Reus)

Objectives: Liver damage associated to Type 2 DM is known, poorly studied and generally assymptomathic. The aim of this study, was to determine the kind of liver damage associated to Type 2 DM, grade of study and CHV role.
Material and Methods: Primary study in patients with Type 2 DM (n = 122) in a quote of 1220 patients (Type 2 DM prevalence = 10%). We list age, sex, GPT, GGTP, ultrasound, anti-CHV, and clinical or ultrasound diagnosis of liver damage.
Results: 66 from 122 patients, had high levels of some liver enzyms (54.1%). Prevalence of CHV infection, is 4,1 times higher in diabetics than in general population (1%). There is a great number of patients with high blood liver enzyms levels, who had not been correctly studied. We did an ultrasound in 33 from 66 patients with high blood liver enzyms (50%), and anti-CHV was analysed in 10 of these 66 (15.2%). Most common diagnosis in patients with basic hepatopathy study done were: steatosis in 24 of 33 (72.7%), chronic hepatopathy without cirrhosis in 8 of 33 (24.2%), and 8 of 33 (24.2%) had clinical and ultrasound criteria for cirrhosis.
Conclusions: Patients with Type 2 DM has an important prevalence of high blood liver enzyms levels, and usually asymptomatic. CHV infection is 4 times higher in our patients with Type 2 DM than in general population, but this is a primary study, and with our sample size, we can't get significally stadistic differences. Type 2 DM liver damage is infrastudied. Most common diagnosis is steatosis, but we need further studies to know CHV role.

P-422

Do primary care physicians initiate medical encounter as they should?

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Background: At the beginning of a medical encounter, physician should initiate the encounter by establishing initial contact and by identifying the reason(s) for the visit. One task of establishing initial contact consists of greetings, sometimes during a brief social exchange. Little is known about the exact content of the social exchange. We aimed to analyze the beginning of the encounter, its content and how physician identify the reason(s) for the encounter.
Methods: 99 patients were videotaped during their medical encounters in an academic primary care clinic. We examined the presence or absence of a social exchange at the beginning. These social exchanges were coded by two independent investigators (kappa = 1.0 for the presence of a social exchange). Their content was classified in three categories: biomedical, psychosocial and biopsychosocial.
Results: A social exchange at the beginning of the encounter was present in 68% of office visits. The content of the social exchange was biopsychosocial in 24% encounters, psychosocial in 12% and biomedical in 64%. Physicians used opening questions to identify the patients' main agenda for the encounter in only 23% of the encounters. In 77% of the encounters, physicians first discussed problems identified in an earlier visit, without giving the opportunity to the patient to first mention a new issue.
Conclusion: At the beginning of an encounter, only a quarter of physicians use opening questions to identify the patients' main agenda. An initial social exchange is present in two thirds of the encounter, but its duration is most often close to one minute and its content is especially biomedical. Physicians might forget that patients could develop other complaints than the one identified as the chief complaint during a former encounter. Further studies are needed to understand why physicians do not begin their encounter with an open question, although guides to medical interview underline its importance.

P-423

Psychosomatic aspects of women's health – results from the Prospective Population Study of Women in Gothenburg

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Aims(s) and purpose: To study prevalence of nervousness and mental stress in a female population and to investigate associations between nervousness, mental stress and psychosomatic symptoms as well as mortality and morbidity and investigate secular trends in cardiovascular risk factors in women.
Design and Methods: The Prospective Population Study of Women in Gothenburg, Sweden was initiated in 1968-69 including 1462 women aged 60, 54, 50, 46 and 38 at the beginning of the study. There have

been follow-up examinations in 1974–75, 1980-81, 1992–93 and 2000–01. Data were also obtained from an examination of 38- and 50-year-old women performed 2004–05. Measures included self reported nervousness, mental stress as well as psychosomatic symptoms at baseline, risk factors as smoking, s-lipids, BMI, blood pressure and socioeconomic status.
Results: Prevalence of mental stress in middle-aged women was more than doubled in 2004–05 compared to 1968–69. Women who reported mental stress in 1968–69 were more likely to have abdominal symptoms (odds ratio [OR] = 1.54, confidence interval [CI] 1.20–1.99), headache (OR = 1.71, CI 1.33–2.20), frequent infections (OR =1.73, CI 1.17–2.56) and musculoskeletal symptoms (OR = 1.43, CI 1.13–1.81) than women who did not report mental stress. Women with mental stress had an increased risk of death (OR = 1.40, CI 1.06-1.85) as well as breast cancer (OR = 2.19, CI 1.11–4.30) within the following 32 years. Nervousness was related to asthma, abdominal symptoms and headache as well as higher risk of cardiovascular mortality (hazard ratio [HR] = 1.33, CI 1.00–1.77). Trends in lifestyle changes in 38- and 50-year-old cohorts of women showed a healthier direction. Physical activity has increased and smoking has declined from 39% to 25%.
Conclusions: Women with nervousness or mental stress had higher prevalence of psychosomatic symptoms and higher risk of mortality during more than three decades of follow-up.

P-424

What makes old patients become difficult old patients?

Hürny C. (St. Gallen), Russenberger R. (Bubikon)

Aims and purpose: "Difficult patients" behave inappropriately, evoke negative feelings in their caretakers, have often an additional psychiatric condition and comprehend 10–15% of patients in an acute care facility. What characterizes difficult patients in geriatrics?
Methods: In the Geriatric Hospital of St. Gallen a weekly interprofessional case discussion of difficult patients is taking place since 1998. In a retrospective analysis the main problem of each case was defined and reasons for the problem investigated. Over all 20 categories of problems and 15 categories of main causes for a problem were defined.
Results: In 104 of 851 inpatients a case discussion has taken place (12%): 94 are evaluable, mean age is 81 and 69% were women. The main problems were: therapy refractory pain (16.5%), confusion (9.6%), ambivalent behaviour (8.7%), non-compliance (8.7%),demanding behaviour (7.8%),demanding significant others (7.8%),passive behaviour (7.8%),aggressive behaviour (7.8%). Over all in 45% the behaviour of the patient was the main problem, in 35% the illness and its consequences, in 11% the behaviour of the significant others and in 9% conflicts within the care taker team. The main reasons for the emerging problems were depression (27.7%), dementia/delirium (27.7%), manipulative personality (7%), psychological amplification of a body symptom (7%), complex illness situation (7%).
Conclusion: In the presented retrospective analysis difficult patients are as frequent in geriatrics as in an acute care facility. As in younger patients the most frequent problem for the care taker team is the inappropriate behaviour of the patient. The main reasons for this in old people is dementia, delirium and depression, whereas in younger patients personality disorders, addiction and somatoform disorders dominate. Therapy refractory pain is a frequent problem in young and old difficult patients.

P-425

Peptic ulcer and childhood adversities experienced by working-aged people

Sumanen M. (Tampere), Mattila K. (Tampere)

Aim and purpose: Psychological stress may have an impact on the onset and course of peptic ulcer disease. The aim of our study was to explore associations between peptic ulcer and childhood adversities.
Design and Methods: The Health and Social Support Study (HeSSup) population consisted of a stratified random sample drawn from the Finnish Population Register in four age groups: 20-24, 30-34, 40-44 and 50-54. The survey was carried out by postal questionnaire during 1998. A follow-up questionnaire was sent during 2003 to all those who responded to the first. Altogether 19626 individuals returned the follow-up questionnaire, a response rate of 75.8%. The subjects were asked whether a doctor had told them that they have or have had peptic ulcer. The analyses covered those who responded affirmatively to both the baseline and the follow-up inquiries (N = 718). Those not reporting a peptic ulcer in either of the two questionnaires (N = 17677) were taken as controls. The subjects were further requested (through six questions) to think about their childhood adversities. Age- and sex-adjusted odds ratios (OR) in the logistic regression analysis were calculated.
Results: The most common adversities mentioned were long-lasting financial difficulties in the family, serious conflicts in the family, and a family member seriously or chronically ill. All the adversities reported were more common among peptic ulcer patients than among controls. Age- and sex-adjusted odds ratios varied between 1.45 and 2.01. Adjusting for smoking, heavy drinking, stress and nonsteroidal anti-inflammatory drug use had no further influence.
Conclusion: According to our findings there is reason to believe that stress factors during childhood still have a connection with the development of peptic ulcers, and we venture to state that there are also social factors in the background.

P-426

Are we prepared for treating patients with fibromyalgia?

Sánchez Casco S. (Barcelona), Narvaez Ferri M. (Barcelona), Cuevas J. (Barcelona), Perez Lucena M.J. (Barcelona), Arrieta Nuñez A. (Barcelona), Girbau Solà M. (Barcelona)

Aim: To analyze the existing relation between the intensity of the treatment carried out in patients with fibromyalgia and the symptomatical level, collected by the questionnaire FIQ (Fibromyalgia Impact Questionnaire).
Design and methods: Transversal observation study in urban ABS. Data are obtained from diagnosed patients of fibromyalgia in computerized story and the degree of affectation of the quality of life is measured through questionnaire FIQ (mild, moderate, severe). The medical treatment is registered (PI: little intensive: less of three drugs; I: intensive, three drugs or more; and NF: non pharmacological treatment) and the physical activity: PA.
Results: We obtain datum from 124 patients: women (94.4%), men 7 (5.7%). Prevalency 4.7%. We select sample of 52 patients (42%) women 49 (94.2%), men 3 (5.8%). Results of the questionnaire: Mild FIQ 3 (5.8%): PI 2 (66.6%), I 1(33.33%),PA 1(33.3%). Moderate FIQ 16 (30.8%): PI 5 (31.25%), I 10 (62.5%), NF 1 (6.25%), PA 2 (12.5%). Severe FIQ 33 (63.4%): PI 8 (24.24%), I 25 (75.76%), PA 9 (27.27%).
Conclusions: The ignorance of the etiology and, therefore, of a specific treatment provokes that the boarding of the fibromyalgia is carried out in individualized form. We observe like, in some cases, having a level of severe affectation they are being treated with a little intensive treatment, even with medicines without any recognized scientific evidence. It has to be emphasized the little use of non pharmacological therapies and the scarce physical activity.

P-427

Risk factors for long-term frequent use of primary health care services: a Bayesian approach

Koskela T. (Tampere), Ryynänen O.P. (Kuopio), Soini E. (Kuopio)

Aim and purpose: The aim of this study was to examine factors, which predict frequent attendance in a long-term follow-up.
Design and methods: Prospective cohort study without intervention. 85 primary health care patients from Tampere health center participated in the study. All participants were health care frequent attenders (FA) in the first study year. After four years follow-up the patients were classified as long-term or contemporary FAs. A patient was considered as a long-term FA, if he or she visited the health centre at least 8 times a year for at least 3 out of 4 follow up years. 59 different variables were examined as potential attributes for the long-term frequent attendance. P-course, a web-based Naïve Bayesian classification tool, was used for the modeling of the data.
Results: In our model, most influential predictive risk factors for long-term frequent attendance were female gender, body mass index over 30, former frequent attendance, fear of death, alcohol abstinence, low patient satisfaction and irritable bowel syndrome. New observations were the association of high body mass index, alcohol abstinence and irritable bowel syndrome with long-term frequent attendance.
Conclusions: Our Bayesian model could be used for identifying frequent attenders in uncertain situations. This model can be quite easily further developed as a practical decision making tool for general practitioners. However, before it's use in practice, the external validity of the model will need to be defined.

P-428

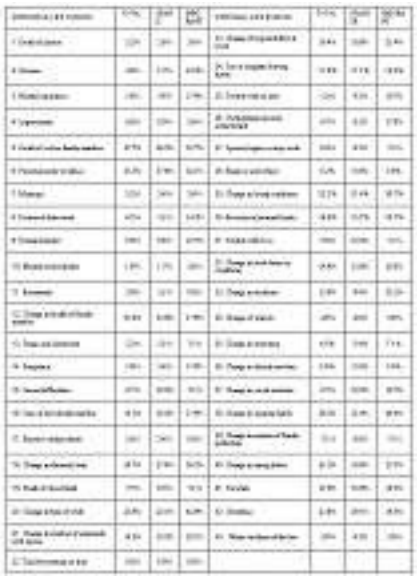
Stressful life events in the city

Fuentes Rodriguez S. (Santa Coloma De Gramenet), Gili Riu M. (Badalona), Herreros Herreros Y. (Barcelona), Valls Dominguez M. (Barcelona), Ledesma Serrano C. (Barcelona), Alvarez Muñoz G. (Barcelona)

Objective: To describe stressful life events in our city working patients and analyze their clinical features.
Design and methods: Descriptive transversal study. City health centre. Random sample of 155 working patients visited by General Practitioner's (GP) in March 2008. Data: Holmes and Rahe Social Readjustment Rating Scale, age, sex, nationality.

Results: 63.2% women, mean age 42 years (IC95% 40.20–44.64), nationality: 75.5% Spanish, 15.82% Latin-Americans. Stressful Life Events: (%E Spanish, %I Immigrants). Description in the table attached. Stressful Life Events (SLE): score SLE: mean 227.64. Distribution: 30% Risk = 37.4%, 50% R = 34.8%, 80% R = 27.7%. Number of LE: mean 5.16. We haven't found statistically significant differences regarding sex or nationality, though it seems that immigrants may have more risk of stress (p 0.205) (80%R: 26.5% Spanish, 35.7% immigrants).
Conclusions: Patient's profile is a forty-something Spanish working woman with 65% chances of stress illness. Life events more described are personal or family illness, vacation, and change in financial state. Immigrant population suffers from more trouble at work, personal and marital areas. They should require special psychological support to cope with these changes with good mental health.

LIVE EVENTS description



P-429

Comorbidity of major depression with other common mental disorders in primary-care patients

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Introduction: Psychiatric comorbidity affects the impact, the prognosis and the management of depression. Aims: To determine the prevalence of other common mental disorders in patients with major depression and to analyze their comorbidity relations.
Design: Two-stage cross-sectional study: 1) Screening (Zung's Scale); 2) A standardized psychiatric interview.
Site: Ten health centres in the province of Tarragona.
Patients: A total of 906 consecutive patients were screened. In the second stage, the 209 patients who gave a positive result and 97 patients who gave a negative result (1/7 at random) were evaluated.
Analysis: The statistical analysis used weights that took into account the two-stage sampling. The frequency with which dysthymia, generalized anxiety disorder, panic disorder and somatization disorder presented concomitantly with major depression was determined. The characteristics of the depressed patients were compared for different degrees of comorbidity.
Results: In 45.7% (IC95%: 32.8–59.2) of patients with major depression there coexisted one more mental disorder, in 19.9% (IC95%: 13.7–27.9) two more mental disorders and in 8.3% (IC95%: 4.5–14.8) three more mental disorders. Generalized anxiety disorder was present in 55.2% of depressed patients (IC95%: 41.6–68.0), panic disorder in 33.8% (IC95%: 21.1–47.1), dysthymia in 15.7% (IC95%: 10.3–23.4) and somatization disorder in 6.6 % (IC95%: 3.3–12.8). In the groups of patients with comorbidity, the depression was more severe and had a greater functional impact. There were no differences in the clinical management variables.
Conclusions: Psychiatric comorbidity of depression is common in primary care. Most depressed patients suffer from other disorders, frequently anxiety.

P-430

Cognitive behaviour therapy for abridged somatization disorder (Ssi 4,6) patients in primary care. Aragon's results

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Hypothesis: The somatoform disorders are characterized by the presence of multiple somatic symptoms without clear organic cause to explain their symptoms completely. They are a frequent cause of consultation in Primary Health Care (PHC), but the approach is difficult.
Objectives: 1. assess the effectiveness and applicability of a program of cognitive-behavioral therapy (individual and group) compared with usual treatment. 2. Know better factors associated with the chronicity of these patients, to intervene early on.
Method: A national multicenter randomized trial with three arms: individual treatment of 10 sessions. Groupal treatment of 10 sessions or Control group (routine treatment). Assessment them 4 times in 12 months time. Sample size: 206 patients, calculated for an error of 0.05, a 80% power, two tails and a difference of 20%. Instruments: Interview Psychiatric Standardized Polyvalent (EPEP) Questionnaire depression and anxiety Hamilton (HAM-A; HAM-D), Clinical Global Impression (CGI), Quality of Life Survey (SF - 36), and demographic and socioeconomic questionnaire. Project is funded by the Institute Carlos III.
Results: So far have captured 61 patients with inclusion criteria, it has made three groupal treatments (22 patients); 26 patients in individual treatment and 13 control patients follow up evaluation at 12 months. After treatment there are significant differences between psychological treatment and control group in favor of the former. Best values were those who had attended a psychological intervention of any type (individual or group). The Individual treatment group maintains its superiority in the following variables: all scores SOMS least that makes no reference to sexual symptoms, in the variable mental health SF-36 and HDRS total score. The group treatment maintained its superiority over the individual intervention in physical function, physical role and vitality of the SF-36 scale.

P-431

Psychological reactions of hospitalized coronary patients versus hospitalized non-coronary patients

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Aims and purpose: To establish difference of anxiety, depression and aggression level, exposure to stress life events and risk health behavior, in hospitalized coronary and non coronary patients.
Method: Psychological parameters were compared between patients with Myocardial Infarction (33) and control group of non coronary patients (30) at two occasions: 10 days after an acute coronary event and after 6 months. Applied instruments were: M.I.N.I. (Minimal international neuropsychiatric interview), HAMA (Hamilton Anxiety Scale), HAMD (Hamilton Depression Scale), KON-6 sigma Aggression Scale and Holms-Rahe (H-R) Stress Life Events Scale. Differences between groups were assessed by t-test chi square test, for $p < 0.05$.
Results: Anxiety (HAMA = 8.15 + 4.37) and depression (HAMD = 8.67 + 3.94) levels were significantly higher in coronary patients than in non coronary patients (HAMA = 4.83 + 2.6) and (HAMD = 4.63 + 2.04), for $p < 0.05$. Aggression level was similar in both groups. In experimental group (KON-6 sigma = 53 + 9.5), in control group (KON-6 = 53.7 + 11.2).Stress life events exposure is higher at E group (H-R = 113.19 + 67.37) related to control group (H-R = 66.27 + 65.43), for $p < 0.05$, and after 6 months. Risk health behavior was present at more then 50% ofall subjects at both occasions, except for higher rate of physical activity in experimental group after 6 months.
Conclusion: There was significant difference between hospitalized coronary and non coronary patients in relation to anxiety and depression levels and exposure to stress events. Aggression level was similar and significant reduced at non coronary patients after 6 months. Risk health behavior was present in most hospitalized patients, and there was no change in the next 6 months, except for physical activity at coronary group. Therapeutic and educational interventions are needed to prevent undesirable psychological reactions of coronary patients.

P-432

Treatment of anxiety in patients with chronic joint pain

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Background: Anxiety syndrome often accompanies and aggravates chronic rheumatic pain. The application of anxiolytic drugs in addition to complex therapy of rheumatic pain is not finally defined.
Aims: to determine the efficacy of etifoxine hydrochloride as adjunctive treatment of chronic rheumatic pain.

Materials and methods: We examined 34 patients with chronic joint pain, caused by rheumatoid arthritis, fulfilling the diagnostic criteria of the American College of Rheumatology, the mean age – 35–64 years, the mean duration of pain – 4–9 years. 17 patients took etifoxine hydrochloride (150 mg/day for 4 weeks) in addition to complex therapy (metotrexat, non-steroid anti-inflammatory drugs) and formed a main group; other 17 patients received traditional complex therapy and formed a comparison group. Efficacy was measured by the changes in indexes: Zung Anxiety Scale (ZUS), Sheehan Anxiety Scale (SAS), Spielberger' State-Trait Anxiety Inventory (SSTAI), Short Form-36 (SF-36), Visual Analog Scale of pain (VAS), Richi indexes (RI).
Results: All patients on baseline had moderate anxiety. After treatment anxiety indexes, indexes of pain and joint syndrome were significant decreased (ZUS – on 42%, SSTAI – on 52%, SAS – on 46%, VAS – on 43%, RI – on 26%) in patients of main group in contrast to the comparison group. More significant relief of anxiety and joint syndrome in patients of main group proved efficacy of etifoxine hydrochloride as adjunctive treatment of chronic rheumatic pain.
Conclusion: Addition of etifoxine hydrochloride to complex therapy of chronic joint pain leads to relief of anxiety, pain and joint syndrome, increase the efficacy of treatment and patients' quality of life.

P-433

Clinical influence of psychological factors in patients with fibromyalgia (FM) and abuse during childhood

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Aims(s) and purpose: The abuse during childhood increases the prevalence of chronic pain. In FM, psychological factors are involved in stress and the increase in clinical severity. We study patients with FM who have suffered sexual abuse during childhood and if psychological or stress factors are associated with the increasing of clinical severity.
Design and Methods: We included 575 patients (550 women), diagnosed of FM by ACR criteria; we use a comprehensive clinical evaluation (existence of abuse, VAS scale, MPQ, FSS, PSQI, EAV, BDI, BAI, SCL-90, PCS, DSI, FIQ and SF-36).
Results: 76 patients (13.21%) (69 women) (average age 47.57 years) had abused. The average delay in diagnosis of FM was 12.32 years in cases of abuse and 12.17 years for others. All parameters examined were worse in the group who had suffered abuse. The differences were statistically significant for the number of symptoms (p <0001), pain (VAS pain, p <0005; MPQ, p <0006), fatigue (VAS fatigue, p <0001, FSS, p <0001), anxiety (VAS anxiety, p <0.001; BAI, p <0.0001), depression (VAS depression, p <0001, BDI, p <0001), sleep (PSQI, p <0001), stress (TS, p <0,01), physical and mental state(SF-36, p <0001) and the impact of FM (FIQ, p <0001). Levels of catastrophism, somatization, obsessive-compulsive disorder, hypersensitivity, hostility, anxiety and psychoticism were higher in patients who had suffered sexual abuse (no statistical significance).
Conclusions: Patients with FM and sexual abuse during childhood have a statistically significant higher number of symptoms, increased intensity of pain, fatigue, anxiety, depression, stress, alteration of sleep, worse levels of physical and mental state and more impact of FM that patients without a history of abuse. They have also higher levels of catastrophism, somatization, hypersensitivity, obsessive-compulsive, hostility, anxiety and psychoticism; the psychological and stress factors are associated with more clinical severity.

P-434

Psychosomatic diseases and depression with general practice physicians

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The psychosomatic diseases belong to the group of the most spread disorders in the contemporary medical practice. Answer to the question – what is the spread of those disorders and depression with general practice physicists, we have looked for by means of a research performed in February 2008 in the Health Centers Nis and "Vozdovac"-Belgrade.As the research instruments, we have used an anonymous questionnaire about the psychosomatic diseases and depressivity self-estimation scale (ZUNG). Those papers were filled by 36 of physicists and general practitioners, male and female, aged 30–55 years. The thirteen of the total 36 polled doctors (36.11%) were found to be affected by psychosomatic diseases. Ten doctors suffer from hypertension (76.92%), two of them has ulcer (15.38%) and one doctor have diabetes (7.69%). Two of them are found not to be depressive (15.38%),three ones are depressive in remission (23.07%), four doctors are depressive with other disorders (30.76%), and four of them need depression medical treatment (30.76). The depression in total number of polled doctors (36) is distributed as follows: Four without depression (11.11%), eight with depression in remission (22.22%), eighteen with depression followed by other disorders (50%) and six of pooled showed depression that needs medical treatment (16.66%). In the polled group, that offered psychosomatic illness, there is one third with depression that need medical treatment (30.76%) – this is two-times more (in percents) than of those in the total number of polled doctors (16.66%).

P-435

Cognitive stress and heart rate variability

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Objective: To determine the association between stress and the cardiac autonomic dysfunction, stress was assessed by measuring the life event related stress and the cognitive stress, and then its relationship with Heart rate variability (HRV) was analyzed.
Methods: A cross-sectional study was performed on 95 outpatients, aged 25 to 49. Cognitive stress and Life event related stress were assessed using the self-report checklist of 'Lee's life stress scale' (98 items) and 'Cognitive stress response scale' (21 items). Time domain (SDNN) and frequency domain (TF, VLF, LF, HF) indices of HRV were calculated by spectral analyses.
Results: In linear regression analysis, Cognitive stress scores were inversely associated with two indices of HRV (SDNN, LF) significantly. After adjusting for age, each? coefficients of two indices increased showing significant association. However, there was no significant relationship between life event stress scores and HRV in either unadjusted or adjusted analysis.
Conclusions: It was found that Cognitive stress were associated with lower HRV, whereas life event stress scores did not show significant relations to HRV. These results suggest that subjective stress may have stronger relationships with cardiac autonomic dysregulation compared with objectively measured stress.

P-436

Evaluation of depression and anxiety levels among aystemic lupus eritematosis patients in a rheumatology clinic

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Aims: Among Systemic Lupus Eritematosis (SLE) patients, frequency of depression and anxiety disorders are getting higher We aimed to indicate the frequency of anxiety and depression, reveal their intensity, and their relations with socio demographical factors and other disease parameters among SLE patients who are hospitalized and treated in a rheumatology clinic.
Design and Methods: We included 40 patients, 3 men and 27 women, who are diagnosed and hospitalized as SLE according to ARA criterias. Stanford Health Questionnare (HAQ), Visual Analog Scale (VAS), Positional Anxiety Scale (STAI-1) and Prolonged Anxiety Scale (STAI-2) Beck Depression Inventory (BDI) are used. Datas are tabulated by SPSS 15.0 software program.
Results: Median STAI-1 score was 52, median STAI-2 score was 47,5 and median BDI score was 19. Separately; there were no significant relation between scales and age and disease period. There was a positive correlation between score sums of BDI and STAI-1, BDI and STAI-2, STAI-1 and STAI-2. (p <0.001, p <0.001, p <0.001). According to both STAI-1 and STAI-2; 10 (25%) patients had mild, 30 (75%) patients had moderate and serious anxiety. If we assess the total BDI scores in accordance with fixed scores; 22 (55%) of the patients were upper than fixed scores. When compared with the visual analog scale; there were meaningful increases in BDI scores correlated with the increase in pain level. (p <0,05). According to sedimentation and c-reactive protein rates; when the rates got higher, BDI and anxiety subscales got higher and significant relation found with the depression and anxiety subscales (p <0.05).
Conclusions: Frequency of anxiety and depression is getting elevated in SLE cases. It affects the pain perception and life quality of the patients. Patients who have chronical diseases must be evaluated with multidiscipliner approaches and at the same time, they must be assessed for biopsychosocial aspect.

P-437

Characteristics of patients with ST elevation myocardial infarction who first came to general practitioners

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Background: Thrombolytic therapy in Serbia is given only in coronary care units (CCU).
Objective: Considering the opportunity for prehospital thrombolysis in primary health care facilities, we examined the frequency and characteristics of patients with ST elevation myocardial infarction (STEMI) who first came to general practitioners (GP).
Method: In this observational study we used the data from the 2007 Population Registry of Acute Coronary Syndrome of Serbia. Patients are selected by two criteria: confirmed diagnosis of STEMI

and registered data of first contact with health care providers on different levels. The 2 test was used for statistical analysis.
Results: Of 6221 patients with STEMI, 55.6% (3458) came to hospital emergency department by emergency ambulance, 19.2% (1193) first came to their GP, 17.8% (1110) independently came to hospital emergency department using their own transportation, 7.3% (460) came from another hospital or from non coronary hospital department. All of these patients were then transferred to CCU. Patients who contact their GP received thrombolytic therapy more rarely (32.5%) than patients who call emergency service (45.5%). Characteristics of patients who contact GP are: adult patients, especially of age 30 to 39 ($p < 0.01$), patients from semi rural and rural areas ($p < 0.01$), patients without previous history of cardiovascular diseases ($p < 0.01$), patients who were less physical active ($p < 0.01$) and who were under stress ($p < 0.01$).
Conclusion: Introduction of prehospital thrombolysis in primary health care can significantly reduce the time from symptom onset to thrombolytic therapy in eligible patients. Adequate training in collaboration with central supporting service, with special guidelines and equipment, are necessary for general practitioners, especially those working in rural areas of Serbia.

P-438

Elders with acute myocardial infarction (AMI): time since the beginning of symptoms, attention in the primary health center (PHC) and transfer to the hospital

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Background: Time is an important prediction factor in the attention to patients with AMI. How long does it take to arrive to the hospital?
Aims: Determining the epidemiological profile and the time since the beginning of the symptoms of AMI in elders, the attention in the PHC and the arrival to the hospital's emergency
Methods: Longitudinal and observational multicentric study carried out from March 2001 to February 2004, in emergency services of 42 hospitals and in their associated PHCs. Variables: Age, sex, cardiovascular risk factors, family history of isquemic cardiopathy, presence of peripheral arterial illness, time since the beginning of the symptoms, arrival to the PHC and transfer to the hospital. Data were analyzed with SPS.
Results: 3,772 patients, 1,647 above 70 years, 61.3% men. The most frequent risk factors were: tobacco 24.5%, arterial hypertension 57.6%, dislipidemy 26.5%, diabetes 35.3%. Personal history of vascular illness: 10.1% previous cerebral vascular accident, 15.1% history of coronary illness, 6.5% with peripheral vascular illness. Family history of isquemic cardiopathy in 3.8%. Only 14.6% of patients went first to the PHC, and the average time for the arrival was 432 minutes for patients above 70 versus 272 minutes for those below 70 ($p < 0.01$).The average time between the beginning of the symptoms and the arrival to the hospital's emergency in patients coming from the PHC was 561 minutes for patients above 70 versus 382 minutes for younger patients ($p < 0.01$).
Conclusions: Elderly patients with symptoms of AMI attended in their PHCs arrive later to the hospital's emergency than younger patients do. This can be due to the atypical or silent clinical presentation, to the low perception of severity by the patient or relatives, and to the delay in the contact with the extrahospitalary system.

