

De-QUORUM

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While updating a lecture on evidence-based dentistry recently I was pleased to see that the number of references on Medline for randomised controlled trials (RCTs) in dentistry is continuing to increase (Figure 1). The picture for references to systematic reviews on the other hand is relatively static at around 1000 per year (Figure 2).

While on first appearances this figure for the number of systematic reviews may seem respectable, many of these references relate to editorials and letters regarding systematic reviews rather than reviews

themselves. Furthermore when you look at the reviews there can be duplications; for example many of the high quality Cochrane reviews which are available in long form on the Cochrane Library are published in short form in other dental journals. Consequently duplication is one cause of inflation of the numbers of systematic reviews available. Another problem as highlighted by Glenny *et al*² and by a summary in the previous issue is the quality of the reviews.

For the reader, and for the editorial team who consider many reviews for

inclusion in the journal it is often difficult to decide on the real quality of the reviews because of the way in which they are reported. Glenny highlighted a number of areas; inadequate search strategies, screening and quality assessment of papers, the pooling of data and the interpretation of findings. From this journal's point of view an equally frustrating element is the number of reviews stating that electronic database searching was carried out, but providing limited or no information about the search strategy, or inclusion or exclusion criteria of studies. Without this information it is difficult to assess their quality so we reject them out of hand when often they may contain information of relevance to the practitioner.

They are rejected because we have no easy way of knowing whether search strategies, inclusion and exclusion criteria were appropriate. This may have been because they were not carried out, because the authors decided not to include them in the submitted paper or they have been removed prior to publication, either way it results in a diminution both in the quality and its usefulness.

Clear guidelines exist for both the conduct^{3,4} and reporting^{5,6} of systematic reviews, a point which we have made many times in this journal. While Glenny *et al*² noted a slight improvement in the quality of systematic review reporting, dental journals still have a long way to go before they meet the requirements of the QUOROM statement and we reproduce the QUOROM statement checklist here (Figure 3).

To finish on a positive note in this issue we publish summaries of the final two Cochrane systematic reviews on topical fluoride treatments. The series which has included reviews on gels, mouthrinses, toothpastes, varnishes and combination treatments represents a

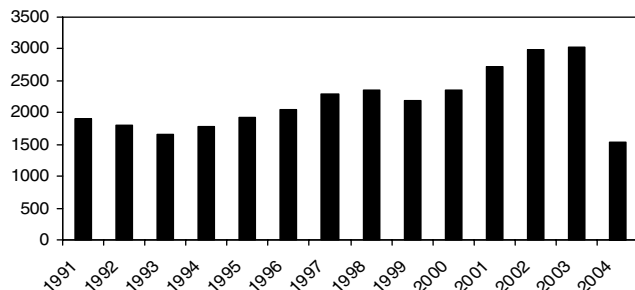


Figure 1. Number of references in dental journals on MEDLINE for randomised controlled trials 1991–2004 (Medline searches conducted in March 2004 using search strategies outlined later in this issue¹).

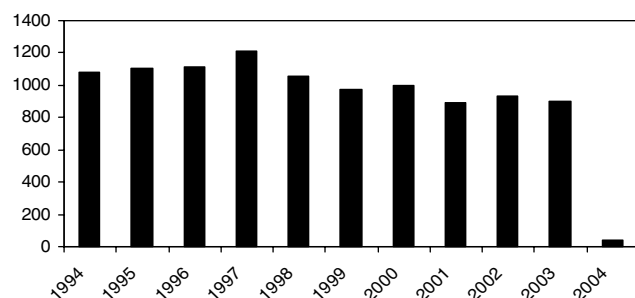
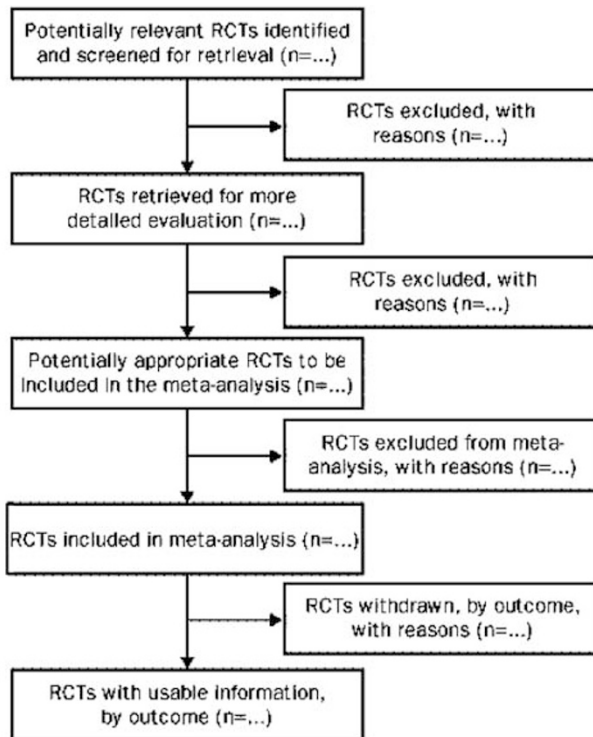


Figure 2. Number of references in dental journals on MEDLINE for systematic reviews 1991–2004 (Medline searches conducted in March 2004 using search strategies outlined later in this issue¹).



*The *Lancet* is happy for readers to make copies of the checklist and flow diagram. Permission need not be obtained from the journal for reproduction of these items.

Figure 3. The QUOROM statement checklist.

phenomenal achievement and a huge amount of work (as unlike many areas these topics have undergone significant investigation) most of which was carried out by the lead reviewer Valeria Marinho who deserves much praise as this work has greatly clarified the evidence-base around topical fluoride treatment.

1. Richards D, How we select articles for summary in the journal Evidence-based Dentistry 2004; 5:50-51.
2. Glenny A-M, Esposito M, Coulthard P, Worthington HV. The assessment of systematic reviews in dentistry. Eur J Oral Sci 2003; 111:85-92.
3. The Cochrane Reviewer's Handbook online www.cochrane.dk/cochrane/handbook/hbook.htm
4. Undertaking Systematic Reviews of Research on Effectiveness. York Centre for Reviews and Dissemination's Guidance for those Carrying Out or Commissioning Reviews. CRD Report Number 4, 2nd Edn., March 2001. <http://www.york.ac.uk/inst/crd/report4.htm>.
5. Moher D, Cook D, Eastwood S, Olkin I, Rennie D, Stroup D, for The Quorum Group. Improving the quality of reports of meta-analyses of randomised controlled trials: The QUOROM statement. Lancet 1999; 354:1896-1899.
6. Stroup D, Berlin J, Morton S, Olkin I, Williamson G, Rennie D, Moher D, Becker B, Sipe T, Thacker S, for the meta-analysis of observational studies in epidemiology (moose) group. Meta-analysis of observational studies in epidemiology. A proposal for reporting. JAMA 2000; 283:2008-2012.