

Book review

TRICK OR TREATMENT? ALTERNATIVE MEDICINE ON TRIAL

SIMON SINGH AND
EDZARD ERNST

Bantam Press, 2008

HB, 352 pages, £16.99, 9780593061299

The main conclusions of Ernst and Singh's very thorough and clever book are that:

- there is no evidence to justify any claim for the specific effectiveness of any except a very few specific complementary and alternative medical (CAM) treatments in specific conditions, nor of CAM treatments overall;
- the perceived benefits are explained by other dynamics of the therapeutic process, particularly the placebo effect; and
- these benefits, even if substantial in terms of the patient's experience, should be disallowed because they are unethical and dishonest; they involve lying to patients about the nature of the treatment.

These conclusions are supported by clear discussion of the nature and virtues of evidence-based medicine and the scientific method that underpins it, and an overview of research evidence in CAM that demonstrates the absence of effectiveness. Many with research experience in this field will argue that this overview is partial and by no means definitive, but my interest in the book is more general.

The authors set great store by the pursuit of truth and knowledge, and the role of science in that enterprise. The book is explicitly dedicated to the pursuit of truth, and claims a balanced presentation of the facts in pursuit of the truth of the matter, in this case the validity of CAM as a contribution to health care. I applaud that aim. Truthfulness is an essential attribute of a therapeutic relationship and an essential attribute of the scholarship that informs clinical practice. But it is in this regard that I am critical of *'Trick or Treatment? Alternative Medicine on Trial'*. It is full of data about CAM, but it does little to advance our knowledge of medicine, particularly our

knowledge of its role in human healing. That is disappointing. And although I don't doubt the authors' desire for truth, I do doubt their hold on truth. They display great certainty in their pronouncements, but there is a difference between truth and certainty. Both are precarious, but those engaged in the pursuit of truth know it. Those possessed of certainty often don't. It takes wisdom and discernment to tell the difference, and on those counts I find this book lacking.

The book provides excellent counsel about the shortcomings of CAM (and there are many, if you take the whole nebulous field into consideration), and its susceptibility to popular and commercial exploitation. But a recurring lack of truthfulness is the lack of the perspective that would have been provided by relating these to comparable problems in conventional medicine. For example, risk is an ever-present concern in all medicine, and Ernst and Singh rightly highlight the risks of CAM. Unfortunately they do not present those risks in relation to the risks of conventional medicine; nor discuss the rarity of the CAM disasters they cite. Medical risk is direct (harm caused by the intervention), or indirect (harm resulting from neglect of some more necessary or appropriate intervention). In conventional medicine the predominant risk is direct — adverse, for example, drug reactions, anaesthetic or surgical errors. But indirect risk also occurs. A simple example is inappropriately prescribing an antibiotic for a self-limiting viral infection rather than explaining the condition and encouraging an expectant and self-sufficient attitude; compounded by the direct risk of an adverse reaction and the further indirect risk of developing antibiotic resistance. Iatrogenic harm from direct risk in conventional medicine is regrettably frequent, and can be fatal. In CAM it is very rare. Indirect risk in CAM is a more serious problem and comparable to indirect risk in conventional practice.

This is one example of a lack of truthfulness and balance in the book. If CAM lacks compelling evidence of specific efficacy, patients may legitimately prefer it to a treatment of proven efficacy that carries a greater degree of direct risk. More so if the training of the practitioner guards against

indirect risk; increasingly the case in the best established therapies.¹

This use of the word 'efficacy' points up another evasion. Throughout, the word 'effectiveness' is used in discussing the lack of positive evidence from formal trials of CAM. Formal trials usually test efficacy, the ability of an intervention to do what is intended in ideal test conditions. Effectiveness is what happens in an actual clinical context. 'Efficacy' tests narrowly defined specific effects. Effectiveness is more relevant to what happens in the real world and really more interesting. *Trick or Treatment? Alternative Medicine on Trial* is generally challenging efficacy, not effectiveness.

The book disappoints me in other ways that are in a sense a retreat from truth, or timidity in making an adventure in truth, a truly scientific exploration of reality. Firstly, its determined exposure of the negatives of CAM neglects the positives. Surely we cannot be so foolish as to assume that the modern western medical scientific model and paradigm are the whole truth, a complete and sufficient answer to the ills of mankind? In which case we need to enquire, and the proper scientific attitude requires us to enquire deeply into the phenomena that CAM describes — insights into the complete dynamics of illness and healing, comprehensively documented in the best CAM literature but wholly inadequately researched, that lie outside the frame of reference of the prevailing biomedical model, and that could really enrich knowledge and be a stepping-stone to truth.

Another disappointment is disregard of the implications of what CAM reveals of the power and importance of non-specific and placebo effects; acknowledged on one hand as a strength of the method, and on the other dismissed as a form of trickery. Treatments 'proved' to be 'nothing but placebos' are represented as a deceit practised on the patient by dishonest or lazy doctors. (What about the inappropriate prescribing of conventional drugs?)

