

EDITOR'S PAGE

Guidelines for the reporting of clinical research

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Readers will be aware that 28 rehabilitation journals recently made a collective decision to mandate the use of internationally accepted guidelines and checklists for the reporting of clinical research in their journals.¹ Large medical journals and some other smaller journals made this decision 10 or more years ago. The guidelines are all freely available through the Network for Enhancing the Quality and Transparency of Health Research (EQUATOR)^{2,3} and include the following:

- The CONSORT guidelines for randomised controlled trials
- The STROBE guidelines for observational studies
- The PRISMA guidelines for Systematic Reviews and Meta-analyses
- The STARD guidelines for diagnostic studies

This initiative is to be applauded because it will help lift the standards of clinical research in the area of rehabilitation. Importantly, it will reduce bias, increase transparency and improve the reporting of results.³

Bias is a serious threat to the validity of clinical research. It tends to inflate the size of treatment effects in clinical trials and systematic reviews; increase the accuracy of tests in diagnostic studies; and exaggerate nebulous findings in observational studies.^{3–5} Bias is insidious and comes from many different sources, including the researchers themselves. Researchers tend to selectively see and report parts of their work that support what they believe to be true. This is usually done subconsciously and stems from researchers' passions, loyalties for their professions and hopes for their patients. This and other forms of bias can be more readily detected if researchers are upfront and transparent about what they did. Readers can then make judgements about the likely influence of bias on results. The guidelines have a strong focus on transparency. For example, one item of the CONSORT guidelines for the reporting of clinical trials requires authors to clarify whether a primary outcome was pre-specified.⁶ This is important because without an articulated pre-specified primary outcome researchers can selectively highlight positive outcomes without providing a balanced and impartial interpretation of the results.⁷ This problem is confounded if researchers report some but not all outcomes and if outcomes are split across many publications.

The guidelines for the reporting of clinical research are not solely about bias. Some items focus on the reporting and interpretation of results. For example, one item of the CONSORT guidelines requires researchers to present the size (and associated uncertainty) of treatment effects rather than just *P* values. The CONSORT guidelines also contain items dealing with the interpretation of results. One item is specifically directed at ensuring that the discussion section of papers provide a balanced interpretation of the results and is not 'filled with rhetoric supporting the authors' findings' (page 20).⁶ Rhetoric does not help progress evidence-based care.

This edition of *Spinal Cord* includes a paper⁸ from my colleagues and I that looks at the recent push from rehabilitation journals to ensure that their publications adhere to the internationally accepted guidelines and checklists for the reporting of clinical research. We specifically looked at the CONSORT guidelines and how well clinical trials investigating the effectiveness of physiotherapeutic interventions for people with spinal cord injuries adhere to them. The results indicate a need for improvement. For example, only 11 of 54 trials were registered and the other trials did not provide an explanation as to why there were not registered (item 23), and there was poor reporting of effect sizes and their precision, with still a strong sole reliance on *P* values (item 17a). We argue in our paper that the self-imposed deadline of January 2015 by rehabilitation journals to ensure adherence to CONSORT and other reporting guidelines is a very positive but ambitious initiative that will increase transparency and lift the standards of rehabilitation research. This can only ultimately improve the care of people with spinal cord injuries.

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2 EQUATOR Network. Available at: <http://www.equator-network.org/> (accessed 27 April 2014)

3 Moher D, Simera I, Schulz KF, Hoey J, Altman DG. Helping editors, peer reviewers and authors improve the clarity, completeness and transparency of reporting health research. *BMC Med* 2008; **6**: 13.

4 Moher D, Pham B, Jones A, Cook DJ, Jadad AR, Hoer M *et al*. Does quality of reports of randomised trials affect estimates of intervention efficacy reported in meta-analyses? *Lancet* 1998; **352**: 609–613.

5 Pildal J, Hrobjartsson A, Jorgensen K, Hilden J, Altman D, Gotzsche P. Impact of allocation concealment on conclusions drawn from meta-analyses of randomized trials. *Int J Epidemiol* 2007; **36**: 847–857.

6 Moher D, Hopewell S, Schulz KF, Montori V, Gøtzsche PC, Devereaux PJ *et al*. CONSORT 2010 explanation and elaboration: updated guidelines for reporting parallel group randomised trials. *BMJ* 2010; **340**: c869.

7 Kyriakidi M, Ioannidis JPA. Design and quality considerations for randomized controlled trials in systemic sclerosis. *Arthritis Care Res* 2002; **47**: 73–81.

8 Harvey LA, Gliinsky JV, Bowden JL, Arora M. How well do randomised controlled trials of physical interventions for people with spinal cord injuries adhere to the CONSORT guidelines? An analysis of trials published over a 10-year period. *Spinal Cord* 2014; **52**: 795–802.