Peer reviewed article

Coercive procedures and facilities in Swiss psychiatry

Ian Needham[a], *C. Abderhalden*[b], *T. Dassen*[c], *H. J. Haug*[d], *J. E. Fischer*[e]

[a] Psychiatric Hospital, Wil, Switzerland
[b] WE'G Institute for Post Diploma Education in Health-Professions, Aarau, Switzerland
[c] Department of Nursing Science, Humboldt-University, Berlin, Germany
[d] Psychiatric University Hospital, Zurich, Switzerland
[e] Horton Institute for Research, Zurich, Switzerland

Summary

Background: Coercive measures in psychiatry, although in many cases effective in violence management and injury reduction, have been criticised from a consumerist point of view.

Method: A questionnaire regarding coercive facilities and procedures was dispatched to the charge nurses of 86 acute psychiatric admission wards in German speaking Switzerland covering a catchment area of 75% of the Swiss population.

Results: 95% of all wards responded rendering the survey representative. The majority of wards have seclusion rooms and 55% of charge nurses perceive seclusion facilities as adequate. Two to twenty staff members are involved in overwhelming dangerous patients and some discontent is expressed at the haphazard fashion in which such events occur. Almost 70% of the wards use a form for reporting, 42% of wards keep statistics on violent incidents and 17% of wards have access to these data. Of all wards 84% register injections against patients' will, 83% seclusion, and 78% mechanical restraint and a minority of wards register the coercive administration of oral medication, forced nutrition, threats of coercive measures in case of pharmacological non-compliance.

Discussion: Isolation, the coercive administration of medicine and restraint techniques are sensitive forms of treatment. Deficits reported by the charge nurses point to the need for enhanced facilities and improved forms of coercion management such as training in the use of mechanical restraints and the overwhelming of dangerous patients.

Conclusion: The data show considerable differences in the facilities, the use, and the recording of coercive measures in the area under scrutiny.

Key words: psychiatry; psychiatric hospital; coercion; violence; psychiatric nursing; Switzerland

Introduction

Coercion is a long standing problem which has been controversially debated since the beginning of modern psychiatry and many attempts have been made to solve this problem. Some early reports regarding the humanisation of the treatment of psychiatric patients can be traced back to the 18th century when Philippe Pinel (1745–1876) not only freed the patients from their chains but also restricted the use of strait-jackets [1]. In France these reforms were continued by Jean-Etienne-Dominique Esquirol (1772–1840), Pinel's most prominent follower and on the other side of the Channel the British psychiatrists John Conolly (1794–1866) and Robert Gardner Hill (1811–1878) initiated the no-restraint movement [1]. For the management of the patients Conolly only allowed transitory isolation in a padded room [1]. The no-restraint movement was also adopted in some Swiss hospitals e.g., by Heinrich Cramer (1831–1866) of Solothurn and by Ludwig Wille (1834–1924) of the Psychiatric Hospital in Rheinau [1].

In spite of such movements, coercive practices such as seclusion and restraint remain major interventions for controlling patient aggression [2, 3]. Patient attacks on healthcare personnel can have devastating effects such as workplace stress [4], post traumatic stress disorder [5, 6] or, to a lesser extent, physical injury [7]. In psychiatric settings such attacks happen to all types of care professionals. A recent study demonstrated that more than half of the physicians, psychologists and social workers in four German psychiatric hospitals have been subjected to serious injury induced by patient violence during their career [8]. But the group most affected is the nursing profession [9]

No financial support declared.

with almost 100% of nurses experiencing patient violence in the course of their career [10] compared with a rate of 61% for other therapists (physicians, psychologists, and social workers) [11]. Given the problematic nature of patient violence and the sequelae thereof, coercive measures can be seen as a possible solution and it has been demonstrated that restraint and seclusion are basically efficacious in preventing injury [12].

Coercive practices on the other hand are classical treatment forms which influence the image of psychiatry in the public eye [13]. Psychiatric institutions have been criticised for their inhumane use of such methods and coercive treatments have been depicted in the media as having been carried out arbitrarily [14] which indeed may have been the case in the past. Few empirical investigations have been done from the patients' vantage point of the actual experience of coercive measures. Such studies reveal that coercive practices can be experienced as being punitive rather than therapeutic [15] or as having been conducted in a "brutal" fashion [16]. With the recent shift toward patient centred care and consumerism [17] trust in traditional health-care practices has dwindled [3] and most patients and family members have come to view seclusion and restraint as a violation of the right to respectful care [3]. Thus, any attempt to reduce the number of coercive treatments will be welcomed not only by patients, their family members, and patient organisations but also by the professionals in the field of psychiatry itself.

