Evidence based publishing

The BMJ's ongoing programme of editorial research is now at bmjresearch.com

Science is based on experimentation and data. Yet ironically the publishing of science has been largely based on faith, not study. The evidence based movement is transforming medicine, so why shouldn't the same thinking now transform publishing? At the BMJ Publishing Group we are taking a scientific approach to our own work, in pursuit of our vision of becoming an evidence based publisher. Evidence based publishing means studying the way we do things, objectively appraising our own practices in pursuit of better solutions, and following the same rigorous standards in our business that we demand from the science we publish.

The importance of evidence based publishing reaches beyond business practice. By getting a better understanding and trying to overcome the shortcomings of our own editorial work, we hope to present better science and thereby help to improve the work of doctors. To these ends the BMJ Publishing Group has established an evidence based research programme, BMJ Research. This programme enables us, whenever possible, to make policy decisions based on data, not faith. We aim to challenge traditional methods of publication and peer review and assess what evidence there is to support their use.

Peer review is vital to scientific publishing, at its best weeding out poor research, improving good research, and providing assurance to those who will use the science. But we also know that peer review is not a flawless system.¹ At BMJ Research we have an ongoing programme to examine our own peer review practices, with research questions such as how effective is peer review, and how can it be made better; does training for reviewers improve their performance; should peer review be blinded; should peer review reports be publicly accessible; and can editors rely on reviews written by author suggested reviewers.²⁻⁵ Our research has a definite practical bent, and for our reviewers we have developed training materials and hands-on workshops. As well as research on peer review, we have investigated editorial decision making,⁶ competing interests,^{7,8} readers' and authors' perceptions of electronic publishing,⁹ preferences for presenting scientific

articles,¹⁰ authors' perceptions of open access publishing,¹¹ how statistical expertise is used in medical research,¹² among other topics.

Details of all our research are on the newly launched BMJ Research website (www.bmjresearch.com). We hope this website will become a forum to stimulate further research and collaboration that is relevant to editors, authors, peer reviewers, and publishers working across the biomedical sciences. In the meantime, we are grateful to all those who have so far been involved in BMJ Research—reviewers, authors, readers, and co-researchers—for giving their time to our work, and helping us to do things better.

Leanne Tite *web administrator*

Sara Schroter *senior researcher*

(sschroter@bmj.com)

BMJ, London WC1H 9JR

Competing interests: LT and SS work for the BMJ Publishing Group. There is no financial interest in the success of the website.

- Godlee F, Jefferson T. *Peer review in health sciences*. 2nd ed. London: BMJ Books, 2003.
- Black N, van Rooyen S, Godlee F, Smith R, Evans S. What makes a good reviewer and a good review for a general medical journal? *JAMA* 1998;280:231-3.
- Van Rooyen S, Godlee F, Evans S, Smith R, Black N. Effect of blinding and unmasking on the quality of peer review: a randomized trial. *JAMA* 1998;280:234-7.
- Van Rooyen S, Godlee F, Evans S, Black N, Smith R. Effect of open peer review on quality of reviews and on reviewers' recommendations: randomised trial. *BMJ* 1999;318:23-7.
- Schroter S, Black N, Evans S, Smith R, Carpenter J, Godlee F. Effects of training on the quality of peer review: randomised controlled trial. *BMJ* 2004;328:673-5.
- Schroter S, Barratt H. Editorial decision-making based on abstracts. *European Science Editing* 2004;30:4-5.
- Schroter S, Morris J, Chaudhry S, Smith R, Barratt H. Does the type of competing interest statement affect reader perceptions of the credibility of research? A randomised trial. *BMJ* 2004;328:742-3.
- Haivas I, Waechter F, Schroter S, Smith R. Editors' declaration of their own conflicts of interest: a survey. *CMAJ* 2004;171:475-6.
- Schroter S, Barratt H, Smith J. Authors' perceptions of electronic publishing: two cross-sectional surveys. *BMJ* 2004;328:1350-3.
- Müllner M, Waechter F, Schroter S, Squire B. How should general medical journals present scientific papers? A survey of readers and authors. *CMAJ* (in press).
- Schroter S, Tite L, Smith R. Perceptions of open access publishing: interviews with journal authors. *BMJ* 2005;330:756-9.
- Altman DG, Goodman SN, Schroter S. How statistical expertise is utilized in medical research. *JAMA* 2002;287:2817-20.

BMJ 2006;333:366