

1 November 2000

**Original version submitted**

# **Message to complementary and alternative medicine: evidence is a better friend than power. Editorial for BioMed central Complementary and Alternative Medicine**

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**Message to complementary and alternative medicine: evidence is a better friend than power**

**Editorial for BiomedCentral Complementary and Alternative Medicine**

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## **ABSTRACT**

Evidence-based medicine (EBM) is being embraced by an increasing number of practitioners and advocates of complementary and alternative medicine (CAM). A significant constituency within CAM, however, appears to have substantive doubts about EBM and some are expressly hostile. Many of the arguments raised against EBM within the CAM community are based on a caricature radically at odds with established, accepted and published principles of EBM practice. Contrary to what has sometimes been argued, EBM is not cookbook medicine that ignores individual needs. Neither does EBM mandate that only proven therapies should be used. Before EBM, decisions on health care were based on tradition, power and influence. Such modes tend to work to the disadvantage of marginal groups. By placing CAM on an equal footing with conventional medicine - what matters for both is evidence of effectiveness - EBM provides an opportunity for CAM to find an appropriate and just place in health care.

## **DISCUSSION**

EBM has been sometimes argued to constitute a threat to CAM, interfering with practitioners' daily work, creating problems with funding bodies, perhaps putting even the very survival of CAM in doubt[i]. Such an argument is difficult to square with current understandings of EBM and considerations of the alternatives to a strong role for evidence in making decisions about medicine.

### **An evidence-based approach to EBM.**

EBM as often presented in the CAM literature is a caricature unrecognizable from EBM as usually understood. CAM advocates seem to suggest that the only thing that matters in EBM is scientific evidence, that the only scientific evidence that counts is large randomized trials and that the results of these trials should be followed blindly with no place for clinical judgment and assessment of individual patient needs. Accordingly, a typical argument is that EBM constitutes a 'contrasting rhetoric' to the clinical art, intuition and the idiosyncratic nature of the consultation[i]. It is difficult to credit that anyone who has made an attempt to learn about EBM could believe such a claim. For example, the first paper found by the search "What is evidence based medicine?" on the world-wide web is an editorial by Sackett et al [ii]. The very first sentence states that EBM is "about integrating individual clinical expertise and the best external evidence." Later in the article, Sackett claims that "clinicians who fear top down cookbook [medicine] will find the advocates of evidence based medicine joining them at the barricades". Similarly, the claim that EBM pushes doctors to use only those treatments "research has proven [to] work" [i] bears no relation to anything found in the EBM literature. Quite the opposite, by incorporating decision analysis (see page 138 of Sackett et al's introductory book [iii]), EBM provides an explicit framework for incorporation of therapies where evidence is incomplete.

### **EBM and individualized care.**

CAM advocates have sometimes argued that EBM prevents a clinician from varying treatment to meet individual needs. Yet templates for EBM decision-making include issues such as whether the results of a study are applicable to an individual patient and considerations of patient preference. Moreover, there is no reason why individualization cannot be an inherent part of the evidence on which treatment decisions are made. For example, psychotherapy necessarily involves individualization of care. There have been randomized trials of psychotherapy demonstrating a treatment effect[iv]. These can be used for evidence-based care of patients experiencing or at risk for psychological distress.

### **EBM and conventional medicine**

It is hard to think of many figures in conventional medicine who are not associated with CAM and yet who are prepared to go on the record to defend it. Advocates of EBM are a notable exception. This is because what matters in EBM is evidence, not the more politically and historically contingent concepts of "complementary" or "conventional" medicine. For example, Brian Haynes, a long-time advocate of EBM, has criticized in print a paper which, partly on the basis of a "deep model of the physical world", claimed that "the loud signals of alternative medicine [are] false" [v]. Haynes argued that deep models (i.e. theory) are "for snobs, oppressors, and wishful thinkers" and recommended that CAM "embrace empiricism" [vi]. Similarly, Iain Chalmers, Director of the UK Cochrane Centre, has called for "a single standard" for evidence of the effects of health care that is applied "across orthodox and complementary medicine" [vii]. It is also of note that many EBM textbooks give equal prominence to CAM as to areas such as nursing, surgery and internal medicine [viii].

### **EBM: threat or opportunity for CAM?**

Let us be clear: no-one is proposing "1984". There are no EBM thought police snooping around waiting to burst through the clinic door and arrest clinicians caught using treatments not approved by an EBM "big brother". Clinical autonomy is not under threat from EBM. Similarly, no-one is threatening anybody's right

to practice. No laws are being proposed to ban those who use therapies not justified by current evidence. With respect to funding, it is hard to see the present as a golden age for CAM provision that will come to a close once EBM advocates get into positions of power.

Indeed, the freedoms and opportunities thought by CAM advocates to be under threat by EBM are far more vulnerable to pre-EBM modes of decision making. Decisions in medicine have often been made on the basis of tradition, power and influence. Such modes of decision making will inevitably work to the disadvantage of marginal groups. It was, after all, the American Medical Association (rather than a research institution) that was found guilty of a “conspiracy” against chiropractic by misuse of its power and influence. The reason why physiotherapy, but not acupuncture, is widely available on the UK National Health Service (NHS) is because the former was around when the NHS was established whereas the latter was not. And what of the argument that medicine’s disproportionate reliance of synthetic drugs is due to the financial influence of pharmaceutical companies? If CAM advocates believe that chiropractors should have the right to practice, that acupuncture should have a place in the NHS, and that CAM should replace the use of some pharmaceuticals, then EBM must surely be a welcome change.