The decentralised health-care system of the Swiss Confederation adheres to the principle of sovereignty of its 26 Cantons. Each Canton has its own constitution and determines independently how health-care functions and makes its own laws. Consequentially the Confederation has only limited powers pertaining to the health-care system at cantonal level. Given the federalist structure of the Swiss health-care system a great amount of variance within contemporary procedures dealing with the restraint and seclusion practices of violent patients in psychiatric hospitals would be expected. Independent of the Swiss situation other authors have noted that much variance in coercive techniques accrues owing to a lack of unifying rules [13] or that other – non-clinical – factors like cultural biases, staff role perceptions, and the attitude of the hospital administration influence coercive practices [12]. The frequency of restraint also seems to depend on factors such as staff-patient ratios, the training level of staff [17], shift times, gender of staff [18].

The aim of this cross sectional survey is to answer the following questions: Which coercive procedures are employed and which facilities exist on acute admission wards in psychiatric hospitals in German speaking Switzerland? How do the charge nurses of the wards evaluate these procedures and facilities?

Methods

In this cross-sectional survey a questionnaire containing questions on ward characteristics and items on coercive practices and facilities was despatched to the 86 acute psychiatric admission wards in the German speaking part of Switzerland in September 2001.

The participating wards were recruited from psychiatric hospitals lying within the German and Romansch speaking part of Switzerland. The psychiatric hospitals in the area under scrutiny cater for the inpatient treatment of approximately 75% (5 376 800 persons) of the Swiss population [19]. Not included in this survey are psychiatric hospitals in the French and Italian speaking Cantons and a small proportion of inhabitants living in the French speaking areas of predominantly German speaking Cantons (for example psychiatric hospitals in the French speaking part of Canton Berne).

Inclusion criteria: for the purpose of this survey we defined an acute psychiatric ward as follows: the majority of patients have an acute psychiatric disorder, they are admitted directly onto the ward, they stay less than three months on the ward, they are older than 18 and younger than 65 years, and the ward is not specialised in the treatment of special disorders (eg, depression, addiction). The proportion of involuntarily admitted patients was not taken into consideration.

The questionnaire consisted of questions on ward characteristics; number of beds, locked or open status, number (full-time equivalent) and educational status of nursing staff; seclusion facilities, facilities for mechanical restraint, management of violent incidents, reporting systems for violent incidents, and the registration of coercive measures.

The unit of observation was the single acute psychiatric admission ward. One questionnaire was collected per ward. The questionnaires were completed by the charge nurses (the nurses leading the wards and bearing the overall responsibility for nursing). We specifically instructed the charge nurses to report an unbiased picture. The charge nurses were also asked to judge whether the facilities and procedures for handling violence on their wards are sufficient or insufficient. In cases of discontentment, nurses were requested to comment on insufficiencies.

No data were gathered on actual frequencies of coercive measures applied or on patients involved. The data analysis was descriptive without any hypothesis testing.

Results

Eighty-two (94%) of the 87 wards invited to the survey responded representing 30 (94%) of the 32 institutions in the study area. The number of wards in the institutions varies from one to eight. Ten (12%) of the wards are open, 29 (53%) are partially open, and 43 (53%) are locked. The number of beds varies between 6 and 25 (median 17, mean 16.6 ± 3.7). The proportion of patients to nursing personnel (100% posts / beds) lies between 0.3 and 1.8 (median 0.7; mean 0.7 ± 0.2).

Seclusion practices

On just over one half of the wards (n = 43) there is a lockable area (e.g., an intensive care area). The majority of the wards (64 or 78%) have at least one seclusion room, 13% have no such room and seven wards failed to respond to the item. Approximately half of the wards have one seclusion room, 22 wards (27%) have two, with the highest reported number of seclusion rooms being six. Patients are secluded in normal single bedrooms on 33% of the wards (n = 27). 55% (n = 45) of the ward nurses rate the seclusion facilities as adequate and 45% (n = 37) as inadequate. Table 1 demonstrates that almost 90% of all wards have at least on facility for secluding aggressive patients. Eight wards have no facilities at all for secluding aggressive patients. Four of these wards are located within hospitals having provision for seclusion on other wards. It is reasonable to assume that aggression can be managed by referring violent patients to neighbouring wards. About half of the ward nurses expressed discontent at the inadequate number of seclusion rooms or on structural drawbacks of the building. Other points of discontent were the necessity to displace some patients onto other wards, and the use of mechanical restraints in group bedrooms.

