

# Usage of complementary medicine across Switzerland

## Results of the Swiss Health Survey 2007

Sabine D. Klein, Martin Frei-Erb, Ursula Wolf

Institute of Complementary Medicine KIKOM, University of Bern, Inselspital, Bern, Switzerland

### Summary

**QUESTIONS UNDER STUDY:** This study investigated the use among the Swiss adult population and regional dissemination of various methods of complementary medicine (CM) provided by physicians or therapists in Switzerland.

**METHODS:** Data of the Swiss Health Survey 2007 were used, which comprised a telephone interview followed by a written questionnaire (18,760 and 14,432 respondents, respectively) and included questions about people's state of health, health insurance and usage of health services. Users and non-users of CM were compared using logistic regression models.

**RESULTS:** The most popular CM methods were homeopathy, osteopathy, acupuncture and shiatsu/foot reflexology. 30.5% of women and 15.2% of men used at least one CM method in the 12 months preceding the survey. Lake Geneva region and central Switzerland had more CM users than the other regions. Women, people between 25 and 64 years of age and people with higher levels of education were more likely to use CM. 53.5% of the adult population had a supplemental health insurance for CM treatments. 32.9% of people with such an insurance used CM during the 12 months preceding the survey, and so did 12.0% of people without additional insurance.

**CONCLUSIONS:** Almost one fourth of the Swiss adult population had used CM within the past 12 months. User profiles were comparable to those in other countries. Despite a generally lower self-perceived health status, elderly people were less likely to use CM.

**Key words:** complementary medicine; CAM; Switzerland; survey

### Introduction

Complementary medicine (CM) comprises a multitude of therapeutic approaches and diagnostic measures that exist mostly outside the current mainstream health system of a particular society and the institutions where conventional health care is taught. Generally it is no longer referred to

as alternative medicine, since it is often used by patients along with conventional medicine [1]. Patients almost never use CM because they are disappointed with conventional medicine, but for a number of other reasons including e.g. CM practitioners taking more time for them than in conventional medicine, feared or experienced side-effects of conventional medicine, CM treating the whole person or CM allowing them to take a more active role in maintaining their health [2, 3]. The motivations of physicians offering CM are less investigated. When asked in an open-ended question why they performed acupuncture, American physicians answered that it was effective, that the standard medical approach was often inadequate, that it was an adjunctive therapy and it offered a holistic approach to medical care [4].

CM is popular in many countries, and its dissemination and availability is increasingly becoming an important subject of research [5]. It has to be noted, however, that frequencies of usage are often difficult to compare, since they not only depend on the definition of CM and the time span (e.g. 12 months or lifetime), but are sometimes investigated for a certain group of patients or only certain parts of the population. In England, 13.6% of the adult population used eight of the most common CM methods (acupuncture, chiropractic, homeopathy, medical herbalism, hypnotherapy, osteopathy, reflexology, aromatherapy) within a period of 12 months. This percentage increased to 28.3% when over-the-counter drugs were included and to 46.6% when lifetime use was investigated [6]. In Israel, increasing use of CM up to 12.4% of the population in 2007 was reported. Main types of CM were acupuncture, reflexology, homeopathy, naturopathy, chiropractic, biofeedback and massage [7]. In Germany, 70% of women and 54% of men had used CM during the 12 months preceding a study in 2002, the most frequently used methods being exercise therapy, herbal medicine, hydrotherapy and massage. Homeopathy had been used by 14.8%, acupuncture/acupressure by 8.7%, traditional Chinese medicine by 1.6% and anthroposophic medicine by 0.9% of men and women aged 18 to 69 years [8].

In Switzerland CM is also very popular, an overview over the literature in 2006 revealed that approximately half of the population had used CM [9]. A survey among primary care physicians showed that 30% of them were asked for CM by their patients more than once a week and about three quarters either offered CM themselves or referred their patients to CM treatments [10]. The response rate in this survey was 50.4%. Even if it was assumed, that the non-responding 49.6% of the physicians neither offered CM nor referred patients to CM treatments, yet 37.5% would do so. In 2009, two thirds of Swiss voters demanded more consideration of CM in the Swiss health system and coverage by the basic health insurance of five CM therapies [11]. Critics fear that this will lead to much higher costs for health care, if CM is used along with and not instead of conventional care, although a previous study suggested that costs will increase only minimally [12]. A recent cost-effectiveness study from the Netherlands showed that patients whose general practitioner had additional training in CM had rather lower health care costs due to fewer hospital admissions and fewer prescriptions of drugs [13]. For patients starting anthroposophic therapies in Germany no increase in total health costs in the first year and a reduction in the second year were found [14]. In a comparative cohort study in patients with chronic disorders, patients treated with homeopathy had a better outcome of severity of symptoms compared to patients with conventional treatment, whereas total costs in both groups were similar after 12 months [15]. Thus, use of CM seems not to be necessarily associated with higher total health costs.