P-439

Acute malaria in an emergency service

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Aims(s) and purpose: To describe the casuistry, clinical presentation and characteristics of the diagnosed patients of malaria in our center in the last years.
Design and Methods: Study retrospective epidemiologist of the diagnosed patients of malaria in our ERS between 2005 and 2007. By means of revision of clinical history, referring variables to sex, age, country.
Results: 43 cases (12 of smaller them of 14 years), 31 men and 12 women were identified. All the patients were original of endemic countries or children of immigrants born in our country who had traveled to the one of origin. Eight of the ill children had been born already in Spain. In the majority of occasions one took place the trip between the months of April and September, time of rains. The beginning of the clinic was during the trip in a 23% and up to 3 weeks from the return in 58%. The most constant symptom was the fever, followed of asthenia and anorexia, vomits and migraine. It was detected hepatomegaly in 5 cases and splenomegaly in 4. The more frequent analytical findings were thrombocytopenia and anemia. The identified species more was Plasmodium falciparum. In 67% parasitemia was inferior to 4%, whereas he was superior to this percentage in 14%. 21 patients were admitted at the hospital, the percentage raised 83% in the case of the children.
Conclusions: Most of the infantile cases it had been born in Spain and it had contracted the disease when traveling without prophylaxis adapted to the country of origin of the parents. They detected deficits in the collection of important data for diagnosis in the prognosis of malaria in the clinical history of the patients. The formation of the sanitary, clinical personnel is urgent on the one hand and of laboratory that is going to take care of the malaria patients and, on the other hand, of the immigrant population that travels to its country of origin to train it in the adapted use of the prophylactic measures.

P-440

Number of missions at night and at week-ends is negatively correlated to quality of life and job satisfaction of general practitioners in on-call-duty systems

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Introduction: In a survey conducted 2008 in the PizolCare Medical Network in Eastern Switzerland we asked general practitioners in two different districts about their quality of life and job satisfaction related to the amount of days spent on on-call-duty in 2005 and 2008 respectively (see graph 1). We found out, that even small changes in the amount of days spent on on-call-duty had a significant influence on the general practitioners perception of quality of life and job satisfaction. (see graph 2) In this poster we report on a second important observation.
Method: Using a survey-form during a quality circle session in 2008 we addressed to a total of 28 out of 38 GPs taking part at the regional on-call-duty-system. In the analysis of the results we took 20 forms into consideration, all of them that had be filled in by GPs serving a full work-rate of on-call-duty days in 2005, 2008 respectively.
Results: Job satisfaction and perception of quality of life in general practitioners is negatively correlated to the number of missions occurring at night and at weekends. (see graph 3) In contrast missions occurring in the evening (until ten o'clock p.m.) had no impact on the topic examined. (see graph 4)
Conclusion: We conclude, that not only the amount of days spent on on-call-duty but also the case-load, i.e. the number of missions at night and on week-ends, directly influence general practitioner's perception of quality of life and job satisfaction, whereas evening missions do not contribute to this effect. GPs obviously do acknowledge the need of on-duty-service until late in the evening, but bother missions at night and on week-ends. We think that these reservations could be challenged either by merging the on-call-duty districts or by cooperating with the staff of regional hospitals, who take over duty at night.

P-441

From the family medicine center to the intensive care unit

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Background: Admission into the intensive care of critical care patients usually come from the emergency department, medical or surgical wards and extrahospitalary emergency services. Occasionally critical patients come from a family practice center.
Aims and purpose: To describe clinical characteristics and outcome of patients initially treated in the family practice setting and referred directly to an intensive care unit (ICU).
Design and methods: Design: Observational prospective study. Setting: Family Medicine centers of the sanitary area of Jerez and a 17 bed medical ICU. Subjects: Consecutive patients referred to the ICU unit from the family practice center by an emergency ambulance transportation (EPES-061) from January 2007 to December 2008. Patients who were less than 18 years of age were excluded.
Statistical analysis: Data were analyzed by SPSS 15 and expressed as a mean ± standard deviation. Main variables of interest: age, gender, vascular risk factors, hospital diagnosis, ICU length of stay, mechanical ventilation requirements and outcome were collected.
Results: During the study period, 74 consecutive patients were transported from the family center to the hospital by emergency ambulance, 9 patients, 12.2% of them, were admitted in the intensive care unit. Mean age was 64 ± 13.6 years. 8 patients were male and 1 female, 77.8% of patients had vascular risk factor. Acute coronary syndrome was the commonest hospital diagnosis, 4 myocardial infarctions and two unstable angina, other diagnosis were syncope, trauma and acute respiratory failure. ICU length of stay was 5.6 ± 4 days, two patients required mechanical ventilation and mortality was 11.1%.
Conclusions: Initial management of critical care may be in the family medicine center, an early diagnosis and treatment impact on outcome. Most of patients of the study had vascular risk factors, myocardial infarction was the commonest diagnosis in this group of patients.

P-442

The prevalence of depression and anxiety in women-victims of domestic violence in family medicine

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Aims: The aim of this study was to identify the prevalence of depression and anxiety in women-victims of domestic violence, who have already reported domestic violence to their family doctors.
Design and methods: A cross-sectional survey on incidence of depression and anxiety in Bosnian families in both, rural and urban area of Tuzla city, in which domestic violence was reported. It included the work of two family medicine teams, one in the city center and these cond one in the suburb, who have screened 154 patients; each tenth consecutive patient who already reported domestic violence, was surveyed in the period of one month. By using Hopkins check-list (HSCL-25) for depression and anxiety, we identified that the rate of depression and anxiety was rather high in traumatized patients.
Results: 13 patients (4 in rural and 9 in urban area) denied any exposure to domestic violence, although they reported it and it was documented in their files earlier. The depression and anxiety were recognized and diagnosed in 131 patients (71 in rural and 60 in urban area) who reported being physically and psychologically abused, mostly by their partners, mainly men, of whom 78 (41 in rural and 37 in urban area) were diagnosed with post-traumatic stress disorder, and 12 (7 in rural and 5 in urban area) were alcohol abusers. We did not recognize symptoms of depression in 10 patients who were psychologically traumatized by their parents, who were in age group <20 years.
Conclusions: Domestic violence is presenting both, urban and rural parts of Bosnian society. Victims of domestic violence rarely report or even if they do, later on they often deny being exposed to domestic violence. Depression and anxiety are very common in women-victims of domestic violence, mostly in those who were both psychologically and physically traumatised. Depression is more likely to be developed in less educated women and housewives. Victims of domestic violence still rarely seek the help of their family doctor.

P-443

The role of primary health care in the management of patients with symptoms of possible cardiological origin. Data of the emergency department of health centre of Vyronas for 2007

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Aim and Purpose: To evaluate the role of the first urban health centre (HC) in Greece in the management of patients with symptoms of possible cardiological origin and its contribution to the early diagnosis and treatment of acute cardiological patients. Greece is considered a country with highly fragmented Primary Health Care (PHC) services, where the majority of patients with acute symptoms in urban settings attend the Emergency Departments (ED) of hospitals.
Design and Methods: The database of the Emergency Department of Health Centre of Vyronas and the urgent referrals archive for 2007 were reviewed. The classification of cases was based on the main reported symptom.
Results: During the examined period of time, of 27.020 patients who were examined at the ED of the HC, 1.716 patients (6.35% of the total) reported symptoms that may have been attributed to heart disease. After primary medical assessment, only 86 of these 1.716 patients (5.01%), were urgently referred to a hospital through NHS ambulance. However, these 86 cardiological referrals constituted the majority (52.43%) of 164 patients totally referred by the ED of HC of Vyronas for 2007.
Conclusions: The great number of patients with symptoms of possible cardiological origin, who are managed at the HC of Vyronas without being urgently referred, emphasises the role that PHC could play in the diagnosis and initial or total management of such cases, decreasing the burden of EDs of hospitals. Also, the fact that cardiological patients constitute the majority of total patients urgently referred, stresses the importance of proper cardiological training of PHC personnel and the necessity for modern diagnostic equipment in primary care units.

P-444

Approach to the treatment of renal colic

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Keywords: Renal colic, drug treatment, pain
Aims and Purpose: Renal colic is described as one of the most intensely painful events experienced by humans. The estimated risk of a person suffering a renal colic in their lifetime is 1–10%. It is caused by an acute obstruction of ureter, in most cases caused by a calculation. It can also originate in other diseases of the urinary tract or even non-nefro-urological disease. The clinical diagnosis is usually easy, and the first major priority is to treat the pain. The purpose of this study is to ascertain the decision therapy of pain in renal colic by the Cantanhede Health Center (CHC) and establish a comparison with that made by doctors in emergency service at the Coimbra University Hospital (HUC) – Portugal.
Design and Methods: Descriptive cross-section study. The data collection was done through a questionnaire distributed to all staff of CHC and an equal number of doctors in the HUC emergency service. The sample of physicians at HUC was random, resulting in 18 doctors. Data was automatically processed using Excel software.
Results: Diclofenac was the most prescribed drug, according to 32% of the responses of CHC staff and 39% of Hospital doctors, and the second one was Tramadol with Metoclopramide, with 27% of preference at the Center versus 18% at the Hospital. Butylscopolamine is still prescribed by 24% of CHC doctors against 11% of the Hospital. Pethidine is used by 24% of Hospital doctors and only 7% of CHC. As for non-drug therapy, 64% of the CHC doctors administered a serum against 36% of Hospital physicians.
Conclusion: We conclude that both at the CHC and the Hospital, doctors make use of Diclofenac, either on its own or in combination with an analgesic. The essential difference is that the analgesic with the highest rate of prescription by CHC doctors is Tramadol while Hospital staff favours Pethidine. Butylscopolamine as well as intravenous hydration are used less commonly by Hospital doctors.

P-445

Management of pericarditis

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Purpose: evaluate the management of patients with suspected pericarditis in an emergency department.
Design and methods: Retrospective descriptive study of patients attending the emergency department from January to October 2008 and were diagnosed with pericarditis. We designed a card showing the study variables. The data were analyzed using the SPSS program.
Results: 23 cases (sample size) were diagnosed with pericarditis (1 ?). 82% men and 17% women. Without cardiovascular risk factors 56%. Smokers 30%. Hypertension and dyslipidemia 13%. 21% chest pain clinic. Retrosternal 52%. Left thorax 13%. Oppressive 39%. Execerbated with inspiration 52%. Change with position 56%. Pericardial friction rub 4%. Previous catarrhal process 34%. No statistically significant differences (p >0.05) between winter months and the rest. Electrocardiogram shown widespread upward concave ST-segment elevation 43%. Normal 21%. Troponin was determined in all the patients, and was elevated in 13%. Creatine kinase and its MB fraction were determined in 34% of the cases and were elevated in 8%. All patients admitted had elevated troponin concentration. Admitted 34%: 21% in Cardiology service and 8% in the Intensive Care Unit. 52% of the patients were discharged. Echocardiography was performed at 75% of the admitted patients and showed effusion only in 12% of them. Treatment: 52% ibuprofen, 26% colchicine, 39% aspirin.
Conclusions: 1. The profile is a man without any cardiovascular risk factor. 2. There is no seasonal variation in its incidence. 3. All patients with elevated Myocardial enzymes are admitted. 4. The Echocardiography is a frequent patients, although evidence rarely effusion. 5. The more frequently treatment administered is Ibuprofen. 6. Most management is done at home.

P-446

Management of acute chest pain in rural practice in Europe

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Background: GPs have often to face the problem of acute chest pain. It is probably the most frequent symptom in emergency cares and certainly one of the most important because it can disclose some severe diseases as Acute Coronary Syndrome, pericarditis or pulmonary embolism. In order to make a correct diagnosis and to provide a right therapy the availability of some technologies and the time needed for this are crucial. GPs working in rural and isolated areas have probably to overcome further problems and to find special way for applying guidelines.
Aim of the research: We wanted to draw a picture of real management of this problem in different rural setting across Europe and to point out problems and barriers to follow international GLs.
Methods: We choosed the topic after a wide discussion on EURIPA's listserver and in a workshop during Wonca Europe Conference in Paris 2007. We asked EURIPA's members to take part as volunteers in this project and we gathered about forty practices in different countries available for collecting clinical data. The protocol of the study is the result of further discussion in a special listserver for researchers and

consists in a perspective longitudinal observational study. We developed a form in order to record each case of "new onset (not due to a trauma) chest pain (for which we are usually asked for an unscheduled consultation, an home visit or an after hours call) when we have to do with a differential diagnosis about a severe heart or lung disease". The form aims to collect details about the epidemiology of the problem (frequency, symptoms), the process of care (timing of intervention, decision procedures, diagnosis instrumental supports) and outcomes.
Results: the study is ongoing and we expect to have the first data in September for the conference.

P-447

Managing high blood pressure in the emergency department in primary health care

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Background/aim: Hypertensive emergency is a condition marked by elevated systolic and diastolic blood pressure (BP) along with an acute target organ damage. Hypertensive urgency is a condition with elevated BP and absence of an acute organ damage. Our aim was to record the epidemiologic data and medical history of the patients who presented in the Emergency department complaining of high BP, as well as the management provided by doctors for this condition.
Design/methods: We studied the records of patients who received consultation after complaining for a high BP in the Health Centre between October 2007 and October 2008. These accounted for 56 (0.73%) from 7653 visits totally (37 males and 19 females). The BP measurements they presented ranged from 140–250 mm Hg for systolic and 80–140 for diastolic BP. For each individual, we recorded the systolic and diastolic BP, the presence of concomitant signs or symptoms, the history, the anti-hypertensive medication being taken and the doctor's treatment upon the visit.
Results: The commonest concomitant manifestations were from cardiovascular and nervous systems. 53 patients (94.60%) had already been under treatment for hypertension. In 47 (83.92%) of the cases, doctors intervened with administration of pressure lowering drugs, such as ACE inhibitors, diuretics, calcium channel blockers and in 6 (10.71%) with anti-anxiety drugs. No use of sublingual administration of nifedipine was made. Immediate reference to a Hospital took place in 1 case due to suspected malignant hypertension.
Conclusion: Although a peak of BP doesn't necessarily require urgent treatment, doctors often use drugs in order to lower a remarkably high BP, giving in to patients' appeals and/or to their insecurity for an acute complication.

P-448

Hypertensive crisis: epidemiology and clinical management in emergencies

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Purpose: Study the epidemiology and management of the patient who is diagnosed of hypertensive crisis.
Design and methods: Prospective and descriptive study of all patients diagnosed in the emergency department of hypertensive crisis (HC), fulfilling the criteria of JNC VII: systolic blood pressure >= 210 mm Hg or diastolic >= 120 mm Hg. We excluded those under 18 years old and pregnant. The study period was five months.
Results: 152 HC were collected but only 51.97% fulfilled criteria. The 96.22% were hypertensive urgencies and only 3.78% were hypertensive emergencies. A 68.36% were women and 31.64% were men. The mean age was 67.46 years for females being 69.46 years and 63.12 years for men. The 34.18% were sent from primary care. A 77.22% were previously diagnosed hypertension, 90.16% treated by drugs. Regarding the number of antihypertensive drugs received was one about 49.09%, 30.91% two drugs, three 18.18% and four 1.82%. The symptoms were: headache 39.24%, 35.44% dizzy, chest pain 8.86%, 5.06% feel sick, 5.06% anxiety. The 17.72% were asymptomatic. The tests requested were: 55.7% Electrocardiogram, blood test 45.57%, 35.44% chest radiographs, myocardial enzymes, 10.13%, coagulation 10.13% and brain CT 2.53%. The 93.67% were discharged, recommending a visit to primary care 95.95% of them and 26.58% plus the transferred to the Hypertension and Cardiovascular Risk Unit. In 39.19% of them changed the treatment. The 6.33% were admitted to hospital in the service of Internal Medicine (60%) and 20% in cardiology.
Conclusions: The CH type hypertensive urgency is a relatively common clinical entity in the emergency department but too much diagnosed. The typical patient is a old woman which hypertension is known and treated with a single drug which has neurological symptoms. Most patients are discharged and sent to control to primary care and in a few cases to the specialized care.

P-449

Initial management of emergency in the family medicine center

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An emergency is unexpected and may be brought to a family practice center, the initial management of an emergency should not be delayed pending transportation to hospital.
Aims and purpose: To describe clinical characteristics of patients initially treated in the family practice setting and subsequently referred to the hospital emergency department.
Design and methods: Design: Observational prospective study. Setting: Family Medicine centers and reference hospital of the sanitary area of Jerez de la Frontera (Spain).
Subjects: Consecutive patients referred to the hospital emergency department from the family practice center by an emergency ambulance transportation (EPES-061) from January 2007 to December 2008. Patients who were less than 18 years of age were excluded. Statistical analysis: Data were analyzed by SPSS 15 and expressed as a mean ± standard deviation. Main variables of interest: Age, gender, vascular risk factors, and hospital diagnosis were collected.
Results: During the study period, 80 consecutive patients were included, although, 6 were excluded for not having all the data to analyze. Mean age was 62.9 ± 15.3 years, 47 (63.5%) patients were male and 27 (36.5%) female, 79.7% of patients had vascular risk factor: 67.6% of patients presented history of arterial hypertension, 43.2% dyslipemia, 45.9% cardiopathy and 35.1% diabetes. Acute coronary syndrome (31 patients/41,9%), arrhythmia (14/18,9%) and respiratory failure (6/8.1%)were the commonest hospital diagnosis. 22 patients, 29.7%,were admitted in medical wards and 9,12,2% in the intensive care unit, 43 patients were discharged of the hospital after an hours admitted in the observation unit.
Conclusions: Family medicine centers attend a significant number of emergency per year, family physicians are qualified to provide initial emergency care previous referring the patient to the hospital. Most of patients of the study had vascular risk factors, acute coronary syndrome was the commonest diagnosis.

P-450

Emergency management program in a primary health center

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Objective: To describe an emergency management program designed to provide care of patients requiring immediate medical attention at a Health Center (HC) that combine 4 Primary Care Centers(PCC).
Methods: Our HC, building with 6 floor, has a staff composed of 60 general practicioners (GP),11 pediatrician, 50 nurses, 45 administratives. It does the following tasks: To create emergency committee. To make emergency protocol. Roles and responsibilities. Emergency codes. Review location and use of medical emergency equipment. To spread emergency protocol to staff. Cardiopulmonary resuscitation training courses.
Results: It creates two teams: Urgency Team (UT) and Code 0 Emergency Team (ET). It defines urgency as patient who: – arrives to the HC, and because of his acute pathology can't move up to the consulting room; – doesn't have GP assigned in the HC; – needs immediate medical attention and he's in the street close to the HC (then alert emergency services 061/112); – Emergency: patient who doesn't respond to stimulus and doesn't move. In the event of urgency, the administrative calls UT (made up of GP and nurse) for the day (monthly planning is published on each building floor with professional's names and location).If the patient is unconscious code 0 is activated (every three months rotating one of the PCC has the responsibility to make code 0 ET with a GP, nurse and administrative). In children's case blue code is activated (pediatrician and nurse). Health professionals treat patients with emergency equipment available. Administrative collect patient's data, inform family and call ambulance if it's required. The code 0 ET keep watch over emergency equipment (AMBU mask desfibrillators drugs). Periodically staff do cardiopulmonary resuscitation training courses and 2 briefings is presented to them.
Conclusions: All professionals, physicians, nurses and administratives are needed to deal with medical emergencies. The protocol made coordination between them easier.

P-451

Initiation of postpartum contraception in primary health care in Finland

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Purpose of the study: Concerns of failure in postpartum contraception have been brought up around the world. Also in Finland, risk of induced abortion is increased 6–8 months after childbirth indicating unmet need of contraception. Postpartum visit around six weeks after delivery offers a prime occasion for contraceptive counseling. The purpose of this study was to describe professional practices of postpartum contraceptive counseling in health centers in Finnish municipalities.
Design and Methods: An online questionnaire survey was conducted in the Pirkanmaa Hospital District comprising 107 municipalities and 63 health centers. A sample of 122 physicians and 128 nurses practicing family planning were invited to participate, and 83 (68%) physicians and 118 (92%) nurses responded. Physicians and nurses performing postpartum check-ups were included here, one for each municipality. Thus, the data consisted of responses from 69 physicians and 80 nurses.
Results: Condom was the most common contraceptive method recommended or initiated at postpartum visit to breastfeeding women by both physicians (41% of the responded) and nurses (44%), followed by progestin-only pills and intrauterine contraception. Professionals hardly ever recommended lactational amenorrhea as an exclusive contraceptive method. Thirty-six (52%) physicians used to postpone insertion of copper-releasing IUD and 22 (32%) of levonorgestrel-releasing intrauterine system until menses were resumed. Only few physicians used to insert them at postpartum visit. Combined hormonal contraceptives were initiated mostly when breastfeeding was finished and menses had returned. Contraceptives were supplied free of charge after delivery in less than a half of the responded municipalities.
Conclusions: Effective contraceptive methods could be initiated earlier after delivery. Update evidence-based guidelines on postpartum contraception are needed in Finland.

P-452

The role of primary care physician and gynecologist in detecting partner violence

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Background: Partner violence is common among patients attending primary health care practices. Physicians and gynecologists underestimate frequency and repercussions on physical and mental health of partner violence, because it is frequently unrecognized.
Aim was to discover readiness of female patients from Health Center in suburb Knjaca to speak about experienced partner violence with their general practitioner or gynecologist.
Methods: All female patients who visited the physician during the period of 15 days in February 2008 were asked to answer seven questions concerning physical, sexual, verbal, or psychological abuse from questionnaire (designed by Autonomous Women Centre, Belgrade) in an interview. The same protocol was used for a random sample of patients who visited gynecologist during the first half of the same year.
Results: Of the 160 female patients in general practice, 69 (43%) reported being victims of partner violence, and 58% of them experienced at least four types of violent attacks. The women ranged from 26 to 76 years of age (median = 50 years), and 19% of them were not ready to discuss more about violence. The same number of female patients (160) were interviewed by gynecologist and 89 (56%) reported experiencing some form of violence, but 36% of that number experienced only one type of violent attack (mostly sexual).They were 19 to 75 years of age (median = 41 years) and 55% of women who reported violence were not able to speak more about that.
Conclusions: The high prevalence and health consequences of partner physical, sexual, verbal, or psychological abuse therefore make it important for primary health care professionals to ask every female patient directly about partner violence.

P-453

Study of cases of gender violence from analysis of judicial reports of injuries filed in a primary health center

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Purpose: To detect possible cases of Gender Violence (GV) treated in the Emergency area from the analysis of the judicial reports of injuries (JRI).
Design and Methods: The study was performed in a Primary Care Center of Mallorca. We reviewed copies of JRI between January 2006-February 2008 filled in a Primary Care Center. Reports were classified into 6 groups based on the probability that it was a case of GV. The criteria were agreed upon between investigators from the review of a subsample of reports.
Results: In 48 of the 716 reports of injuries reviewed (6.7%), it is clearly read \'aggression by partner or ex-partner' clear case of GV (Group 1). In 60 (8.4%) did not specify the aggressor, however, aggression occurred in the house of the victim (woman). The type of injuries supported the suspicion (anxiety, hair pulling, bruises, and injuries to mouth or teeth …) (Group 2) Most of the JRI (52.8%) were clearly defined attacks, not attributable to GV (Group 3) In 121 (18.3%), it was not possible to know the nature of the aggression by incomplete data. In many of them, a woman was the victim, but did not contain enough information to confirm the VG (Group 4). In 91 reports (12.7%), no injuries were assaults (traffic, dog bites) (group 5). Eight reports (1.1%) were sexual assault (group 6).
Conclusions: It's difficult to know the real number of cases of GV from the JRI due to insufficient information. It should stress the importance of filled the JRI in detail. This would help the victims when they want to denounce their aggressors and also to take care of this problem in primary health. Maybe many women of group four could be a real case of GV, so we may have lost the opportunity to help these women.

P-454

Emotional impact of working with gender violence: perception of health professionals

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Aim: To know the emotional impact that the work in gender violence has in the professionals of the health. The specificity of the professional work in the topics of violence involves risks for those who develop it. The effects of observing and listening to the stories of the battered women, without relying on the resources and necessary supports, it can affect on the own subjectivity and their labour activity, as well as have an effect in the help given to the women.
Methodology: qualitative study done with focus groups. 6 focus groups (45 professionals) have been realized in the rural and urban areas of Castile and Leon, Spain. Subjects of study: GPs, paediatricians, nurses, midwifes and social workers. The groups have been separated depending on the sex to analyze the discursive differences related to the gender.
Results: The participants report how the attention to forced women causes emotions of dread, impotence, frustration and anger. Frustration is one of the emotional reactions most demonstrated by the personnel that work with violence, especially after having developed a work with a woman and this one decides to continue or to return with her partner. They admit that a deficient elaboration of these emotions, joined to the over-identification and the prejudices can lead to rejection towards the victim and the putting in March of mechanisms of defense. Also they perceive that these experiences can suppose a fundamental transformation in the values and in the professional practice allowing to cultivate another look that helps to preview the violence.
Conclusions: The boarding of these situations exceeds the proper practices of the sanitary attention. It is necessary that the professionals have a better training regarding the communicative and emotional dimensions of their daily practice in relation with the violence, also to improve the conditions in which they develop their activity.

P-455

The relation between smoking and hypertension and distribution to gender

Sevkovic S. (Belgrade), Stojakovic J. (Belgrade), Vucurovic M. (Belgrade)

Smoking and hypertension are two major risk factors for the beginning and developing of cardiovascular diseases, peripheral arterial disease and stroke. The Goal is to show the mutual effect of smoking (the amount of smoking experience and the number of smoked cigarettes) on hypertension.
Methodology: Prospective research in general practice covering the period of four months in 2007.
Results: Research included 279 patients, who were suffering from hypertension, have been examined (146 male and 133 female), average 54.6 years of age. Prevalence of smokers was 76.7% (49.53% female and 50.47% male).The number of years spent smoking was 14.6 and the average number of cigarettes smoked per day was 20.6, without any statistical difference in relation to gender. Their average systolic blood pressure (SBP) was 147.82 mm Hg, and diastolic (DBP), was 89.92 mm Hg. By applying certain energetic medical interventions, at the end of research, important statistical

differences (P <0.05) were established: the number of cigarettes smoked per day was reduced to 17.4; 12.68% of patients stopped smoking completely (n 27); the average value of CBP was reduced by 13.4% (127.35 mm Hg), and DBP was reduced by 9.78% (80.32 mm Hg).
Conclusion: The relationship between smoking and hypertension is evident. Nicotine causes addiction similar to heroin addiction. By educating patients about the bad influence of smoking, together with change of lifestyle and increasing the amount of physical activities will all reduce the risk of cardiovascular diseases.

P-456

Impact of gender violence in immigrant population in Spain

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Aims: Learn the differences between the frequency distribution of cases of violence against women (VAW) in Spanish women and foreign Vilassar de Mar, to assess the uniqueness of the Moroccan population.
Material and methods: – Descriptive study with follow-up cohort (from – 2002 to 2009) – Study population: women 15 to 65 years residents and registered in the Municipal Register of Vilassar de Mar. of weighted population is half the period – Registration of the urgent care to victims of VG of our Primary Care Centre (PC) – Variables studied: nationality, have suffered episodes of VG that have made the necessary emergency care in our PC – Analysis: Probability of suffering VAW by nationality. Calculating the difference of proportions and the ratio of proportions and their confidence intervals of 95% between Spaniards / foreigners; Spaniards / South American; Spaniards / Moroccans.
Results: 97 cases of VAW, 66 Spaniards, 19 Moroccans, 5 Latin Americans, 4 women of the European Union and 3 other nationalities. Spaniards account for 87.62% of cases. South Americans and Moroccans are 77.41% of cases among foreign. Only moroccans women are 61.29% of the foreign battered. Prevalence: Spaniards (0.95%) Foreigners (4.53%), Moroccans (11.44%) South Americans (2.3%) Ratio of proportions. Foreigners / 4.77 = Spaniards, South Americans / Spaniards = 2.42; Moroccans / Spaniards = 12.04. Moroccans / South Americans = 4.97. Conclusions foreign woman, a resident of Vilassar de Mar, has a risk biggest of an episode of VG that needs urgent attention, than the Spanish national resident in the same municipality. Within the group of foreign women, the Moroccan immigrant has a much higher risk of suffering VG. After seven years of follow-up, levels of prevalence remain very highs. It is necessary strategies for the detection of VAW before it is needed urgent assistance, especially in the group of foreign women and especially among Moroccan women.

