PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (see an example) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Assessment of the quality of reporting for treatment components in Cochrane reviews of acupuncture
AUTHORS	Kim, Kun Hyung; Kang, Jung Won; Lee, Myeong Soo; Lee, Jae Dong

VERSION 1 - REVIEW

REVIEWER	Panos Barlas School of Health and Rehabilitation MacKay Building Keele University Staffordshire England
REVIEW RETURNED	I receive income from teaching acupuncture skills to health professionals 15-Oct-2013

GENERAL COMMENTS	I found this paper informative, well written and thorough in its exploration of STRICTA reporting in Cochrane reviews. It has identified its shortcomings, however, it is my opinion that the paper could include a discussion on the potenital impact of studies that have employed protocols which don't comply with STRICTA recommendations to the overall conclusion of Cochrane reviews. From the findings of this paper, it is plausible that studies using sub- optimal acupuncture treatment regimes (which may have had little or no effect on the condition treated) but with an otherwise high methodological score, could have been included in published Cochrane reviews, giving a skewed opinion on the effects of acupuncture. This would be equivalent to assessing a sub-optimal
	dose of a pharmaceutical and concluding that it fails to treat a condition.

REVIEWER	Ying Cheong University of Southampton United Kingdom
	Author of a paper reference One of the editors of the Cochrane Subfertility, menstrual disorder and subfertility group
REVIEW RETURNED	30-Oct-2013

GENERAL COMMENTS	The authors set out to investigate the reporting quality of Cochrane reviews of acupuncture. There are several issues with this study that
	will need rectifying.

1) Page 6, search strategy - the authors only included trials within reviews that was published since 2005. Reviewers of Cochrane did not perform their review with this privilege. They should have excluded reviews that have included older studies altogether to provide a more objective comparison.
 Introduction of guidelines can take up to 10 years to be taken up. This review is a little premature.
3) The review is about Cochrane reviews adherence to reporting on specific acupuncture process details (albeit suggested by STRICTA guidelines). But this manuscript did not even comment on how this will influence outcomes? Reporting on a multitude of process details without considering the impact of these on the clinical outcome measures is meaningless.
4) 'Actually performed acupuncture intervention' - this presumably in an RCT context is the treatment protocol as it should be 'intention to treat'?
5) 'less than half the reviewers (44%) reported that they were aware of STRICTA. The Cochrane group functions on an 'alturistic, no conflict of interest' manner. Many reviewers therefore come and go. Reviewers performing reviews between 2005 and now may have left. A representation of active cochrane reviewers in the area of acupuncture should at least be reported.
6) The discussion is too lengthy and needs to be cut down.
7) I disagree that not including all the details of the acupuncture process, even if recommended by STRICTA, constitute selective reporting and lack of validity. I urge the authors to review the use of these words.

VERSION 1 – AUTHOR RESPONSE

To the reviewer 1 (Panos Barlas)

Comment 1: "... it is my opinion that the paper could include a discussion on the potential impact of studies that have employed protocols which don't comply with STRICTA recommendations to the overall conclusion of Cochrane reviews. From the findings of this paper, it is plausible that studies using sub-optimal acupuncture treatment regimes (which may have had little or no effect on the condition treated) but with an otherwise high methodological score, could have been included in published Cochrane reviews, giving a skewed opinion on the effects of acupuncture. This would be equivalent to assessing a sub-optimal dose of a pharmaceutical and concluding that it fails to treat a condition."

Response 1: Thank you for your comment. We agree that the suboptimal acupuncture treatment protocol reported in the study may not reflect the effects of acupuncture protocol in real clinical practice. Nevertheless, this review has focused on reporting quality and the selective omission of core treatment-related information during data abstraction in Cochrane reviews. Future research regarding whether the completeness (or incompleteness) of reporting the core treatment process of acupuncture in component RCTs affects the direction and significance of the effect estimates of Cochrane reviews may provide good empirical evidence for the potential influences of the reporting quality of the treatment process on the results of Cochrane reviews. Although this is partially addressed in the "Implications of future research", we slightly revised the sentence as follows (revised

parts are underlined). "... Whether and how reporting items of ... and their potential impacts on the direction and significance of the effect estimates of Cochrane reviews should also be explored."

To the reviewer 2 (Ying Cheong)

Comment 1: "Page 6, search strategy - the authors only included trials within reviews that was published since 2005. Reviewers of Cochrane did not perform their review with this privilege. They should have excluded reviews that have included older studies altogether to provide a more objective comparison."

Response 1: Thank you for your comment. With respect, we gently disagree with your comment. Cochrane reviews are expected to be updated in a timely manner so to include both old and new eligible trials and the revised review results whenever possible, although published RCTs cannot do so. We believe that authors of Cochrane reviews with older and newly included studies can still consider the revised reporting of treatment-related information based on the STRICTA recommendation when they update the review. In this sense, we believe that there is no reason to exclude Cochrane reviews that have included both trials published before 2005 and after 2005 in order to achieve our study purpose.

Comment 2: Introduction of guidelines can take up to 10 years to be taken up. This review is a little premature.