In order to update estimates about the use of CM services in Switzerland, we analysed in the present study the respective data of the Swiss Health Survey 2007, which were obtained from the Swiss Federal Statistical Office. This survey focused on adolescents and adults and on 11 CM methods that required visiting a physician or therapist. In contrast to research in other countries, over-the-counter drugs, food supplements, spiritual healing or prayer were not part of the survey. The objectives of this analysis were to investigate, which sociodemographic factors were associated with the use of CM services or with having an additional health insurance for CM, which CM methods were most popular and how frequently they were used. Since regional differences in health topics such as health literacy [16] or cardiovascular risk factor screening and management [17] are known across Switzerland, we included the home region into our analyses.

## Materials and methods

### Data

Data of the Swiss Health Survey 2007 were obtained from the Swiss Federal Statistical Office. The Swiss Health Survey is performed every 5 years in a sample and is representative of the Swiss resident population from the age of 15 on. It comprises a telephone interview followed by a written questionnaire, since not all questions can be asked on the telephone (due to length of the interview, complexity of some questions, possible need for consulting documents, intimacy of some questions). The survey includes questions

about people's state of health, general living conditions, lifestyle, health insurance and use of health services. In 2007, there were 18,760 respondents in the telephone interviews (66.3% of the valid telephone numbers of the sample) and 14,432 of the subsequent written questionnaires (80.5% of the available addresses of the respondents of the telephone interviews) [18].

For the analysis in the present study, socio demographic data (from the telephone interview), all questions related to CM and, for comparison, questions about health in general and visiting a physician were chosen. In particular, the following questions were used:

- How is your health in general? (Telephone interview.)
- Have you been seeing a physician in the last 12 months? How often have you seen a physician within the last 12 months? (Telephone interview.)
- How often have you used one of the following therapies in the last 12 months: acupuncture; homeopathy; herbal medicine; shiatsu/foot reflexology; autogenic training, hypnosis; neural therapy; traditional Chinese medicine; bioresonance therapy; Indian medicine/ Ayurveda; osteopathy; other therapies, e.g. kinesiology, Feldenkrais method etc.? (Written questionnaire.)
- If you have used one of the following therapies, have you been visiting a certified physician / non-medical therapist / don't know? (Written questionnaire.)
- Do you have a supplemental health insurance for CM? (Written questionnaire.)

Persons who answered that they had used at least one CM therapy once were coded as CM users.

### Statistical analysis

Weights of the telephone interviews were used to calculate the general self-perceived health status and number of visits to a physician. Weights of the written part of the survey were used to calculate usage of CM, and standardised weights were used to calculate logistic regression models as indicated by the Swiss Federal Statistical Office. The numbers of respondents given in the tables correspond to the actual numbers in the survey (without weights).

Logistic regression models, which belong to the family of generalised linear models and are applied for binomial regression, were employed. In table 1, the usage of various CM methods in the Swiss regions was compared using logistic regression models with region of residency (Nomenclature of Units for Territorial Statistics, NUTS level 2) as categorical predictor variable and each CM method as a response variable.

For model 1, age group, gender, level of education and region of residency were chosen as categorical predictor variables, with usage of CM (1 = used at least once in the previous 12 months or 0 = never used in the previous 12 months) as the response variable.

For model 2, age group, gender, level of education and health-consciousness were chosen as categorical predictor variables, with having an additional health insurance for CM as the response variable.

Age was not used as a continuous variable, since it was not linear in the models. Predictor variables were chosen that

are either known from previous studies to influence usage of CM (age, gender, educational level) or a new object of investigation (area of residence). Odds ratios and 95% confidence intervals were calculated from single factors of the logit function. An alpha level of 0.05 was considered statistically significant.

### Software

SPSS Statistics 17.0 (IBM, Armonk, USA) was used for statistical analysis.