Mechanical restraint

On three fifths of the wards (49 or 60%) straps to restrain aggressive patients are available but many respondents remarked that these facilities are employed only very rarely. On one ward bed bars are used in conjunction with straps made of textile. 59 (72%) assess the restraint facilities as sufficient, the other 18 (22%) as insufficient. Seven charge nurses expressed discontentment with unsuitable beds (e.g., beds on which straps could not be fastened), six mentioned the poor quality of straps (e.g., lack of stability or scope for adjustment for patients of varying body size), and five respondents reported a lack of experience and/or difficulties in handling mechanical restraints.

The management of violent incidents

When a violent or dangerous patient has to be overwhelmed a minimum of 2 to 20 persons are involved during the daytime (mean = 7.8 ± 3.1; median = 8), and a maximum of 3–20 (mean = 9.8 ± 3.9; median = 10). The respective numbers for such incidents occurring during the night are: Minimum 2–11 (mean 5.3 ± 2.7; median 5), and maximally 2–12 (mean = 6.1 ± 2.4; median = 6). On 29 wards (35%) non-nursing personnel are also involved in overwhelming violent or dangerous patients.

58 of the charge nurses (70.7%) rate the techniques for overwhelming patients as satisfactory and the other 22 (26%) as unsatisfactory. Reasons for dissatisfaction with the techniques are an insufficient number of available personnel especially at non-peak working hours and during the night (n = 10), the haphazard fashion of overwhelming which is dependent on the participating personnel, the lack of experience (n = 10), unfavourable environmental characteristics (e.g., restraint of a patient

Table 1

Facilities for seclusion with percentages of total number of wards (n = 82).

	open wards n (%)	partially open wards n (%)	closed wards n (%)	total n (%)
no seclusion facility	5 (6.1)	1 (1.2)	2 (2.4)	8 (9.8)
one or more seclusion facilities	4 (4.9)	26 (31.7)	37 (45.1)	37 (81.7)
missing	1 (1.2)	1 (2.4)	1 (4.9)	7 (8.5)
total	10 (12.2)	29 (35.4)	43 (52.4)	82 (100)

Table 2

Wards registering coercive measures (n = 82).

	any measure n (%)	coercive injections n (%)	seclusion n (%)	mechanical restraint n (%)
yes	59 (72.0)	69 (84.1)	68 (82.9)	63 (76.8)
no	19 (23.2)	12 (14.6)	14 (17.1)	18 (22.0)
missing	4 (4.9)	1 (1.2)	–	1 (1.2)
total	82 (100%)	82 (100%)	82 (100%)	82 (100%)

in a dormitory) (n = 2), the lack of resources to protect personnel (e.g., shields, facial masks), protracted length of time until arrival of the police, or an insufficient dosage of medication administered.

Reporting systems for violent incidents

Almost 70% of the wards (n = 57) use a form for reporting violent incidents. 7.5% (n = 5) employ the internationally used SOAS (Staff Observation Aggression Scale), 31.3% (n = 21) use a form devised by the Psychiatric University Hospital Zurich [20], Switzerland and 49.3% (n = 33) use other types of forms. These other types of forms consist of documents for registering extraordinary incidents (n = 10), for risk management or critical incident reporting (n = 7), injury forms (n = 5), integral parts of the nursing documentation system, or special reports to the nursing or medical directors. 11.9% (n = 8) of the wards document violent incidents without the use of a specific form.

35 wards (42.2%) keep statistics on violent incidents and on 14 wards (17.3%) the statistics can be accessed by ward personnel. On 15 wards (18.8%) violence induced absences of personnel are systematically recorded and in just over half of these wards the statistics can be accessed on the ward.

Forty-six charge nurses (56.1%) are content with the reporting systems on their wards. The most numerous remarks of discontent are related to deficiencies in the systematic nature of reporting and statistical documentation (n =16) and to the fact that there is no feedback to the wards regarding reported incidents. Other comments relate to unsuitable or over-numerous reporting forms.

