

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 Freyberg 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, Rosenberg 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

(http://cgi.pathfinder.com/time/magazine/1998/dom/981012/a_week_in_the_life_of_a14a.html).

Do these discontinuities occur in dentistry? William Ecenbarger, in a March 1997 report for the *Readers Digest*, visited 50 dentists in 28 states for dental treatment plans. He obtained a range of plans ranging from \$500 to \$30,000 (<http://www.readersdigest.com/rdmagazine/specfeat/archives/dentists7.htm>).

Clinical trials, while not so dramatic, indicate that the discontinuities found in medical care do occur in dental care.^{2,3} To estimate the relative levels of evidence for dental and medical specialties we searched MEDLINE using MeSH headings encompassing 'oral' or 'dental' from 1996–1998, displayed only those references that were published in English, pertained to humans, and that were meta-analyses. For comparison we carried out an identical search of MEDLINE for the following medical specialties: cardiovascular, gastrointestinal, infectious diseases, dermatology, musculoskeletal and connective tissue, dermatology, endocrine, and haematology (see table 1).

Table 1 Articles per year (Mean \pm SD)

| | Dental | Medical | P |
|----------------------|-------------------|-------------------|-------|
| No. of articles | 10,240 \pm 178 | 27,028 \pm 1746 | 0.003 |
| No. of meta-analysis | 8 \pm 4 | 37 \pm 50.01 | 0.01 |
| % of meta-analysis | 0.08% \pm 0.04% | 0.13% \pm 0.02% | 0.12 |

This data indicates that while the number of dental articles was significantly less than those in the medical specialty fields, the percentage of meta-analysis was not significantly different. This suggests that the evidence for dental care may be similar to or less than that found in other medical specialties.

As pointed out by Dr Donald Berwick, a pediatrician at Children's Hospital Medical Center in Boston, and President and CEO of the Institute for Health Care Improvement: 'How good we are is no indication of how good we could be'. To systematically and successfully improve our care, clinicians need to consider embracing the methods of evidence-based health care.

Several forums are now in place to

facilitate these evolutionary changes. The Office of Evidence-Based Dentistry at the Harvard School of Dental Medicine, supported in part by the National Institute of Dental Research, specifically implemented evidence-based dentistry courses into its predoctoral and postdoctoral dental curricula. Harvard is also commencing its first class for postdoctoral graduate training in evidence-based dentistry during the Spring of 1999. Similarly, the Centre for Evidence-based Dentistry at Oxford University, supported in part by the National Health Service, offers short-term intensive courses in evidence-based dentistry. Harvard and Oxford also will be collaborating in a workshop on Evidence-Based Dentistry on March 10, 1999 at the American Association of Dental Schools meeting in Vancouver (for information email: meetings@aads.juh.edu).

In addition to these educational opportunities, *Evidence-Based Dentistry* (EBD) brings oral health into the fold of a burgeoning field of specialty journals focused on evidence-based health care. EBD should allow oral health care workers to more quickly and reliably identify the best evidence for care, and assist oral health care researchers in identify interesting and important areas for health care research. It should also facilitate the transfer of knowledge (vs information) to our colleagues, our students, and our patients.

In short, to paraphrase James Miller, founder and CEO of Miller Business Systems: The road to success is always under construction, and evidence-based dentistry provides a road map through the construction zones.

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- 1 Field M J Lohe K N (ed). *Guidelines to clinical practice*. p. 34. Washington: National Academy of Science, Institute of Medicine, 1992.
- 2 Bader J D, Shugars D A. Variation in dentists' clinical decisions. *J Public Health Dent* 1995; **55**: 181–188.
- 3 Raphael K, Marbach J J. Evidence-based care of musculoskeletal facial pain: implications for the clinical science of dentistry. *JADA* 1997; **128**: 73–79.