## Results

### Most popular types of CM across the seven Swiss regions

In the Swiss adult population, the most popular CM therapies requiring visiting a physician or therapist were homeopathy, osteopathy, acupuncture and shiatsu/foot reflexology (table 2). 30.5% of women and 15.2% of men had used at least one CM method within the 12 months preceding the survey, and women had used all methods listed more frequently than men. The average number of treatments ranged from  $3.13 \pm 3.58$  for homeopathy to  $8.55 \pm 13.68$  for autogenic training or hypnosis.

There were statistically significant differences between the regions: CM in general and acupuncture in particular were used more often in Lake Geneva region and in central Switzerland than in the other regions (table 1). Osteopathy

and herbal medicine were most popular in Lake Geneva region, homeopathy and shiatsu/foot reflexology in central Switzerland.

In the survey people were also asked whether they had visited a certified physician or a non-medical therapist for treatment. The CM methods could be grouped according to the answers in the following way: patients had more often contacted physicians for treatments with homeopathy, acupuncture, anthroposophic medicine and neural therapy; non-medical therapists were more often chosen for shiatsu/foot reflexology, herbal medicine, ayurveda, autogenic training or hypnosis and other methods; and both options had been equally frequently used for osteopathy, traditional Chinese medicine and bioresonance therapy (table 3).

### Sociodemographic factors correlated to CM use

Table 4 shows the relation between sociodemographic factors and CM use. Persons below 25 and above 64 years were less likely to use CM than those between 25 and 64 and women more likely than men. Higher educational levels and living in Lake Geneva region or central Switzerland also had higher odds ratios than the respective reference categories (upper secondary level, Northwestern Switzerland).

In comparison, 77.8 and 89.8% of people between 15 and 64 and 65 years and above, respectively, had seen any physician (conventional or CM) during the 12 months prior to the survey. The average number of treatments of those persons was  $5.03 \pm 8.54$  and increased from  $3.86 \pm 6.49$

**Table 1:** Usage of various methods of CM (percentage and number of respondents [N]) in the last 12 months depending on area of living (Swiss Health Survey, Switzerland, 2007)<sup>a</sup>.

Method	Lake Geneva region		Espace Mittelland		Northwestern Switzerland		Zurich		Eastern Switzerland		Central Switzerland		Ticino	
	%	N	%	N	%	N	%	N	%	N	%	N	%	N
Any	29.8 <sup>b</sup>	773	22.4	874	20.5	305	20.4	399	19.4	311	26.8 <sup>b</sup>	451	20.0	220
Homeopathy	6.2	170	6.5	227	5.9	94	5.3	98	6.9	102	9.0 <sup>b</sup>	144	4.6	58
Osteopathy	15.4 <sup>b</sup>	391	5.4 <sup>b</sup>	275	(2.3)	27	2.5	48	(1.5)	(27)	3.1	40	2.6	30
Others	4.5	130	5.3	202	5.3	82	5.5	115	5.7	84	6.0	106	3.2	35
Acupuncture	5.7 <sup>b</sup>	163	4.5	162	4.1	57	5.3	101	3.9	70	6.3 <sup>b</sup>	111	4.5	52
Shiatsu/foot reflexology	5.0	129	4.9	185	4.3	73	4.5	88	4.4	74	6.4 <sup>b</sup>	106	4.8	52
Herbal medicine	4.2 <sup>b</sup>	120	2.1	107	2.7	36	2.0	40	3.0	46	2.0	43	3.1	30
Traditional Chinese medicine	1.1 <sup>b</sup>	32	1.2 <sup>b</sup>	48	2.2	37	1.8	40	2.5	31	2.5	35	(0.9)	(12)

<sup>a</sup> Results based on <30 answers are presented in parentheses, results based on <10 answers are not shown.

<sup>b</sup> Statistically significant difference to reference region (Northwestern Switzerland),  $p \leq 0.05$ .

**Table 2:** Usage of various methods of CM in the last 12 months with respect to gender and average number of treatments (Swiss Health Survey, Switzerland, 2007).

