Reviewer’s report

Title: A guide to doing a peer review of randomised controlled trials

Version: 1 Date: 6 June 2015

Reviewer: Harriet MacMillan

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General comments to authors
The authors have provided a practical guide to peer review written at a level that has the potential to be useful for new investigators. The issues raised below can all be addressed, but some major rewriting and reorganisation will be necessary.

Since several of the sections are general in nature, and not specific to peer review of randomised controlled trials (RCTs), it is recommended that this manuscript undergo restructuring to reflect this; specific recommendations are outlined below. The relevant reporting standards have been discussed, but it would be useful to elaborate on some of these standards with examples. Restructuring of the manuscript should improve clarity of the key messages and ensure it is more specific to the topic of RCTs.

Major Compulsory Revisions
1. The manuscript needs to summarise the aspects of peer review and “main steps” that are common to any research article and then have a section on those that are specific to review of a RCT. Steps such as “Acquainting yourself with the manuscript”, “Essentials – checking for fatal flaws” and the entire “Final thoughts” section are all relevant to peer review, but not specific to review of RCTs. If this appears as a stand-alone manuscript that needs to address general comments for peer review, the Introduction should reflect this, followed by a section that discusses general recommendations for peer review and then a section that includes specific recommendations for review of RCTs.

2. The Introduction emphasizes the importance of peer review, but this section needs to be balanced, so should at least acknowledge some of the problems with peer review. The authors discuss the limitations in peer reviewers’ ability to detect flaws in point #3; this information should be moved up to the earlier section that provides a general discussion of peer review.

3. The two examples of fatal flaws in section #2 may be cases of inadequate reporting rather than actual fatal flaws. Information about ethics approval, participant consent or trial registration may have inadvertently been omitted. I recommend revising this section to indicate that if the reviewer finds a potentially fatal flaw that involves missing information, the first step is to communicate this to the editor, who can then decide whether this information should be requested. Although the authors discuss missing information in the last sentence of section #3, this point should be introduced as a general principle; it applies to both major
and minor flaws.

Minor Essential Revisions

1. It is helpful that the authors have referred to the disappointment that can accompany rejection, but I recommend revising this to avoid comments such as “heavy toll on the ego” (second paragraph of the Introduction). The authors can refer to the demoralizing effect of rejection, but also state that it is common - all authors face rejection at some point and helpful reviews, even in the context of rejection, can lead to a better manuscript.

2. As discussed by the authors, it is essential for reviewers to be constructive and respectful in their comments, however I would not recommend that criticisms be delivered “positively” (second paragraph of Introduction). The emphasis needs to be on communicating in a clear and straightforward manner while ensuring there are no derogatory, inflammatory or demeaning comments. Criticisms that are delivered in a “positive” way, for example, regarding a fatal flaw, can confuse authors.

3. There are several places where the writing could be improved. The following are examples: 1) in the first paragraph, sentence two: “Editors rely on the expertise of their reviewers to provide the expertise of a specific area to be able to undertake this process.” could be reworded as “Editors rely on the expertise of reviewers for specific content and methodologic expertise to undertake this process”; 2) three of four sentences in section #1 end in “it”, which is repetitive; and 3) in section #4, “Examples of minor flaws include: clumsy writing; some of the argument that you think could be clearer…” could be reworded as “….clumsy writing; lack of clarity;…..”

Minor Issues Not for Publication

1. In the last sentence of the second paragraph of #2 after “data-trawling,” “find” should be changed to “finds” or “found.”

2. In section #1, in sentence 3, “allow” should be “allows”.

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.