The registration of coercive measures

The majority of wards record the use of coercive measures. 84.2% register injections against patients' will, 82.9% seclusion, and 77.8% mechanical restraint. In addition to these measures some wards record the coercive administration of oral medication (n = 9), forced nutrition (n = 7), threats of coercive measures in case of pharmacological non-compliance (4), the use of bed-bars, and video surveillance. 66 wards (82.5%) use forms for recording coercive treatment measures and 35 wards (42.7%) keep a statistical record of coercive treatments administered. Just 8 of these wards (22.9%) have ready access to this statistical information on the ward. Exactly half of the respondents rate the reporting of coercive measures as satisfactory. The main reasons for discontent with reporting are the lack of feedback to the wards (n = 16), unsuitable forms (2), lack of reporting on various matters (duration of coercive measures, analysis of the measures, attacks towards personnel), lack of reporting accuracy, or double reporting.

Discussion

Isolation, the coercive administration of medicine and restraint techniques are sensitive forms of treatment [18] requiring special consideration within contemporary psychiatric practices. This descriptive study attempts to capture a reliable picture of such practices in the German speaking part of Switzerland and is deemed with a response rate of 94% representative. The questionnaires were completed by charge nurses who are very familiar with contemporary practices. It can thus be assumed that the factual data in this survey are valid. The data expressing the opinions of the charge nurses is of course subjective and it is thus uncertain if these views correspond with those of other nurses or professions.

It has been argued that psychiatric institutions cannot be free of structural violence and that the reactions of staff to patient violence cannot be suppressed rendering violence an element of the psychiatric profession [21]. It has also been noted that "it is nearly impossible to operate a programme for severely symptomatic individuals without some form of seclusion or physical or mechanical restraint" [12]. Ryan and Poster, two prominent researchers on violent patients, report a greater assault risk to nursing personnel due to patients increased acuity [4] and other authors have remarked that societal aggression is of "increasing national concern" and that "health care settings reflect this trend" [22] with assaults by patients on staff increasing over the past years [23–25]. Probably part of this general increase in violence against humans can be attributed to regular viewing of violent content on television. A recent longitudinal study comprising of 17 years of follow-up demonstrated a five-fold increase (45% vs. 8.9%) in violent acts against other persons by young adults who regularly viewed television for >3 hours daily compared with young adults viewing television for <1 hour per day [26].

With this possible long-term increase in the rate of violent incidents, it is noteworthy that most charge nurses regard the facilities for secluding patients to be basically sufficient. One of the main problems nevertheless is the deficient structural quality of seclusion rooms suggesting a need for devising recommendations on how to fit out such a facility. Within the study area four wards have neither seclusion possibilities nor neighbouring wards with such facilities. Two of these units are situated within general hospitals and the other two are located in private clinics. It seems that these wards have either no prominent violence problem, or employ alternative practices for aggression management. Although 60% of the wards report using straps as restraint measures many note that

such usage is vary rare. This and the reported lack of personnel's experience with restraint measures may indicate that such practices are on the decline. The experience deficit with mechanical restraint points to the need for training in such practices as has been suggested elsewhere [12, 27].

The data on the management of violent or dangerous patients show that up to 20 persons can be involved in overwhelming an individual patient. Such numbers can be justified by the therapeutic rationale that such a display of power can in fact induce patient participation and thus avoid brachial brawls. On the other hand patients themselves have commented that being confronted by an overpowering number of staff is "brutal" [16]. For the charge nurses a shortage of personnel and the haphazard way of dealing with the situation are the main problems in the management of incidents of patient violence. Other authors have demonstrated that such actions can lead to harm or stress not only in patients but also in personnel [12, 18, 28]. These findings suggest the need for methodical and effective ways of management which render the incident less traumatic for patients and personnel alike.

Although 70% of all wards have systems for reporting violent incidents only a minority keeps statistics and even fewer (17.3%) actually have access to the statistics on the ward. This means that probably the most important process in quality management – feedback – is lacking and raises the question of the usefulness of reporting. Given this deficit and the overabundance of reporting forms in some institutions it is to be assumed that under reporting of violent incidents will occur as reported elsewhere [29–31].

Several limitations pertain to the present survey. First, the questionnaires were completed by charge nurses who are very familiar with contemporary procedures and facilities. It can thus be assumed that the factual data in this survey are valid. In contrast, the data expressing the judgements of the charge nurses is of course subjective and it is thus uncertain if these views correspond with those of other nurses or professions. Second, we did not request the gender of the respondents. Thus we have no means to estimate the possible extent of gender bias. Third, we only collected one questionnaire per ward which was completed by one person. Reporting bias cannot be ruled out. However, given the current "negative" public opinion on coercive measures, possible reporting bias is more likely to result in under reporting.