P-457

Violence against women in partnerships

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Violence against the women is a serious social and medical problem in Serbia, and globally. In partnerships, 92% of violence is recognized against the women. We have to diagnose this problem among our patients and to help to the victims.
Aim: was to identify and analyze different kinds of violence against the female patients from Health Center of The Interior Ministry Employees.
Design & Methods: All female patients who visited the physician during the period of 15 days in February 2008 were asked to anonymously fill out the questionnaire for screening the family violence. The questionnaire was designed by Autonomous Women Centre, Belgrade, 2006.
Results and discussion: Fifty female patients with average age of 51.4 filled out the questionnaire. The questionnaire consisted of six questions related to various kinds of violence. Eighteen percent of the women confirmed that they were suffering physical abuse; 16% of them confirmed that they were sexually abused, while 10% of women positively replied to both previous questions. Ten percent of women responded YES to the question if they were afraid of their partners. Thirty percent of female patients endured insults and humiliation, while 10% of them experienced threats and various prohibitions (e.g. to go out of home). Only 54% of females positively answered to the last question if they were ready to talk openly about the violence issues, while 46% were not ready to talk about that, despite the fact that they suffered the aggression.
Conclusions: This study suggests that the violence is a serious problem in the partnerships of the female patients in our institution. Therefore, we have to consider it carefully and to identify it in a due time in order to help to the victims.

P-458

Hypertension among elders: differences by gender

Cimbaljevic B. (Krusevac), Vukadinovic N. (Krusevac)

The old age represents unchangeable risk factor for chronicle diseases. Hypertension is most frequent disease among elders.
Aim: To identify the level of blood pressure (BP) among elders and whether there is a difference in the level of BP between the genders. We set up the hypothesis Ho-there is no difference between genders and working hypothesis Ha-there is a difference between genders.
Methods: The study took place at the Health Centre Krusevac, October 2008-yr. The data was taken from medical history of 200 patients (100 male, 100 female) in age between 65 and 90 years, which were stratified by age and gender in groups of five years time interval. The data was statistically processed and tested (t-test).
Results: The average age of patient was 74.85 years: 75.08 years for male and 74.63 years for female. The diagnosed hypertension had 76% of patients. All of them had therapy. The average systolic blood pressure (SBP) was 134.4 ± 15.7 mm Hg: 136 ± 9.5 mm Hg for male and 136.05 ± 15.43 mm Hg for female. The difference between gender was not statistically significant (t = 0,038; p <0.1). There was significant difference in the level of SBP between groups of male 65–69 years (127.4 ± 16.2 mm Hg) and 70-74 years (139 ± 13.2 mm Hg), t = 2.72, p = 0,01. The average diastolic blood pressure (DBP) was 81.22 ± 6.2 mm Hg: 80.05 ± 7.5 mm Hg for male and 79.4 ± 15.15 mm Hg for female. This difference was not statistically significant (t = 0.38, p <0.1). There was significant difference between male DBP (78 ± 2.4 mm Hg) and female DBP (81 ± 5.6 mm Hg) in group of 65–69 years: t = 2.42, p = 0.05.
Conclusion: Although blood pressure increases in age, it is possible to keep the desirable values. Between genders, there was no statistically significant difference in the level of SBP and DBP, and we accept a working hypothesis Ho, and dismiss Ha.

P-459

Barriers and drivers to consulting a doctor about erectile dysfunction

Gay J. (Singapore)

Background: Erectile Dysfunction (ED) is a common problem amongst male adults. Studies have shown that comorbid conditions such as diabetes mellitus, hypertension, Ischaemic Heart Disease (IHD) and stroke are associated with a higher risk of ED. Whilst there has been research on the prevalence and treatment of ED in Singapore, little is known about factors that drive or inhibit patients to discuss erectile dysfunction with a doctor in the local setting.
Objective: To identify drivers and barriers to discussing erectile dysfunction with a doctor in Singapore.
Method: A cohort of 100 men aged 30 years and above with know diabetes, hypertension, IHD and/or stroke were recruited during visits to our primary healthcare clinic. Study participants completed a questionnaire in which they were asked to identify factors that would drive or inhibit them from discussing erectile dysfunction with a doctor. Data on their demographics and medical conditions were also collected.
Results: Common barriers to discussing ED with a doctor included embarrassment, the belief that ED was a natural part of aging, and being attended to by a female doctor. Common drivers to discussing ED with a doctor included a desire to have sex and influence by a spouse/sex partner.
Conclusion: Several barriers to discussing ED with a doctor exist. As there are effective treatments available, doctors should aim to encourage discussions with their patients about ED. This may include offering patients the option to see a male doctor, providing patient education and initiating discussions about ED.

P-460

Gender-based treatment outcomes in diabetic hypertensive patients

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Background: Gender-Based Treatment disparities in cardiovascular preventive therapy have received little attention.
Aims: To evaluate the gender-based differences in cardiovascular disease risk profile, drug prescribing pattern, blood pressure (BP) and glycemic control rates in diabetic- hypertensive patients treated in the primary care setting in Santorini.
Settings and Design: A retrospective study.
Materials and Methods: An audit of the medical records of 392 diabetic hypertensives (127 men, 265 women).
Results: BP and glycemic targets were achieved in <30% and <40% of diabetic hypertensives, respectively. Angiotensin converting enzyme inhibitors monotherapy was more often prescribed in males. Apart from this, no significant differences in prescribing policy were observed between male and female diabetic hypertensives treated

with antihypertensive mono or multidrug therapies. With the exception of insulin which was more often prescribed to females, a similar prescribing pattern and rank order of antidiabetics, either as monotherapy or combinations, was observed in both genders. The majority of diabetic hypertensives were at high cardiovascular risk. The body mass index and total cholesterol level were higher in females. The prescription of lipid-lowering drugs and aspirin was suboptimal; aspirin was more often prescribed to males. There was no gender-based difference in the use of lipid-lowering drugs.
Conclusions: BP and glycemic controls were suboptimal in both male and female diabetic hypertensives treated by primary care physicians. Cardiovascular disease preventive strategies have received little attention regardless of gender or other risk factors. Gender-based treatment inequities also need to be addressed.

P-461

The violence against women of Bohemian population group

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Aim: The research of the violence presence against women of bohemian population group in Pirot district.
Method: The anonymous survey on the women of bohemian nationality who have come forward in the period 21.–28.01.2007 and reported for any reason to trustee for bohemian question in Service Center in Pirot muncipiality.The inquiry from Autonomous Women Center was used, which comprised these questions: Have your partner ever slapped, hit, or kicked you, or hurt you some other way, or threatened to do so? Are you frightened of your partner? Have your partner ever offended you, criticized you in offensive way or yelled upon you? Did he throw or smashed your belongings? Have you ever been forced to have sexual intercourse with your partner when you were not willing to? Have your partner ever threatened to kill you, forbade you to visit your family, forbade you to leave home, or refused to give you the money? Are you ready to scrutinize these problems with someone?
Results: The research has been implicated to 108 bohemian women average age 31.27 ± 8.05 y.o., whereby 41.67% has declared to tolerate whichever aspect of violence on the part of partner. Thereof 42.59% has declared for existance of physical violence, 50% of psychical, 27.78% of sexual violence, 41.67% have feared the partner, and 17.59% have been controlled by partner. In the 24.07% of the researched population have included all types of violence towards women in the age group 29.2 ± 8.07y.o. Those women who have tolerated any kind of violence 80.95%, have been ready to talk about it.
Conclusion: High percentage of women in bohemian population group are the victims of family violence. The most anxious data have showed that the women who tolerated violence have been younger, but very positive was that high percentage of those women have been ready to talk about it, which was the first step in the struggle against violence in the family.

P-462

The violence against employed women in education

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Aim: The research of presence of the Family Violence in partner relationship of the women employed in education.
Method: The anonymous survey of the women employed in two schools (one primary school and one middle school) in the area of Pirot muncipiality in the period 21.01–28.01.2007. The inquiry from Autonomous Women Center was used, which comprised these questions: Have your husband (partner) ever slapped, hit, or kicked you, or hurt you some other way, or threatened to do so? Are you frightened of your husband (partner)? Have your husband (partner) ever offended you, criticized you in offensive way or yelled upon you? Did he throw or smashed your belongings? Have you ever been forced to have sexual intercourse with your husband (partner) when you were not willing to? Have your husband (partner) ever threatened to kill you, forbade you to visit your family, forbade you to leave home, or refused to give you the money? Are you ready to scrutinize these problems with someone?
Results: The research has included 165 women employed in education, of the average age 43.51 ± 10.21 y.o., whereby 29.09% has declared to tolerate any type of violence from a partner. Thereof 13.94% has declared for existance of physical violence, 19.39% of psychical, 8.48% of sexual violence, 8.48% have feared the partner, and 6.06% has been controlled by the partner. In the 3.09% of the researched population of the average age group, 45.06 ± 10.24 y.o. have included all types of the violence. Only 15.15% of women who have tolerated violence, have been ready to talk about it.
Conclusion: Almost 1/3 of women employed in education have been victims of family violence and only 15.15% of these women have been ready to talk about, which is worrying especially, if we consider that this has been the group which has to be activly involved in rendering and support to victims of family violence.

P-463

Maternity of the female workers in two primary care centers in Lleida (Spain): rural and urban

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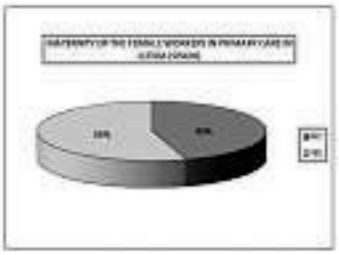
Aims and purpose: The goal of this study was to determine the prevalence of maternity in primary care based on the type of women occupation.
Design and methods: Cross-sectional study. Population was women who worked in two different primary care centers in our province: one rural and the other urban. The variables were obtained by anonymous inquiry. The variables were: age, occupation (doctor, nurse, administrative, auxilary and resident) and the site of the work (urban or rural).
Results: The sample was 93 women with average age of 37.04 years (SD: 9.7) in the rural area and 37.02 years (DE: 9.08) in the urban area. The prevalence of maternity in the rural primary care was 63.26% although in the urban area was 45.45%. Finally the prevalence of maternity depending on occupation was: administrative (rural [R]: 61.53%; urban [U]: 71.42%), nurse (R: 72.22%; U: 36.3%), doctor (R: 70%; U: 36.3%), residents (R: 20%, U: 0%), auxiliary (R: 50%, U: 100%).
Conclusions: The prevalence of maternity in rural area for all type of occupation was higher than in urban area with statistical significance ($p < 0.05$) specially doctor and nurse. Then maternity in women who worked in a primary care would be influenced by different factors. Further studies are need to identify environmental factors that may affect maternity in urban area.

Maternity of the female workers



P-464

A cluster randomized trial on the treatment of urinary incontinence in older women: the pro-active approach of the URINO-project

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Aims and purpose: Urinary incontinence is a very common health problem, especially in older women. Although effective treatment options are available only a minority of the affected women asks for help. The URINO-project compares a pro-active approach of older women with urinary incontinence with usual care by the general practitioner. We will study the effects and cost-effectiveness of protocolized diagnosis and evidence-based treatment of urinary incontinence in older women, compared to standard care.
Design en methods: The design is a cluster randomized trial. To prevent contamination, general practitioners will be randomized instead of patients. All female patients of 55 years and older with urinary incontinence registered in 12 general practices will be invited to participate in the project, regardless whether they are known by their general practitioner as being incontinent for urine or not. The intervention will consist of a protocolized assessment of urinary incontinence and an evidence-based treatment, tailored to the patient. In the control group women will receive standard care as their general practitioner is used to give. The primary outcome will be the severity of the incontinence according to the Incontinence Severity Index. Secondary outcomes will be quality of life and costs.
Results: This study design is innovative because of the active approach of the patients: all older women are invited for diagnosis and treatment, also those who hesitate to visit their GP.
Conclusions: We expect that the proposed intervention will lead to a reduction of incontinence symptoms, to an improvement of quality of life and a reduction of the costs, as compared to usual care. The

project may also lead to transmural guidelines for the care of incontinent women, including recommendations for the optimal diagnostic approach of incontinence problems, and to a profile of women that may profit from a pro-active approach to their incontinence symptoms.

P-465

Mobile radiography in Switzerland – report of a trial

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MOBIRAD GmbH / Sarl was founded as company in 2007 with the intention to launch an onsite trial in the cities of Basel and Geneva. The aim was to demonstrate the feasibility and benefits of mobile radiography. In Geneva the service has been available for over 2 years now. Radiography technicians use a small 80 kg mobile radiography unit in order to x-ray mostly aged persons in their home. The modern units are equipped with digital x-ray and use low x-ray dosages and their use has been approved by the Swiss Federal office for healthcare. The images are transported digitally to a radiologist for diagnosis and the results are conveyed to the referring clinician the same day. The service allows patients, which are difficult to transport to be examined in their own houses or even own rooms. This frequently makes transports to an x-ray facility in private practice or in a hospital unnecessary, thus avoiding stress and anxiety. Besides the high acceptance of the service by the patients, avoiding their transports in many cases allows saving transport costs as ambulance transfers are expensive. Furthermore, delegating personal to accompany the patients can be avoided, by their being x-rayed in the home. As was shown in studies from Norway, the fact that aged persons are not or only in delayed time being referred to a radiological unit, may result in delayed or under-diagnosis of senior citizens in urban centers. We would like to report our experience with mobile radiography in Geneva, where on the average 5–6 patients / day are being studied. The service by now is well known and proves to be of cost efficient, as it in many situations reduced the need for hospital referrals of senior patients substantially. It is conceivable, that in the future mobile radiography may allow the general practitioner earlier and more efficient triaging of the older patient segment among his clients.

P-466

What pharmacological expense is generated by a well-controlled diabetic patient?

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Aims and purpose: To describe the profile, degree of control and pharmacological expense of our diabetic patients (DM).
Design and methods: Cross-sectional descriptive study in an urban primary center with 13341 inhabitants. March–May 2008. Sample: 294DM in pharmacological diabetic chronic treatment (DMPCT) (56.5% of the whole DMPCT). Analyzed variables: Age, sex, type of diabetes; Follow-up doctor (DF), degree of control: (HbA1c <7: good, HbA1c: 7–8: acceptable, HbA1c >8: bad, cardiovascular risk factors (RCF), complications and cardiovascular associated pathology (CCAP), annual cost pharmacological treatment (ACPT).
Results: Average age 71, 74y. 2.7% women. 93.2% DM2. DF: 32.6% by General Practitioner (GP); 19.1% reference endocrinologist (RE); 14,3% private endocrinologist (PE); 12.2% geriatric residence doctor (GR); 11.9% reference hospital endocrinologist (HE); 8.8% other (CO).Degree of control: 59.2% good; 17.3% acceptable; 15.3% bad; 8.16% not listed. 41.5% present one RCF; 40.81% two; Arterial Hypertension the most frequent. CCAP most frequent: Chronic ischemic heart disease: 18.7%, Chronic renal insufficiency: 13.9%, Diabetic retinopathy: 10.9%. ACPT whole: 82878,6.EUR,.16.7% generated by patients controlled by GP with ACPT average 145 EUR (IC95% 102–188). ACPT average/patient: 291,9 EUR (IC95% 280,8–322,9EUR) ACPT according to degree of control: Good: 239 EUR (IC95%190,9-288,2 EUR), Acceptable: 383,4 EUR (IC95%280, 3-486, 6 EUR), Bad: 354,9 (IC95%262, 9-447, 1 EUR) ACPT of DM with good control according to the DF: 77.8% of CGP (97.4 EUR [IC95%66.1–128,7]); 56.3% of CRE(276.8 EUR(IC129.7–423,8); 68.5% of CHE with ACPT 480,4 EUR (IC95%328,7-632,1).
Conclusions: The GP tracks almost one third of the DMPCT, only accounts for 16.7% of the drug that they generate. There is a greater percentage of patients well controlled and with a lower expense on primary care. It is essential to improve coordination between levels of care, encouraging the design and use of clinical guidelines to achieve a shared more efficient control of our patients.

P-467

15 years chair in complementary medicine at the University of Bern: from the complexity of general practice to the individuality of an academic chair

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Background: In Switzerland, 10% of the general practitioners (GPs) are certified in, 30% are practising, and 40% are referring to complementary medicine (CM) to satisfy the high public demand.
Aim: To describe the implementation of a chair in complementary medicine (CM) into an university due to a public vote. Structure: This chair is divided into four CM methods: Anthroposophic Medicine, Classical Homeopathy, Neural Therapy, and Traditional Chinese Medicine including Acupuncture, each represented by one GP as docent (25%) and one research associate or resident (50%). Further positions are funded by third parties. The administration has 200% full time equivalent. Service: Clinical consultations, visits, and outpatient services increased steadily from 100 to nearly 2000 per year. Public mandates for authorities, e.g. the national Office of Public Health, are further services. Research: Interdisciplinary research collaborations were formed with other institutes of the University Hospital and other national and international institutions. Research foci were preclinical and clinical studies in the four CM fields, with modern physical, biochemical, and biological methods, clinical trials, research methodology, art therapy and medical education.
Results: were presented at national and international conferences, invited lectures, posters, or scientific publications in books or peer-reviewed journals. Teaching: The chair participates in the regular curriculum for medical students, e.g. lectures, seminars, practical courses. Lectures were also held for students in pharmacology, and veterinary medicine. Public lectures are held throughout the winter semester. Continuous and further education was offered in co-ordination with the respective CM societies.
Summary: The chair for complementary medicine KIKOM is a successful example of CM implementation into academic medicine. However, to be able to exploit the full potential, more personnel and a better infrastructure is needed.

P-468

Approach of three conditions in pediatric dermatology

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Aims and Purpose: The molluscum contagiosum, warts and pityriasis rosea are diseases of Pediatric Dermatology, responsible for many consultations in primary health care. They are a source of concern, especially for parents, and may have an adverse impact on the child's quality of life. This study aims to address the correct diagnosis and treatment of such diseases, which in most cases can be treated in primary health care without resort to the Department of Dermatology.
Design and Methods: Literature review, based on the consultation of manuals and periodicals, in search of articles published in the database Pubmed/Medline between January 1999 and January 2009 in English, Spanish, French and Portuguese.
Results: The Molluscum Contagiosum is a skin disease caused by Pox virus. It is characterized by umbilicated papules, mostly distributed over the face and upper body. This is a self-limiting benign situation, which often requires no treatment. Whenever necessary, the therapy involves scarification of the skin lesions. The warts are hyperkeratotic lesions caused by the Human papilloma virus, divided into ordinary, plane and plantar. The first line of treatment is the use of keratolytic varnish. Proper application of this therapy is a vital weapon for the resolution of the pathology. Pityriasis rosea is characterized by a self-limiting papular eruption-peel. The etiology is unknown, though the one most frequently invoked is viral (human herpes virus). The treatment involves tranquilization, as well as education of the patients and their parents concerning the benign nature of the disease.
Conclusion: Comprehensive knowledge of these three entities and proper treatment are essential for good clinical practice. This also decreases the cost of health care, through the elimination of unnecessary referencing for Secondary Health Care.
Keywords: Molluscum Contagiosum, Warts, Pityriasis rosea

P-469

Cost-effectiveness of antihypertensive treatment in elderly – an analysis of the HYVET study from a Swiss perspective

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Aims: To determine the economic benefit of antihypertensive treatment in patients 80 years of age or older from the perspective of the Swiss healthcare system.
Methods: The cost-effectiveness analysis of antihypertensive treatment in elderly was performed applying the results of the

Hypertension in the Very Elderly Trial (HYVET) to the Swiss healthcare system. A sensitivity analysis was performed by varying the costs of medication, stroke, myocardial infarction, heart failure, and life expectancy.
Results: The analysis shows that antihypertensive treatment provides, compared to placebo, an additional life expectancy of 0.0457 years per patient, over a follow-up period of 2 years. The medication cost was covered by the reduction of costs related to the treatment of strokes, myocardial infarctions and heart failure: the total cost per patient in the active group (841 CHF medication cost + 1'666 CHF treatment costs) resulted in a dominant strategy of savings compared to the placebo group (2'544 CHF treatment costs). The sensitivity analysis yielded a stable estimate after varying the costs of medication, treatments, and life expectancy, confirming the robustness of these results.
Conclusions: The economic evaluation of the antihypertensive treatment of very elderly persons, based on the HYVET study and performed from a Swiss perspective, has shown to be a dominant strategy with net savings. Moreover, considering that antihypertensive treatment also positively affects the incidence of dementia, and taking into account that reduction of diabetes and renal failures were not analysed in the HYVET study, those net benefits might even be underestimated.

P-470

Adjusted clinical groups: management of primary health care team and patient management

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The Adjusted Clinical Groups System (ACG) is a population-based case-mix that has been widely used in care management. ACG (version 8.1) classifies each patient into mutually exclusives classes defined by age, sex and morbidity.
Objective: (1) To describe morbidity patterns and its variability among Primary Health Care teams (PHC), (2) Evaluate cost of patients according to resources consumption and to revise global cost as a function of the ACG assigned. Methods: Data comes from a data base of 2.800.000 Spanish patients electronic records (year 2007), collected from 203 PHC (population of 4.200.000 inhabitants). Data includes: age, sex, diagnosis, visits, pharmacy cost and derivations to other services. Efficiency Indexes relating actual consumption to the expected ones were adjusted by morbidity.
Results: Global complexity of patients was 1.2 (from 0.5 to 2.2) and it showed correlation with data quality (percentage of patients without diagnosis went from 12% to 46% and average number of recorded diagnosis ranged from 1.7 to more than 8.0 depending of PHC). Average number of visits was 9.5 visits per year per person (from 4.6 to 19.3) and average pharmacy cost was 255.6 EUR (from 127.9 to 406.9 EUR). We also analyzed referrals to specialist with a variation from 0.13 to 0.98 per patient during one year. 10% of patients showed frequent user patterns (more than 21 encounters per year). As an example: two patients from the same PHC. The first one, a 57 year old man with low complexity (0.783), 167 visits, had a cost (214 2EUR) 20 times the expected (105 EUR). On the contrary, a 48 year old woman with high complexity (2403 EUR), and 110 encounters, showed half the cost expected from her characteristics (246 EUR, instead of 480 EUR expected).
Discussion: (1) Data quality is crucial to correctly interpret results, (2) Profiling PHC by means of ACGs has proven empirically useful for managing resources and patient consumption.

P-471

The practice of medicine in an age of economic uncertainty

Sayre J. (Ponte Vedra Beach, FL)

While major medical training institutions in Europe and the Americas do an outstanding job of training residents and fellows to treat significant medical problems few institutions have been prepared to train graduating physicians for their new environment of rapidly changing economic climates. Recent government reactions to deteriorating economies have resulted in many physicians facing new administrative, financial, and contractual challenges for which they have received little or no training. In the U.S., a large academic medical center has partnered with its alumni association to produce a series of training programs entitled "Life After Fellowship or Residency: Transition to Practice." Begun shortly before the recent recession, the latest series of programs have incorporated new training to assist young physicians in coping with the economic realities they are finding in practice. Faculty physicians have used research and expertise from the sponsoring organizations to develop seminars to familiarize residents, fellows, and spouses with practice skills such as: marketing, practice management, maintaining productivity and quality of care, communication skills, personal finance skills, and the impact of new governmental directives, while maintaining work-life integration. Resident evaluations of the program have been extremely favorable with program goals achieved. Future programs will reflect resident and fellow needs.

P-472

The sale of antibiotics without prescription in pharmacies in Catalonia

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Aims and purpose: The aim of this study was to quantify the percentage of pharmacies selling antibiotics without an official medical prescription in Catalonia, Spain, by the simulation of three different clinical cases interpreted by actors.
Designs and methods: A prospective study was carried out from January to May 2008 involving all of Catalonia. Two actors visited a sample of 197 pharmacies in Catalonia from among the total of 2,959 pharmacies in 2007. A randomized and stratified sample from the four provinces was elaborated by urban and rural areas and by richer or poorer socioeconomic zones. Three levels of demand were approached to convince the pharmacists to sell the antibiotic.
Results: Antibiotics were obtained in 79.7% for a supposed urine infection, in 34.8% for pharyngitis, and in 16.9% of the pharmacies in which acute bronchitis was simulated ($p < 0.001$). In 75.4% of the pharmacies in which urine infection was simulated, the antibiotic was given with only an explanation of the symptoms, with no further demand on behalf of the patient. Of the total number of pharmacies in which the antibiotics were sold, the pharmacists provided an explanation as to the number of times per day the drug should be taken in 84.3%, in 68.7% the duration of treatment was also indicated, in 68.5% the actors were asked about accompanying symptoms, and the pharmacist inquired about allergies prior to the sale of the antibiotic in only 16.9%. In the case of urine infection, interpreted by a young actress, only 3.6% of the pharmacies asked if she might be pregnant. Of the 108 pharmacies which did not sell the antibiotics, only 52.8% explained that they could not be given over the counter for healthcare reasons or antibiotic resistance.
Conclusions: These results demonstrate that, although illegal, the sale of antibiotics without a prescription continues, preferentially when the infection is supposedly bacterial.

P-473

Primary care in children of an isolated rural prefecture

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Introduction: Primary Care has always been of vital importance in any well structured health system.
Aim: Evaluation of children's Primary Care in our area.
Design and methods: The database of our practice for pediatrics from July 2006 to December 2008. For the analysis of our data we used the program "Spss for Windows".
Results: 3289 children were examined. 2572 were insured and 873 (21.8%) did not have health insurance. 798 vaccinations and 166 Mantoux tests were carried out. 249 personal health cards were filled out. 1586 children came in sick, from which 58.6% suffered from respiratory diseases, 22.1% from skin problems, 12.1% from gastrointestinal disturbances and 2.5% from ophthalmological problems. 481 children came back for a follow-up visit, 2 patients were sent to hospital by ambulance as emergency cases and 27 patients were referred to a second degree health facility (1.8%).
Conclusions: The importance of our practice for pediatrics, which covers an isolated area, whose population increases impressively every summer, is indisputable, especially as far as the following are concerned: a. observing infants' normal development b. vaccination of our area's children c. treating large numbers of patients so as to avoid congestion of second degree facilities and d. treating the uninsured pediatric patients. Only a small number of children in our jurisdiction (about 300) allow a thorough and correct registration of data that will enable us to further organize and improve the Primary Care structures in our area.

P-474

Information difficulties perceived by users in primary care consultations: qualitative research through focal users' groups

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Objective: To know the information difficulties perceived by primary care health users and their proposals to avoid them.
Methods: We conducted a structural qualitative study of focal groups. Urbane health area of Salamanca (Spain), there were 10 focal groups

with 83 users between 18 and 80 years old and were followed from December 2006 to December 2007. The data recruitment was done through essentials informants and snowball technique. A structural sampling was done depending on age and educational level. The meetings were recorded on video and audio and were transcribed literally in paper. The analysis of the texts were done by three researchers, looking for the consensus among them.
Results: The information difficulties are: – The time spent on the consultation is the most important and frequent factor that the users mentioned. – Personal treatment, communication way content and language used in the relation physician-patient. – Limited number of sanitary information points and also personal and telephone difficulties in the access to them. – Conditions of the consultation and waiting room. They suggest to improve the sanitary education in the clinical interview and to create specific and effective information points and also improve the work's conditions in health centers.
Conclusions: The users express concern about the health information that they received, as much in the aspects related specifically with their health, as the administrative and management topics. Their suggestions are orientated to the improvement of the accessibility to the information and to promote environments that develop the relation between sanitary workers and users: more time in the consultation and a better environment. They distinguish the need that the sanitaries ones should dominate skills of communication.

P-475

Effectiveness of tailored feedback of clinical results on cardiovascular health to primary care physicians

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Aims and purpose: To assess the improvement of clinical practice on cardiovascular health by means of different degrees of tailored feedback to primary care physicians in a primary care district.
Design and methods: Before and after, multicentre study. Thirty primary care centres were invited to participate. A random sampling of 2,992 patients was recruited (alpha: 0.05; beta: 0.2). Variables of the survey: cardiovascular risk score by means of the Framingham risk chart, screening and control of the different cardiovascular risk factors, and coronary heart disease. Centres were randomly allocated to three degrees of feedback intensity: high-intensity, medium-intensity and low-intensity feedbacks. Statistical analysis was carried out by means of chi-square and Student's t test.
Results: Patients assigned to physicians who received the lowest-intensity feedback had significantly lower screening percentages (6.5% less in high blood pressure, 11.3% less in diabetes, and 9.7% less in dyslipidemia), lower control rates (18.9% less in high blood pressure, 13.8% less in diabetes and 6.5% less in dyslipidemia) and lower cardiovascular risk scores (0.6 ± 5.2) compared with those assigned to the remaining GPs.
Conclusions: Providing physicians with feedback about their clinical results on cardiovascular health indicators produced an increase in screening percentages, a better control of the different cardiovascular risk factors and a slight reduction in the cardiovascular risk.

