



Journal watch:

Development of reporting guidelines, adequacy of treatment descriptions in manuscripts, and online articles and citation diversity

By Nancy Milligan

Reporting guidelines for medical research

High-quality reporting in medical publications is the primary means of sharing research findings with healthcare professionals and the wider research community. Reporting guidelines, such as the CONSORT Statement [1], have been developed to improve the quality and reliability of publications; however, no coordination or collaboration of reporting guidelines exists and therefore guideline development methods vary greatly. In response to this, the National Knowledge Service of the UK NHS provided funds to set up the EQUATOR Network (Enhancing the QUALity and Transparency Of health Research; <http://www.equator-network.org/>) to improve the quality of scientific publications by promoting transparent and accurate reporting [2]. The first project of the EQUATOR Network involved surveying authors of reporting guidelines in order to gather information on their development methodology, dissemination and implementation strategies, and any problems encountered during the process. A survey of 37 generic published reporting guideline developers found that development methods were generally similar (this included generating ideas, literature review, critical appraisal of the evidence, generation and discussion of guideline items, agreement on phrasing, writing and incorporation of comments until consensus among the group) but varied in important details; development usually took a substantial amount of time; only about half of the developers had strategies for dissemination, uptake, and impact of the guidelines, and a lack of sufficient funding was a major problem. 87% of respondents cited poor quality of reporting as the primary reason for the guideline development. An interesting point was that most of the surveyed guidelines (73%) were developed by multidisciplinary groups generally including statisticians, journal editors, clinicians, and epidemiologists. Some included medical writers, social scientists, information specialists, health economists, and representatives from pharmaceutical companies. In conclusion, the authors suggested that 'there is a need to harmonise methods used in the development of reporting guidelines and concentrate more on their active promotion, implementation, and evaluation' to ensure improved reporting of medical research.

Adequacy of treatment descriptions in manuscripts

For clinicians to use the treatments or interventions that are tested in trials, they need to be described in sufficient detail in the original manuscript. Glasziou et al [3] suggest that in manuscript writing guidelines such as the CONSORT

Statement little attention has been given to the adequacy of the description of the treatments used. Glasziou et al prospectively assessed 80 consecutive studies selected for abstraction between October 2005 and October 2006 in the journal *Evidence-Based Medicine* (a journal which the authors suggest provides research summaries that are highly relevant to clinical practice). Elements of the treatment or intervention were missing in 41 of the 80 studies; this was most frequently a description of the process, but also in several cases included missing handouts or booklets. The authors noted that the details provided were better in reports of individual trials than in systematic reviews, and for drug treatments than for non-drug treatments. When contacted, most of the manuscript authors (52 out of 59 authors) were willing to provide some missing information so that the completeness of the treatment description improved from 49% to 76%. Glasziou et al suggested that further guidance on how to effectively describe treatments would be helpful; they suggested a detailed checklist covering the 'who, what, when, and where' of the treatment, although this would need to be tailored to different types of interventions. They suggest that a full description of the treatment used would include: procedures used, timing of the treatment (e.g. duration, dosing or session intervals), materials needed (e.g. patient handouts, devices), and accessibility of materials or instructions, including overcoming language barriers. This may need to be supplemented with copies of materials or handouts and a graphical depiction of the flow and timing of sessions of treatment. They concluded by reiterating the importance of this issue to researchers, suggesting that 'providing some additional treatment details could improve the uptake of trial results in clinical practice'.

Effect of online availability of journal articles on citations

As more and more research articles are being published online, James Evans (a University of Chicago sociologist) asked in *Science* what effect this has on work cited in subsequent research [4]. In theory, online access should make more research more readily available and therefore lead to a broadening of the work cited. However, using a database of 34 million articles (from Thompson Scientific's *Science*, *Social Science*, and *Arts and Humanities* citation indexes) and their citations from 1945 to 2005, Evans suggested that as more journal issues came online, the articles referenced tended to be more recent, the number of distinct articles and journals cited was reduced (by 14%), and more of the