Method	Percentage of usage			Number of treatments		Number of respondents
	Total	Women	Men	Mean $\pm$ SD	Median (range)	
Any	23.0	30.5	15.2	7.66 $\pm$ 9.95	5.0 (1–200)	3,333
Homeopathy	6.4	8.6	4.0	3.13 $\pm$ 3.58	2.0 (1–50)	893
Osteopathy	5.4	7.3	3.5	3.53 $\pm$ 3.30	2.0 (1–30)	838
Others	5.2	7.5	2.8	7.06 $\pm$ 8.94	4.0 (1–99)	754
Acupuncture	4.9	6.6	3.1	6.57 $\pm$ 5.78	5.0 (1–50)	716
Shiatsu/foot reflexology	4.8	6.9	2.7	5.56 $\pm$ 6.34	4.0 (1–50)	707
Herbal medicine	2.7	3.9	1.5	4.26 $\pm$ 8.90	2.0 (1–99)	422
Traditional Chinese medicine	1.7	2.2	1.3	4.68 $\pm$ 5.41	2.0 (1–30)	235
Bioresonance therapy	1.3	1.7	0.9	3.96 $\pm$ 4.28	3.0 (1–99)	185
Ayurveda	1.0	1.5	0.5	3.38 $\pm$ 4.12	2.0 (1–20)	141
Anthroposophic medicine	0.9	1.1	0.7	5.29 $\pm$ 7.50	2.0 (1–56)	126
Autogenic training, hypnosis	0.7	0.8	0.5	8.55 $\pm$ 13.68	5.0 (1–99)	90
Neural therapy	0.5	0.8	0.3	5.00 $\pm$ 4.21	4.0 (1–30)	80

to  $6.19 \pm 9.73$  for the youngest to the oldest age group. In addition, the self-perceived general health status rated as good or very good decreased from 96.0% (15–24 years), 92.7% (25–44 years), 84.3% (45–64 years) to 71.8% (65 years and older), respectively.

#### Additional health insurance for CM

CM treatments were generally not covered by the mandatory basic health insurance, with the exception of a limited consultation time for acupuncture when performed by a certified physician. This is the reason why 53.5% of the adult population had an additional health insurance that for the most part covered CM treatments. Persons aged 45–64 years, women, persons with a higher level of education or those who perceived themselves as more health-conscious were more likely to have such insurance than the other age groups, men, persons with a lower level of education or those who were less health-conscious (table 5). There were no significant differences between the regions of Switzer-

land in this model, and therefore, this variable was excluded from the model.

32.9% of the persons with an additional health insurance used CM during the 12 months preceding the survey, and so did 12.0% of people without an additional health insurance. It was considered to include having an additional health insurance in the model for CM use as a predictor variable; however, this would not be meaningful, since it was obvious that people holding such insurance would generally also be using CM.

## Discussion

There is an on-going debate in Switzerland, whether certain CM methods: namely homeopathy, herbal medicine, traditional Chinese medicine, anthroposophically extended medicine and neural therapy, should be covered by the mandatory basic health insurance if practiced by a certified physician, as it is presently the case for acupuncture. Those therapies had been covered previously from 1999 to 2005

**Table 3:** Visiting a certified physician or a non-medical therapist for CM treatments in the last 12 months regarding CM method (Swiss Health Survey, Switzerland, 2007)<sup>a</sup>.

Method	Certified physician		Non-medical therapist		Don't know <sup>b</sup>	
	%	N	%	N	%	N
Homeopathy	59.7	454	35.5	306	4.8	46
Osteopathy	50.4	338	47.5	366	(2.2)	(19)
Others	18.9	116	77.5	539	(3.6)	(20)
Acupuncture	63.4	403	32.8	232	(3.8)	(20)
Shiatsu/foot reflexology	11.7	63	83.5	531	(4.8)	(26)
Herbal medicine	30.7	112	60.4	236	(9.0)	(23)
Traditional Chinese medicine	48.0	96	44.4	88	(7.6)	(11)
Bioresonance therapy	42.6	62	54.5	93	–	–
Ayurveda	(18.6)	(26)	76.4	90	–	–
Anthroposophic medicine	83.4	87	(14.2)	(14)	–	–
Autogenic training, hypnosis	(25.4)	(19)	66.1	47	–	–
Neural therapy	75.7	49	(24.3)	(13)	–	–

<sup>a</sup> Results based on <30 answers are presented in parentheses, results based on <10 answers are not shown (–).

<sup>b</sup> Only given answer "don't know", without respondents giving no answer.