P-476

Who are bullies and who are victims of school bullying in Herzegovina?

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Introduction: The children involved in school bullying have been classified in four group: pure bullies, those who bully other children only; pure victims, who are children who are victimized by bullies; bully-victims, who are children who are involved in bullying other children and who also are victims of bullying, and neutral children. Psychical and somatic symptoms are found more frequently among school bullying victims. Aim: to find out characteristic of children involved in school bullying as bullies, victims and bully/victims (gender, class and school achievement) in the sample of Herzegovinian primary school children.
Methods: This cross-sectional study used a sample of 484 students enrolled in fourth to eight grade of two primary schools. The students were individually pooled with a standardized questionnaire. The data were presented in absolute and relative frequencies. Chi-square test was used for evaluation of differences between frequencies. For statistic analysis was used SPSS software.
Results: there were 68 (14%) victims, 19 (4%) bullies, 12 (3%) bully/victims and 385 (79%) neutral students. We found that the girls where more often neutral (51,7%), but the boys were more among bully/victims (83.2%) (Fisher's test = 9.530 df = 3, P = 0.023). We found no difference in school achievement in four tested groups (Fisher's test = 12,017, df = 12, P = 0.570) as like as in age/class (P = 0.326). The majority of victims and bully/victims (60%) attended the same class with the bullies (x^2 = 57,000, df = 4, P <0.001).
Conclusion: School bullying is present among primary school children in Herzegovina. The most of children involved in school bullying are victims of bullying. The age and school achievement are not predictors for school bullying involvement. Results of this study should be used in formulation of preventive measures and interventions in school children in primary care settings.

P-477

Health risk of future health coaches – lifestyle risks among medical students – a cross sectional study

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Background: There are no studies about medical students health related lifestyle in Germany. But it seems important to know about this regarding the function of future doctors as health coaches. Thus students should learn more about health risks by analyzing their own state of health and health related lifestyle.
Methods: In 2008/2009 a cross sectional study among 880 medical students of the 3.–6. academic year at Halle medical school by using an standardized questionnaire was conducted. Validated instruments of the 24 Items questionnaire consisted e.g. of the fast-alcohol-screening-test (FAST) and the lifestyle satisfaction fraction of the Union-Health-Survey (BGS). Data were evaluated using SPSS 16.0© and analyzed by means of Chi2 and T-test.
Results: 719 students responded (response rate 82%) of this were 32% men and 68% women, mirroring the sex distribution of the whole sample. Risk factors (alcohol and tobacco consumption, physical activity, BMI) distributed constantly over academic years. Rate of nonsmokers was 80%, with higher academic year tobacco consumption increased among smokers. The FAST showed that men have a considerable risk for alcohol-referred disturbances (42% high risk proportion).Data regarding physical activity scores shows that only half of women are at least minimal sportily active. The risk behavior of male smokers shows that they are more dissatisfied with their health situation than female nonsmokers.
Discussion: Considerable gender differences concerning tobacco and alcohol consumption and physical activity were observed. The need for gender-specific interventions becomes clear. The high portion of risky alcohol consumption patterns among male students shows need for action.
Conclusion: The medical education itself has no health promoting effect. Students should learn more about their own health risks for becoming better health coaches or at least improving their own life-style.

P-478

Greek doctors' knowledge of generic drugs: an opinion study

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Aim: The purpose of this study was to survey the opinion and practical experience of Greek doctors regarding generics drugs.
Method: We analyze the responses of 143 doctors in a questionnaire about experiences and attitudes toward generic drugs prescription. The main topics study were prescribing practises and habits, risk associated with generic drugs and pharmacist substitutions. The influence of doctors' related variables on prescribing was also analyzed. The chi2 test and Fisher's exact test were used in the data analysis with SPSS 16.0.
Results: Despite all the doctors prescribe generic drugs rarely, it is found that some categories of generics often prescribed (antibiotics 43.1%, NSAID 32.6%, PPI 33.3%). Only 44.5% and 42.4% of the doctors considered generics to be as effective and safe as brand names drugs. 31.2% of the participants believe that the evidence of bioequivalence is enough to guarantee efficacy and safety of generics. 54.2% of the doctors believe that the generics prescription could have negative impact for their professional status.
Conclusion: Practitioners do not refuse to use generic drugs, but there is some uncertainty if official authorities are able to ascertain that the pharmaceutical quality of generic drugs is acceptable.

P-479

Induced prescription in Spanish hospital and extra-hospital emergencies

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Aims and purpose: To know the prevalence of induced prescription (IP) in Spain comparing the attitude of the hospitals emergency and extra-hospital emergency rooms in the 17 Autonomous Communities.
Methods: Through a descriptive cross-sectional study, we analyze the proportion of induced prescription in Spanish emergency departments, and with a systematic review, we find out the legal support that allows to refuse or give a recipe that another doctor prescribed.
Results: In 41,17% of the Autonomous Communities prescribe the drugs at the Hospital Emergency room in comparison to the 52,94% that are done in extra hospital emergency department. Only Madrid, is the legal protected city where a GP is not force to prescribe a treatment that the patients has been taken in the ER when they discharged from hospital.
Conclusions: There are a lot of Inducted Prescriptions in Spanish Primary care, which means an important proportion of prescriptions without GP agreement. It would be necessary to design a system that allows each specialist to admit responsibility for their own recipe without GP consent or force to prescribe this drug under National Health Service for the patient to get it cheaper, being agree or not.

P-480

Investigating temporary disability in urban areas

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Aims: In our country we have a GP document, the temporary work disability that excuses to go to work if you have a disease. This plays an important part of our work and high demand of appointments.
Objective: we want to compare a sample in two urban cities and find differences and strategies for improvementi our work.
Methods: There are multiple factors involved in it. We analyze the rate between two teams of two health centers. Using the percentage-weighted population and the number of days absent from work. Selected two urban cities with population, population density and area similar. Estadistics official data.
Results: Populations A/B; population A 62899/B 58493 , sup. A 31.4/ B 30.6 and density of P A 2002,5 / B 1914 p/Km2; A 1215 / B1580 working age population, A 27.69%/ B 27.71% percentage-weighted population with temporary work, A 20.10/ B 27.88 days off work. A 28.58%/ B 19.31% work in the city ; A 33%/ B 39.8% work out of town; A 7.2%/ B 14.3 university degrees; A 18,3%/ B 10,5 % no academic title.
Conclusions: – There're no differences in percentage-weighted in temporary disabily. – We have time differences on the duration. – Work outside the city can help to prolong the process. – Specific sections to do these appointments can improve our work.

P-481

Analysis of general practitioners' knowledge, opinions and experiences due to generic substitution and generic drugs in the Czech Republic

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Aims and purpose: Generic substitution was legislative established in the Czech Republic by the law on January 2008. Immediately follow this step a passionate discussion between medics is created. Are generic drugs so superior and safe like originals and give the system of generic substitution some benefit for the patients? The aim of this study is to evaluate and analyze general practitioners' knowledge, opinions and experiences of generic substitution and generic drugs after first year of new law in Czech health system.
Design and methods: Data of this prospective study are collected by questionnaire that general practitioners (GPs) fill in during scientific congresses from November 2008 to February 2009. Questionnaire consists of 30 questions. Demographic characteristics of GPs are recorded in first part of the questionnaire. In the second part of the questionnaire, respondents are asked about their accordance with affirmation about generic drugs and generic substitution. In third part, respondents are asked about their private opinions of and positive and negative experiences with generic substitution. We would like to include 500 general practitioners. Data will be processed by descriptive statistics and Pearson's and Kendall's correlation.
Results: This study should bring relevant and exclusive data about GPs knowledge of, opinions of and experiences with generic substitution in the Czech Republic. Correlation between respondent's characteristics and questions concerning knowledge, experiences and opinions of generic drug and generic substitution will be analyzed. The study will point to positive and negative GPs experiences with generic substitution. These experiences will be discussed and analyzed.
Conclusion: The aim of this study is support of effective cooperation between general practitioners, pharmacists and patients. The results will be background of discussion about generic substitution and generic drugs.

P-482

Drug therapy in sleeping disorders in General Practice

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Background: Sleeping disorders are an increasing problem among Finns. According to The Social Insurance Institution of Finland (Kela) the drug therapy in sleeping disorders has increased 50% in 15 years.
Aim: This study examined the practice of prescribing sleeping medicine in Malmi Health Center in Helsinki, Finland. Malmi Health Center provides primary care for app. 34000 people. There are 11 GPs and 10 junior doctors.
Method: Cross sectional study on patients refilling their sleeping medication (temazepam, zopiclone, zolpidem, melatonin, nitrazepam, midazolam) without visiting their GP in September 2008. Medical history (age, gender, diagnosis , regularity of GP visits) and data of sleeping medication over previous year were assembled from computer data base.
Results: 208 patients (80 males, 188 females), mean age 62.4 years. 46% of the patience were over 65 years of age. 71% of patients had a chronic somatic disease. 38% of patients had a psychiatric diagnosis. 17% had a history of alcohol or drug problem. Only 24% of patients using sleeping medication had a proper diagnose of a sleeping disorder (had a relevant ICD-10 code and/or a record of sleeping disorder in medical history) The most frequent sleeping medicine prescribed was zopiclone 48%, following temazepam by 31%. We found out that 47% of the patients were using more than 300 sleeping tablets /year, which indicates regular use. The most alarming thing was that 13% were using over 600 tablets/year. 97% of the patients had visited their GP for some reason during the past year. The sleeping difficulties and treatment were however discussed with only 20% of the patients.
Conclusions: According to the medical records sleeping disorder is a chronic health problem and unfortunately the sleeping medicine is usually the only treatment offered. The diagnosis and the follow-up of the medication are inadequate. Non-pharmaceutical treatment is seldom used.

P-483

Introducing the first Primary Care unit in an urban setting in Greece; comparison with a rural unit

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Aims(s) and purpose: Discrepancies in primary health care (PHC) services between urban and rural settings have already been studied in many countries; however, limited information exists regarding countries, such as Greece, where public Health Centres dedicated to primary care have not been in existence in major cities. The objective of this study was to evaluate points of divergence or convergence between an urban and a rural health centre, in an attempt to underline challenges faced by the introduction of urban health centres in Greece.
Design and Methods: A cross-sectional analysis was conducted in the Health Centre of Vyronas, Athens, Greece and in the Health Centre of Nea (New) Madytos, Thessaloniki Prefecture, Greece between February 2004 and February 2006. The profile of the population seeking care, as well as data on the services provided were collected and compared. In addition, the reason for choosing each primary health care unit was also recorded.
Results: More patients visited the urban centre (145415 vs. 112513), while the pattern of services utilized by the citizens differed significantly ($p < 0.001$) between the two Health Centres. The frequency of diagnoses made according to ICPC-2 was not similar in the two Health Centres ($p < 0.001$). The three most frequent reasons for the adults choosing the Health Centre for their problem were low waiting time, proximity to residence and satisfaction with the services provided in previous visits in Vyronas.
Conclusions: The results of this study highlight the significant differences regarding PHC services utilization between an urban and a rural population. Urban citizens seem to have different health needs and reasons for choosing a PHC unit than residents of the Greek countryside. Proximity to health services and the public character of the urban health centre seem to be its main advantages.

P-484

Annual national day of family medicine on April 1 as engine for the translation of political demands promoting the advancement of Family Medicine

Cina C. (Messen)

On April 1, 2006, well over 10,000 demonstrators gathered at the Bundesplatz in Bern to promote the advancement of Family Medicine. Now each year on April 1, the Swiss General Practitioners hold their annual National Day of Family Medicine. On the National Day of Family Medicine, General Practitioners remind the population, the media, the government and the politicians of the concerns of General Practitioners with a variety of national and cantonal campaigns. Local and regional events with General Practitioners and ruling authorities are held throughout all regions of Switzerland. The goal is to improve relationships and develop common solutions of current conflicts regarding Family Medicine. By calling attention to the important issues within Family Medicine, the event has, in its short history, contributed to several important initiatives in the Canton of Solothurn: On January 1.2008, the Medical Practice Assistant project of the Canton Solothurn was successfully implemented with 6 granted positions, financially subsidized by the Canton. In addition, with the participation of General Practitioners, the Outpatient Emergency Room at the Buergerspital Solothurn became operational on January 1, 2009. At the Kantonspital Olten preparations are in process for an opening in its new facility in the fall of 2009. These three successful projects serve to promote community health and welfare, promote the continuity of Family Medicine and, with relief from emergency services, promote the attractiveness of a career as a General Practitioner.

P-485

Quality of life in adolescents from "Eixample Dret" in Barcelona

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Aim: During 2007–2008 year school, we conducted a study to estimate the quality of life related to health (HRQL) in adolescents assigned to a public and a private school in our urban area and its relationship with sociodemographic and health variables.
Design and methods: A cross-sectional descriptive study with students from 3rd and 4th year of Secondary Education (SE) (13 to 17 years old). Inclusion criteria: students from 3rd and 4th SE years in both centers. We asked parents for written consent and we excluded students who didn't have that permission. Also were excluded students who didn't attend class the day of administration of questionnaires. The sample was 194 schoolchildren from a total of 223.
Results: Participation was 88%. 51% were girls. 60.3% were between 14–15 years old, 34% were immigrants, and 55% did physical exercise outside school. 21.6% of adolescents were smokers. From those, 21.9% began to smoke at 11–12 years old, 40.6% between 13–14 years old and 37.5% among 15–17 years old. 64.4% of adolescents referred some alcohol consumption. 53% began to consume alcohol between 11–13 years old, 33.5% had consumed some leeks, 3.6% design drugs, 11.3% tranquilizers, 3.1% cocaine. Girls have lower HRQL scores and higher for dimension "relationship with friends or girlfriends". HRQL gets lower as adolescent age increases. Positive statistically significant differences were found for native adolescent. Among immigrants, we found no correlation between HRQL and time staying in Catalonia. Adolescents from private concerted school have better scores. At private concerted school, proportion of native adolescents is 69.4% while at public school is 30.6%.
Conclusions: A better HRQL those who do exercise outside school, have not used grugs, are native from Catalonia.

P-486

Reasons for attending in a primary health care center

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Objective: The aim of this study was to describe of 5 general practitioners (GP) in Primary Health Care Center (PHCC): patients' reasons for attending GP, kind of pathology, referrals and complementary explorations they generated.
Material and methods: This cross-sectional descriptive study was conducted at 5 general practices over a 13-days period during February 2008 in a city PHCC with an average of 1650 patients per practitioner, 26% >65 years old. We analysed patient's age, gender and nationality; number and kind of reasons for attending GP and referrals and complementary explorations they generated.
Results: 1582 patients were attended: 979 female (61.9%) and 603 male (38.1%). Average age was 56.51 years old.
1482 (93.7%) were Spanish and 100 (6.3%) foreigners.
1124 (71%) had an appointment and 458 (29%) had not.
1428 patients (93.6%) claimed 2222 reasons for attending GPs: average 1.56. 878 (61.5%) patients one reason, 398 (27.9%) 2 and 152 (10,8%) 3 or more. 559 (25.15%) patients were diagnosed with acute pathology; 624 (28.08%) with chronic pathology;
387 (17.41%) needed bureaucracy; 328 (14.76%) our prescriptions;
267 (12.01%) other practitioners' prescriptions and
57 (2.56%) preventive actions. The 3 most common pathologies were: musculoskeletal (22.7%), infectious (17.2%) and metabolic (16%).
No complementary explorations were requested for
1203 (84.2%) patients. 191(13.4%) patients were requested 1 and
34 (2.4%) 2 or more. No referrals were generated for
1260 (88.2%) patients. 153 (10.7%) were referred to 1 practitioner and
15(1%) to 2 or more.
Conclusions: Almost 1/3 of patients didn't have an appointment. 38.5% patients attended GP for more than 1 reason. More than 80% of patients didn't generate neither referrals nor complementary explorations.

P-487

Quality indicators of chronic disease for primary care setting

Pinichwattana W. (Bangkok)

Aims: A quality indicator is defined as "an interdisciplinary process designed to raise the standards of the delivery of preventive, diagnostic, and therapeutic measures in order to maintain, restore, and improve health outcomes of individuals and populations. The aim of the study was to identify the important quality indicators of chronic diseases that can used to assess family physicians' performance in primary care setting. These indicators are for using in out-patient clinic.
Methods: In year 2006–2008, a comprehensive literature review of 95 published literatures was done by 7 family physicians and 2 nurses. 72 papers were excluded because they are related to other aspects of practice performance indicators such as patients and providers' relationship & satisfaction, practice organization and management. There are 23 papers for chronic diseases. 319 indicators were extracted and rearranged in groups through a consensus process. Most of them were supported by grade A or B recommendations and level I to III evidence. These indicators are generally about assessing chronic disease and its complications, specific and supportive treatment, and how to advise patients.
Results: We identified 16 indicators for hypertension, 5 indicators for dyslipidemia, 23 indicators for diabetes. For heart disease, 5 indicators for congestive heart failure, 8 indicators for ischemic heart disease, 3 indicators for peripheral arterial disease, and 2 indicators for atrial fibrillation. Additionally, 5 indicators for cerebrovascular disease, 2 indicators for Alcoholic dependence, 8 indicators for asthma, 2 indicators for breast cancer and 1 indicator for depression. The lists of them are summarized in the poster presentation.
Conclusions: All of the indicators are potential markers for good quality of care and can be used to measure family physician's performance. They should be revised and justified before use in accordance with each primary care setting.

P-488

What can primary care do to help save the planet?

Ballard T. (Marlborough)

Aims and Purpose: We face the prospect that climate change will have a devastating and unpredictable impact on the health of all. The impact on disease patterns and lifestyle will be complex. Those in poor countries will pay the highest price, but everyone in the world will be affected. Primary care physicians and their organisations, in particular the Royal College of General Practitioners, are in a position to influence carbon usage. There are immediate as well as long-term benefits. A poster presentation is an easy and accessible way of conveying the salient points of the Sustainability Agenda, and in particular illustrating the potential benefits of influencing patients and doctors and planners towards sustainable behaviour and policies. We would also like the opportunity to present the work that the Royal College of General Practitioners is engaged in on climate change both corporately and externally.
Conclusion: A poster presentation is an excellent method of starting delegates thinking about the issues involved in this extremely complex area.

P-489

The concept of general practitioner – safe future

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Aims: To explore patient's opinion toward concept of general practitioner (GP).
Design and methods: Research is carried out in four rural and four urban practices. During the fifteen working days every fifth patient older than sixteen years is anonymously asked to fulfill the survey while waiting for examination. The questionnaire included data about

age, sex and number of family members in care of GP. They also had to answer: "Does the concept of GP make a useful contribution to quality of care" and "What are the reasons for maintenance of the concept of GP". Descriptive statistics, chi square test and software SPSS were used for analyzing.
Results: 960 patients participated in research, 428 (44, 58%) male and 532 (55, 42%) female. 494 (51.46%) of patients are registered in rural, 466 (48.54%) in urban practices. Most of the patients were older than sixty years 382 (39, 79%). 145 (29.35%) patients in rural and 98 (21, 03%) in urban practices confirmed that all family members are in care of the same GP. In rural practices is significantly greater number of complete families in care of the same GP ($X2 = 23.27$, $P < 0.001$). 736 (76.67%) patients completely agreed that concept of GP make a useful contribution to quality of care. 510 (53.13%) patients choose the fact that the GP knows all about their patients as a main reason for maintenance of the concept of GP. On the second place is ability of GP to solve family problems 253 (26, 35%), on the third place is accessibility 126 (13, 13%). 36 (3.75%) patients choose possibility of home visit, 33 (3.44%) simplicity of administration. Two patients (0.21%) named other reasons.
Conclusions: Research shows that the concept of GP has a positive perception in the eyes of patients, and that our main qualities are complete care and economic use of health resources.

P-490

Investigation into the quality of psychiatric reports with special consideration being given to the methodical procedure adopted by the medical expert

Pizala H. (Basel), Gyr N. (Basel), Hoffmann-Richter U. (Luzern)

In Switzerland medical reports are of major importance in examining benefit entitlement within the Swiss social insurance system. Although the social and financial consequences attaching to them are far-reaching in their effect, no attention has been given to these expert reports to date. Nevertheless, psychiatric reports are often necessary and crucial in adjudging or rejecting benefit entitlement in accident or disability insurance schemes. In the present investigation, 100 medical reports, mostly requested by the disability insurance, were examined for quality of form and content. To assure a representative selection, 25 psychiatric reports originating in three psychiatric centers (two institutional and one private) together with an official requesting authority (Zurich Canton Social Insurance Establishment) were included in the investigation. These expert reports were collected from a set date in 2007 onwards and anonymously examined by the author. Quantitative factors such as processing time together with qualitative factors such as report structure, coding diagnoses, indicating grounds for diagnoses, and using proper medical insurance terminology were examined and evaluated.

P-491

Do we know how to properly handle sexual transmission disease patients?

Miro P. (Barcelona), Franco A. (Barcelona), Mañes E. (Barcelona)

Aim: To know the boarding methods of sexual transmission disease (STD) patients from the point of view of prevention, diagnosis and monitoring during primary care.
Design and methods: Is a transversal observational study in which we study the prevalence and incidence of STD in our centre compared with Barcelona (2002 to 2007). In this time we attended a total of 69682 patients (15 to 99 years). Variables of the study: 1.type of STD; 2. gender; 3. age; 4. ethnic origin; 5. presence of concomitant STD; 6. sexual orientation; 7. monitoring. Statistical analysis will be realized by SPSS.
Results: 873 out of 1015 cases were confirmed true STD's, 51.52% of the monitoring was made during primary attention, 11.99% at hospital and 31.81% by both of them. Preventive advice on the transmission of STD's was registered in 40.9% while 59.1% were neither registered nor made. The STD´s pair of patients study conducted showed that it was effective in 8.5% of the cases whereas wasn´t either registered or made in 91.5% of the cases.
Conclusion: – Majority of HIV and AIDS studies were conducted at hospital attention level. – Syphilis is the primary STD detected within a 63.63% of patients registered as having received prevention advice. – Only 8.5% of the cases were registered in the STD's partner patients studies showing no differences between the STD's. – There is a lack in the data registration process during STD´s cases conducted and the study of their partners.

P-492

Comparison of hip fracture incidence and trends between Germany and Austria 1995–2004

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Introduction: Pronounced variations in hip fracture incidence rates and trends have been documented not only between countries regions but also within geographical areas. We aimed to compare incidence rates and trends between Austria and Germany from 1995 to 2004 by analysis of hospital discharge diagnosis register data.
Methods: Annual frequencies of hip fractures and corresponding incidences per 100,000 person years were estimated, along with 95% confidence intervals (CI), overall and stratified for sex and age, assuming Poisson distribution. Multiple Poisson regression models including country and calendar year, age and sex were used to analyse differences in incidence and trend between 1995 and 2004. The difference of annual changes between the two countries was tested using an interaction term (calendar year * country).
Results: Overall, hip fracture risk was 1.31fold (95% CI 1.29–1.34) in Austria compared to Germany, adjusted for age, sex, and calendar year. The risk was equally higher for both sexes (men RR 1.35 [95% CI 1.32–1.37], women RR 1.31 [95% CI 1.29–1.33]). Hip fracture trends from 1995 to 2004 indicate an increase in both countries without a statistically significant difference between Austria and Germany (interaction term: $p = 0.67$). Also sex-specific interactions were also not significant (men: $p = 0.07$; women: $p = 0.96$).
Conclusion: The hip fracture incidence in Austria is 30% higher compared to its neighbouring country Germany. For both countries a similar increasing trend of hip fracture incidence over the ten years study period was calculated. Further studies to explain the difference between the countries are needed.

P-493

Frequent attenders of health services in a primary care setting of Northern Greece

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Aim and purpose: Unnecessary frequent attendance in general practices produces excessive workload. It also has great impact on the resources of our healthcare services. The aim of this study is to analyze the associations between the presence of chronic illnesses as well as socioeconomic factors and the frequency of attendance in the patients with frequent attendances.
Method: Data was obtained from January to December 2008 of a rural setting in Northern Greece. Data included demographics, presence of chronic illness and need for regular prescription of chronic medication. Odds ratio of being a frequent attender was the main outcome measure in this study.
Results: 393 patients frequent attenders were identified (defined as > 24 times within 1 year), accounting for 5844 consultations (4.8% of the total consultations). As frequent attenders were determined patients who visited the primary care setting for no acute illness or problem. Preliminary data showed a female predominance (59%). Patients aged >60 years old, with chronic illness and regular medications were more likely to be frequent attenders (Ors 1,9 [CL 1.30 to 2.78], 3.69 [CL 2.01 to 6.75], 3.83 [CL 2.05 to 7.16] respectively). Patients with primary or no education level, and those who were not working were also more likely to be frequent attenders (Ors 1.73 [CL 1.18 to 2.53], 2.62 [CL 1.76 to 3.93] respectively).
Conclusion: Presence of chronic illness, elderly, non-working patients and patients with low educational level were more likely to use the system in general practice. Our future aim will be to further explore the beliefs of these groups of patients in order to reduce their over-usage.

P-494

How many car-kilometres can we save with a decentralized health service?

Bernath R. (Solothurn), Emch F. (Hessigkofen)

In this study medical doctors in villages (definition: the only practice in a village) asked their patients on a day of their choice (from January 09 to July 09) about their domicile, age, sex and about the number of kilometres they would have had to travel (by bicycle, motorbike, car or public trafic) if there hadn't been a practice in their village. The first results from 2 practices in the Kanton Solothurn on the 12 of January 2009 show that every day more than 100 car-kilometres can be saved. The figures of as many as possible practices shall be joined in order to get results for the whole of Switzerland.

P-495

A retrospective study of students' personal health cards in rural area of northwest Peloponnese in Greece

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Introduction: Office calls for filling out a student's personal health card offer the physician a good opportunity to exercise preventive medicine as well as perform various screening tests.
Aim: Our study aimed at pointing out the importance of keeping students' personal health cards up to date, extracting conclusions about students' health problems and evaluating the quality of medical intervention.
Design and methods: 1370 students aged 6–14 were examined over the last 2 years, 688 (50.2%) boys and 681 girls (49.8). The examination took place in three outpatient general practitioners' offices and it included demographics (height-weight), thorough history and physical examination.
Results: A mild to medium heart murmur was revealed in 28 children (2, 04%), which were referred to a cardiologist for further evaluation. 142 children (10.4%) suffered muscle- bone- joints problems and 66 (4.81%) demonstrated eye-diseases. 146 children (10.6%) had increased blood pressure, 678 children (49.4%) had dental problems and 70 children (5.1%) were obese (BMI >25). Most children had been vaccinated according to the National Vaccination Programme and as far as BCG was concerned, students of the 1st Grade had been scheduled to receive it.
Conclusions: Thorough examination of a child often reveals health problems that need immediate evaluation and treatment. Therefore, parents should have their children examined by their primary care physician at least once a year, on the grounds of filling out the children's health cards.

P-496

Caring for grandchildren and grandparents satisfaction

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Introduction/aim: Describing the activities of people who care for their grandchildren and their satisfaction.
Design: Descriptive study. Scope. Health urban center with postgraduate education.
Methods and materials: During the months of October, November and December 2008 passed a piece of data to all patients who visited the Primary Health Care and having grandchildren. They were asked about how many hours and what of activities grandparent spend with grandchildren and they related the degree of satisfaction in their time caring. Scale 1/10.
Results: Agreed to answer a sheet of paper out of 174 patients, with an average age of 67.3 ay 69.54% women. There are two different groups in terms of the number of hours of dedication and satisfaction. A group representing 66.5% devotes half of 2.4 hours a day in the care of grandchildren, are basically companions with them and are awaiting the arrival of their parents offer a single daily meal, lunch or snack. The average age of children is 5.2 a. Satisfied and 8.6 / 10. The other group, with 29.5% spent an average of 5.7 hours per day, the grandkids have more than two meals a day and the activity is split between support and baby sitting or day care. The average age of children from 15 months, the smallest 18 weeks and increased 2.8 a. 2.4% are living with their grandparents from Friday afternoon to Monday morning Satisfaction is 5.2 / 10. There is 2% of grandparents with their grandchildren without activity.
Conclusions: Our study shows a difference in the satisfaction of the two groups. This satisfaction decreases as increasing the hours of dedication. It would make interesting statistical evidence to link activities i satisfaction with physical and mental health of such people.

