

## A symbiosis of paper and electronic publishing, serving the interests of the *Journal's* readers<sup>†</sup>

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### IMPROVING THE QUALITY AND EFFICIENCY OF MEDICAL PUBLISHING

The public and the health professions expect medical journals to publish reliable information about the effects of healthcare, and to do so efficiently. A recent example of the ways in which many journals are taking seriously their responsibility to publish reliable information is the widespread adoption of the CONSORT recommendations for reporting controlled trials (Begg *et al*, 1996). One of these recommendations is that investigators should "state (the) general interpretation of the data in light of *the totality* [my emphasis] of the available evidence" (Begg *et al*, 1996). A recent analysis of reports of trials published in five leading general medical journals, however, has shown that in the vast majority the quality of the discussion sections was inadequate in this respect (Clarke & Chalmers, 1998). These deficiencies are very important because it is impossible to interpret with any confidence the results of a particular study unless they have been set in the context of a scientifically defensible, systematic review of other relevant research.

Whether such systematic reviews of evidence are published as components of reports of new trials or as 'stand alone' reports of 'secondary' research, they present an inevitable problem to editors of journals published on paper (Chalmers, 1991). This is because adequately detailed reports of systematic reviews tend to be lengthy. Print journals have a limited number of pages per issue to work with, so even if reports of systematic reviews are accepted for publication after satisfying external and internal referees, the appearance of these often lengthy reports in print may be very

delayed. Indeed, sometimes they will be quite seriously out of date when they appear. For example, Mari & Streiner's 1994 report of a systematic review of controlled trials of family intervention for schizophrenia appeared in print more than a year after it had been accepted for publication, by which time two important additional trials had been reported. In the words of one of the authors "Our report was importantly out of date when it was published and not worth the paper on which it was printed" (J. J. Mari, oral presentation, 2nd Cochrane Colloquium, Hamilton, Ontario, Canada, October 1994).

### A SYMBIOSIS OF PAPER AND ELECTRONIC PUBLISHING

Until recently, many delays such as this were inevitable, but the advent of electronic publishing has brought about a radically changed situation. Within a few months of its appearance in print, for example, the Mari & Streiner review was updated and published electronically in the *Cochrane Database of Systematic Reviews* (Mari & Streiner, 1995). Some journals have embraced the new possibilities that are emerging. Editors at the *British Medical Journal*, for example, have declared that the (free) electronic version of their journal is now its principal version (Delamothe & Smith, 1998). 'Shortage of space' can no longer be credibly invoked as a reason either for delay in publishing an accepted report or for publishing it in less detail than readers require to assess its validity.

It is highly unlikely that printed journals will ever become obsolete, if only because they are far more convenient for readers than electronic documents. Rather, their role will change to reflect the preferences of most of their readers for synoptic information. In particular, it seems likely that the archival role of journals will be met

increasingly through electronic publication. Linked printed and electronic publications, such as those that were pioneered within medical publishing by the *Lancet* and the *Online Journal of Current Clinical Trials* (Anonymous, 1992), seem likely to become increasingly frequent, particularly to deal with the need to set the results of new research systematically within the context of the totality of other relevant research.

Relevant arrangements already exist between several journals and the Cochrane Collaboration in respect of reports of 'stand alone' reviews. Reviews published electronically in the *Cochrane Database of Systematic Reviews* are usually very detailed, highly structured documents. Indeed, it may be partly because they are not subject to space constraints that they have been judged to be methodologically superior to systematic reviews published in print journals (Jadad *et al*, 1998). Readers of a less detailed report of the same review published in print can consult the electronic version to obtain further details. In principle, reference to relevant reviews published electronically might also be the most efficient way of implementing the CONSORT recommendation that reports of new controlled trials should "state (the) general interpretation of the data in light of the totality of the available evidence" (Begg *et al*, 1996).

### COCHRANE REVIEWS AND THE BRITISH JOURNAL OF PSYCHIATRY

As noted by the editor of the *British Medical Journal*, there are many circumstances in which duplicate publication of systematic reviews will help the dissemination of important material, and so, "along with other journals, the *BMJ* has agreed that it will publish versions of such systematic reviews despite their already being available in the *Cochrane Library*" (Smith, 1999). Clearly, steps must be taken to indicate in the printed and electronically published versions that the two publications are linked (and this is not yet being accomplished satisfactorily; Drummond Rennie, personal communication). And whichever version is published second, should take into account comments and criticisms generated by the version that was published first.

Some print journals continue to require that the print version of a Cochrane Review

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should be published before it is published in the *Cochrane Database of Systematic Reviews*. No moral issue arises here as long as this requirement does not delay the publication (on paper or electronically) of peer-reviewed evidence relevant to the well-being of patients and the public. In contrast to some other journals, the *British Journal of Psychiatry* welcomes submissions of versions of Cochrane Reviews after they have been published electronically in the *Cochrane Database of Systematic Reviews*. Prior electronic publication will mean that the reviews have been exposed to post-publication peer review (Bero & Rennie, 1995). This should mean that the versions of Cochrane Reviews printed in the *British Journal of Psychiatry* will be more likely to be valid accounts of the existing evidence, and will thus serve the interests of the *Journal's* readers more effectively.

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