**Table 4:** Logistic regression model: Usage of CM in the last 12 months (Swiss Health Survey, Switzerland, 2007).

	Odds ratio	95% confidence interval		p-value	Number of respondents N
		Lower	Upper		
<b>Age group</b>					
15–24	0.670	0.582	0.772	<0.001	1,188
25–44	1.075	0.975	1.186	0.145	4,648
45–64	1				4,548
65 and above	0.688	0.601	0.788	<0.001	2,770
<b>Gender</b>					
Men	1				5,812
Women	2.657	2.434	2.902	<0.001	7,342
<b>Level of education</b>					
Compulsory school	0.658	0.564	0.768	<0.001	1,394
Upper secondary level	1				7,962
Tertiary level	1.375	1.248	1.514	<0.001	3,798
<b>Region</b>					
Lake Geneva region	1.697	1.464	1.966	<0.001	2,379
Espace Mittelland	1.146	0.991	1.326	0.067	3,491
Northwestern Switzerland	1				1,422
Zurich	0.974	0.834	1.137	0.736	1,734
Eastern Switzerland	1.004	0.851	1.185	0.962	1,434
Central Switzerland	1.467	1.233	1.746	<0.001	1,700
Ticino	1.012	0.793	1.291	0.924	994

and will be covered again at least during a test phase from 2012 on to 2017 [11], and thus it is of much interest, who uses which methods how often. In this context, the previous Swiss Health Survey (2002) had been evaluated regarding the use of these five methods [19]. Homeopathy had been used by 6.1% (95% confidence interval (CI) 5.7–6.5%) of the population, herbal medicine by 2.6% (CI 2.3–2.9%), traditional Chinese medicine by 1.6% (CI 1.4–1.8%), anthroposophic medicine by 1.0% (CI 0.9–1.2%), and neural therapy by 0.6% (CI 0.5–0.8%). In the present study we found no significant changes in the proportions of users compared to the previous study. Thus, exclusion of these methods from the basic health insurance did not lead to a diminution in usage. Similarly, previous inclusion of these methods had not led to a distinct increase in usage [12, 19]. This may be connected with more than half of the adult population having an additional health insurance and being independent of coverage by the basic health insurance. CM users who had a higher education and, therefore, higher income were probably also able to pay for 3 to 8 CM treatments (mean, table 2) out-of-pocket. It has to be kept in mind, that the discussion about coverage only concerns five CM methods when performed by certified medical doctors, i.e. 60–65% of treatments with homeopathy, 30–35% of herbal medicine, 50–55% of traditional Chinese medicine and the majority of anthroposophic medicine and neural therapy (table 3).

The user profile among the Swiss population was comparable to that in other countries [5, 7, 8, 20, 21]: women, people with a higher level of education and of middle age were more likely to use CM. It was also comparable to the profile of users of homeopathy, herbal medicine, traditional Chinese medicine, anthroposophic medicine and neural therapy based on data from the Swiss Health Survey 2002 [19]. However, in the population of 65 years and above the self-perceived health status was lower and the number of medical treatments higher, raising the question whether elderly people were less interested in CM, had less access to CM, or both. A decline in CM usage with age had also been observed in other countries, e.g. England [6].

In a previous study, the consultation rates per patient per year during 2002 and 2003 were found to be 4.7 for phys-

icians being certified for CM, 4.1 for physicians providing CM without certification, and 3.7 for conventional physicians [22]. In this survey, the average number of consultations with any physician was slightly higher ( $5.03 \pm 8.54$ ), and was obtained from the perspective of the patients, i.e. may include consultations with several physicians.

Since Switzerland has a variety of regional differences, e.g. regarding languages, urbanisation, health legislation and health literacy, the regional consumption of CM was also investigated. Osteopathy was particularly popular in the French speaking regions, and homeopathy was frequently used in central Switzerland. However, the reasons for this unequal distribution are not obvious and will be investigated elsewhere in more detail and in context with the distribution of the therapists.

The questionnaire used in this survey focused on CM treatments that needed a visit to a practitioner (certified physician or non-medical therapist), and thus the proportion of people using CM was lower than in other studies that included a wider range of CM methods [9]. From the data it was not directly apparent, how many different methods were used by one person, since the last question asked for “other therapies used” that comprised one or several methods. For an approximation, it was assumed that persons indicating “other therapies” used only one other CM method. Thus, 64.6% used only one CM method, 22.4% two, 8.3% three, and 4.6% four or more different CM methods. This partially indicates a general interest in CM rather than adherence to a particular method and is in line with findings that associated the personality factor of openness to the number of CM methods used [23]. The average number of treatments within 12 months was also calculated from the respective answers and ranged between 3.13 (homeopathy) and 8.55 (autogenic training, hypnosis). Although the results seemed plausible [24–26], it would have been more useful to know how many treatments were needed in the course of a specific therapy than within 12 months before the survey, because therapies might just had started or ended.