P-497

Cross sectional study about the use of ICT in Swiss physicians' practices

Zoller M. (Zürich)

Background In Switzerland the use of electronic medical records in ambulatory care and exchange of patient – related clinical data is by far lower than in comparable European countries. In 2007 the federal council of Switzerland presented an eHealth strategy. At that time precise data about ICT-Infrastructure as well as about the use of specific software in medical practices was lacking. Research question: How are ICT- infrastructure and the use of specific software in Swiss physicians practices? What are the expectations for the future and the perceived barriers to implement more digitalized processes?
Method: We conducted a representative cross-sectional study sending a questionnaire to 1200 randomly selected physicians. It contained sections about ICT Infrastructure, ICT- processes with a focus on the use of electronic medical record and expectations as well as fears for the future.
Results: Of the 1200 physicians 707 or 59% sent back the questionnaire, 25% among them being female, 57% working in a single handed practice and 51% among them holding a title which allows to work as a General Practitioner. Among the responders 28% have a computer station in each consulting room, 48.1% are using a network and have internet access on the same network. Two reasons are building the main barriers for not using EMR: Switching to an electronic medical record is too time-consuming, and the computer as a third party in consultation room may perturb patient-physician relationship. By now, 11.7% are using EMR fully, 11.2% partially, while 66.9% don't want to switch within the next 3 years.
Conclusion: To reach the goal of the eHealth-Strategy it may be necessary to offer specific incentives for physicians practices as it was done in other projects e.g. in the Neherlands or Scandinavia.

P-498

Useful summaries of evidence to answer clinical questions

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Aim: To analyse clinical queries developed by first-year medical residents and test the usefulness of the summary of evidence to answer them.
Materials and methods:
Study type: Descriptive.
Design: We analyzed 54 questions generated by first-year medical residents, which were identified in a training course. These questions were reviewed by two researchers with experience in Evidence Based Medicine (EBM), who excluded non-clinical questions or too generic. Four trained reviewers used five resources: Clinical Evidence, UpToDate Guide Health, Trip Database (only selecting Clinical Practice Guidelines), GuiaSalud and Harrison Online to answer them in pairs (peer review). Were analyzed for each question: type of question (etiology, diagnosis, therapy or prevention), if it comprised a PICO format (Patient, Intervention, Comparison, Outcome), if it contained suitable information, if it responded to the question, the search time and as a whole if the question was answered with one of these resources. The statistical analyses were performed with SPSS. Interobserver agreement was quantified by using kappa statistics.
Results: Among all questions selected the 66.67% of them were about therapy, 25.92% diagnosis, 25.92% prevention and 5.56% about etiology, which conformed to PICO format 72.22%. The kappa index was 0.535 Clinical Evidence, 0.48 Harrison Online, 0.46 Trip Database, 0.26 UpToDate y 0.25 GuíaSalud. The resource which responds to more questions is UpToDate, which makes 81.48% of all cases, followed by Trip Database at 64.81%. GuiaSalud responds only 22.22% of the questions. Overall, it found answers in a 92.59% of cases.
Conclusions: Summaries of evidence are useful to answer clinical questions. UpToDate is the most effective resource to answer clinical questions followed by Trip Database. The highest Interobserver agreement was found in Clinical Evidence.
The need to enhance residents' skills in EBM.

P-499

Administrative and reporting tasks of family physicians in Europe

Rurik I. (Debrecen), Kalabay L. (Budapest)

In the different health systems worldwide the administrative tasks of health professionals have been increasing continuously. This increase has been experienced in the primary care as well. The electronic health records and hard copies are managed and stored often parallel. Electronic health records are considered more precise for date managements and statistics. The administrative and reporting tasks of family physicians are regulated by rules and contracts, depending from the respective countries. The aim of the evaluation was to compare the recent administrative tasks in Europe at primary care level.A questionnaire with 21 questions was constructed on the main domains of administrations. Family physicians from 22 countries of the European General Practice Research Network were asked to fill a questionnaire regarding their countries. Job status; type of finances and/or salary; insurance companies or health authorities to whom the reports should be sent; required frequency of reports; topics included: identifying the patients, diagnostic procedures, treatment; sick leave; prescription form and coding the receipt; reimbursement of drug prices; existing free medication system (depending from type of illness or income of patients); referral system to specialists or hospitals; GP's budget. The results of their answers regarding the domains are presented in the tables and were analyzed, comparing countries and insurance systems. Different systems are existing in Europe. No clear

relations were found between administrative workload and number of insurance companies. Financial data and epidemiological data are rarely consistent. It seems that state operated primary care systems need less administration. Existing primary care systems are working in very different administrative circumstances.

P-500

Searching in the internet for diagnosis. Can it replace the family physician?

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Aims(s) and purpose: Broadband internet connections are very common in Greece following the European trend. Although still an uncommon practice, some patients use the internet for various health issues, starting from simple queries to setting a diagnosis. The aim of this study was to evaluate if patients can set a correct diagnosis, only by using internet.
Design and Methods: Twenty four individuals were randomly selected from a larger sample of fifty-four visitors to Primary health care unit of Vyronas, Greece between May and October 2008. Inclusion criteria were at least B2 level of English language knowledge and secondary educational level. Twenty diagnostic cases as described in the case records of New England Journal of Medicine were presented to them. The participants had to find the correct diagnosis in 2 hours using only Internet resources. Finally, they were compared with a group of eight residents in General Practice
Results: The proportion of correct diagnosis was 29.2% (95% CI: 12.6%–51.0%) for the non-physicians and 75% for the doctors ($p < 0.001$). It took 25.2 ± 6.7 minutes for case reading and searching for the non-doctors group. No significant difference regarding the correct diagnosis was found among the non-physicians.
Conclusions: A correct diagnosis may be reached even from non-professionals, even in a low proportion, only by briefly searching in the internet. This may indicate that new patients, especially those with a higher educational level may interact with their family physician in terms of evaluating clinical signs, laboratory findings and follow-up.

P-501

Electronic medical records and computer usage in a Swiss primary care network

Dürrenmatt U. (Thun), Frey P. (Bern)

Aim and purpose: IGOMED Thun is a complex primary care network with 119 doctors founded in 1996 by general practitioners, specialists and hospital doctors. In the USA only 15% of primary care physicians use a "basic health information system." In Denmark every doctor uses a PC during consultation. The aim of this inquiry was the analysis of computer usage and habits of the Swiss primary care network in order to improve communication and data exchange within the network and with the hospital.
Design and Methods: The inquiry was made with a standardised questionnaire, which also included free text answers i.e. narrative elements. The questionnaires were sent in June 2008 by mail or by fax with a deadline till 20th July 2008. In August 2008 we sent a reminder. 103 of 119 questionnaires were returned, corresponding to a response rate of 86.5%. 102 questionnaires were valid.
Results: 27% of the doctors in the IGOMED Thun network use an electronic medical record, which is more than the Swiss average. 91% have a Health Info Net (Swiss secure mail) account, 60% are capable of end-to-end encryption. Only 54% can create a PDF file. Several doctors had concerns about lacking eye contact with the patient if they had a computer screen instead of a paper record.
Conclusions: These data are fascinating, because in a Swiss urban region with advanced hospital informatics (electronic medical record, drug prescription and automatic drug distribution) the possibilities of medical informatics are apparently more used than in the Swiss average (11.7% full electronic medical record, 11.2% partial) and in the USA. For more details see our poster.

P-502

The new informations and computer science technologies in the primary care consultation: qualitative research with focal users' groups

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Objective: The perception of users about the presence and usefulness of new technologies in primary care consultations (PC).
Methods: Qualitative structural focal groups study. Urbane health area of Salamanca (Spain), there were 10 focal groups with 83 users between 18 and 80 years old and were followed from December 2006 to December 2007. The data recruitment was done through essentials informants and snowball technique. A structural sampling was done depending on age and educational level. The meetings were recorded on video and audio and were transcribed literally in paper. The analysis of the texts were done by three researchers, looking for the consensus among them.
Results: On one hand the users think that the presence of the computer in the consultation improves the bureaucratic aspects, also, it facilitates the access to the patient's clinical information (clinical history) and improves the management of the time. On the other hand, they perceive that user and computer compete with the available time in the consultation, being an origin of delays. Nobody showed worry for the safety of their information. The young and middle age people use Internet (before and after the consultation) to look information about symptoms, treatments, etc. As weaknesses indicate the credibility and interpretation of the received information and request the collaboration of the physician to clarify their doubts. They suggest to use sms or e-mail to facilitate direct and personalized information.
Conclusions: The sanitary people must take care the communication with the patient to prevent that the use of the computer damaged the physician-patient relationship. The doctor acquires new roles when the users use Internet as an adviser and a tool for searching and valuating the sanitary information. Young users demand the use of new technologies to facilitate the accessibility and communication with sanitary system.

P-503

What are the difficulties encountered by family physicians during an e-learning program and what is their opposition to this program?

Minguet C. (Bruxelles), Gagnon S. (Québec)

Objectives: to evaluate why physicians have some resistance to do e-learning programs and innovative continuing professional development programs.
Design and methods: Evaluation by participants of the 2008 cohort of an International e-learning program for supervisors of residents in Family Medicine. For that we used an Internet questionnaire based on one developed by Université de Sherbrooke (CERES). We have evaluated 8 learning dimensions. Answering rate was 67% (n = 16). Another questionnaire upon satisfaction with the program was sent to participants. This one had opened and closed questions. The answering rate was 54% (n = 13).
Results: In the first questionnaire, participants mentioned that they like to learn in a collaborative way. They had the perception that their engagement was good all over the program even when there were difficulties. They also mentioned to have difficulties to transfer things they learned and to estimate the link with their tasks as supervisor of residents. In the second questionnaire, they all mentioned to be very satisfied but to find time in their busy schedule was a real problem. It is difficult to figure what is the ideal amount of working time and the best time of the year for this program. Half of them had technical difficulties and would have like more information on tools prior to the course. All are willing to network with colleagues from other countries.
Conclusions: Results of this study are according to some others upon the difficulty for busy physicians to find time to do e-learning activities but the need for networking with colleagues from other countries. To try to evaluate why some physicians don't engage in e-learning programs should be the next step.

P-504

Instant messaging use and impact among healthcare professionals

Gouveia A. (Arcos De Valdevez)

Instant Messaging (IM) is an Internet based real-time text communication technology. Healthcare professionals can use IM to communicate, instead of resorting to telephone calls and real conversations. This study aimed to determine the use and impact of IM among general practitioners, nurses and clinical secretaries. An observational descriptive cross-sectional study was performed in a Family Health Unit, at a Health Centre in Northern Portugal. The researcher developed an online questionnaire in order to collect four variables: IM use at work, reason for IM, impact of IM in the perception of quality of work and impact on communication between healthcare professionals and patients. Five general practitioners, three trainees, four nurses and four clinical secretaries answered the questionnaire (69% female) and 82% of them used it at work. IM was used for exchanging clinical information, for calling patients from the waiting room, for asking specific activities (eg. administrative cores, clinical observation or treatments) and also for speaking about personal life

and other aspects unrelated to work. All the professionals that used IM considered that it has increased the quality of their work and 64% of them considered that it had a positive impact in terms of communicating with patients. 79% of IM users think that the relationship between healthcare professionals at the Family Health Unit was improved. Instant messaging is used as an alternative communication method among general practitioners, nurses and clinical secretaries. It has a positive impact in the self-perception of the quality of work, in the relationship between professionals and also in the communication between professionals and patients.

P-505

Implementing an opensource electronic medical record in primary care

Bhend H. (Aarburg)

Background: Switzerland has a low implementation rate of EMR in Primary Care (12%). Argomed, a network-organisation of primary care phycicans, started in 2007 an initiative to help doctors with the transition to an electronic documentation system.
Aim and questions: Is the Opensource-product Elexis a viable software tool for Family practice settings? This includes daily routine-documentation, lab machine-connection, prescription, document-management (print, fax, mail; in, out), billing, transfer of billing data.
Design and Methods: Only colleagues with moderate interest in information technology where accepted. They required to be willing to answer a questionaire and/or be ready for an interview. After one year an evaluation was conducted. The Argomed Members where invited to join the pilot project. Most of the phycicians started the electronic documentation with this project altogether. 15 Offices were included. Each FP got a free installation, an introduction to the software along with his practice team and phone and/or mail support. After 6 months an anonymous online survey was conducted, and one year after the project started another survey had to be filled in where FPs and their medical assistants had separate questions to answer.
Results: The opens ource product Elexis is a valid alternative to commercial products. Although the product itself is free of cost, a stable intranet, support and the additional time for going paperless are still costly. The argolead project, as a side effect, had the additional benefit of improving computer skills of the participating practice teams. Conclusions: Implementing an open source product needs organized support in some way, which cannot be free of charge. For this reason the primary investments are about the same for both open source as well as closed-source software. a greater benefit is for further development. Elexis has the advantage of being programmed by an FP, so the usecases are very close to daily practice work.

P-506

Negotiating acceptable risk level with the patient

Nenonen M. (Hartola)

Aims: We learn art of medicine as rules, lists and trigger levels. World is, however, multivariate and complex. This makes care of chronic diseases demanding. It takes years to learn to master complexity by trial and error and to develop the touch of experienced physician. Research has produced models linking risk factors and clinical parameters to end-points. Classical examples are population studies in Framingham and North Karelia. This paper tests these models in GP practice.
Methods: In 1993 I introduced into my practice a simple "Framingham-calculator" to predict the risk of death. It was primitive and clumsy tool, but still its predictive power was frightening. The church bells announced the death of my high risk patients sooner than I had ever expected. Today I use an Internet-based tool, where I fill together with my patient: age, sex, smoking habits, total- and HDL-cholesterol levels, blood pressure, diabetes, and family history of ischemic heart disease. It gives 10 year estimates for myocardial infarction and stroke.
Results: All patients (~200 estimates this far) have accepted the approach. We look together projections for 10, 20 and 30 years. The most important part is "trimming the risk". We test combinations of interventions to reach an acceptable but realistic risk level. Risk levels in percentages are not easy to understand. This is why I use more illustrative methods. A risk level of 17% equals a single round placed in a six-shot revolver in Russian roulette. Discussing how many bullets the patient wants in his or her revolver is easily understood: 1 (17%), 2 (33%), 3 (50%) etc. For a 50 year old man a fully packed revolver is a good motivating factor to change smoking habits.
Conclusions: This field testing has shown that multivariate models may be introduced into everyday GP practice and they are accepted and appreciated by the patients. Modern IT-systems should have these models built in to monitor the whole target population.

P-507

Incorporation of new technology in physiotherapy home care

Muixí Gebellí R. (Mont-Roig), Inglés Novell M.M. (Tarragona), Maya Martín A.M. (Constantí), Jové Monné J. (Tarragona), Fernández Martínez J. (Falset), Pascual Morón J.I. (Tarragona)

Aim: Spread the new tools we use in physiotherapy home care.
Methodology: The greater volume of patients that we have in our physiotherapy centers, make that our work tools have been implemented and modernized. Then the health care received by patients is better.
These tools are: – A specific informatics program of primary care for register valuations at home (e-CAP); – 15 tablet PC to streamline the administrative work at home and expedite the transfer of data. The e-CAP clinical history that records all the pathologies diagnosed by all health professional (physiotherapists, family doctors, nurses). The pathologies are encoded in the e-CAP with international code of disease- v10. Each one has a password to enter into the program and write their assessment and treatment. The tablet PC is a mini laptop with 3G connection and therefore we have access to internet and intranet.
Results: – e-CAP software is easy to use and successfully implemented. – The tablet PC has just entered the unit and is increasingly used.
Conclusions: – Due to the two tools are fully implemented our work is more flexible, faster and more effective. – Because of we have access to patients' entire medical history when we do the first visit at home (we don't have to need to go to the center of reference to look at it); so we can do a better treatment plan.

P-508

Web-based careplans for chronic disease management

Schattner P. (Notting Hill), Adaji A. (Notting Hill), Jones K. (Notting Hill)

Aims: Careplans are written documents which outline the management of patients with chronic disease. They are produced by GPs, but can have contributions from allied health professionals, medical specialists and pharmacists, depending on the need of the patient. Initially, GPs used paper-based careplans which were widely distributed as computer templates. In the current project (titled Chronic Disease Management-Net, or CDM-Net), careplans have been produced as web-based versions and are being piloted. Our aim is to investigate attitudes and beliefs about web-based careplans from non-GP members of the care team who share the management of patients with chronic disease.
Design and methods: The GP-piloted web-based careplans will be demonstrated to a representative sample of practice nurses, allied health professionals and medical specialist in a workshop format. Separate demonstrations will be held for those with different professional backgrounds. Questions about usability and perceived benefits over existing non web-based careplans will be explored. Questions of interest will include whether these careplans offer any advantages over other forms in terms of (a) patient management (b) cost-efficiency (c) promotion of collaboration within the care team and (d) the role of the practice nurse in care planning.
Results: The proposed demonstrations of Internet-accessed careplans to a sample of health care providers will provide qualitative information on how these plans work in practice, and their perceived benefits and limitations compared to other forms of careplans. The health professionals will provide feedback on the careplans in the context of chronic disease management which is primarily focused on primary care.
Conclusions: This study will provide additional information to the original CDM-Net project on the possible benefits and limitations of web-based careplans to patients, health care providers and their practices.

P-509

Phytotherapy in general practice: a web approach

Menin A. (Vicenza)

Purpose: Some chronic diseases, especially in General Practice, don't have an elective treatment. Furthermore some patients specifically ask to be treated with natural products. The aim of this work is to implement some informational cards on medicinal plant treatment to be downloaded from a web site for general practitioners.
Design and methods: Three frequent conditions (irritable bowel syndrome, upper respiratory tract infections and cough) have been chosen to start the project. The reason for this choice is the poor result from usual therapy. A bibliographic research for the treatment with medicinal plants, and after, a review of the available preparations with satisfactory quality assurance on the market has been performed. Once the first draft was written it has been discussed and approved by the members and the scientific committee of the "Progetto Medicina Generale on the Web". The final cards have been published on the web site of the General Practitioners for this project.

Results: The three cards on irritable bowel syndrome, upper respiratory tract infections and cough are the first step of an ongoing project planned to be offered to GP's as an "online help" for the treatment of common diseases with medicinal plants.
Conclusions: Although phytotherapy was part of the history of medical science, due to little control of the available preparations in the market, it is now forgotten by GPs. This work will empower GPs to use in a rational way herbal remedies with proved efficacy.

P-510

The image of general practitioners' profession in a changing society

Natanzon I. (Heidelberg), Szecsenyi J. (Heidelberg), Götz K. (Heidelberg), Joos S. (Heidelberg)

Background and Purpose: Due to an existing or predicted lack of general practitioners, the German health care is confronted with a serious problem. Beside the political general conditions and problems regarding the vocational training, social changes can influence the attractiveness of general practitioners' profession and therefore it could also influence a lack of young general practitioners. The aim of the study was to explore, which current image exists of general practitioners' profession from their viewpoint and which social developments influence their image.
Methods: A qualitative study was undertaken by interviewing 16 general practitioners in their practice or in the Department of General Practice and Health Service Research, University Hospital of Heidelberg, Germany.
Results: From general practitioners' point of view, they receive a positive image from people from rural district and elder generations. A negative image exists between younger people and people from cities. The image is influenced by following social changes: Declined social competencies, lack of responsibility and fascination of complexity, specialism instead of generalisation as well as an increasing flexibility.
Conclusion: Because particularly younger people have a negative opinion about general practitioners and young physicians belong to that target group it could be possible that the subject general medicine is less attractive for trainees. Due to the negative image, general practitioner is not perceived as professional future perspective. Social changes which have an influence on the professional choice should be more considered as connecting factor for the development of approaches against the lack of trainees in general medicine.

P-511

Shared decision making in hypertension – a narrative review of the current state of empirical research

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Aims and purposes: Lack of adherence is a major problem in effective blood pressure control. The primary care physician can enhance adherence by improving patient participation. Shared decision-making has been studied as an approach to optimize blood pressure control since 30years; this review summarizes research findings.
Design and Methods: A systematic literature research via Medline ("shared decision-making" OR "patient participation" OR "patient involvement" AND "hypertension") was conducted up to November 2008 and studies investigating a shared decision-making approach in hypertension treatment were identified.
Results: 24 studies were included in the review. 10 studies examined the autonomy and treatment preferences of hypertensive patients and the realization of patient participation in practice today. Generally, autonomy preference in hypertensive patients is high but varies. Patient's treatment preferences are variable and differ from doctors and guideline perspectives. Patient participation is not sufficiently implemented in clinical practice. 2 studies investigated correlation between doctor-patient-communication/ patient participation and adherence/blood pressure control. Findings were not consistent. 12 studies evaluated interventions to implement patient participation. Interventions included Patient information (3), Decision Aids (4), Training for doctors (2) and structured treatment programs (3). Some interventions were found to have positive effects on adherence, decisional conflict or clinical outcome but overall research findings are not conclusive. All RCTs were of short duration, max. 14 months.
Conclusions: Many hypertensive patients have different treatment preferences as doctors and wish to be more involved. The effects of interventions to implement enhanced patient participation on clinical outcomes remain unclear. More research, preferably RCTs in the primary care setting with longer follow-up are needed.

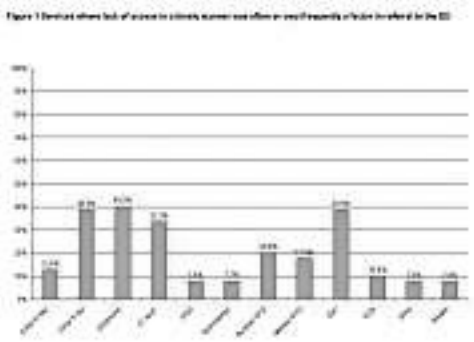
P-512

Access to services and influence on general practitioner referral to the emergency department

Gallagher J. (Clonmel), Azhar M. (Clonmel), Morrow C. (Clonmel), Mobed C. (Clonmel)

Introduction: A recent study at our hospital indicated a significant number of GP referrals to the Emergency Department (ED) were discharged home. We postulated that lack of access to diagnostic services may play a role in referral to the ED.
Method: A questionnaire was sent to all GPs in the catchment area of the ED. We ascertained if GPs had an electronic hospital link already and number of patients referred to the ED each month by each GP. Using a Likert 5 point scale GPs were asked to state if lack of access to diagnostic and outpatient appointments led to referrals to the ED that otherwise could have been avoided. Finally GPs were asked if access to online chest radiograph images on the same day for their patients would be of benefit in reducing referrals.
Results: 67 questionnaires were distributed and 48 were returned (response rate 72%) 65% of GPs were already using Lablink, an online system which is used to transmit laboratory results to individual GPs. 44.1% of GPs felt that improving access for GPs to services could reduce referrals to the ED often or very frequently, while 50% stated it would reduce referrals sometimes. Lack of access to radiology services and exercise stress test were the services most frequently identified as a factor in referral to the Emergency Department. 60% of GPs felt that access to chest radiograph images online on the same day would be beneficial or very beneficial. 22.5% felt that this would be of no benefit.
Conclusion: Lack of access to diagnostic services is a significant factor in referral to the Emergency Department by GPs. Improving access for GPs to these services may lead to reduced referral rates to the Emergency Department although this will require further study.

Figure 1



P-513

Tightening cooperation with physiotherapists in the PizolCare medical network: a pilot project aiming at cost-control and outcome-improvement

Keller U. (Wangs), Hatziisaak T. (Trübbach), Jürgens J.P. (Bad Ragaz)

Introduction: Expenditure for physiotherapy amounts to almost 4% of the PizolCare Medical Network budget. Taking into account, that one series of physiotherapy costs EUR 275, it is obvious that there must be instruments for process control in order to balance cost-efficiency and improve patient's outcome. In this project we wanted to examine if standardized physiotherapist's (PT's) reports were useful for physicians in managing the patient's course of disease at an early stage.
Method: We developed a report-sheet, which had to be filled in by PT's for every MC-patient treated and sent back to the ordering physician and to the PizolCare office. In return PT's were reimbursed with EUR 10 per completed form. In this report-sheet PT's had to fill in the following items: – diagnosis; – complaints at admission (incl. biometry and Visual-Analogue-Scale); – complaints at discharge (incl. biometry and VAS points); – cooperation; – working ability.
Results: 106 report sheets were sent back to the PizolCare office. A total of EUR 1000 was paid to 8 PT's involved. The report sheets were filled in non-uniformly. Only three PT's consequently used biometric measurements and VAS at admission and discharge. Two PT's referred to biometric data and VAS only occasionally. Three PT's reported simply by narrative. All PT's commented on patient's cooperation. Patient's working ability was estimated in half of the cases.
Conclusion: In joint quality circles we have to further improve communication between PT's and physicians. Most important seems to be the use of common terms, i.e. referring to biometric measurements and VAS at patient's admission and discharge. A PT's comment on patient's cooperation and estimation of working ability is appreciated by physicians.

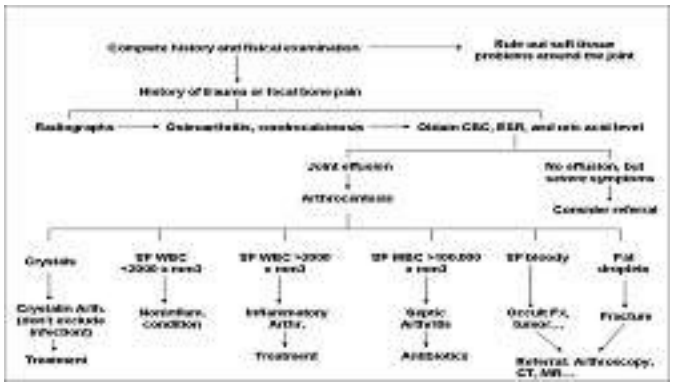
P-514

Antitetanic vaccine and acute shoulder pain

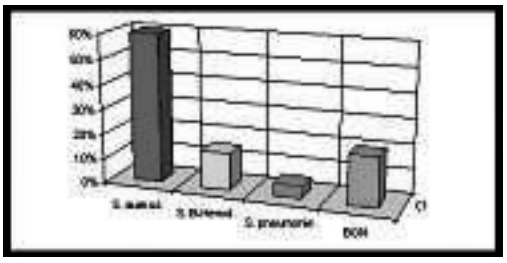
Arancibia Freixa I. (Terrassa), Griñó Guimerà A. (Cerdanyola Del Vallès), Fernández Martínez C. (Martorell)

Scope of the case: Emergency.
Reason for consultation: Acute shoulder pain post-administration of tetanus vaccine at primary care.
Personal Background: No interesting.
Physical examination: Woman, fever, null active mobility of right shoulder, painful passive mobility. Flush and heat at administration zone of vaccine. Semiology of articular effusion.
Complementary test: Analysis 14,000 leukocytes (80% N and 20% L), CRP 315, 120 GSS. Shoulder X-ray: no significant changes. Arthrocentesis: >100,000 PMN.
Differential Diagnosis: Pain, flushing and swelling in a joint must be distinguished with active rheumatic disease, crystals and traumatic arthritis, joint and periarticular infectious processes, bone infection.
Clinical Significance: Careful history, physical examination and study of the articular fluid are essential. This must be done quickly, at minimum suspicion of articular disease.
Discussion: For applying intramuscular medication is very important proper technical, expertise and above all, proper disinfection of cutaneous area. She was diagnosed of septic arthritis secondary to intramuscular administration of medication. Strange complication, but very dangerous. It's caused by invasion of germs (70% by S. aureus). It's an emergency as causing a quick articular destruction and even death. Acute clinical launches in hours or days. Presents articulate spontaneous and intense pain to mobilize articulation, volume increase, skin redness, heat, fever, impotence and functional non-painful position. There may be a clear door, like skin infection or evolve in the course of an infectious disease. The fluid examination is essential for diagnosis. The bacteriological study is essential to confirm the infectious etiology. Treatment is an emergency: Empirical antibiotic therapy, articulate debridement if necessary, immobilization of the joint.
MSH: Arthritis, vaccines, shoulder pain.

Diagnoses diagram



Septical Arthritis



P-515

Prevalence of spouse conflict in an out-patient unit, department of family medicine

Prueksaritanond S. (Bangkok), Tubtimtes S. (Bangkok), Pumkompol T. (Bangkok), Bhatanaprabhabhan D. (Bangkok), Prueksaritanond S. (Bangkok)

Aims and purpose: To study the prevalence of conflict between spouse in out-patient clinic of Family Medicine Department, Ramathibodi Hospital in Thailand. Issues of conflict and factors related to couples conflict and violence were also conducted.
Design and Methods: The descriptive study ,460 out-patients were sampled by stratified random sampling. Spouse conflict were assessed by questionnaire. Its alpha coefficient reliability was 0.8140. Data analysis were expressed in percentage, and by using Chi-square test and Binary Logistic regression.
Results: Most of the samples were female, single family, marriage licensed and had lived together for more than 7 years. Mean of age in male and female was 49 and 46 years, respectively. 300 out of 460 (59.1%) had spouse conflict in the previous year. Most of conflict interests were male disposition (71.0%), female disposition (59.6%) and different opinion (21.3%).The other conflict issues were illness (14.3%), nurture of the children (8.5%), unfaithful behavior (5.9%) and debt (5.1%). Binary logistic regression analysis revealed that unfaithful behavior was the issue that predicted spouse injuries significantly (predicted value 94.9%).18 out of 272 (6.6%) conflicted patients used to have injuries in the previous year. Most of the abusers were husbands.
Conclusions: More than half of the patients had spouse conflict. Unfaithful behavior was related to physical and mental injuries. It was the concealed problems in Thai culture, so family doctors should not ignore and overlook, otherwise their illness may not be cured appropriately.

