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Editor

Welcome to Evidence-Based Dentistry

Evidence-based dentistry is 'the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients'.

Dentistry is currently undergoing dramatic shifts in health care technology —molecular diagnostics, infection control, regeneration, materials science, and management systems. We are re-evaluating the safety of our current restorative materials and the efficacy of our current treatments. There is an ever increasing amount of information and treatment options, and an enormous proliferation of journals. How can anyone keep track of it all, especially as it is going on simultaneously and there is no central repository for this information?

At the same time as all these professional trends take place, patient access to health care information is continually increasing and 'intrudes' on our approaches to care. Patients are no longer content simply to accept the treatments that they are offered or advised. Rather they will wish to ask whether the treatment works, whether it is necessary for them and whether there is an alternative. The internet is available to both clinicians and patients, and patients routinely use this as one of their primary health care information sources.[1,2] The 'evidence' is at their fingertips over the internet (http://www.nlm.nih.gov/). However, the internet has no refereeing of information or any quality controls. The pages consulted may have come from an internationally respected expert or from a crank. A dentist should be in a position to respond with good quality information that is backed by appropriate references. This should help dentists answer those awkward questions that patients ask. This in turn will improve the quality of informed consent.

For both the professional and the patient, the central question is therefore how can we get the right information and conversely avoid getting the wrong material (http://cebm.jr2.ox.ac.uk/docs/searching.html#senspec) We could wait for our practice experience and professional consensus reports to offer solutions. It is clearly better that we put the methods of evidence-based health care into practice now.

Evidence-Based Dentistry (EBD) should help provide this information as it is based on the methods of evidence-based healthcare.[3,4] It is defined as: 'The conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients'.[3] The methods of EBD are relatively straight forward, and relatively unbiased.[4] They are:

- Ask evidence-based questions (hypothesis formulation);
- Search for the current best evidence (e.g. Medline, Cochrane Databases, or Embase);
- Critically appraise the information (Is the information valid, and important?);
- Apply this information to your patient's problems or questions (e.g.: in the areas of diagnosis, prognosis, treatment, potential harm).

Accordingly, the supplement will search world-wide for good useful evidence on a whole range of issues relevant to primary dental care. The articles will be assessed by independent experts in their particular field using explicit criteria. They will critically assess the methods used, the results obtained and whether in their critical view the conclusions can be supported. Once the article has been validated as good evidence, a further expert will then be asked to write a short critical summary and commentary on the article. This commentary places the paper in its clinical perspective, pointing out how and where it is relevant to everyday practice and indeed whether practice should change in the

light of the paper. The abstract and the critical commentary will be published together. This will make it possible for you as a practitioner to get a useful overview on a particular subject. We would also encourage you to look at the source article, either from a medical postgraduate library, or where appropriate, from the Internet.

The *British Dental Journal* is an international journal and, similarly, this supplement seeks to be international. We have appointed as associate editors; Dr Richard Niederman from Harvard, Boston, as our North American Associate Editor and Dr Asbjorn Jokstad from Oslo University, Norway as our European Associate Editor. Mr Derek Richards, who is the Advisor in evidence-based dentistry to the *BDJ*, is also our UK Associate Editor and has written a number of articles in this first edition. We are working closely as a team together and both our International Associate Editors have written an editorial published in this edition. The wider team includes spotters who are scouring the world for useful article and assessors who comment on them.

You will see that this first issue of Evidence-Based Dentistry has articles covering many of the key areas in dentistry and we hope that they will interest you. We will need your help too. Let us know what issues you would like us to explore? Please tell us where you think there is a great lack of evidence? If you feel able to help with writing commentaries then look at our call for commentators on page 10.We have designed the layout in an easy to read way. We would value your feedback on other ways that we could improve it. Let us have your letters. We need your help if this supplement is to meet your needs.

I would like to thank all our spotters, commentators and editors for their hard work in producing this inaugural issue . I would also like to give my thanks to Dr Mike Grace, the Editor of the BDJ, Mrs Jayne Marks of Stockton Press, and to the Evidence-based Dentistry Centre and Board in Oxford.

1 Coiera E. The internet's challenge to health care provision. *BMJ* 1996; **312:** 3–4.
2 Freydberg B. Get with the net. *J Am Dent Assoc* 1997; **128:** 1654–1656.
3 Sackett D L, Rosenberg W M C, Gray J A M, Haynes R B, Richardson W S. Evidence based medicine: what it is and what it isn't. *BMJ* 1996; **312:** 71–72.
4 Sackett D L, Richardson W S, Rosen-berg W, Haynes R B. *Evidence-based medicine. How to practice & teach EBM*. New York: Churchill Livingstone, 1997.

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Is it philosophy of care or evidence-based dentistry?

How good we are is no indication of how good we could be. To systemically and successfully improve our care, clinicians need to consider embracing the methods of evidence-based health care.

In his book *Demanding medical excellence*, Michael Millenson (1997) relates the following story. 'A guest lecturer at an East Coast medical school tells of discovering that each of the four heart surgeons at the school used a different approach to presurgical care, the surgery itself, and postoperative treatment. When the lecturer, also a surgeon, asked why the faculty didn't compare notes, he was told that it was good for the medical students to be exposed to a variety of techniques and philosophies of care.' Millenson then comments rhetorically: 'One wonders whether it was equally good for the patients.'

Occurrences like this led the US National Academy of Science's Institute of Medicine to estimate that less than half of the health care provided in the US is evidence based.[1] But Dr Robert Califf, Director of the Duke University Clinical Research Institute, as reported in the October 12, 1998 issue of *TIME* magazine, estimates that less than 15% of US health care is evidence based