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citations were to fewer articles and journals. Evans suggested that although searching for articles online is fast, easy, and efficient, they may be used differently than print articles and researchers may be inadvertently narrowing the range of findings they may use in their subsequent research. In response to this, a short article in the same issue of *Science* by Jennifer Couzin suggested, using a number of lines of evidence, that the opposite may be true [5]. She mentions, for example, a US study by Carol Tenopir (an information scientist) and Donald King (a statistician) which suggested that scientists are in fact reading older articles and reading more broadly—at least one article a year from 23 different journals, compared with 13 journals in the late 1970s. Luis Amaral, a physicist in the US, argued that Evans' results might reflect shorter publishing times. He said "Say I wrote a paper in 2007" that didn't come out for a year. "This paper with a date of 2008 is citing papers from 2005, 2006". But if the journal publishes the paper the same year it was submitted, 2007, its citations will appear more recent. However, Evans did not think that this affected his results, suggesting that publication still remains sluggish in many research fields.

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2. Simera I, Altman DG, Moher D, Schulz KF, Hoey J. Guidelines for reporting health research: the EQUATOR network's survey of guideline authors. *PLoS Med* 2008;5(6):e139.
3. Glasziou P, Meats E, Heneghan C, Shepperd S. What is missing from descriptions of treatment in trials and reviews? *BMJ* 2008;336(7659):1472–4.
4. Evans JA. Electronic publication and the narrowing of science and scholarship. *Science* 2008;321(5887):395–9.
5. Couzin J. Sociology. Survey finds citations growing narrower as journals move online. *Science* 2008;321(5887):329.

Mid-career depression hits in the 30s

The older you are the happier you are at work. Vodafone commissioned a survey that found 7 out of 10 workers aged over 50 years felt fulfilled in their work but that only 5 out of 10 aged between 25 and 31 years felt fulfilled. Even more surprising, 95% of those over 65 years who were still working felt 'enabled' in their work whereas only 61% of those aged 31–35 years felt this way. Employees in their 30s felt undervalued (58%), unfulfilled (43%) and were also demotivated. Why? The report put the mid-thirties' lacklustre down to the pressures of starting a family but maybe disillusionment is nearer to the mark. The report also warned that those born since 1980 will face 'inevitable disillusionment' when they enter their 30s.

Source: <http://news.bbc.co.uk/2/hi/business/7511205.stm>

Be prepared for more jargon at the end of the holiday silly season!

An article in *BBC News Magazine*¹ warns readers to be prepared for the jargon that might await them when their boss returns from holiday. The warning is relevant to the theme of this issue of *TWS* because instead of relaxing on the beach with a good fiction book, managers are increasingly falling prey to pop sociology books that are specifically marketed at them. These books according to the article have a simple metaphor, usually expressed in a single word that appears in large-type on a grabby cover. The article lists four books and extracts buzz phrases and golly-ghosh anecdotes from each to help those of us who make better use of our precious reading time to nod along as the envelope gets pushed. The buzzword 'nudge' for example means a reminder that you might be about to do something you might regret. If your boss uses this word you will know he has been reading *Nudge: Improving Decisions about Health, Wealth & Happiness* by Richard H. Thaler & Cass R. Sunstein.

One of the anecdotes related from *Yes! 50 Secrets from the Science of Persuasion* by Noah Goldstein, Steve Martin & Robert Cialdini, a book that presents experiments from psychology journals as foolproof 'secrets', is about persuading people to complete surveys. It was found that adding a sign-off of 'Thank-you' and the sender's initials to a hand-written Post-It note on a survey increased the response rate: personalising a request makes it more persuasive. Another tip in the book is that asking people to give their name makes it more likely they will be civil to you—an argument already long known in biomedical journal publishing to advocates of open peer review (where the reviewer's name is revealed to the author).

Old wisdom is also pepped up in *Flip: How to Succeed by Turning Everything you Know on its Head* by Peter Sheahan. The book advises that you 'go outside your company when looking for innovation', supporting the saying with an anecdote of one John Harrison who, having created a longitude clock that located a ship's position at sea, had to fight to receive the £20,000 prize money the king had offered to anyone who invented such a device.

To find out what 'econs', 'homers', 'thin slicing', 'the locked door' and 'capitinitis' mean, you will have to read the article. But maybe you would prefer to join Lucy Kellaway's campaign against office jargon (http://news.bbc.co.uk/2/hi/uk_news/magazine/7453584.stm).

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1. Available at: http://news.bbc.co.uk/2/hi/uk_news/magazine/7450649.stm