P-516

Couples conflict of out-patients in a family medicine unit: coping and impacts

Tubtimtes S. (Bangkok)

Aims and purpose: To study couple conflict coping methods and impacts in out-patients clinic of Family Medicine Department, Ramathibodi Hospital in Thailand.
Design and Methods: Descriptive study, 460 out-patients were sampled by stratified random sampling. Couple's conflict coping methods and impacts were assessed by questionnaires with Likert's scale. Its alpha coefficient reliability was 0.8140. Data analysis were expressed in percentage and by using Chi-square test and Binary logistic regression.
Results: 59.1% of them have couple conflict in the previous year. Most coping methods were silent (76.5%), sarcastic (44.5%), attack or bawl (45.6%) and beat with or without weapon (10.7%). Cry and ventilating were found in wife more than in husband (OR 6.48,3.47), but denial was found in husband more (OR 2.452). 6.6% of couple conflict were injuried that most abuser were husbands (64.3%). Most injuries included scratch, sore and sprain. 6 in 18 injuried patients went to the doctors or the police station. A half of injuried patients still have lived together but less still having quarrels. Binary Logistic Regression Analysis revealed that the coping with beating and attack methods significantly predicted their injuries (95.6%).
Conclusions: More than half of them had couple conflict. The beating and attack coping could predict their injuries. Most of them wanted to find appropriate coping methods and to consult their family doctors. So, role of consultation in couple conflict accordingly may not be evaded and not overlooked.

P-517

Professional skills for the healthcare workforce of the 21st Century

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Purpose: Based on the recommendations of the WHO and Institute of Medicine (IOM) regarding health care competencies emphasizing chronic illness management and the management of geriatric syndromes for the 21st century, the goal of this project was to revise and strengthen an existing Master's curriculum for Advanced Practice Nurses at the Institute of Nursing Science (INS) at the University of Basel.
Methods: The 3-year Master of Science in Nursing program consists of 3 modules (research, advanced nursing practice and clinical leadership and collaboration) with a total of 23 semester courses. We analyzed the match between the criteria of the WHO and IOM core competencies for health care professionals and our Advanced Nursing Practice framework including learning goals, course content and student outcomes in current semester courses. In order to evaluate the congruencies and gaps between the current Master's curriculum and the competencies put forward by WHO and IOM, we initiated a review process with 7 faculty members incorporating student's feedback on the semester courses.
Findings: The curriculum content analysis reveals that the 5 WHO core competencies: patient-centred care, partnering, quality improvement, information and communication technology, and public health perspective were fully or partially addressed in 48% to 87% of the courses whereas the criteria were not applicable in some courses. The content of several courses needed to be revised to ensure a stronger fit with some of the WHO core competencies such as information, communication technology and a public health perspective.

Conclusions: The educational program of the INS has the ability to serve as a reference curriculum in the German speaking area of Europe in view of preparing advanced practice nurses for the care of patients with chronic conditions, service provision in new models of care and inter-professional collaboration with other health care providers such as primary care physicians.

P-518

The patient-centered attitudes in patient-physician relationships of public in South Korea

Soo Kyung L. (Kyunggi), Aesun S. (Kyunggi), Yoon J.C. (Kyunggi)

Aims and purpose: As the Society changed to consumer-oriented trend, physician-patient relationship is in need of change. There have been studies on the patient-centeredness of medical students and physicians in Korea, but none was performed on the patient's patient-centeredness. The aim of this study was to investigate attitudes towards patient-physician orientation of public in South Korea.
Design and Methods: We constructed a questionnaire that included the Patient-practitioner Orientation Scale(PPOS) for measuring of patient-physician relationship and items on demographic characteristics and conducted a population-based, cross-sectional survey in 1,000 individuals PPOS. According PPOS scale, the score was grouped by quartile.
Results: The total PPOS score was 3.47. The Sharing and Caring subscales were 3.63 and 3.31, respectively. The public' desire to obtain medical information and to take part in decision making (Sharing) were higher than that of public' expectations for gaining respect of one's feelings and interpersonal relationships (Caring). The public who were higher income (OR = 1.929, 95% CI = 1.310–2.838), older than 40 years old (OR = 1.516, 95% CI = 1.039–2.212), live in the suburbs of the Seoul metropolitan area (OR = 2.551, 95% CI = 1.720–3.784), do less physical activities (OR = 1.896, 95% CI = 1.297–2.772), have more health concerns (OR = 1.843, 95% CI = 1.256–2.704) is shown to be significantly more patient-centered. PPOS mean scores did not differ according to education. Differences in education related mean scores for the sharing and caring sub-scales also failed to reach significance. Marital status, the number of family members has an independent impact upon patient-centered attitudes.
Conclusions: These data suggest that the public in South Korea preferred to patient-centered attitudes. These results may influence to improve of patients' satisfaction from patient-physician relationship.

P-519

Pink panthers meet grey panthers

Hatziisaak T. (Trübbach), Naef M. (Azmoos), Rutschmann U. (Azmoos)

Introduction: Since the year 2006 schoolchildren of a primary school in Azmoos in Eastern Switzerland regularly gather together with the inhabitants of the nursing home. In these sessions, taking place once per month, they either sing together, cook and eat together, play games such as "Lotto" or simply talk to each other about various topics and sometimes look at old photographs. On the one hand, these activities are part of the activation therapy program of the nursing home. On the other hand, to many of the children, who in these modern times do not have a close relationship to elderly people, these meetings mark a unique opportunity to get to know old people, respect them with all their handicaps and thus learn how to behave, when they get in contact with them.
Method: To make children realize what it means to be old and suffer from different handicaps, we decided to hold two school-lessons in the nursing home, where the children would experience three simulated handicaps. Optical handicap: Children would wear special eyeglasses mimicking cataract or retinopathy. They would then have to read and understand a text. Acoustic handicap: Children would have to listen to a story with plugs in their ears. After that, they would have to repeat the story in their own words. Handicap of the locomotor apparatus: Children would have to move with wheelchairs inside the nursing home.
Feedback: According to the children exploring age this way was both, funny and sad, though most important, a very impressive experience. They realized what it means to be old and handicapped and learned important lessons for successful communication with elderly people, e.g. talking loud and clear, standing in front of the elderly while communicating with them, avoiding fast movements, switch on the light in order to create a better visibility, ask them, if they wish for help etc.

P-520

Prevalence of fall and the associated risk factors in hip fracture patients at Songklanagarind hospital

Gaensan T. (Songkhla), Sirirak T. (Songkhla)

Aims: To study associations between internal and external factors in the elderly who fell and had been admitted with a hip fracture to Songklanagarind Hospital between 2006 and 2007, and secondly to determine the cost of hip fracture treatment.
Methods: A retrospective study design looked at secondary data collected from the computerised database of Songklanagarind Hospital. From 133 patients aged >= 60 years, who had been admitted with hip fractures from falls, data was gathered to provide an epidemiological profile of the hip fractures in the patients. Possible associated factors consist of personal data, history of previously fall and fracture, underlying disease, medication, living conditions, and environmental factors.
Results: The mean age of the patients was 79 years and 77.4% of patients were female. The fall usually occurred at home (42.9%) and the external causes of falls were environmental hazards (21.1%), muscle weakness (15.8%) and a history of falling (12.8%). We found that 26.7% of the patients had been taking a course of four or more medications prior to the fall with the most common involved being NSAID (29.8%). Of this group of patients the highest associations were found with a loss of postural control and muscle weakness. Most of the treatment given was bipolar endoprosthesis (37.6%) for patients who were admitted to the hospital for a period of 7 to 13 days (33.8%). The main complications from admittance were urinary tract infection and cystitis (32.6%). Admission cost ranged from 1,200 to 1,500 dollar for each case of hip fracture. The in-hospital mortality rate was 5.3%.
Conclusion: Falls are more common among elderly females and the majority of falls occurred at home. Environmental hazards were the most important cause of a fall and polypharmacy was a key risk factor. Cost-effectiveness could be achieved by combining the cost of hip fracture treatment with a nurse supported home exercise programme, saving about 400 dollar per case.

P-521

The role of subjective theories in physician-patient-interaction: the example of sleep disorders

Herrmann W. (Berlin), Flick U. (Berlin)

Physician-patient-interaction: is highly complex. It is influenced by many interfering factors and its outcome is often quite unpredictable. Diagnostic labels try to reduce this complexity for patients and physicians. Diagnostic labels are an attempt to bridge the subjective-objective gap between patient's perspective and physician's measuring. They rather create new problems in arising questions about the meaning of illness, disease, health and normality. An example concerning this issue is sleep disorders. Research shows an immense and relevant discrepancy between subjective complaints and estimations and objective measurements of sleep. Labeling of sleep disorders is still a flowing process. Sleep and sleep disorders show a vast variety of factors involved. This makes it impossible to determine causalities. Hence our **goal** was to think of a new approach dealing with complexity in physician-patient-interaction. Therefore we considered different theoretical approaches and reviewed literature. As a **result** we want to introduce the impact of patients` subjective theories as an aid to resolve the complexity of sleep disorders. We regard subjective theories as personal perceptions of cause, label, consequences and course of diseases interconnected by an implicit argumentation. Physician-patient-interaction has an important impact on healing especially in complex bio-psycho-social diseases. Recognizing his/hers patients` subjective theories makes it easier for physicians to understand their patients and makes the physician-patient-interaction more effective. This promotes the healing-process as well.
To **conclude**, it is necessary to research subjective theories in different important fields of primary care. Therefore, we are researching subjective theories of nursing home residents about sleep in a present study. We are focusing on constructing a typology of these subjective theories for daily use by physicians in their interaction.

P-522

Measuring quality of life in hypertension and diabetes mellitus in primary care

Lygera A. (Alexandroupolis), Lygidakis C. (Bologna), Sarafianos P. (Palaiohora), Thomaidou E. (Chrisoupolis), Chliaras V. (Chrisoupolis), Papatheodosiou L. (Alexandroupolis), Symeonidis A. (Palaiohora), Argyriadou S. (Chrisoupolis)

Aims: to evaluate self-reported health related quality of life in patients suffering from hypertension and diabetes mellitus.
Study population and methods: GPs carried out a questionnaire on visitors of two Health Centres, which was consisted of demographics, the EQ-5D for reporting the health status and the personal perception of health.
Results: 496 visitors were examined (mean age = 61.72 years, sd = 15.53), 274 (55.2%) of which were from rural areas and 368 (74.2%) had a basic education. 358 patients were affected by hypertension and 258 from diabetes. Patients with hypertension reported a significantly worse VAS rating (Mdn = 70, U = 20239.00 p = 0.002) and were more anxious / depressed (U = 21410.00, p = 0.014), while in diabetics no differences were noticed in EQ-5D. Women with hypertension were 2.99 times

(95%CI: 1.62–5.54) more likely to affirm a worse health status and 1.77 times (95%CI: 1.05–2.99) more likely to state anxiety / depression. Significant differences between the genders were also noted. Men presented worse mobility and more important problems performing usual activities when affected by either hypertension or diabetes, whereas women suffered more from pain and anxiety / depression in both situations. Reporting self-care problems by blue-collar workers and farmers was 4.45 times (95%CI: 1.34–14.73) and 1.99 times (95%CI: 1.04–3.09) more probable when affected by hypertension and diabetes correspondingly. Among blue-collar workers, there was a significant association between hypertension and difficulties in performing usual activities (Fisher, p <0.001, OR = 5.81, 95%CI: 1.72–19.65) and anxiety / depression (Fisher, p = 0.006, OR = 2.25, 95%CI: 1.25–4.07).
Conclusion: Our findings suggest that hypertension and diabetes may affect in different ways the principal dimensions that determine the quality of life. Social demographic variables, such as gender and type of work, seem to influence the perception of health status.

P-523

Coordination of attention to mistreatment in an semiurban population. The program is working

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Purpose: 1. To interrelate the sanitary assistance that offers our centre of primary attention (CAP) with the Social Services of the Town hall (S.S.) and with the local and autonomic Police, in relation to the attention to the victims of any type of mistreatment. 2. To agglutinate and to coordinate the proper protocols of the diverse implied classes, in a general plan of attention to the mistreatment.
Material-Methods-Centre: Semi-urban CAP. – Participants: patients at the risk of suffering mistreatment; that is to say, the whole population. – Achievement of interdisciplinary meetings CAP/S.S. Town hall/Police officers – Contrast of protocols of every class.
Results: – Making of a stable circuit of meetings between all the implied parts – Making of an integral and multidisciplinary program of assistance to the battered person – Making of protocol of urgent assistance to the victims of maltreatment. – Making of an algorithm of detection of the risk of maltreatment.
Conclusions: – With the coordination of the different services there speeds up the activation of the safety plan of the victim. – The reports to the court become finished, with the necessary information – In our CAP the reports of maltreatment have improved and the psychic maltreatment is contemplated also – It has increased the implication and sensibility of all the professionals- The work in team is a feed-back, favours learning and the continued formation of the professionals – The program is exportable to other municipalities.

P-524

Complicity in complexity: an interdisciplinary partnership or the follow-up of diabetes patients in primary care

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Objective: Therapeutic education is considered to be crucial for the follow-up of diabetes patients. Our aim is to integrate this interdisciplinary approach into the family doctor's consulting room.
Method: The physician requires the help of a nurse specialised in diabetes care. They meet with the patient in an "all-together consultation", set the therapeutic objectives and coordinate their work. After this the nurse can also follow-up the patient at his residence or at her office.
Results: 4 specialized nurses and 17 physicians started the project with 74 patients. 7 patients dropped out. Average age: 60. Average duration of diabetes: 5 years (0 to 29). 50% of the patients answered the evaluation. ¾ stated that they would not have met the specialised nurse outside this setting. 88% of them considered having benefited from a therapeutic education involving knowledge of the disease care and practical skills. 100% felt integrated in their follow-up and helped to be more active in their self-management. 78% had their HbA1C measured during follow-up with an average reduction of 1% (8,4 to 7,4). 90% of the physicians and nurses were positive about their partnership allowing the access of the patient to therapeutic education and to the sharing of information.
Conclusion: To reach more patients, we decided to bring therapeutic education closer to the patient, at her/his own doctor's consulting rooms. Most of the family doctors were able to set up an interdisciplinary partnership with the specialised nurse. The patients felt encouraged to be more active in their follow-up. This could explain the improvement of their glycaemic control.

P-525

The Health Centre in a shopping mall: Florence (Empoli)

Salvadori P. (Empoli), Fanciullacci A. (Empoli), Mennuti N. (Empoli)

The Health Centre in a shopping mall: Florence (Empoli). The aim is to demonstrate the integration between primary care and other facilities like fitness centers and shopping malls to assure better healthcare for people and reduce costs**.**
Design and methods: in Empoli we have a health centre named "Health House" in a shopping mall. It is formed by 5 general practitioners, 3 nurses, 3 administrative personnel and 1 social worker. There is also a dental surgical office, a physiotherapy centre and a fitness centre. They take care of 7,500 people. This is a centre which ensures each citizen good health and welfare and social safety. We compared the health house performances with inpatient hospital admission and first aid admission with the performances of all other primary care workers of our Local Health Authority. (We used t student and P for the statistical analysis)Results: the inpatient hospital admission of people of health house is 10% less than the other people of our Local Health Authority (P <0.05). First aid admission is reduced by 15% (P <0.01)
Conclusions: A health centre can reduce health parameters and people are willing to choose this type of healthcare near a shopping mall, because they can optimize the time of their care and the time of their personal activities. This shopping mall and health centre is becoming a centre of social community open seven days a week, 24 hours a day.

The Health Centre of Empoli in a Shopping Mall

P-526

When maternity is not happiness

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Introduction: Pregnancy and post-partum are critical and vulnerable periods for the initiation of psychological disorders which are often not diagnosed. Major mental disorders in post-partum are baby blues (40 to 60%), depression (12 to 14%) and psychosis (0.1 to 0.2%).
Purpose: To review strategies for diagnosis and management of the psychic disturbances of post-partum in primary health care.
Methodology: Review literature by research in the Medline/Pubmed, scientific journals and text books of reference. Keywords: postpartum depression, screening and management.
Results: The main risk factors for mental disorders in the postpartum are the woman's psychiatric history, adverse socioeconomic factors, characteristics of the pregnancy and previous pregnancies, among others. For diagnosing mental disorders in the early postpartum is essential that the family doctor screens certain areas of the life of the pregnant woman and the couple, both during the pregnancy or during postpartum. There are clinical criteria and specific screening methods that are easy to apply, as the scale of postpartum depression in Edinburgh. Once the diagnosis is done, it is essential to start treatment in time and to know criteria for referral to health care side.
Conclusion: To ensure functional families and a healthy development of the newborn it is extremely important the correct approach of the main psychiatric disorders of maternal care. The Primary Health Care System plays an important role in addressing these disturbances, to avoid the negative consequences of these diseases.

P-527

The quality indicators of communication and professional integration in health services

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Background: According to the Chronic Care Model, to face chronic conditions, it is necessary to set up an effective communication among health professionals, aimed to create an integrated system of care. An Italian survey in 2005 showed that 71,2% of interviewed doctors consider very lacking interprofessional communication.
Aim: To find an effective methodology to asses professional integration in the care system through quality indicators referred to

interprofessional communication, utilizable also for new bargaining standards.
Design and Methods: The feasibility study "Leonardo Project – Disease and Care Management" experimented a care model based on the Care Manager, a new professional figure, and on the integration of all involved health professionals, reaching positive results. During the experimentation 2 new communication tools were used as well as quality indicators referred to the interprofessional communication.
Results: Starting from Leonardo experimentation and the suggestions of literature it is possible to identify a set of indicators to assess quality of professional relationship by the following categories: – Structure indicators, to verify requirements for procedures implementation – Process indicators, for quantitative analysis of use of communication tools – Performance indicators, aimed to the qualitative analysis of activities aimed to communication and interprofessional integration.
Conclusions: Definition of measurable specific indicators can be a suitable methodology to assess health professional integration and communication, available for a bargaining system of incentives.

P-528

Implementation of a cryotherapy surgery in primary care

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Objective: To analyze and evaluate the implementation of a cryotherapy surgery in Primary Care (CSPC).
Material and Methods: Retrospective descriptive study in an Urban Primary Care center with a population of 22728 in 2006 and 23656 in 2008. Description of the activity of CSPC and comparative analysis of the decisive capacity (estimated throug referrals per 100 inhabitants [R100IH]) in dermatology (D) before and after its implementation in 2007).
Results: Referrals D 2006: 1345. R100IH: 5,9 Referrals D 2008: 1098. R100IH: 4.6. 249 visits CSPC (133 first visits). 369 lesions were evaluated, 6 injuries referred for assessment by reference dermatologist. Cryotherapy was applied with good tolerance in 98% cases, only 10 patients had complications in form of blister. Type of injury treated in CSPC: 56.25% acrochordon; 12.2% warts; 9.5% fibroma; 8.6% seborrheic keratosis; 4.6% plantar warts; 4.6% actinic keratosis; 4% solar lentigo; 0.27% other. Reasons for consultation in dermatology referrals (RCDR) 2006: Tributary lesions CSPC (30.8%): 69.6% Warts; 14.3% acrochordon; 8.9% seborrheic; 7.1% actinic. No tributary lesions CSPC (69,2%): 28.6% dermatitis; 20,6% mycosis; 18.2% nevus; 7.9% acne; 3.9% neoplasms; 3.17% genital warts; 17.5% other. RCDR 2008: Tributary lesions CSPC (11.6%): 53.8% Warts; 38.5% seborrheic; 7.7% acrochordon; No tributary lesions CSPC (88.4%). 27.3% dermatitis; 22.2% nevus; 12.1% neoplasms; 9% mycosis; 5.1% genital warts; 5.1% acne; 19.1% other. Referrals tributary lesions CSPC 2006: R100IH: 1,8. Referrals tributary lesions CSPC 2008: R100IH: 0.5.
Conclusions: The implementation of CSPC improves the decisive capacity in Primary Care and can contribute to improve the accessibility of the population to specialized care.

P-529

Qualitative study on physician's experience and attitude toward working in the community medical unit (CMU) of central Thailand

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Background: In 2006, Community Medical Units (CMU) were established throughout Thailand as part of a new scheme for providing primary health care. Until now, there has been no evaluation of the project from the physicians' viewpoint. The aim of this study was to understand and explore the working lives of CMU physicians.
Methods: In-depth semi-structured interview with a selected sample. Participants were 20 doctors working at CMUs in central Thailand; 10 family physicians, 5 general doctors, and 5 specialists (2 surgeons, a radiologist, a pediatrician, and a gynecologist). Ages ranged from 27–74 years with a median age of 35 years. A total of 9 CMUs were involved in the study, situated in 5 provinces (Samutsongkam, Saraburi, Nakornpathom, Nontaburi and Ayudhaya).
Results: Working patterns varied in each province and depended on the practices existing prior to the reforms. Contrary to project guidelines, most doctors rotated to CMUs rather than having fixed full-time jobs. The provision of medical treatment in each CMU was combined with the physicians' previous tasks, most having worked in preventive medicine departments. When assessing attitude towards work, all responses were positive. Doctors reported choosing this work through personal interest and the influence of government health policy. Greater patient accessibility, a better relationship with patients and the community, and a more comfortable working style were given as reasons for being satisfied. Doctors reported being dissatisfied with the inability to perform appropriate investigations, perceived negative social status and inappropriate incentives. Insufficient manpower was reported as being a serious problem. Most doctors intended continuing to work in a CMU.
Conclusion: Physicians working in CMUs have a positive attitude towards their work experience but the prevailing system does not allow them to offer primary care and family medicine in the way it should be practiced.

P-530

Evaluation of family medicine in Australia and Turkey

Tekin N. (Izmir), Sahin H.A. (Van), Capa A. (Blacktown)

Aims and methods: Compared to other countries Australia is a developed country with its multicultural population and isolation from the other continents. It was aimed to compare the Australian Family Medicine experience with Turkey in order to solve the problems that we are facing.
Results: Health politics is based on primary health care (PHC) in Australia, in contrast PHC is neglected for many years in Turkey. The Royal Australian College of General Practitioners (RACGP) has a history of almost half a century and is the largest college specialising in PHC. Australian Academic General Practice began in the middle of the 1970's and The Faculty of Rural Medicine was also established inside of RACGP in 1992. Rural Family Medicine, the Aboriginal community controlled health services is very important for the Indigenous community. The recognition and practice of Family Medicine is very recent in Turkey. Turkish family physicians have to deal with individuals recently moved from rural to urban in their daily practice. Australian family physicians have to deal with multicultural individuals who have recently immigrated from overseas countries to Australia. Formal postgraduate training programs had voluntarily started in the 1960's and has become compulsory since 1996. Today only the family practitioners who have completed post educational programs can work in PHC units of Australia. Besides the gatekeeping system in Australia, the accreditation procedure has became more important quality in primary care.
Conclusions: Whilst Family Medicine Practices in Australia is widely accepted and utilized, it is still being formed in Turkey. For better health outcomes in Turkey postgraduate education programs must be compulsory with increased quotas. As a consequence, the family practice will gain more importance and recognition in Turkey.

P-531

Quality deficit: complexity of reforms implementation

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Aims and purpose: The aim of our study was to find out and collect methods that enhance implementation of reforms in local clinical practices in the Finnish health centres.
Methods: The good and successful practices were collected from the reports of the health centres during the annual seminars and meetings.
Results: Several useful practices were found that enhance reforms implementation in the local settings. These included e.g. repeated email messages, repeated measurements, small steps and broad participation in the planning.
Conclusions: Implementation research has not given much hope in making changes in clinical practices. Our experience from the quality networks is that changes take places slowly and in small steps, but the process is helped if certain simple rules are followed.

P-532

The best model of care for follow up of increasing numbers of breast cancer patients: an increasing dilemma

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With breast cancer detection and follow up increasingly subject to public scrutiny and debate we undertook a research project to examine satisfaction with the current gold standard of follow up at tertiary centres and explore the possibility of shared care with involvement of GP's. Currently post operative breast cancer patients are followed up in accordance with ASCO guidelines 2006 – every 3 to 6 months for the first three years, 6 monthly for years 4 and 5, and annually thereafter [1]. However recently with increasing numbers of breast cancers being detected and at earlier stages, specialist clinics are under increasing pressure – adhering to guidelines for follow up of

treated patients and the responsibility to review all new cases within two weeks of referral. In the recently published ASCO guidelines, it concluded that careful history taking, physical examination and regular mammography are appropriate for follow up and detection of breast cancer recurrence [1]. With this in mind the effectiveness and necessity of specialist follow up in the detection of recurrence is increasingly being questioned [2, 3]. Recent studies have suggested that recurrences are less likely to be detected at scheduled hospital visits than by a patient discovering a sign or symptom suspicious of recurrence in the interval [4, 5]. Upon this discovery patients present more frequently to their GP rather than to a specialist centre with their suspicion [5–7]. This highlights the possible underestimated role played by GP's in breast cancer detection and follow up. After a recent literature review allowed us to conclude that GP versus specialist follow up is not associated with an increase in time to diagnosis of recurrence or an increase in patient anxiety [8], we decided to undertake a research project to see if we could involve GP's in a more active and formal role in the care of postoperative breast care patients.

P-533

Who interrupts us in the medical consulation?

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Introduction: Studies have found that telephone and physical interruptions are one of the most important factors that that distort the normal functioning of medical consultations Objective: To quantify the number and causes of interruption of medical consultations and to identify avoidable interruptions and suggest possible interventions for further study.
Method: Interruptions of medical consultations of three general practitioners from an urban Basic Health Area (BHA) during nineteen days in May 2008 were recorded. Interruptions were classified as telephone interruptions (emergencies, administrative, BHA staff and personal calls), in-person interruptions (emergencies, BHA staff and patients), and interruptions due to computer events.
Results: A total of 367 interruptions were detected, of which 50% were due to telephone calls, 47% to in-person interruptions and 3% to computer events. The most common reasons were in-person interruptions by BHA colleagues (37%), telephone calls from colleagues (24%) and administrative telephone calls (21%). The number of interruptions per day/per practitioner ranged between 3 and 35, with a mean of 11.1 ± 6.7. The mean number of interruptions was higher in the morning shift (14.5 ± 7.6) than in the afternoon/ evening shift (7.6 ± 3.1).
Conclusions: The number of interruptions is high, and nearly all are telephone calls or in-person interruptions by colleagues. A large part of these interruptions could be avoided. Further studies are needed to evaluate interventions to reduce the interruption of consultations.

P-534

Development of palliative care in the Czech republic

Miškovska Z. (Prague)

Aims: Since the number of palliative care beds has increased only slowly in the Czech Republic, essential general palliative care will continue to be provided mostly at general practitioners' offices. Therefore it is suitable to identify initial positions, such as level, hidden reserves, and needs, in the primary care at the time of updating the Recommended Procedure and before the implementation thereof. Regular reassessment should provide valuable information about the effective implementation of the RP and the necessity of potential changes in the RP. For these reasons Dr. Miškovská included a special survey focused on palliative care in the agenda of the 27th Annual Conference of the Society of General Practice.
Methods: Questionnaire investigation. Question: a) We realize that the patient's disease has reached the terminal phase. b) We enter this change into the patient's records, c) We change the medication, d) We ensure home infusions, e) We talk openly with the patient about the impending death, f) We talk with the patient's family about the impending death. Our patients mostly die: g) at home, h) in the hospital, i) we don't know, nobody tells us.
Results: Only half of the practitioners change the medication, and one-third of the practitioners ensure infusions in a home setting. The practitioners talk mostly with the patient's family about the impending death.When patients are dying at home, the strongest correlation was found between education and supportive discussions with the family about the impending death.
Conclusion: The negative facts revealed suggest the need for a systemic solution: 1/ Education in legal matters, 2/Education concerning changes in the chronic medications of terminally ill patients, 3/ Education concerning the management of acute conditions in terminally patients in a home setting.

P-535

The potential role of primary care in diabetic care review

Begg S. (Newcastle Upon Tyne)

Introduction: Diabetic care follow-up has been provided for over five years in the primary care setting at the Claypath Medical Practice in Durham, North East of England. This poster will give an overview of the services provided to the patients. Additionally the results of patient satisfaction questionnaire of the patients attending this clinic will be stated. The services provided include annual check of appropriate blood tests, dietician, chiropody, nurse and doctor review. This service is traditionally provided in a secondary care setting in the NHS in England.
Method: The results of patient satisfaction survey with feedback from the patients will be summarised. This survey is currently in process at the time of submission of abstract, hence results are not stated. The sample size will be 100.
Conclusion: The poster will illustrate the possibility of diversity of the types of care that can be provided in the modern primary care setting. Objective evidence will be given regarding the potential greater satisfaction on the part of the patient (this has previously been surmised from patient discussions). Additionally the benefits of such a 'one stop' service will be outlined, with regards to better patient control of their chronic disease.