Bearing these limitations in mind, the present survey points to considerable differences in the facilities, in the use, and in the recording of coercive measures in the study area. Against this background it seems that the challenge of the present day is twofold: To strike a good balance between the optimal management of patient violence, which ensures safety for patients and staff alike, and concurrently reducing the frequency of coercive practices in order to maintain and protect the patients rights and dignity [3]. Thus the main conclusion in the light of these findings is that discussions are necessary at an inter-regional or national level in order to standardise some aspects of coercive practices. It is expected that such discussions aimed at establishing professional guidelines will reduce the variability and lead to a higher degree of reflection on such treatments. Because restraint and seclusion have deleterious physical and psychological effects on patients and staff [12] it is important to keep such practices to a minimum and to monitor the development of coercive measures by repeating a similar survey in the future.

Correspondence:
Ian Needham
Kantonale Psychiatrische Klinik Wil
CH-9500 Wil
Switzerland
E-Mail: needham@bluewin.ch

References

1 Haenel T. Zur Geschichte der Psychiatrie: Gedanken zur allgemeinen und Basler Psychiatriegeschichte. Basel: Birkhäuser; 1982.
2 Visalli HG, McNasser L, Johnstone, Lazzaro C. Reducing high-risk interventions for managing aggression in psychiatric settings. J Nurs Care Qual 1997;11:54–61.
3 JCAHO Reducing restraint use in the acute care environment. Oakbrook Terrace: Joint Commission on Accreditation of Healthcare Organizations; 1998.
4 Ryan JA, Poster EC. The assaulted nurse: short-term and long-term responses. Arch Psychiatr Nurs 1989;3:323–31.
5 Rippon TJ. Aggression and violence in health care professions. J Adv Nurs 2000;31:452–60.
6 Richter D, Berger K. Patientenübergriffe auf Mitarbeiter – Eine prospektive Untersuchung der Häufigkeit, Situation und Folgen. Nervenarzt 2001;72: 693–9.
7 Carmel H, Hunter M. Staff injuries from patient attack: five years' data. Staff injuries from patient attack: five years' data, 1993;21:485–93.
8 Steinert T, Beck M, Vogel W, Wohlfahrt A. Gewalttätige Patienten: Ein Problem für Therapeuten an psychiatrischen Kliniken? Nervenarzt 1995;66:207–11.
9 Geser AM. Aggressionen von hospitalisierten psychisch Kranken: Eine systematische Evaluation von knapp 2000 Aggressionsfällen. Medizinische Fakultät, Universität Zürich; 1999. p. 30.
10 Carmel H, Hunter M. Staff injuries from inpatient violence. Hosp-Community-Psychiatry 1989;40:41–6.
11 Wynn R, Bratlid T. Staff's experiences with patient's assaults in a Norwegian psychiatric hospital: A pilot study. Scand J Caring Sci 1998;12:89–93.
12 Fisher WA. Restraint and seclusion: A review of the literature. Am J Psychiatry 1994;151:1584–91.
13 Gebhardt RP, Steinert T. Innere Struktur der stationären psychiatrischen Krankenhausversorgung 22 Jahre nach der Psychiatrie-Enquete. Nervenarzt 1998;69:791–8.
14 Steinert T, Gebhardt RP. Erfolgen Zwangsmassnahmen willkürlich? Psychiatr Prax 2000;27:282–5.

