PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Disagreements in risk of bias assessment for randomised controlled trials included in more than one Cochrane systematic reviews: a research on research study using cross-sectional design
AUTHORS	Bertizzolo, Lorenzo; Bossuyt, Patrick; Atal, Ignacio; Ravaud, Philippe; Dechartres, Agnes

VERSION 1 - REVIEW

REVIEWER	Livia Puljak Catholic University of Croatia, Croatia
REVIEW RETURNED	15-Jan-2019

| GENERAL COMMENTS | Dear Editor,

thank you for giving me an opportunity to review the revised manuscript bmjopen-2018-028382, of Bertizzolo et al. I think this is very relevant and important topic. The authors have done a lot of work responding to numerous reviewers' comments and they should be commended for it. Reviewers can make one's professional life very difficult, but I hope that there will be a unanimous conclusion that the manuscript is now much better. I am sorry that the BMJ did not offer the authors an opportunity to revise the manuscript and take into account the comments that we were just able to read.
I would like to suggest acceptance of the manuscript after minor revisions.

Firstly, I would like to express my disagreement with some of the comments that other reviewers provided. Namely:
- I do not agree with a comment about potential lack of relevance of the current study, considering the development of the Cochrane risk of bias tool version 2.0. I think that the authors have responded on this comment adequately. The new tool is still in development. It has been updated recently again – the website devoted to the new tool says that the latest revision happened in October of the last year. This means that the tool perhaps is not finalized yet, and it is definitely not in use yet. Although I am not personally involved with development of this tool, I am a Cochrane author, and as an author of several ongoing Cochrane reviews, I did not receive any information directed to authors that the Cochrane RoB tool assessments should be changed into the second version. Therefore, due to to the current and future continued use of the Cochrane RoB tool, findings of this study are very relevant for both research community, as well as for users of information presented in systematic reviews using Cochrane RoB tool. If we cannot rely on information produced by using this tool, then we have a major problem. I also agree with authors that the |

newly developing tool does not address certain relevant sources of bias, compared to the current version.

-I do not agree with the comment that the authors should have studied non-Cochrane reviews too. Those reviews do not have obligation to use Cochrane RoB tool, compared to Cochrane reviews, and they are not produced by a single organization – compared to Cochrane reviews. Cochrane reviews should be expected to produce consistent and non-conflicting results particularly because they are produced by one organization. In that respect it is strange if one can find different result for the same assessment of authors preparing a review within the same organization.

My minor suggestions for revision:
-As written above, I agree with the authors that exclusion of non-Cochrane reviews in this study is justified. I do not think that this choice was a limitation, as the other reviewer has suggested. I would like to suggest that authors explain in the manuscript that they have decided to focus on Cochrane reviews since they are produced by a single organization, which should then be expected to yield consistent results on risk of bias for the same trials included in multiple reviews. And, if possible – if the editors agree, I would suggest to exclude this issue from limitations.

-This could be addressed in the limitations of the study:
"Whenever a single RCT was included in three reviews or more, we considered
only the risk of bias assessment from two reviews chosen at random."
I support this approach of the authors, but it is also possible that different combinations of two chosen evaluations could have produced different results, so it would be nice to address it as a potential limitation.

REVIEWER	Lars Joergensen
	Nordic Cochrane Centre Rigshospitalet, 7811 Blegdamsvej 9 2100
	København Ø Denmark Phone: +45 35 45 71 12
REVIEW RETURNED	16-Jan-2019

| GENERAL COMMENTS | I would like to thank the authors for their thoughtful and exhaustive revision that overall is very satisfactory. I have no remaining important comments or suggestions. |

REVIEWER	Roberta W Scherer
	Johns Hopkins Bloomberg School of Public Health. USA
REVIEW RETURNED	22-Jan-2019

| GENERAL COMMENTS | All my concerns and comments have been adequately addressed |

Reviewer: 1

thank you for giving me an opportunity to review the revised manuscript bmjopen-2018-028382, of Bertizzolo et al. I think this is very relevant and important topic. The authors have done a lot of work responding to numerous reviewers' comments and they should be commended for it. Reviewers can make one's professional life very difficult, but I hope that there will be a unanimous conclusion that the manuscript is now much better. I am sorry that the BMJ did not offer the authors an opportunity to revise the manuscript and take into account the comments that we were just able to read.

