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The European Journal of Medical Sciences

Editorial | Published 14 October 2010, doi:10.4414/smw.2010.13113 Cite this as: Swiss Med Wkly. 2010;140:w13113

Can complementary medicine be based on evidence?

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The use of complementary and alternative therapies has been widespread for many years. Although they are relatively widely accepted by the public and practitioners, there is ongoing debate on the safety and efficacy of complementary and alternative medicine (CAM) [1-4].

According to the World Health Organisation definition, complementary and alternative medicine (CAM) refers "to a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system" [5]. The National Center for Complementary and Alternative Medicine of the U.S. National Institute of Health cites acupuncture, Traditional Chinese Medicine, chiropractic medicine, diet therapy, herbalism, and homoeopathy as examples of CAM therapies [6].

As most governments are facing spending cuts, including spending cuts for health systems, reimbursement agencies are also grappling with funding cuts. Politicians in England and Germany have recently suggested withdrawing funding from homoeopathic treatments [7, 8].

In Switzerland, the debate surrounding reimbursement of CAM therapies as part of the basic health insurance ("Grundversicherung") has been going on for more than a decade [9]. Since 1999 CAM therapies have been part of the Grundversicherung. Following the "Programm Evaluation Komplementärmedizin" report of the Federal Office of Public Health ("Bundesamt für Gesundheit") the obligation to provide indemnification was withdrawn in 2005 [10]. However, the report was controversial [11] and in May 2009 a public vote decided that cantons are required to add complementary medicine to Grundversicherung. To allow reimbursement of CAM therapies their efficacy, usefulness, and cost-effectiveness ("Wirksamkeit, Zweckmässigkeit und Wirtschaftlichkeit") must be proven [12]. However, high-quality evidence of CAM therapy is often lacking [13].

This edition of Swiss Medical Weekly includes a systematic review on Bach flower remedies. Bach flower remedies are named after the British physician Dr Edward Bach, who developed the underlying principles 80 years ago. "Each of the 38 remedies discovered by Dr Bach is directed at a particular characteristic or emotional state" [14] and would, according to the underlying principles, restore the health of the user. A small quantity of fresh flowers are dissolved in a solution of water and brandy to produce remedies. The remedies are mostly taken orally and are aimed at cure by balancing the mental state of patients.

The paper entitled "Bach flower remedies: a systematic review of randomised clinical trials" [19] by Edzard Ernst, professor of complementary medicine at the universities of Exeter & Plymouth (United Kingdom), updates a previous systematic review published in 2002 [15]. An extensive search including five databases, contact with manufacturers, authors and experts in the field as well as handsearching of relevant journals was conducted to identify randomised controlled trials (RCTs) of Bach flower remedies "regardless of the disease or illness they related to and regardless of the outcome measures or the type of control intervention employed". Results of 7 RCTs show that there is "no convincing evidence to suggest that flower remedies are associated with clinical effects differing from those of placebo".

Although the topic of the review is well defined and systematic methods were employed, this systematic review has limitations. Despite the extensive search, studies could have been missed due to the publication bias known in this area [16]. The inclusion criteria for patients and outcomes are broad, but given the paucity of data in this area, this would appear appropriate. However, pooling of studies was not possible due to the heterogeneity of the trials included. It should be mentioned that all the steps in this systematic review were carried out by a single person, the author of the review. This contradicts recommendations that this step in a systematic review should be done independently by at least two different researchers [17].

Despite these limitations, the results are similar to recent systematic reviews. In 2009 Thaler et al. published a systematic review on Bach flower remedies for psychological problems and pain [18]. The group identified four randomised controlled trials that were also included in the systematic review by Ernst published in this edition of SMW [19]. Their analysis of the Bach flower remedies for examination anxiety and attention-deficit hyperactivity disorder indicates that there is "no evidence of benefit compared with a placebo intervention". The authors highlight the high risk of bias in the studies included and insufficient data on the safety profile.

Some may fear that a campaign is being run against CAM or that evidence-based medicine and CAM are opposed [20]. However, for all medical treatments, including CAM, high-quality evidence from RCTs and systematic reviews is needed for any meaningful or sound decision on reimbursement, or before therapies are implemented in practise. Better research is the best way to assess (and overcome) doubts about the efficacy and safety of CAM therapies. In addition, it would be utterly unethical to conduct low-quality research in an area under scrutiny.

Fortunately, evidence-based medicine and complementary medicine are not necessarily different sides of the same coin. The examples cited above and numerous other publications show that high-quality evidence can be produced in the field of complementary and alternative medicine. A Cochrane entity provides high-quality evidence on complementary medicine [20]. In addition, there are examples of implementing courses in CAM in curricula of school medicine and vice versa [21–23].

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