15 Ray NK, Myers KJ, Rappaport ME. Patient perspectives on restraint and seclusion experiences: A survey of New York State psychiatric facilities. Psychiatr Rehabil J 1996;20:11–8.
16 Finzen AH, Haug J, Beck A, Lüthy D. Hilfe wider Willen: Zwangsmassnahmen im psychiatrischen Alltag. Bonn: Psychiatrie-Verlag; 1993.
17 Morrison P. A multidimensional scalogram analysis of the use of seclusion in acute psychiatric settings. J Adv Nurs 1990;15: 59–66.
18 Klimitz H, Uhlemann H, Fahndrich E. Fixieren wir zu häufig? Indikation, Häufigkeit und Randbedingungen von Fixierungen in einer allgemeinen psychiatrischen Abteilung: Eine prospektive Studie. Psychiatr Prax 1998;25:235–9.
19 BFS. Bevölkerungsstruktur 2001. (29.12.2001) www.statistik.admin.ch/stat_ch/ber01/dufr01.htm
20 Gerber A. Aggressionen psychiatrischer Patienten in der Klinik: Eine 2-Jahres-Studie an der Psychiatrischen Universitätsklinik Zürich in der Medizinischen Fakultät. Universität Zürich; 1995.
21 Cahn T. Gewalt – Element des psychiatrischen Berufes. Schweiz Arch Neurol Psychiatr 1995;146:109–14.
22 Blair T. New Assaultive behavior: know the risks. J Psychosoc Nurs Ment Health Serv 1991;29:25–30.
23 Haller R, Deluthy R. Assaults on staff by psychiatric in-patients: A critical review. Brit J Psychiatry 1988;152:174–9.
24 Noble P, Rodger S. Violence by psychiatric in-patients. Brit J Psychiatry 1989;155:384–90.
25 Hansen B. Workplace violence in the hospital psychiatric setting. An occupational health perspective. AAOHN-J 1996;4: 575–80.
26 Johnson JP, Smailes CE, Kasen S, Brook J. Television viewing and aggressive behavior during adolescence and adulthood. 2002. (5.4.2002) www.science.org
27 Forster PL, Cavness C, Phelps MA. Staff training and restraint in an acute psychiatric hospital. Arch Psychiatr Nurs 1999;13: 269–71.
28 Marangos-Frost S, Wells D. Psychiatric nurses' thoughts and feelings about restraint use: a decision dilemma. J Adv Nurs 2000;31:362–9.
29 Lion JR, Snyder W, Merrill GL.Underreporting of assaults on staff in a state hospital. Hosp Community Psychiatry 1981;32: 497–8.
30 Lanza ML. Nurses as patient assault victims: An update synthesis and recommendations. Arch Psychiatr Nurs 1992;6: 163–71.
31 Owen CC, Tarantello MJ, Tennant C. Violence and aggression in psychiatric units. Psychiatr Serv 1998;49:1452–7.

Swiss
Medical Weekly

Official journal of
the Swiss Society of Infectious disease
the Swiss Society of Internal Medicine
the Swiss Respiratory Society

The many reasons why you should choose SMW to publish your research

What Swiss Medical Weekly has to offer:

- SMW's impact factor has been steadily rising, to the current 1.537
- Open access to the publication via the Internet, therefore wide audience and impact
- Rapid listing in Medline
- LinkOut-button from PubMed with link to the full text website http://www.smw.ch (direct link from each SMW record in PubMed)

- No-nonsense submission – you submit a single copy of your manuscript by e-mail attachment
- Peer review based on a broad spectrum of international academic referees
- Assistance of our professional statistician for every article with statistical analyses

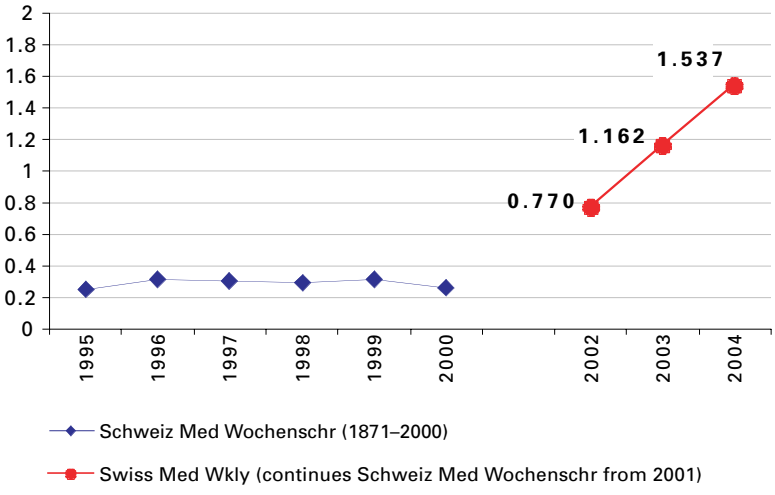
- Fast peer review, by e-mail exchange with the referees
- Prompt decisions based on weekly conferences of the Editorial Board
- Prompt notification on the status of your manuscript by e-mail
- Professional English copy editing
- No page charges and attractive colour offprints at no extra cost

We evaluate manuscripts of broad clinical interest from all specialities, including experimental medicine and clinical investigation.

We look forward to receiving your paper!

Guidelines for authors:
http://www.smw.ch/set_authors.html

Impact factor Swiss Medical Weekly



EMH FMH Schwabe
Editores Medicorum Helveticorum

All manuscripts should be sent in electronic form, to:

EMH Swiss Medical Publishers Ltd.
SMW Editorial Secretariat
Farnsburgerstrasse 8
CH-4132 Muttenz

Manuscripts: submission@smw.ch
Letters to the editor: letters@smw.ch
Editorial Board: red@smw.ch
Internet: http://www.smw.ch