I would like to suggest acceptance of the manuscript after minor revisions.

Firstly, I would like to express my disagreement with some of the comments that other reviewers provided. Namely:

- I do not agree with a comment about potential lack of relevance of the current study, considering the development of the Cochrane risk of bias tool version 2.0. I think that the authors have responded on this comment adequately. The new tool is still in development. It has been updated recently again – the website devoted to the new tool says that the latest revision happened in October of the last year. This means that the tool perhaps is not finalized yet, and it is definitely not in use yet. Although I am not personally involved with development of this tool, I am a Cochrane author, and as an author of several ongoing Cochrane reviews, I did not receive any information directed to authors that the Cochrane RoB tool assessments should be changed into the second version. Therefore, due to to the current and future continued use of the Cochrane RoB tool, findings of this study are very relevant for both research community, as well as for users of information presented in systematic reviews using Cochrane RoB tool. If we cannot rely on information produced by using this tool, then we have a major problem. I also agree with authors that the newly developing tool does not address certain relevant sources of bias, compared to the current version.

Response: We thank the reviewer for her advices and help and we agree with the comment regarding the relevance of our study. As we mentioned in the answers to reviewers the new tool has not been used in any of the reviews published until now and is not mentioned in the protocols of future reviews. Nevertheless, we understand the push by the Cochrane community and general scientific audience to move toward the adoption of a new development. We think that the importance of our findings goes beyond the risk of bias evaluation through a specific tool, but can also help identifying areas of knowledge that are not completely clear or homogenous among skilled researchers.

-I do not agree with the comment that the authors should have studied non-Cochrane reviews too. Those reviews do not have obligation to use Cochrane RoB tool, compared to Cochrane reviews, and they are not produced by a single organization – compared to Cochrane reviews. Cochrane reviews should be expected to produce consistent and non-conflicting results particularly because they are produced by one organization. In that respect it is strange if one can find different result for the same assessment of authors preparing a review within the same organization.

My minor suggestions for revision:

-As written above, I agree with the authors that exclusion of non-Cochrane reviews in this study is justified. I do not think that this choice was a limitation, as the other reviewer has suggested. I would like to suggest that authors explain in the manuscript that they have decided to focus on Cochrane reviews since they are produced by a single organization, which should then be expected to yield consistent results on risk of bias for the same trials included in multiple reviews. And, if possible – if the editors agree, I would suggest to exclude this issue from limitations.

Response: We modified the manuscript to better explain in the text why we decided to limit our choice to Cochrane reviews and we removed the passage from the limitation section.

Manuscript modification, Discussion section, page 18:

[We decided to focus on Cochrane reviews because these reviews are produced within a single organization, therefore we expected results and procedures to be more appropriately comparable. Authors compiling Cochrane reviews are members of the organization and, in most cases, they underwent a similar training for assessing risk of bias.]

-This could be addressed in the limitations of the study: "Whenever a single RCT was included in three reviews or more, we considered only the risk of bias assessment from two reviews chosen at random."

I support this approach of the authors, but it is also possible that different combinations of two chosen evaluations could have produced different results, so it would be nice to address it as a potential limitation.

Response: We modified the manuscript to include this among the limitations of our study.

Modification in the manuscript, Discussion section, Strengths and weaknesses, Page 19:

[Whenever a single RCT was included in three reviews or more, we considered only the risk of bias assessment from two reviews chosen at random. Nevertheless, we cannot exclude that different combinations of two chosen evaluations could have produced slightly different results.]

Reviewer 2:

I would like to thank the authors for their thoughtful and exhaustive revision that overall is very satisfactory. I have no remaining important comments or suggestions.

Response: We thank the reviewer for the comments and the help in improving the manuscript.

Reviewer 3

All my concerns and comments have been adequately addressed

Response: We thank the reviewer for her time and advices.