Fortunately this attitude is redressed by the focus on the value of placebo in the edition of the *British Medical Journal* that coincided with

the publication of *Trick or Treatment? Alternative Medicine on Trial*.² But here the possibility of what might be learned from CAM about our ability to stimulate self-regulating and self-healing mechanisms whose pervasive role in medicine Ernst and Singh acknowledge, is tragically neglected. Dismissing the results of the Bristol Homeopathic Hospital clinical outcome study on the grounds of explanations other than the effect of homeopathic medicines (some of which are tendentious and don't reflect a diligent study of the research paper), they ignore the core fact that for whatever reason many patients with a long and continuing history of significant illness despite conventional treatment did remarkably well.³

The question is not 'do CAM treatments show efficacy in formal trials', but 'do they enhance patients' whole wellbeing and quality of life?' And if so how? And by what means can we make better use of whatever is the answer to 'how'? And what more can we learn about health, illness, and the human condition in the process? Surely this should be the agenda of an academic department of complementary medicine? Surely its original remit to investigate the scientific basis of CAM did not preclude this? Surely it was not merely to investigate whether CAM can be fitted into the same box as conventional medicine; made to fit the prevailing medical model?

To conclude, this book offers a salutary critique of the problems that beset the investigation and integration of CAM in relation to conventional medicine, but by a more genuinely truthful and truly scientific examination of its subject it could have enlarged our vision of health care. Unfortunately it only serves to perpetuate a kind of scientific tunnel vision.

Jeremy Swayne

REFERENCES

1. Healthwork UK. National Occupational Standards for Homeopathy. Bristol: Healthwork UK, 2000.
2. Godlee F. Reclaiming the placebo effect. *BMJ* 2008; **336**(3 May): doi:10.1136/bmj.39567.551181.47 <http://www.bmj.com/cgi/content/full/336/7651/0?rss=1> (accessed 5 Sep 2008).
3. Spence DS, Thompson EA, Barron SJ. Homeopathic treatment for chronic disease: a 6-year, university-hospital outpatient observational study. *Journal of Alternative and Complementary Medicine* 2005; **11**(5): 793–798.

DOI: 10.3399/bjgp08X342525

EDZARD ERNST — A RESPONSE

Trick or Treatment? Alternative Medicine on Trial is not a book against alternative medicine, it is a book in favour of good evidence and single standards in health care. Jeremy Swayne admits that 'truthfulness is an essential attribute' but criticizes our book for lack of 'wisdom and discernment', 'lack of ... balance', neglecting 'the positives' and disregarding 'the power and importance of non-specific and placebo effects'. He concludes by accusing us of 'scientific tunnel vision'. These are strong words which require a robust response.

Using our chapter on acupuncture as an example, we can effortlessly demonstrate that we bend over backwards to present the current evidence as balanced and truthfully as possible. We discuss the history and complexities of clinical trials and the best current scientific evidence in much detail. The truth is that, according to this evidence acupuncture might be effective for some types of pain and nausea. The truth is that even this evidence is not fully convincing (NICE recently recommended against using acupuncture for knee osteoarthritis, the flag-ship indication of acupuncturists!).¹ The truth is that it is not free of risks. The truth is that it is expensive compared to many other effective treatments.

The truth we present is based on the best available evidence, which means that sometimes we endorse therapies (for example, several herbal treatments) and sometimes we have to be very critical about them (for example, magnet therapy). But Swayne does not appreciate this type of truth. Why? Presumably because, when our truth is applied to his pet therapy, homeopathy, this form of treatment appears like a sick joke.

In his endeavor to promote his type of 'truth', Swayne wants us to discuss the failings and faults of conventional medicine. We do not deny that these exist. Maybe, one day, when we write a book about conventional medicine, we will discuss them in detail. But, writing about alternative medicine, we think it is fair to mention them only in passing.

And finally, Swayne points to the importance of the placebo effect. But so do

we, even in much detail. The difference is that we try to apply just one standard while Swayne uses two. The placebo-effect is clearly powerful, thankfully we both agree on that. Swayne believes this justifies the routine use of homeopathy and other ineffective treatments. We point out that you don't need to administer a placebo to generate a placebo response — effective treatments do that too and they convey specific effects as well. The logical conclusion therefore is that, by using pure placebos, we do our patients a grave disservice.

So who is suffering from 'tunnel vision'? We suggest the readers of this debate go to their library, take out our book *Trick or Treatment? Alternative Medicine on Trial* and make up their own mind.

Edzard Ernst

REFERENCE

1. National Institute for Health and Clinical Excellence. *Osteoarthritis NICE version — draft guidance for consultation*. NICE: London, 2007. <http://www.nice.org.uk/guidance/index.jsp?action=download&o=35844> (accessed 9 Sep 2008).

DOI: 10.3399/bjgp08X342534