## Conclusion

There are no good reasons to suggest that EBM is somehow incompatible with CAM, or that it works to CAM’s disadvantage. Were the CAM community to reject EBM, its future would be decided in the closed-off back rooms of power. I hope instead that CAM advocates chose the open light of evidence and embrace EBM.

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- i Adams J: **General practitioners, complementary therapies and evidence-based medicine: the defence of clinical autonomy.** *Complement Ther Med* 2000; **8**:248-52
  - ii Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS: **Evidence based medicine: what it is and what it isn't.** *BMJ* 1996; **312**:71-2
  - iii Sackett DL, Straus SE, Richardson WS, Rosenberg W, Haynes RB: **Evidence-based medicine.** *London: Churchill Livingstone* 2000
  - iv Fukui S, Kugaya A, Okamura H, Kamiya M, Koike M, Nakanishi T, Imoto S, Kanagawa K, Uchitomi Y: **A psychosocial group intervention for Japanese women with primary breast carcinoma.** *Cancer* 2000; **89**:1026-36
  - v Leibovici L: **Alternative (complementary) medicine: a cuckoo in the nest of empiricist reed warblers.** *BMJ* 1999; **319**:1629-32
  - vi Haynes RB: **Commentary: a warning to complementary medicine practitioners: get empirical or else.** *BMJ* 1999; **319**:1632
  - vii Chalmers I: **Evidence of the effects of health care.** *Complementary Therapies in Medicine* 1998; **11**:1-5
  - viii Vickers AJ. **Complementary Medicine.** In: CD-ROM accompanying Sackett DL, Straus SE, Richardson WS, Rosenberg W, Haynes RB: **Evidence-based medicine.** *London: Churchill Livingstone* 2000

30 March 2001

**Reviewers' reports**

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**Edzard Ernst**

This article is an opinion piece on how Evidence Based Medicine and Complementary/Alternative Medicine fit together.

I agree with every word Dr. Vickers writes. Yet I find that this manuscript would be perhaps more suited as an Editorial in a CAM journal than for BioMed Central. The decision is yours.

**Marja Verhoef**

**Comments**

The role of evidence in conventional and complementary and alternative medicine is very important and needs to be understood by all those delivering health care services. This editorial, however, tends to be one-sided and provides limited evidence to back up its claims.

1. The purpose of the paper is not very clear, but according to the title, would be to argue in favour of practice decisions based on evidence rather than on power. It is only in the last paragraphs that this issue is discussed and the author concludes, without providing a well-developed argument, that while previously decisions on health care were based on tradition, power and influence, now CAM has the opportunity to choose EBM. Encouraging an evidence based approach is important, however, it appears somewhat naïve to assume, that in current health care practice "no-one is threatening anybody's right to practice" and to suggest that decisions in medicine are not based on tradition, power and influence anymore.
2. Vickers claims that EBM in the CAM literature is often presented as a "caricature unrecognizable from EBM". Little evidence for this and other similar statements is

provided. The only reference to "typical arguments about EBM" refers to a qualitative study of 25 (conventional) GPs practicing acupuncture, homeopathy or hypnotherapy in Scotland.

3. The paper appears to suggest that misguided conceptions of EBM are typical to CAM. However, it should be recognized that several CAM approaches are based on evidence (e.g. acupuncture for nausea, herbal treatments such as St John's Wort, kava and saw palmetto, chiropractic for low back pain) and conversely, that many conventional treatments are not evidence based. In addition, the debate about the limitations of EBM in conventional medicine is very much alive (e.g., Tonelli, 1998). Thus, it appears that rather than polarizing CAM and conventional medicine, it would be more constructive to look at EBM as a shared issue and concern. Both can hugely benefit from it and both are struggling with its application and limitations. Elsewhere (e.g., Vickers A, Introduction to evidence-based complementary medicine, <http://www.library.utoronto.ca/medicine/ebm/syllabi/comp/intro.htm>) Vickers has provided a balanced view on the role of evidence in CAM and conventional medicine and on the progress made by CAM in establishing an evidence base. Issues regarding evidence, tradition, power an influence also apply, albeit differently, to both CAM and conventional medicine. If this is the main theme of the paper, it should have been worked out in more detail and clarity.

**Level of interest**

A paper whose findings are important to those with closely related research interests

**Advice on publication**

Accept after revision, which I do not need to see

**Quality of written English**

Mostly acceptable, but in places the writing style is not very clear. For example, the section 'EBM and conventional medicine' (which is mostly about CAM) contains sentences (e.g the first and third sentence) that are unclear and too many quotes full of jargon.

**Competing interests**

None declared

Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this paper? If so, please specify.

No

Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this paper? If so, please specify.

No

Do you have any other financial competing interests? If so, please specify.

No

Are there any non-financial competing interests you would like to declare in relation to this paper? If so, please specify.

No

