

*Trick or Treatment? Alternative medicine on trial*

**Simon Singh and Edzard Ernst**

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*Review by Jane Galbraith*

Singh and Ernst introduce the histories and philosophies of four major areas of alternative medicine and review the evidence for their efficacy and in the Appendix they further provide a rapid guide to 36 alternative therapies from the Alexander Technique to Traditional Chinese Medicine.

Chapter 1 uses historic examples, such as bloodletting, scurvy, deaths in the Crimean War, smoking and lung cancer, to illustrate how evidence can be used to determine both contributory causes of disease and the effectiveness of proposed remedies. They emphasise the importance of controls (subjected to a different treatment regime) to determine whether any apparent benefit of a treatment is greater than a placebo effect. The Randomised Controlled Trial (RCT) is introduced as the *gold standard for putting therapies to the test*.

Further discussions of scientific method for evidence-based medicine are embedded in the following chapters: chapter 2, on Acupuncture, also introduces meta-analysis and systematic review as formalised by the Cochrane Collaboration; chapter 3, on Homeopathy, tells the story of Dr Snow and the Broad Street Pump and, by way of explaining the flaws in Benveniste's experiments, emphasises the importance of *blinding* in RCTs; chapters 4 and 5, on Chiropractic Therapy and Herbal Medicine, give the evidence that some treatments may work for some conditions but not for all that are claimed and warn of possible risks or side-effects.

The final chapter, *Does the Truth Matter?*, discusses the ethics of giving an alternative treatment, if it only works through a placebo effect, just to exploit that effect?

Numerous examples (scandals?) give the book entertainment value although sometimes the endeavour to round up and assess available evidence makes for heavy reading.

I strongly recommend this book for those interested in evidence-based medicine or in alternative medicine and end by quoting from a contribution to Jack of Kent's blog of 7th April 2010, <http://jackofkent.blogspot.com/>

*Professor Stephen Curry of Imperial College writes about the nature of*

*evidence and the Court of Appeal decision on British Chiropractic Association v Simon Singh.*

First, it is pleasing to see that their Lordships have a sophisticated understanding of the nature and variability of what constitutes evidence, even in science. I can only speculate that they have read either or both of Ernst and Singh's *Trick or Treatment* and Ben Goldacre's *Bad Science*, which give detailed expositions on the factors that determine the quality of scientific experiments, with particular reference to clinical trials. Not all experiments are equal. Controls—the deceptive application of a mock treatment—are vital. Blinding of the scientists and the participants to whether any given participant is receiving the mock or the test treatment provides the most unbiased way of determining treatment efficacy. But not all investigations adhere to these standards.

*Jane Galbraith*  
*Department of Statistical Science,*  
*University College London,*  
*jane@stats.ucl.ac.uk*