editorial

Thinking for oneself

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Critical appraisal is a core skill for applying evidence-based dentistry. Understanding how, and being able, to appraise articles critically is the first step to liberating the practitioner from the expert and academic.

To my mind there are two essential skills that are needed to practise evidence-based health care: knowing where to look for information and being able to decide whether that information is of any use to you and your patients.

With the great mass of information that is available or delivered to us, knowing where to look is helpful. One of the roles we hope to fulfil in the coming issues of the journal is to help you identify where some of the sources of this information are. Of course one of our prime objectives is to bring you some of the best quality information that is out there in an easily digestible format. However, the single page format has its critics (see the letters page) and this is where the second core skill of critical appraisal comes in. In a single page format it is impossible (in most cases) to cover all the relevant points of interest. It is also impossible to know the exact clinical circumstances in which you may wish to use this knowledge. This is why an evidence-based approach is not cookbook dentistry. It needs to take into account the evidence, the patient and your own clinical experience. Critical appraisal is therefore an essential skill, and this is increasingly being recognised and introduced into professional examinations. The value of critical appraisal teaching has also been assessed in a recent systematic review,

which is considered in this issue of the journal (see page 94). The review did show beneficial effects on health care workers and patients.

Interestingly, the results of a pilot study¹ published in Tuith, the on-line journal of The Scottish Dental Practice-Based Research Network showed that only 17% of Vocational trainers* and 21% of trainees thought that it was appropriate for them to appraise the literature themselves. But, gratifyingly, 42% of trainers and 63% of trainees thought that they would be interested in following this route in the future.

Elsewhere in this issue we take a look at reviews of the quality of literature in two areas, decision analyses in dentistry and enamel erosion; one a sadly under-used area, the other an area of growing interest.

We also look towards the reporting of meta-analyses of observational studies (MOOSE)² following the publication of recommendations similar to those for systematic reviews (QUOROM)³ and randomised controlled trials (CONSORT)⁴. Incidentally, an updated version of the CONSORT statement together with information on MOOSE and QUOROM can be found on the website <http://www.consort-statement.org/>.

An article by Tim Newton⁵ provides an overview of qualitative research. This is an area that early evidence-based

practitioners tended to ignore. However, it is being increasingly recognised that what is required is good quality studies, both qualitative and quantitative research.

Furthermore, we should look to the most appropriate study design to answer the particular research question we are interested in answering⁶.

**Dental graduates in the UK now undergo a compulsory 1-year period of training in the practice situation (vocational training), where the trainee is supervised by a general practitioner (Vocational trainer)*

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3. Moher D, Cook JC, Eastwood S, Olkin I, Rennie D, Stroup DF. Improving the quality of reports of meta-analyses of randomised controlled trials: the QUOROM statement. Lancet 1999; 354:1896–1900.
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6. Sackett DL, Wennberg JE. Choosing the best research design for each question. BMJ 1997; 315:1636.