P-536

Results of the support unit of mental health in primary care during 2008

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Introduction: The Mental Health Support (MHS) in Primary Care (PC) that consists in 1 psychologist: 21 hours/week and 1 psychiatrist: 14 hours/week, works in our center for almost 2 years. Since the introduction of the MHS, the waiting list has been reduced in the mental health center and the customer service has been improved.
Purpose: The objective of this revision is to analyze the activity in the MHS during 2008.
Design and Methods: Descriptive cross-sectional study in an urban health center (39.000 inhabitants, 1 psychiatrist, 1 psychologist, 16 general practitioner), which analyzes the demand of our professionals in the service of mental health, types of visits by the psychologist and the psychiatrist and the percentage of failure visit in consultation mental health.
Results: 1270 visits (Psychiatrist: 52.3%, Psychologist: 47.7%). First visits: 41.6%; follow-up visits: 45.4%; interconsultations: 9.8%; telephone consultation: 2.2%; other: 1%. 10.38% of the patients were not presented to the first visit and 11.44% were not presented to the follow-up visits. The day of the week's biggest failure for first visits was Friday (86.53%), and for follow-up visits was Tuesday (86.36%). If we compare the activity of the MHS by months, greater activity was observed during July (18.2%) and less activity during August (6.4%). The average waiting time for psychiatrist visit is 21 days and to the psychologist visit is 60 days.
Conclusions: MHS in PC has worked very well since its creation. It has a great demand from our professional and it is well received by users of our population.

P-537

Survey on the education network for asthmatics and allergics (RESEDAA 67, Réseau d'Education des Asthmatiques et Allergiques) conducted on practitioners and patients

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The RESEDAA 67 network has been created to promote therapeutic education for asthmatics and allergics in the Bas-Rhin (France). 2½ years after the creation of this network, only 20% of practitioners in RESEDAA, have included a patient (specialists 33%, general practitioners-GPs-12%)
Objective: to study 1) the reasons why practitioners did not include patients, 2) the reasons why the patients' annual evaluation forms were not returned, 3) the use of the network's tools intended for patients (written action plan and notebook). 69 practitioners who are members of the network out of 71 have been questioned using a standardised phone interview. 105 patients out of 147 whose files were exploitable were interviewed in the same way.
Results: In 50% of the cases, lack of time was put forward by GPs to explain the absence of inclusions. Another reason was the practitioners' lack of knowledge concerning the organisation of the network and the procedure to include patients (free report). 91% of the practitioners were willing to delegate therapeutic education. 65% of the GPs cited patients' lack of interest as a problem. To explain why they did not return the annual evaluation forms, 62% of the practitioners admitted they forgot to do so, 100% of them put forward difficulties to

follow-up patients. 92% also expressed the fact that patients forgot their notebook. Concerning the network tools, 72% (CI = 62–82) of the patients were in possession of a written action plan (only 25% [CI = 15-35] before being included in the network). 89% (CI = 79–99) of them had the network notebook but 75% (CI = 65–85) did not take it to the pharmacist.
Conclusion: Our results suggest that GPs and Paediatricians would be in favour of delegating therapeutic education in asthma. Thanks to RESEDAA, a greater number of patients were in possession of a written action plan.

P-538

Minor surgery in primary care

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Objective: To describe the minor surgery acivity performed by our minor surgery unit during its first five-year period.
Design: retrospective descriptive study.
Setting: Health Area of Sant Cugat. 2 health centres (Sant Cugat, Valldoreix) that provide attention to 73.000 inhabitants.
Participants: Patients who were treated over 5 years (2003–2007). Main outcome measures: The agreement between clinical and pathological diagnosis. Other mesures included were: sex, age, general practicioner, cardiovascular risk factors, number and location of the skin lesions, local anesthesia used, kind of procedure undertaken, complications, waiting time, written consent and antitetanic vaccination.
Results: 1520 patients were interventioned and 2317 surgical procedures were performed. The average age was 46 (8–94). 51% were women. Main conditions treated were: 22% epidermal cysts (510), 20% naevi (443) and 18% polyps (421). More frequently located on thorax and abdomen 41% (n = 943), 28% on limbs (n = 653), 24% on head (n = 565) and 7% on neck (n = 152). Mepivacain was used as local anesthesia in the 73% of procedures. The most used surgical techniques were: 50% incisions (829), 33% shave (759) and 28% fusifom excision (648). The agreement between minor surgery unit GP and histological findings was 81%. There were 5% complications (113). Pacients were attended with a mean waiting time of 30 days. We found that 42% of patients had not a correct antitetanic vaccination coverage. Written consent was recruited from 89% of patients.
Conclusions: Minor surgical procedures carried out by general practicioners (GP) in GP premises are possible. It has a high agreement between GP diagnosis and histological findings and a low rate of complications. Our population has low rates of antitetanic vaccination.

P-539

Training in quality: a bid for new models of shared management

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Aims of the experience: To train attending and non-attending professionals of two teams of primary attention which cover an urban population of 70,000 inhabitants in respect of assistance quality. To offer teaching tools which would support subsequent work in management by processes. To favour continuous quality improvement in centres by enhancing the knowledge of professionals.
Description of the experience: The Management of teams decided to implant management by processes. For this purpose, a spaced-out training is provided by way of a master's in management and methodology of assistance quality to the team managers and the five members of the Quality committee. It was seen that management by processes suffered a little on account of the scarce specific training of the professionals involved. To remedy this, during the years 2007 and 2008 the Quality team provided adequate training to the remainder of the team. Differentiated training is given to collaborators and process owners. Training is carried out in one or two five-hour annual sessions. Later by means of a satisfaction-assessment questionnaire an evaluation is made of the teaching imparted.
Conclusions: In 2007, up to 67% of the 83 people involved in the management by processes were trained with the afore-mentioned methodology. In 2008 the professionals trained were 94: those who had not been trained the preceding year and, in a specific way, the process owners in specific areas. The training has contributed to improved development in the management of processes with a high degree of satisfaction expressed by the professionals who had undergone the training.

P-540

Telephone calls: a useful tool in primary care

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Background: In our Primary Care center the daily agenda of the General Practitioners is organized as follows: 1) Pre-arranged visits (patients request attention when the need arises). 2) Programmed visits (the doctor arranges a follow-up visit for the patient). 3) Ugent visits (the patients requests attention that very same day). 4) Telephone Consultations (the patient phones the doctor for help and advice). 5) Home visits (the patient asks the doctor to come to their home).Recently a new type of visit has been added: Telephone Results visits (TR). They consist of daily calls to all patients who have undergone complementary tests (blood test, x-ray, memory test, ECG, etc) in order to: Inform them of their results without them having to go to the surgery. Recommend any further action (health advice, more tests, prescriptions of a new medication, visits to specialists or programmed visits to continue the treatment).TR visits have some advantages such as saving the patient and doctor's time a faster communication of the results, allows medical decisions to be taken calmly and at a time which suits the doctor, reduces patient absences from work, may cut the number of pre-arranged visits and implies better work organisation. However TR visits have several disadvantages: the lack of contact with the doctor, the obligation of making the phone calls daily and the difficulty of locating some patients. We have recently started a qualitative study with focal groups of patients and doctors to find out their opinion about the RT.

P-541

Experience of an e-mail consultation service by family phisicians

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Introduction: After reading an article in a newspaper that referred to the progressive increase since its launch in 2005, of the number of patients who make their appointment with their primary care physician online through the website of the Department of Health, without having to go to the health centre or wait for him to pick up the phone. We think that if an objective of the Department was "to bring health services to people through new technologies to streamline the system" then we could use new technologies to expedite the on-demand care.
Material and methods: In June 2008 we created the email account CS.XABIADUANES@hotmail. We hung posters in various parts of the Health Centre, together with the mailing address and instructions (name of doctor you want to ask, name and sip number of the patient). The same information was offered in postcard- sized leaflets in all consultations and we also published the same information in a local newspaper.
Results: We analyzed the data of the first 8 months of service. We have received 44 messages from 26 different patients, 50% Spanish and 50% other nationalities. Age ranges: 41 to 65 years (36.36%), 15 to 40 years (28.57%). There was a predominance of females (70.45%). November was the month with most consultations: (36.36%). The most frequent types of consultation were: medical: (45.45%), administrative: (38.63%), other (11.3%).The average time to respond to the e-mails was 25 hours.
Conclusions: The use of new technologies, such as electronic mail, allows us to bring the health services closer to patients and to streamline the system, in addition to increasing accessibility. We note the importance of administrative consultations being resolved by this method, thereby reducing bureaucratic "red-tape" (a target to be achieved by the Public Health Authority). We believe that if we follow and actively promote these methods, the use of this service will gradually increase.

P-542

Impact of 24-hours non-invasive blood pressure monitoring on hypertension management in general practice

Petek ŠTer M. (Ljubljana), Kersnik J. (Maribor)

Background: Ambulatory blood pressure monitoring (ABPM) gives important additional information to office blood-pressure measurements in diagnostic and treatment of patients with high blood pressure. The aim of our survey is to find out the impact of ABPM on management of arterial hypertension in primary care.
Patients and methods: We included 339 consecutive patients with uncontrolled arterial hypertension, treated with at least two different antihypertensive drug classes in 38 general practitioners' offices in Slovenia. We randomly divided patients into the test (ABPM) and the control group (office measurements only). After 12 weeks we assessed the impact of ABPM on management of arterial hypertension.

Results: We analysed data of 339 patients: 160 in the testing and 179 in the control group, aged from 34 to 80 years (mean 61.4 years, SD 9.8 years) with mean systolic blood pressure 159.2 (SD 12.5) mm Hg and mean diastolic blood pressure 92.1 (SD 8.7) mm Hg. 45 (28.1%) of patients after ABPM have controlled blood pressure. Possibility for controlled blood pressure is higher in female (OR = 5.445, 95% CI: 2,16–13,76) and patients with lower mean office blood pressure (OR = 0.931, 95% CI: 0.84–0.97). Performance of ABPM did not have impact on the number of hypertension related office visits (1.6 in tested vs. 1.7 in control group, p = 0.306). Patients in the testing group less often underwent changes of antihypertensive drug therapy (52.5% vs. 66.5% in the control group, p = 0.009).
Conclusions: White coat effect is common in patients on combined antihypertensive therapy in primary care. APBM did not reduce the number of office visits, but reduced the probability of antihypertensive drug changes.

P-543

Management by processes: a tool of shared management

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Aims of the experience: To involve attending and non-attending staff of two teams of urban primary attention who offer health service to 70,000 inhabitants, in a model of management by processes. To make professionals participate in the focusing of activities tailored to the satisfaction of the user, to strengthen teamwork and co-responsibility in the taking of decisions, to diminish professional variability, to increase efficiency and effectiveness, to implant a culture of continuous improvement and create channels for developing and putting together the creativity of all professionals.
Description of the experience: In 2004 the Management of the centres decided to implant the system of management by processes. It defined Mission, Vision and Values of the venture and associated a model of variable remuneration. An external consultant elaborated the road map, the tree of processes and the table of consistency. The process of implantation was initiated in the first year with five processes, twelve in the second year, three in the third and one in the fourth, with the progressive incorporation of all professionals. Parallel to this, a Quality team was created whose task was to give technical support and train the staff methodologically.
Conclusions: Management by processes has furnished a global vision of the organisation, identifying the parts that it is composed of and the relations among them. It ensures the taking of decisions and the culture of management by facts and figures, identifying suitable indicators; it promotes the involvement of people, enhancing horizontal communication. It manages continuous improvement through cycles of evaluation and betterment of the processes that have been carried out.

P-544

Nutritional counseling for diabetic patients

Rurik I. (Budapest), Ruzsinkó K. (Budapest)

Background: Nutritional advices and counseling are important parts of diabetes care. In the recent structure of the Hungarian health care system it is available only at the secondary and never at the primary care level.
Methods: Authors planned and implemented a self financed nutritional counseling in primary care setting. For 67 of 108 diagnosed diabetic patients of the practice a free of charge educational service was offered. The 47 patients who accepted the invitation were educated in two consecutive group sessions. Only 24 of them were ready to take part on three other individual consultations. Fasting blood glucose and glycated hemoglobin were measured before and after the sessions and 1 year later. Comparison was made between genders (31 men, 16 women) and patients who took part on the grouped and individually organized form of nutritional counseling.
Results: Consultation was preferred better by patients with higher educational level and shorter duration of diabetes. All of the glycemic parameters improved after counseling in all groups but this was significant only by men and by the grouped form of consultation. After one year a further improvement was registered by women and by patients of the individual counseled group. Data of men and grouped consulted patients increased again, reaching almost the baseline level than before consultations.
Conclusions: The educational level and compliance of patients have a strong impact on the clinical and laboratory outcome. Nutritional counseling in the primary care offers more conform and help for diabetics but requires changes in regulation and practice while needs an increase in resources.

P-545

EUROpep in BH family practices

Hasanagic M. (Vrapcici), Vejzovic Z. (Mostar), RedžEpagic L. (Zenica), Cupina A. (Mostar), Saric B. (Mostar), Rahimic M. (Mostar), Batic O. (Tuzla), Stanetic K. (Banja Luka)

Aim: To asses EUROpep in Bosnia and Herzegovina Family Practicies.
Method: EUROpep Questionnaire form will be used in 5 BH Family Medicine clinics in order to improve quality in every day work.
Results: In many other countries it has been shown that patients are not satisfied with waiting time, then by work with urgent patient and we will see what are the result in our study. The study will be done in 5 FMC from in order to asses patient satisfaction with the work of family medicine team.
Conclusion: This is going to be the first work done on this topic in BH and can be used to improve health polica and everyday practice work.

P-546

The effects of accreditation process on the quality of care and treatment outcomes in patients with diabetes mellitus

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Background: The patients' rights have led to increased demand for healthcare accreditation in BIH.
Aims: The aim of this study was to determine the difference in quality of care and treatment outcomes between the patients with diabetes mellitus treated by family physicians with accreditation certificate and family physicians without accreditation certificate.
Design and method: The chart review of 749 patients with diabetes mellitus has been conducted during 2008. 306 patients were registered with family practices with accreditation certificate and 443 patients were registered with family practices without accreditation certificate. The data concerning BMI, cholesterol level, HgbA1c %, glucose level, foot examination, urine proteins and blood pressure were obtained.
Results: 77% of charts led by accredited physicians, and 40% of charts led by unaccredited physicians contained all relevant data. BMI <25 has been reached in 20% of patients treated by accredited physicians and in 18% of patients treated by unaccredited physicians. Median cholesterol level was lower in a group of patients treated by accredited physicians. HgbA1c % <7% was reached in 29% of patients treated by accredited physicians and in 8% of patients treated by unaccredited physicians. Median glucose level was lower in a group of patients treated by accredited physicians. Foot examination has been performed in 74% of patients treated by accredited physicians, and 47% of patients from the other group. Urine proteins were recorded in 59% of patients treated by accredited physicians, and 41% of patients from the other group. Median blood pressure level was lower in a group of patients treated by accredited physicians.
Conclusion: Accreditation process leads to the improvement in quality of care and treatment outcomes of patients with diabetes mellitus. Accreditation is a step that primary heath care institutions would essentially take.

P-547

"Hello?": Telephone consultation in general practice – a Portuguese setting

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Purpose: Accessibility is one of the main features of GP. Besides good practice management, telephone and e-mail are used to improve it. In most of Portugal it isn't yet possible to register phone consultations in medical records. We intend to show how the telephone has been used with a patient list and discuss its fair valorisation in clinical activity.
Aims: – To determine the frequency of telephone consultations during six months; – To identify the population that used this means of communication; – To analyse this type of consultation according to months and weekdays; – To identify the motives for phone consultations during the period of study.
Design and Methods: Cross-sectional study using electronic medical records, e-mail inbox and a spreadsheet as information sources. Statistical analysis of all consultations during six months (April to September 2008) by a GP in an urban area of Portugal. Statistical software: R.
Results: During the study period, the GP made a total of 2441 consultations: 1766 (72.35%) were in-person visits and 675 (27.65%) were not in-person (indirect contacts, e-mail and telephone). Of the latter 268 (10.98% of the total number) were phone consultations: 67.9% of the calls were made by the patients, 80.6% were female and the mean age was 47.78 years (min: 17, max: 91). July was the month with the largest number of phone calls.

Patients called in more on Mondays and the GP on Wednesdays. Motives for phone consultation: clinical queries; prescription request; secondary healthcare information; booking an appointment; bureaucratic matter. Clinical queries prevailed.
Discussion: Telephone consultation represents an important part of clinical practice. It is crucial that this kind of consultation is registered in medical records and factored in medical productivity assessment. We suggest expanding this study to a whole year period and involving a larger number of GPs to gauge its importance and incite change in institutional attitude towards it.

P-548

The performance indicators for measuring the organization performance of family medicine setting: systematic review

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Aim: After the economic crisis in Thailand since 1999 the Thai government changed its policy, reforming primary health care. A lot of government funding was provided to organize more Family Medicine Settings in Thailand. To assess the effect of current or future health care policy, rigorous and objective methods for measuring quality of care and other aspects of performance are needed. The purpose of this study is to develop the set of evidence-based-performance indicators for measuring the performance of Family Medicine Setting in the four key areas of primary care activities.(accessibility, comprehensiveness, continuity and coordination of care).
Method: The electronic database of PUBMED was searched to December 2008. The published articles focused on developing and using the indicators for measuring performance of Family Medicine Setting in the four aspects (accessibility, comprehensiveness, continuity and coordination) were included. Two reviewers reviewed and extracted data independently.
Results: Ten articles fulfilled the inclusion criteria for the review, five from the UK, three from USA and two from Canada. From these articles, the total 80 indicators for evaluating the performance of Family Medicine Setting in the four areas were identified. The details of included studies and the lists of indicators of each aspect of performance assessment are summarized in the poster presentation.
Conclusion: This finding suggests the set of evidence-based-performance indicators to measure the practice organization in four areas of organization performance. The assessment of individual organization with the set of indicators might identify areas in which improvement is needed and provide feedback to improve performance quality and efficacy of Family Medicine Setting in Thailand. However, further work is required to examine the validity, reliability and applicability of the set of these indicators in Thai Family Medicine Setting.

P-549

The pilot implementation of family medicine and the transition period training program in Turkey

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Purpose: To inform about the final situation of the ongoing pilot implementation of family medicine (FM) and the transition period training program (TPTP) in Turkey.
Design and methods: Done in terms of the final situation report of the FM implementation prepared and published by The Turkish Ministry of Health (TMH), Department of FM and FM Training Department data.
Results: Under the current circumstances as the number of the Family Medicine Specialists (FMS) is not enough, the practicing physicians are working in the primary care. One of the main aims of the TMHs transformation project is to provide the primary health care by the FMSs. To achieve this, TMH started the transition period training program and the pilot implementation of family medicine practice (PIFMP) in Düzce province on September 15th, 2005. It was further extended to totally 31 cities before 2009. 26% of the national population were brought under coverage of FM services that were administered by 5186 certified family physicians. In the designated pilot regions, the practicing physicians and specialists excluding those from FM were trained for 10 days. By the end of the 2012, transition is planned to have been completed throughout Turkey. TPTP has two phases. The main theme in the first phase is acquisition of the attitude that the FM is a medical discipline with its own set of principles and, on the cognitive side, learning of philosophy and fundamentals of FM. Following the first phase, successful MDs will continue with a year-long second phase of clinical training. The main goal of the second phase TPTP is for the physicians who have completed the first phase to reach and surpass the competency levels in clinical training by 40 e-learning modules.
Conclusion: The umbrella objective for the whole program is the completion of TPTP by 2017 with all the physicians currently working in primary care becoming FMSs.

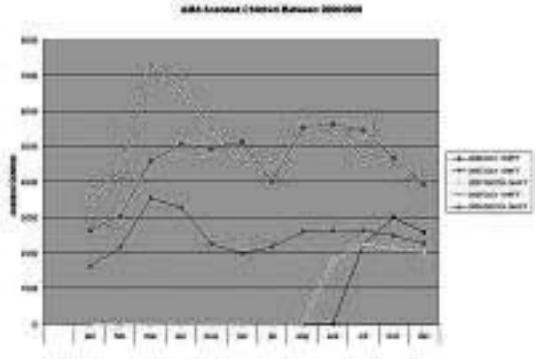
P-550

Public private partnership: a positive contribution in health care for São Paulo city population

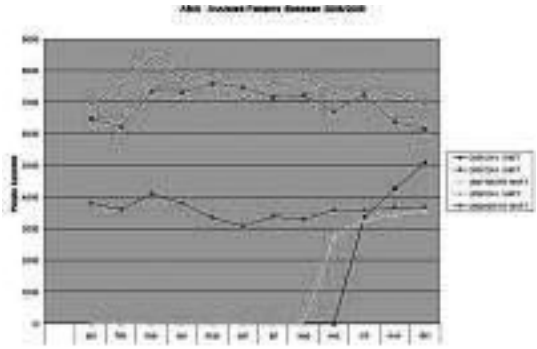
Beringhs-Bueno L.A. (São Paulo)

Broadening people's access to quality health care is a social challenge. The Sociedade Beneficente Israelita Brasileira Albert Einstein – SBIBAE (Albert Einstein Brazilian Israeli Philanthropic Society) is promoting partnerships in city, state and federal levels in order to determine public-private joint performance guidelines. Established in 2006 in a São Paulo Municipal Public Hospital, the Emergency Room Assistance Unit (AMA) – run by SBIBAE – meets population's natural demands, favoring General Practice (GP) or Pediatrics (PD) non-scheduled appointments. Offering social justice to the community thru responsible actions based on ethic and citizenship policies improves quality support in health care. Purpose: To discuss and assess public-private initial performance aspects in the city system, thru AMA's practice. Methods: descriptive and quantitative initial study. Results: Between October and December of 2006, 12.747 GP patients and 7.838 PD were assisted. In 2007 96.371 patients and 62.940 PD were assisted (night shift implementation in September). In 2008, the numbers went up to 133.006 cases in the city hospital's ER and in AMA 240.453 (GP) and 90.122 (PD). Since the project's implementation the number appointments was 402.988 (GP+PD). There was over 70% of increase on the total yearly visits. today, more than 64% of GP and PD visits at the hospital's Emergency Room are directed to the AMA Unit.
Discussion/Conclusions: Number of people assisted: 2006 Hospital Municipal ER (GP+PD) 42.804, AMA (GP+PD) 20.585; 2007 ER (GP+PD) 229.192, AMA (GP+PD) 159.275; 2008 ER (GP+PD) 167.667, AMA (GP+PD) 225.020. Public-private partnership is an efficient way to work, as has proven SBIBAE\'s initiative along with the Municipal Hospital, which optimized – thru the AMA Unit – health care assistance to the population. Positive results achieved in this joint effort encourage the broadening of public-private partnerships in health care.

AMA Assisted Children Between 2006/2008



AMA Assisted Patients Between 2006/2008



P-551

Email in general practice: perturbing instrument or stimulus for the improvement of the service's quality in its clinic, psychorelational and organizational dimensions?

Valcanover F. (Trento), Tordi D. (Trento), Ortolani D. (Trento)

Purpose: Growing use of computer technologies in GP has gone also with the use of emails in the patient-physician communication. This phenomenon, which is widespread in USA and in some non-European countries, is growing quickly also in Europe, even if there are not yet shared guidelines for its implementation. At the moment it is still sporadic and restricted in Italy. The analysis of the emails returned in a semester in an urban Practice had some results which allow to reflect

about aims, limits and capability of the use of this complex instrument in the setting of GP.
Methods: It carried out a qualitative and quantitative analysis of all emails received between January and June 2008 in a Practice of Trento (Italy), composed by 5 GPs, 2 secretaries, 1 nurse and a catchment area of about 6.000 patients (14 to 100 aged).It was done a report in order to stimulate organizational, clinical and relationships changes inside the practice.
Results: In six months 1.440 emails arrived. More than 25% of these were sent by patients who didn't use personally the PC but only through third persons (usually relatives). Only 35.21% contained requests which could be carried out exclusively by a physician, while 11.18% contained several types of requests. The 15.69% contained new clinical information.
Conclusions: The considerable flow of emails shows that the service is much appreciated by the patients. It comes to light unusual critical situations in the patient-physician relationship, and organizational problems which need appropriate action-research projects in order to improve the service. It is desirable to lead further studies about perturbing effects of the Information Technology on the patient-physician relationship and also on the care and service's qualities.

P-552

Implementing speech recognition: lessons from a practice

Pine D. (Minneapolis)

In 2007, in a community-based practice, 3 family physicians changed from dictating to a transcriptionist to using a speech recognition software program. The clinicians recorded their observations during the initiation period and report their findings. The cost saving is huge, but the time required to develop templates, train voices, and change office protocols was substantial. We were not able to measure the time required for implementation. It is critical to plan for this time commitment during the initiation period. Word accuracy was about 90% after 4 hours of training. Initiation of the program included the development of 7 templates for different types of office visits. This new approach appears to have a positive effect on quality because the templates remind clinicians to carry out and document a more complete history and physical exam. Notes are more accurate, concise and comprehensive because editing can be done when visit information is "fresh." It has also been helpful to us and to other office staff to have visit notes available immediately after dictation. Some strategies ease implementation. It is critical to retrain the program when a word is not recognized. Timely technical assistance is necessary and is an additional cost to implement the program. Some practice protocols must change. The clinician will find it necessary to communicate with other office staff without talking when the software is in use. It is sometimes practical to copy portions of previous notes to be included in a new note.We conclude that using speech recognition software enhances patient care and lowers transcription cost but requires significant time for initiation. This requirement limits the usefulness of this transcription strategy.

P-553

Support program on mental health in the primary care (PSP)

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Aim: Started a program on mental health to bring it to population with cooperation between institutions. Starting appointment (psychiatrist/psychologist) directly to the health center of Primary Care.
Population: All the patients in the program's PSP (psychiatry / psychology) of a Primary Care Area.
Method: Descriptive statistics. Revision of hª ecap computerized shared; sheet of derivation, listing of pharmacological prescription and clinical follow-up. Summarize variables; age and sex, motive of derivation, nº of previous appointment from Gps in last 6 months, differences on treatment (tt) , lost appointments to the PSP, referred to Clinical Mental Center.
Results: Evaluate (Sep-08 to Jan-09).
Referred to: 1 = Psychiatrist; 34% (women 70% – middle age 49.78 y/ men 30% - middle age 42 y) , anxiety 38.8%, depression 55.5%, other 5%. 2 = Psychologist; 56% (women 76.4% – middle age 39.2 y / men 23.5% – middle age 44.25 y) , anxiety 67.6%, depression 32.3%. Nurse 10% all women with anxiety. Numbers of previous appointment from GPs 1= 2,6 /2 = 2,5. Treatment; unchanged 81.8%, initiation 9 %, added 9%. Lost appointment 1 = 1º 27.7% , 2º 7.6%; 2 = 1º 17.34%, 2º 2.9%. Reffered to Clinical Mental Center; 1 = 33.3%, 2 = 10.7%.
Conclusions: Referred many anxiety syndromes preferably to psychologist. More women suffer from mental disorders average age 40 y. with sd. Anxiety. We must seek new strategies of improve their self caring and to undersantanding their pathologies in integrated services. We are working in future actions: Improve the information circuit between GPs and colleagues in the CSM. To improve the circuit of prescription in severe mental disorders. Therapy group and relaxation techniques.

P-554

Primary care improvement and reform: maximizing scopes of practice

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Aims(s) and purpose: The use of reminders for preventative and follow-up care by primary care physicians in Canada is the lowest among seven nations surveyed by the Commonwealth Fund (Schoen et al. 2006). The percent of doctors reporting their practices "well prepared to care for chronic diseases" was also disappointingly low. Equally alarming was the rating for multidisciplinary team and non-physician roles in patient care.
Design and Methods: This paper reviews the standard practices and new initiatives that are currently utilized to address these issues in a primary care academic teaching practice in Edmonton, Alberta. This documentation is intended to offer a benchmark for judgement by others as to utility and relevance to primary care practice and to slay the "dragons" of assumptions about the roles of doctors and nurses in primary care service delivery.
Methods: Regular weekly team meetings routinely address hunches and PDSA initiatives in key operational practice improvement areas such as medication review and renewal processes, pharmacist integration, nurse advice, and individual health goals of patients. A nurse-led initiative of mail-outs and follow-up phone calls for periodic health screening is the newest initiative.
Results: All professional staff at the Royal Alexandra Family Medicine Centre have embraced these initiatives to improve performance in health screening. The process has been very well received by patients within the practice. This has resulted in greater degrees of work satisfaction on the part of doctors and nurses.
Conclusions: The maximization of scopes of practice of health professionals has resulted in better and more reliable service delivery for patients in the practice, and increased satisfaction on the part of doctors and nurses in reaching the goals of enhanced service provision.

