

A reply to Dr Alanen

What is this thing called evidence? Writings about evidence have their origin in the history of the philosophy of science, and as Dr Alanen points out, there is a large body of papers discussing its nature. Nevertheless, evidence for the effects of an intervention can be ordered into a sort of hierarchy (1), with the pinnacle reserved for the systematic review and meta-analysis, followed by randomized controlled trials. That observational studies, such as cohort studies, case-control studies and cross-sectional studies, are placed on a lower level in this hierarchy does not mean that a faultily performed randomized controlled trial is placed above a well-designed cohort study.

In the evaluation of evidence for treatment and prevention of disease there has been a movement towards evidence-based clinical sciences, such as Evidence-Based Medicine, or, why not, Evidence-Based Dentistry, defined as the 'conscientious, explicit and judicious use of current best evidence in making decisions about individual patients' (2). An instrument for finding 'current best evidence' is the systematic review (3), in this case, of clinical trials at the top of the hierarchy. The use of systematic reviews may be debated, even mocked, but there is consensus among a large group of clinicians about its benefit (4). Several large organizations base their recommendations on systematic reviews, among them the

Swedish Council on Technology Assessment in Health Care established in 1988.

However, also systematic reviews should be evaluated (5). As an Editor of this journal I welcome both systematic reviews and systematic reviews of systematic reviews!

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References

1. Guyatt GH, Sackett DL, Sinclair JC, Hayward R, Cook DJ, Cook RJ. Users' guides to the medical literature. IX. A method for grading health care recommendations. Evidence-Based Medicine Working Group. *J Am Med Assoc* 1995;274:1800–4.
2. Sackett DL, Rosenberg WMC, Gray JAM, Haynes RB, Richardson WS. Evidence based medicine: what it is and what it isn't. *Br Med J* 1996;312:71–2.
3. Needleman IG. A guide to systematic reviews. *J Clin Periodontol* 2002;29:6–9.
4. Straus SE, McAlister FA. Evidence-based medicine: a commentary on common criticisms. *Can Med Assoc J* 2000;163:837–41.
5. Greenhalgh T. How to read a paper: papers that summarise other papers (systematic reviews and meta-analyses). *Br Med J* 1997;315: 672–5.