Three factors restrict the validity of the results presented here: the choice of the sample, the fact that the data were self-declared and the absence of definitions of the CM

**Table 5:** Logistic regression model: Holding an additional health insurance for CM (Swiss Health Survey, Switzerland, 2007).

	Odds ratio	95% confidence interval		p-value	Number of respondents N
		Lower	Upper		
<b>Age group</b>					
15–24	0.366	0.326	0.410	<0.001	1,128
25–44	0.801	0.736	0.871	<0.001	4,650
45–64	1				4,662
65 and above	0.802	0.723	0.890	<0.001	3,024
<b>Gender</b>					
Men	1				5,972
Women	1.755	1.635	1.885	<0.001	7,492
<b>Level of education</b>					
Compulsory school	0.729	0.649	0.818	<0.001	1,493
Upper secondary level	1				8,127
Tertiary level	1.158	1.065	1.258	0.001	3,844
<b>Health-conscious</b>					
No	1				1,527
Yes	1.374	1.233	1.532	<0.001	11,937

methods. The sample included only adolescents and adults aged 15 and older and people living in a private household. Not included were children, those living in a nursing home or other institution (especially elderly people) and those who were not fluent in German, French or Italian. Consequently, no statements about the use of CM in children could be made, and elderly people as well as immigrants might have been underrepresented. Additionally, social desirability and recall bias (e.g. answers to the question of how often a certain method had been used) are potential sources of bias in self-declared data. The usage of health services can also be estimated from data of insurance companies, but since CM treatments are partially paid out of pocket, they are invisible in such data. Therefore, a population-based survey is most likely the best option to investigate the usage of CM. Finally, some CM methods may be confused with each other, e.g. homeopathy, herbal medicine and anthroposophically extended medicine. This might have been, at least in part, avoided by adding definitions of CM methods.

In conclusion, despite a lower self-perceived general health status, elderly people used less CM than those between 25 and 64 years of age. Some elderly and other people without additional health insurances may not have been able to afford CM treatments, since these treatments were not covered by the basic health insurance.

Further studies should aim to investigate to what extent CM is used additionally or instead of conventional medicine, whether the provisional inclusion of homeopathy, herbal medicine, traditional Chinese medicine, anthroposophic medicine and neural therapy in the basic health insurance influences their usage or user profile, and how varying regulations in Swiss cantons may be responsible for the different usage of CM methods across Switzerland.

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**Correspondence:** Sabine D. Klein, PhD, Institute of Complementary Medicine KIKOM, University of Bern, Inselspital, CH-3010 Bern, Switzerland, [sabine.klein\[at\]kikom.unibe.ch](mailto:sabine.klein[at]kikom.unibe.ch)