P-555

Practice leader programme: stories of leadership

Lynch M. (Oxford), McFetridge N. (Oxford), Scallan S. (Winchester), Leach C. (Winchester)

The aim of this innovative programme is to focus on practice-level service change as a means of improving patient care and developing leadership skills amongst the GP participants. The programme is running in two locations across South Central SHA. Thirteen general practices in Milton Keynes (Oxfordshire, UK) volunteered to participate in one pilot. Milton Keynes was selected on the basis of it being an area of social deprivation and underperformance in national quality indicators. The programme offers participating practices the funded services of a newly qualified GP for two days a week over the period of ten months, in order to backfill a GP from the practice. All participants, new and experienced, take part in bi-weekly Action Learning Sets which address issues impacting on personal and practice development. All seven newly qualified GPs are enrolled on a postgraduate certificate in General Practice, as are six of the experienced GPs. On weeks when the Learning Sets do not run, participants work on their practice-based service improvement projects. Participants are also supported by telephone coaching and placements with the Department of Health and the PCT. This project aims to: 1. promote and support change in leadership thinking and practice; 2. facilitate practice-led service improvement; 3. support career development; 4. support continuing professional development; 5. contribute to the development of extended GP Specialty Training. An evaluation of the project will identify the benefits and outcomes for all participants. Those relating to development and change for the practices and leadership thinking for the participants will be considered in depth. Early findings suggest that as the Learning Sets became established and the participants began to put the principles of the programme into practice, their confidence about achieving project goals increased, along with their commitment to the programme.

P-556

Family medicine in Spain: a four-year training program

Cibrian Sanchez S. (Spain), Gomez Bravo R. (Spain), Piñeiro Lopez A. (Spain), Sarmiento Cruz M. (Spain), Pendon Fernandez S. (Spain), Valiente Hernandez S. (Spain), Terceiro Lopez D. (Spain), Bueno Ortiz J.M. (Spain), Garcia Mozun B.(Spain), Garcia-Ciudad Young V. (Spain), Cervantes Guijarro C.(Spain), Illana Rodriguez J.F. (Spain), Barbosa J.(Spain)

Aims and purpose: Spain has one of the oldest GP training program in Europe. Traditionally it was a 3-year program, but four years ago this was adjusted into a 4-year training. The first promotion of trainees to finísh this program (on May 2009) will analize the differences between both trainings.
Methods: We will analize the opinions and feelings of the future GPs in Spain through a self-elaborated and brief questionnaire that will explore the advantages and weaknesses of the new GP training program in Spain, and will discuss possible contributions to keep improving it. At the same time, we will try to compare the differences that exist between all the 17 autonomous communities, because each one must adapt this program depending on their characteristics.
Results: Preliminary results show that this change has been a big step to improve our professional development. Moreover, it has situated Family Medicine at the same level of other speciality training programmes, that were traditionally considered as more prestigious than GP program. Final results will be shown at Wonca Europe 2009 Conference.

P-557

Facebook: medical possibilities and applications

Sarmiento Cruz M. (Spain), Cibrian Sanchez S.(Spain), Gomez Bravo R.(Spain), Piñeiro Lopez A. (Spain), Valiente Millan M.L.(Spain), Pendon Fernandez S.(Spain), Cervantes Guijarro C. (Spain)

Aims and purpose: The 21th Century has been the eyewitness of many technologies\' birth. One of the most popular is the social net known as Facebook. We will try to describe the different medical utilities and posibilities that this net allows to their users, and analize the risks of their unlimited access.
Methods: We will design an electronic data research to find the most relevant and useful resources that Facebook offers related to medical information and organization also. We will evaluate the characteristics of each resource and the information that might provide to the users.
Results: Facebook has got a great versatility that allows to incorporate in a real time different tools as, for example, blogs, chats, video and photo sharing, experiences or groups and networks with similar worries. These are some of the most used applications in this social net.
Conclusions: Facebook could be used as a tool to getting in touch and speed up communications between professionals, to improve vocational training, as an alternative tool to improve the organization and advertisement in scientific societies. But it has got many ethical limitations and privacity troubles in its use.

P-558

Facebook: an innovating use of some applications

Piñeiro Lopez A. (Spain), Sarmiento Cruz M. (Spain), Cibrian Sanchez S. (Spain), Gomez Bravo R. (Spain), Garcia Mozun B. (Spain), Garcia-Ciudad Young V. (Spain), Cervantes Guijarro C. (Spain), Pendon Fernandez S. (Spain), del Olmo Fernandez S. (Spain), Junco Anos E. (Spain)

Aims and purpose: The 21th Century has been the eyewitness of many technologies' birth. One of the most popular is the social net known as Facebook. Some groups are trying to introduce new applications to give response to specific necessities. The objective of this abstract is to describe the creation of a resource to improve the knowledge of the population about self-health care and the communication with cooperants in the 3rd World.
Methods: We will describe the use of a new application to improve communication with some cooperants working in isolated areas in the 3rd World. The way of carrying it out will be ,the creation of an online network to provide support and formation as a health care educational tool.
Results: The apllication's firstexperiencesshow that this could be a strong way to be communicated with cooperants in isolated areas. The final results of this project will be shown at Wonca Europe 2009 Conference.
Conclusions: New technologies are growing up and we must integrate them into the health care field and also try to use them to cooperate with the colleagues in isolated areas.

The numbers refer to the pages of this supplement.

Abadia Gallego V 181 S
Abarshi E 43 S
Abaurrea MP 88 S, 137 S
Abbott P 20 S
Abraham A 8 S, 148 S
Abrahamsen Daae BC 166 S
Achermann R 101 S
Addink R 80 S
Aekplakorn W 154 S
Agapakis D 92 S
Agréus L 154 S, 166 S
Aivaliotis I 111 S, 157 S
Akulov D 102 S
Albi N 151 S
Alenius H 6 S
Alevizos A 88 S, 152 S
Alexandra D 52 S, 201 S
Alguacil-Ramos A 90 S
Alibasic E 116 S, 174 S
Alice S 36 S, 130 S
Alonso Esteban R 108 S
Alonso Valles L 121 S
Alsina M 110 S
Alves L 107 S
Anastasiou F 100 S
Androutsos O 35 S, 169 S
Antón Sanz MDC 117 S
Apaydin Kaya C 62 S
Aragonès E 177 S
Arancibia Freixa I 54 S, 195 S
Arapaki A 87 S, 95 S
Argüelles Vazquez R 182 S
Argyriadou S 107 S, 154 S
Arias Blanco MDC 105 S
Ariño Martín MD 66 S
Arteaga SC 132 S, 133 S
Arvanitis A 107 S, 191 S
Astier Peña MP 133 S
Athanasopoulos D 120 S
Aubert J 28 S
Aubin-Auger I 23 S, 60 S
Ausfeld B 135 S
Azagra R 93 S

Baena JM 163 S
Ballard T 189 S
Ballieux M 12 S
Bally K 9 S, 15 S, 32 S
Balos Sekuloski L 184 S
Bandi-Ott E 12 S, 28 S
Banque Vidiella J 8 S
Baqué Vidiella J 136 S
Barquero E 47 S
Barraquer M 179 S
Barrionuevo M 171 S
Batic-Mujanovic O 102 S, 103 S
Battaglia M 24 S
Begg S 74 S, 199 S
Begré S 4 S
Beijaert R 67 S
Bellomo G 78 S
Bendova J 170 S
Berendsen A 60 S
Beringhs-Bueno LA 202 S
Bernad J 127 S, 183 S
Bernath R 21 S, 190 S
Besa M 113 S
Besson M 76 S
Bestard Solivellas JM 179 S
Bezakova D 80 S
Bhend H 2 S, 193 S
Bianchi C 73 S
Biasco A 58 S
Bichsel B 4 S
Bilic V 40 S
Billard M 140 S
Bischoff T 14 S
Bisconcin M 78 S
Bjorkstedt S 188 S
Blade J 187 S
Blasco PG 13 S
Blauth E 13 S
Blazekovic-Milakovic S 17 S
Boada Valmaseda A 67 S, 172 S
Bochsler HP 34 S
Bodenmann P 5 S
Bollag U 147 S
Bonani M 89 S
Booth B 42 S
Boskovic M 101 S
Bösner S 26 S, 38 S
Botelho R 3 S, 4 S
Boukes F 146 S
Breyda A 109 S
Brigatti M 130 S, 131 S
Brina N 142 S
Brink G 114 S
Brinkley B 79 S
Brkovic A 143 S
Brljevicova G 72 S
Broekhuizen L 64 S
Broers B 17 S
Brogan E 146 S
Brookes-Howell L 31 S
Brotons C 26 S, 122 S
Bruins Slot M 84 S
Bueno-Ortiz JM 16 S
Buil B 147 S
Bunjak L 104 S
Bureick G 73 S
Burghuber F 25 S
Burla L 132 S
Byoung-Hun L 171 S
Byram A 124 S

Cabak B 86 S
Cabré-Villa JJ 98 S
Caldeira EM 157 S
Cals J 64 S
Camarelles Guillem F 75 S
Campbell L 143 S
Camporese M 83 S
Campos A 197 S
Camps-Vilà L 153 S
Canak M 48 S, 162 S
Canhota C 32 S
Cantrak S 101 S
Carelli F 60 S, 131 S
Carol M 197 S
Carosino C 180 S
Carrazoni C 127 S
Castro A 130 S
Cavadas LF 22 S, 92 S
Cayir Y 71 S
Cebeci S 123 S, 178 S
Cerni-Obrdalj E 187 S
Cerovacki-Nekic V 189 S
Cerveny R 105 S
Céu J 103 S
Chambe J 60 S
Chan WS 33 S
Charlton R 9 S
Chatzopoulou E 86 S, 106 S
Cho KC 29 S
Choi TK 29 S
Chongcharoenkunawooti J 198 S
Christodoulou E 119 S, 175 S
Chronopoulou M 89 S, 165 S
Cibois-Honnorat I 77 S
Cibrian Sanchez S 204 S
Cimbaljevic B 183 S
Cina C 189 S
Civi S 173 S, 174 S
Clarke O 11 S
Clerc O 32 S
Colaço T 154 S
Collecchia G 70 S
Colucci G 61 S
Conic S 89 S
Constantin M 161 S
Coppens M 27 S
Cots JM 186 S
Crapesi L 73 S
Cruzado J 149 S
Cuixart L 122 S

Dabetic J 101 S
Dagdeviren N 123 S
Damen J 47 S
Danojevic L 155 S
Daras M 103 S
Darioli R 100 S
De Benedetto MA 70 S
De Carvalho I 118 S
De Fuentes Guillen C 51 S
Dees M 15 S
Del Olmo Fernandez S 10 S, 79 S
Della Vedova R 82 S
Demirci A 119 S
Derovs A 169 S
Desanka V 93 S
Díaz-Benito J 159 S
Dietrich C 78 S
Dijkstra R 82 S
Dikici MF 48 S, 68 S
Dimopoulou S 103 S
Djordjevic S 162 S
Doce Bartolome V 93 S
Domenech I 115 S
Dominicé Dao M 27 S
Donker G 69 S
Donner-Banzhoff N 5 S
Dosedel M 188 S
Downe S 21 S
Downes T 55 S
Dragoumanos V 25 S, 46 S
Dreiding P 89 S
Drenthen T 46 S
Dukic D 96 S
Dumontier E 142 S
Durieux-Paillard S 37 S
Dürrenmatt U 192 S
Durrer Y 116 S

Eichler K 68 S
Elorza-Ricart JM 75 S
Ephraim M 4 S, 74 S
Ericsson B 31 S
Eriksson T 10 S
Ernst M 26 S
Esquivias Campos MA 145 S
Estella A 179 S
Estella Sánchez L 99 S

Fabris H 156 S
Falguera Vilamajó M 184 S
Fantacci G 82 S
Favrat B 76 S
Fernandez-Alonso MC 139 S, 182 S
Ferreras Amez JM 180 S
Férriz Villanueva G 171 S, 185 S
Fitzpatrick P 45 S
Flegg K 22 S
Flury H 16 S
Fonseca G 185 S
Fonseca M 80 S
Font A 90 S
Fortin M 158 S
Fragkoulis E 157 S, 160 S
Franco A 47 S
Franco Sánchez-Horneros R 74 S
Frappe P 22 S
Frei-Erb M 13 S, 158 S
Freund T 8 S
Frías Vargas M 98 S
Fuentes Rodriguez S 176 S
Fuentes S 150 S

Gaensan T 196 S
Gagnon S 34 S
Gago M 150 S
Gallagher J 194 S
Gallais JL 71 S, 127 S
García Ortiz JC 181 S
Garmiri V 86 S, 88 S
Garopoulou A 125 S
Garrido P 87 S
Gaschignard S 72 S
Gascón-Cánovas JJ 21 S
Gashi M 125 S
Gay J 183 S
Geersing GJ 25 S
Gelzer D 14 S
Gencer B 39 S
Gener Vinas A 151 S
Gener Vinas A 167 S
Giannopoulos D 99 S, 115 S
Giesen P 2 S
Gimferrer N 201 S
Goktas O 140 S
Gold-Szklarski K 11 S
Gomez Bravo R 52 S
Gómez Lumbreras A 130 A
Gonseth S 167 S
Gonzalez Medina M 124 S, 138 S
González-Saavedra I 137 S, 163 S
Gouveia A 192 S
Gras D 52 S
Greenhalgh T 3 S
Griffiths F 24 S, 57 S
Grossenbacher-Villiger M 16 S
Grujic B 97 S
Guerra I 102 S
Guethlin C 133 S
Guimarães A 104 S
Gülnar D 154 S
Guo L 83 S

Halilovic E 168 S
Haller D 121 S
Hange D 175 S
Haralampous H 169 S
Harris N 140 S
Harvey J 9 S
Hasanagic M 201 S
Hashani V 111 S
Hathirat S 134 S
Hatziisaak T 64 S, 196 S
Hatzimarakakis G 157 S
Hauswaldt J 27 S
Heath I 15 S
Heiniger S 72 S
Helsper C 28 S, 29 S
Hennebo N 50 S
Henrichsen SH 18 S
Herrera García A 145 S
Herrero-Velázquez S 98 S
Herrmann W 196 S
Hervás A 98 S

Hillemans K 63 S
Hoby G 147 S
Hoddinott P 68 S
Holla S 11 S
Honkoop P 64 S
Hood K 65 S
Horakulchai S 132 S
Howe A 5 S, 59 S
Huber F 55 S
Hummers Pradier E 6 S, 15 S
Hürny C 176 S
Hurst S 4 S

Iannantuoni L 131 S
Iliakis D 96 S
Ilic V 178 S
Ingram C 39 S, 71 S
Iriartre A 139 S
Ivetic V 44 S

Jaczewska-Matyjaszczyk J 109 S, 140 S
Jamoulle M 17 S
Jankovic S 167 S
Jaunin-Stalder N 5 S, 121 S
Jelisijevic G 161 S
Jørgensen V 81 S
Jotterand S 34 S, 197 S
Jousimaa J 82 S
Juanola-Costa J 191 S
Junco Anós E 59 S
Junod-Perron N 50 S
Jürgens JP 179 S
Jurgova E 21 S

Kähärä K 114 S
Kamaratos A 88 S, 92 S
Kanellopoulos T 165 S, 173 S
Karamagkiolis S 151 S
Karaoglu N 137 S
Karatas I 41 S, 202 S
Kardas P 10 S, 143 S
Karic E 160 S
Kearney M 169 S
Kelidis C 183 S
Keller U 22 S, 194 S
Khabarova Y 170 S
Kidd M 6 S, 69 S
Kim C 168 S
Kim JS 129 S
Kim YS 147 S
Kinder Siemens K 53 S
Kindler B 100 S
Klauser M 174 S
Klement A 187 S
Kleniewska A 107 S, 129 S
Kljakovic M 48 S, 59 S
Koechlin F 5 S
Kok L 150 S
Kokkali S 165 S
Kolokythas D 125 S
Kondic-Ivanovic 183 S
Konstantinou G 131 S
Koppe H 11 S, 40 S
Korzh O 108 S, 113 S
Kosana SK 159 S
Koskela T 176 S
Kosojevic A 113 S
Kosunen E 56 S
Kovandzic M 58 S
Kozomara L 95 S
Kreitmayer Pestic S 21 S, 180 S
Kressig RW 6 S
Kringos D 59 S
Kronenberg A 149 S
Krul M 78 S
Kumar S 48 S
Kunnamo I 63 S
Kupresak D 201 S
Kurdak H 23 S
Kuronen R 20 S, 33 S
Kutlu R 156 S, 172 S

Lajoso S 109 S, 120 S
Langer T 47 S, 165 S
Langewitz W 4 S
Lanham H 41 S
Lapena C 131 S
Laporte C 22 S
Le Goaziou MF 106 S
Lee JG 29 S
Lee SK 30 S
Lemann D 53 S
Lentzas I 95 S, 166 S
León F 24 S
Lepenos T 111 S
Letrilliart L 83 S
Lev I 160 S
Lewek P 80 S, 123 S
Lim YS 91 S
Lin HC 124 S
Litschgi L 7 S, 70 S
Litt J 2 S, 10 S, 76 S
Llor C 159 S
Loh A 194 S
Lombardo P 44 S
Lopez I 29 S, 93 S
López Pareja N 181 S, 189 S
López-Torres J 91 S
Lygera A 196 S
Lygidakis C 35 S, 57 S
Lynch M 203 S
Lysenko G 105 S, 141 S

Mach L 115 S
Maderuelo-Fernández JÁ 186 S, 192 S
Madueño Caro AJ 97 S
Maier M 9 S, 11 S
Maksimovic L 155 S
Maly J 69 S
Mandaric A 159 S
Manea M 172 S
Mangiagalli A 67 S
Mann E 35 S, 190 S
Mantilla T 94 S
Mantzouranis G 111 S, 187 S
Maragiannis K 25 S
Marcelo S 174 S
Marí López A 98 S
Mariolis-Sapsakos T 188 S
Martin C 37 S, 53 S
MartÍn Jiménez A 143 S
Martina B 148 S, 155 S
Martínez Andrés P 147 S
Martínez Lozano J 168 S
Martinez-Altarriba MC 87 S
Matic D 173 S
Matthews JI 84 S
Matyjaszczyk M 30 S, 120 S
Mazo V 37 S
Mazurkiewicz M 126 S, 128 S
Medina Abellán MD 126 S
Meer A 11 S
Megido MJ 114 S
Meland E 44 S
Melidonis A 19 S, 88 S
Membrilla Pastor S 188 S
Menárguez Puche JF 191 S
Menin A 193 S
Mercier A 37 S
Merlo C 51 S
Mermod J 24 S
Metten A 140 S
Meynard A 7 S
Miceta A 182 S
Mickovski Katalina N 178 S
Migilyova O 171 S
Mihas C 95 S, 99 S
Miletic J 152 S
Miljkovic S 112 S
Milosavljevic L 113 S
Milovancevic S 164 S, 170 S
Minguet C 192 S
Minguez J 138 S
Miro P 190 S
Miškovska Z 199 S
Mitic L 175 S
Móczár C 99 S
Mola E 55 S, 197 S
Molina Guasch C 38 S
Moll van Charante E 19 S
Montalva Barra JC 108 S
Moores D 203 S
Morais Cardoso S 96 S
Morales M 153 S
Moreno Castillón C 112 S
Moreno S 177 S
Moreto G 81 S
Morlion B 149 S
Mortsiefer A 19 S
Mottu F 70 S
Mourelle Varela R 38 S, 110 S
Mühlemann K 54 S
Muiño-Bové I 108 S
Muixí Gebellí R 193 S
Mujcinagic Vrabac M 150 S
Mulet Pons MJ 200 S
Muñoz E 136 S

Nanchen D 19 S
Narring F 116 S
Narvaez M 126 S
Natanzon I 194 S
Navarro Arambudo B 105 S
Navarro B 54 S
Nebot Del Valle MJ 164 S
Neighbour R 12 S
Neijens A 73 S
Nenadic D 119 S
Nenonen M 74 S, 193 S
Neuner-Jehle S 2 S, 96 S
Nevalainen M 48 S
Neves AL 46 S, 158 S
Nicodemus L 57 S
Nidecker A 185 S
Niebling W 61 S
Nielen M 20 S
Nitsch-Osuch A 100 S, 113 S
Noel K 142 S
Ntrinias T 186 S
Nugmanova D 142 S

O'Ciardha D 53 S
O'Doherty LJ 23 S
O'Shaughnessy E 198 S
Oberknezev T 136 S
Ocanya A 162 S
Oikonomidou E 106 S, 190 S
Oikonomou N 95 S, 180 S
Ojardias L 77 S
Ortega Bravo M 110 S
Ortin JM 117 S
Ortin Ortin E 55 S
Ortolani D 63 S
Otten H 12 S
Ouvrard P 18 S
Ozcan S 62 S
Ozeraitiene V 100 S
Oztora S 115 S

Panhofer B 7 S
Papadakaki M 54 S
Papageorgiou E 109 S
Papathanasiou M 152 S, 192 S
Park JH 113 S
Párraga I 102 S
Pas L 23 S
Pasagic A 91 S
Pascalicchio A 129 S
Patama G 41 S
Pavlovic T 104 S
Pedro Pijoan AM 30 S
Pejic D 51 S, 156 S
Pendon Fernandez S 134 S
Peremans L 49 S
Perez A 163 S, 178 S
Periti I 137 S
Peritogiannis V 166 S
Pernes S 61 S
Perone N 34 S
Petek ŠTer M 200 S
Petricek G 117 S
Pfützner A 168 S
Picquet M 80 S
Pieper HO 50 S
Pijpers E 144 S
Pine D 50 S, 203 S
Piñeiro Lopez A 204 S
Pinheiro T 56 S
Pinichwattana W 189 S
Picquet M 83 S
Pitkälä K 134 S
Pivic G 160 S
Pizala H 190 S
Plaza S 84 S
Pogonidis C 76 S
Pont P 130 S
Popovic J 111 S
Popovic R 145 S
Poppelier A 66 S
Portero-Alonso A 91 S
Pouchain D 30 S, 40 S
Pouplana M 85 S
Prazeres F 65 S
Pribic S 138 S
Price J 17 S
Prieto D 97 S
Protopsaltis I 92 S
Prueksaritanond S 195 S
Pruskil S 138 S
Punosevac D 62 S

Quesada Almacellas A 109 S

Rabady S 83 S
Racic M 137 S
Radisavljevic N 118 S
Radmila L 161 S
Radosavljevic N 90 S
Radovanovic M 107 S
Rajkovic B 159 S
Ramanayake R 35 S
Rascón García A 199 S
Rebollo Gala G 87 S
Redaèlli M 59 S, 65 S
Reijkic P 145 S
Ribas B 86 S, 189 S
Ribatallada Diez AM 203 S
Riera Nadal C 91 S
Riera Nadal N 163 S, 198 S
Rigon S 129 S
Rindlisbacher B 135 S
Rinnerberger A 63 S
Ripoll-Pons M 55 S
Rita AM 128 S
Rivera Casares F 134 S
Rochfort A 16 S, 43 S
Rodondi PY 175 S
Rodrigo Claverol MD 117 S, 120 S
Rodrigues Pereira M 124 S
Rodriguez Cristobal J 108 S
Roig Grau I 121 S, 122 S
Rojas Blanc M 94 S

Romaguera Lliso A 128 S
Romerio Bläuer S 17 S, 68 S
Roncoletta A 40 S, 49 S
Roni C 71 S
Ros Domingo N 20 S
Rosemann T 2 S
Rothenbühler A 16 S
Rubio Aranda E 145 S
Rubio Fernandez JF 112 S
Rubio V 118 S, 120 S
Rurik I 191 S, 201 S
Ruths S 31 S
Rutten F 39 S, 51 S

Saarelma O 42 S
Sagarra Alamo R 87 S, 94 S
Saisamud K 56 S
Saiz-Satjes M 156 S
Salamin S 28 S
Salvadori P 42 S, 197 S
Samarão J 119 S
Sánchez Calso A 144 S
Sanchez Casado E 153 S
Sánchez Casco S 176 S
Sanchez N 164 S
Sanci LA 3 S
Sannisto T 66 S, 182 S
Santigosa A 175 S
Santos P 96 S, 152 S
Saridi M 146 S
Sarmiento Cruz M 188 S, 204 S
Sartori M 52 S
Sartori N 139 S
Savic S 106 S
Sawicka J 36 S, 52 S
Sayre J 186 S
Schabel M 53 S
Schattner P 63 S, 193 S
Schattner R 64 S
Schaufelberger M 134 S, 135 S
Schläpfer H 93 S
Schneuwly F 6 S
Schnyder-Etienne H 78 S
Schoenenberger A 25 S
Schöni M 135 S
Schutz Y 116 S
Schwendimann R 195 S
Sejranic I 168 S
Selmanovic S 128 S
Senan Sanz MR 151 S
Sequeira E 200 S
Serra M 200 S
Sevkovic S 177 S, 182 S
Sghedoni D 43 S
Shah H 103 S, 127 S
Shakya YL 114 S
Shi Hui Sharon W 139 S
Sibalic V 45 S
Siccama R 26 S
Silva M 180 S
Simic D 77 S
Simon A 61 S
Simoyan O 141 S
Simpson S 31 S
Sirirak T 72 S
Skeraj F 128 S
Skopljak A 157 S
Smeets H 77 S
Smelt A 132 S
Soler M 186 S
Sommer J 9 S, 56 S
Soo Kyung L 196 S
Spelberg B 50 S
Spescha H 155 S
Spiege W 65 S
Spiegel W 40 S
Stamatonikolou V 95 S, 160 S
Stankovic S 184 S
Stankovic V 174 S
Stein R 92 S
Steiner E 8 S
Steinmann A 142 S
Steinmetz D 23 S
Stolper E 17 S
Strand R 13 S, 38 S
Strasser F 26 S
Sturmberg J 15 S, 37 S
Suarez A 18 S
Suija K 139 S, 172 S
Sukhato K 202 S
Sumanen M 176 S
Sumrithe S 124 S
Supersaxco-Maciá L 94 S
Suvarnabhumi K 79 S
Syed Abdul Rahman SA 166 S
Szecsenyi J 3 S, 8 S

Tabenkin H 66 S
Taft A 62 S
Taibjee R 56 S, 79 S
Tamarit Corella F 97 S
Tang WE 144 S
Tannenbaum D 7 S
Tavares AS 118 S
Tejero C 170 S
Tekin N 198 S
Tekin O 141 S
Teran M 199 S
Theile G 45 S
Theodorakopoulou S 31 S, 84 S
Theppawong P 148 S
Thierry V 173 S
Tierno Ortega MT 67 S
Tkachenko V 177 S
Todorovic S 114 S
Tomasik T 39 S, 141 S
Tomonaga Y 115 S, 185 S
Topolski S 14 S, 38 S
Trachsel S 49 S
Troyano L 138 S
Tschudi P 51 S
Tubtimtes S 195 S
Turfaner N 146 S, 164 S
Turk M 132 S
Turunen K 106 S

Valcanover F 202 S
Van de Laar F 3 S
Van de Vooren R 81 S
Van den Broek S 9 S
Van den Muijsenberg M 75 S
Van den Muijsenbergh M 18 S
Van der Jagt L 7 S, 40 S
Van der Wel M 18 S, 32 S
Van Dijk C 72 S
Van Son G 71 S
Van Vugt S 141 S
Vaquero Cruzado JA 20 S
Vaucher P 45 S
Vázquez Rodríguez LT 167 S
Vecellio M 57 S
Veljkovic N 159 S
Veljovic V 162 S
Verdu M 60 S
Verhoeven A 10 S
Veskimägi M 667 S
Vicente García PA 147 S
Vicente-López I 43 S
Vicheto M 46 S
Villalba Tost L 153 S
Villaro M 172 S, 173 S
Vinas R 200 S
Visser E 35 S, 184 S
Vogt-Ferrier N 13 S
Voigt K 144 S
Von Ammon K 36 S, 185 S
Von Below B 135 S
Von Orelli F 170 S
Vrcic-Keglevic M 14 S, 141 S
Vujicic V 112 S
Vukadinovic N 105 S
Vukotic J 86 S, 101 S

Walsh A 57 S
Walter P 36 S, 118 S
Walter P 36 S
Wanvarie S 136 S
Wautrecht JC 46 S
Weber J 148 S
Weber T 89 S
Wehrli H 12 S
Weibel H 199 S
Wellbery C 13 S
Wens J 15 S
Wilm S 3 S, 27 S, 75 S
Winell K 119 S, 198 S
Winkler M 62 S
Wirthner A 33 S
Withnall R 125 S
Wittkampf K 44 S

Xekardaki A 73 S

Yaari M 164 S
Yakimova V 82 S, 123 S
Yaris F 136 S
Yoo KW 178 S
Yoon SJ 122 S

Zalihic A 150 S
Zamora I 156 S
Zarbailov N 69 S
Zarlas G 143 S
Zdravkovic-Vasic V 158 S
Zebrowska O 127 S, 146 S
Zeller A 126 S
Zeytinoglu IY 123 S
Zivkovic M 104 S, 162 S
Zografou I 181 S
Zoller M 161 S, 191 S
Zwart D 81 S
Zyskacherix A 77 S