Response 2: Thank you for your comment. We agree with and accept your criticism. One paragraph was added to the "Strengths and weaknesses" section (the fourth paragraph in the same section of the revised manuscript) as follows:

"Uptake of reporting guidelines by individual researchers and journal editors may take longer than expected. A survey of author instructions conducted in 2007 revealed that only 38% of 165 high-impact journals endorsed the CONSORT statement, which was initially published in 1996.22 The median values of the publication years of the primary component studies and Cochrane reviews used in this study were 2007 and 2010, respectively. The first STRICTA statement was published in 2001, and insufficient time may have elapsed to justify our research. This should be recognized as a weakness of our study, and future follow-up studies may overcome this issue."

Comment 3: The review is about Cochrane reviews adherence to reporting on specific acupuncture process details (albeit suggested by STRICTA guidelines). But this manuscript did not even comment on how this will influence outcomes? Reporting on a multitude of process details without considering the impact of these on the clinical outcome measures is meaningless.

Response 3: Reporting quality on clinical outcomes is an important issue and hope to perform the suggested research in the near future. Nevertheless, we believe our study is not meaningless, because it suggests empirical evidence of incomplete reporting of the core treatment components of non-pharmacological interventions in Cochrane reviews and respective RCTs, which may affect the replicability of study results in clinical practice and research. Previous publications with similar research questions without the investigation of the potential impacts of incomplete intervention reporting on clinical outcomes, by Paul Glasziou and Tammy Hoffman exist in the BMJ journal. For your convenience, please let us provide the URLs of those two articles as follows: http://www.ncbi.nlm.nih.gov/pubmed/18583680

http://www.ncbi.nlm.nih.gov/pubmed/24021722

Comment 4: 'Actually performed acupuncture intervention' - this presumably in an RCT context is the treatment protocol as it should be 'intention to treat'?

Response 4: Thank you for your comment. According to the STRICTA elaboration document, study authors are instructed to report the acupuncture process and intervention details as actually performed, rather than only reporting the planned acupuncture regimen irrespective of its actual implementation. In some situations, the planned acupuncture process may not be the same as those

actually performed, and this discrepancy may allow readers to consider possible barriers to the fidelity and replicability of study interventions in their own context. "Intention to treat" is a term of indicating the analysis of effect estimates based on results from initially allocated groups, regardless of the treatments actually received in each group. Thus, it does not match our purpose of describing "actually performed acupuncture interventions." We hope our response appropriately addresses your point.

Comment 5: 'less than half the reviewers (44%) reported that they were aware of STRICTA. The Cochrane group functions on an 'alturistic, no conflict of interest' manner. Many reviewers therefore come and go. Reviewers performing reviews between 2005 and now may have left. A representation of active Cochrane reviewers in the area of acupuncture should at least be reported. Response 5: Thank you for your comment. We are clearly aware that Cochrane reviewers conduct their research in an altruistic manner, with no conflicts of interest. In some cases, even active Cochrane reviewers cannot update the published reviews within the timeframe recommended by CRGs. It is difficult to distinguish the reviewers who remain active but are unable to update the review in due time from those who have completely left the role of responsible reviewers via an e-mail survey. Instead, we provided the number and proportion of review authors who responded or did not respond to the e-mail query in Table 2. We believe that with this information, your quotation "less than half the reviewers (44%) reported that they were aware of STRICTA" in the results section is unlikely to mislead readers into underestimating the proportion of Cochrane review authors who were aware of STRICTA.

Comment 6: The discussion is too lengthy and needs to be cut down.

Response 6: Thank you for your comment. Although we agree that the discussion is a bit lengthy and has more paragraphs than recommended, each paragraph addresses a different aspect of the interpretation of the study findings. We expect that most readers of this manuscript will be research methodologists, trialists or reviewers who have a specific interest in reporting quality or acupuncture research methodology. Thus, we think it would be worth retaining all the description of the study findings and interpretations for those specific readers. As your comments suggested, we attempted to reduce redundancy in the discussion and removed the first sentence of the "Strengths and weaknesses" paragraph. Please let us know whether you believe there is still unnecessarily duplicated description with regard to the interpretation of the study findings. We will be happy to receive extra comments to improve the readability of this manuscript.

Comment 7: I disagree that not including all the details of the acupuncture process, even if recommended by STRICTA, constitute selective reporting and lack of validity. I urge the authors to review the use of these words.

Response 7: Thank you for your comment. STRICTA items are currently regarded as the best representation of the core components of the acupuncture process, and the thorough reporting of those intervention details enables readers to assess the external validity of study results. We chose the term "selective reporting" because some items were not reported in the Cochrane reviews, even though that information was already reported in the component RCTs. Selective reporting and omission of core treatment components introduce loss of information for the replication of study interventions and may make the reported study interventions different from the actual details of usual clinical practice. If the reported intervention differs from the usual clinical practice, the external validity of trials or reviews can be affected [Rothwell 2005]. Thus, with respect, we gently disagree with your opinion and argue for the use of the terms "selective reporting of intervention details" and "external validity".

Rothwell PM. External validity of randomized controlled trials: "To whom do the results of this trial apply?" Lancet 2005;365:82-93.