## References

- Zollman C, Vickers A. What is complementary medicine? *BMJ*. 1999;319(7211):693–6.
- Büssing A, Ostermann T, Heusser P, Matthiessen PF. Usage of complementary and alternative medicine interventions by German older adults. *J Altern Complement Med*. 2011;17(6):487–9.
- Sirois FM. Motivations for consulting complementary and alternative medicine practitioners: a comparison of consumers from 1997–8 and 2005. *BMC Complement Altern Med*. 2008;8:16. doi: 10.1186/1472-6882-8-16.
- Diehl DL, Kaplan G, Coulter I, Glik D, Hurwitz EL. Use of acupuncture by American physicians. *J Altern Complement Med*. 1997;3(2):119–26.
- Frass M, Strassl RP, Friehs H, Müllner M, Kundi M, Kaye AD. Use and acceptance of complementary and alternative medicine among the general population and medical personnel: a systematic review. *Ochsner J*. 2012;12(1):45–56.
- Thomas KJ, Nicholl JP, Coleman P. Use and expenditure on complementary medicine in England: a population based survey. *Complement Ther Med*. 2001;9(1):2–11.
- Shmueli A, Igudin I, Shuval J. Change and stability: use of complementary and alternative medicine in Israel: 1993, 2000 and 2007. *Eur J Public Health*. 2010;21(2):254–9.
- Härtel U, Volger E. Inanspruchnahme und Akzeptanz klassischer Naturheilverfahren und alternativer Heilmethoden in Deutschland – Ergebnisse einer repräsentativen Bevölkerungsstudie. *Forsch Komplementmed*. 2004;11(6):327–34.
- Wolf U, Maxion-Bergemann S, Bornhöft G, Matthiessen PF, Wolf M. Use of complementary medicine in Switzerland. *Forsch Komplementmed*. 2006;13(Suppl 2):4–6.
- Déglon-Fischer A, Barth J, Ausfeld-Hafter B. Komplementärmedizin in Schweizer Praxen der Grundversorgung. *Forsch Komplementmed*. 2009;16(4):251–5.
- Stafford N. Switzerland is to fund complementary therapies for six years while effectiveness is evaluated. *BMJ*. 2011;342:d819.
- Studer HP, Busato A. Development of costs for complementary medicine after provisional inclusion into the Swiss basic health insurance. *Forsch Komplementmed*. 2011;18(1):15–23.
- Kooreman P, Baars EW. Patients whose GP knows complementary medicine tend to have lower costs and live longer. *Eur J Health Econ*. 2011. doi: 10.1007/s10198-011-0330-2.
- Hamre HJ, Witt CM, Glockmann A, Ziegler R, Willich SN, Kiene H. Health costs in anthroposophic therapy users: a two-year prospective cohort study. *BMC Health Serv Res*. 2006;6:65.
- Witt C, Keil T, Selim D, Roll S, Vance W, Wegscheider K, Willich SN. Outcome and costs of homeopathic and conventional treatment strategies: a comparative cohort study in patients with chronic disorders. *Complement Ther Med*. 2005;13(2):79–86.
- Wang J, Schmid M. Regional differences in health literacy in Switzerland. Zürich: University of Zurich, Institute of Social and Preventive Medicine; 2007.
- Marques-Vidal P, Paccaud F. Regional differences in self-reported screening, prevalence and management of cardiovascular risk factors in Switzerland. *BMC Public Health*. 2012;12:246.
- Bundesamt für Statistik, Schweizerische Gesundheitsbefragung [Internet]. 2008 [cited 2012 May 3]. Available from: [http://www.bfs.admin.ch/bfs/portal/de/index/infothek/erhebungen\\_quellen/blank/blank/ess/04.html](http://www.bfs.admin.ch/bfs/portal/de/index/infothek/erhebungen_quellen/blank/blank/ess/04.html).
- Crivelli L, Ferrari D, Limoni C. Inanspruchnahme von 5 Therapien der Komplementärmedizin in der Schweiz. Statistische Auswertung auf der Basis der Daten der Schweizerischen Gesundheitsbefragung 1997 und 2002. Scuola Universitaria Professionale della Svizzera Italiana; 2004.
- Bücker B, Groenewold M, Schoefer Y, Schäfer T. The use of complementary alternative medicine (CAM) in 1001 German adults: results of a population-based telephone survey. *Gesundheitswesen*. 2008;70:e29–36.
- George S, Jackson JL, Passamonti M. Complementary and alternative medicine in a military primary care clinic: a 5-year cohort study. *Mil Med*. 2011;176(6):685–8.
- Busato A, Dönges A, Herren S, Widmer M, Marian F. Health status and health care utilisation of patients in complementary and conventional primary care in Switzerland – an observational study. *Fam Pract*. 2006;23(1):116–24.
- Sirois FM, Purc-Stephenson RJ. Personality and consultations with complementary and alternative medicine practitioners: a five-factor model investigation of the degree of use and motives. *J Altern Complement Med*. 2008;14(9):1151–8.
- Fulder SJ, Munro RE. Complementary medicine in the United Kingdom: patients, practitioners, and consultations. *Lancet*. 1985;2(8454):542–5.
- Van Wassenhoven M, Ives G. An observational study of patients receiving homeopathic treatment. *Homeopathy*. 2004;93(1):3–11.
- Jeschke E, Ostermann T, Tabali M, Bockelbrink A, Witt CM, Willich SN, Matthes H. Diagnostic profiles and prescribing patterns in everyday anthroposophic medical practice – a prospective multi-centre study. *Forsch Komplementmed*. 2009;16(5):325–33.