Author's response to reviews

Title: A simplified search strategy for identifying randomised controlled trials for systematic reviews of health care interventions: a comparison with more exhaustive strategies.

Authors:

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Reviewer: Steve McDonald.

1. Abstract - 2nd line of background: suggest omit 'randomized' since there are many controlled, but not necessarily, randomised trials in CENTRAL.
   Accepted. The word 'randomized' has been omitted
2. Background - 2nd para: MEDLINE has been systematically searched using the ‘first two phases of a three phase highly sensitive search strategy’. The third phase has not been run systematically across all years.
   Accepted. Have changed to 'The first two phases of a three phase highly sensitive search strategy (HSSS) have been used to search MEDLINE'
3. Consistency in use of EMBASE or Embase
   Accepted. Have changed to EMBASE throughout

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Discretionary Revisions (which the author can choose to ignore)

1. Results: where it states that 'in five out of the 10 reviews the missing trials made no significant difference', the authors might want to elaborate by referring back to their a to d system in the methods. Even though there were no changes in significance, presumably there were differences in the effect sizes and/or confidence intervals.
   Accepted - revised to: '..the missing trials made no significant difference, in that there were no clinically significant changes in effect size, nor any change in whether results were statistically significant or not'

2. Results: instead of 'Two impacts of missing data were found' suggest 'two consequences...'
   Accepted - revised as suggested

3. Results: in the paragraphs on CONSORT and change over time the authors should clarify the sampling frame used. Are the results based on the 677 journal articles indexed in CENTRAL?
   Accepted - revised to clarify by adding: 'Using the 725 journal articles in our sample

4. Citing CONSORT as one of the reasons why exhaustive strategies are no longer necessary is potentially misleading. Only a small proportion of the journals publishing the RCTs included in the sample are likely to be CONSORT journals, thus the adoption of CONSORT per se is not actually being compared.
   Even taking account of the above comments, it's debatable whether CONSORT can be credited with the improvement shown in the proportion of RCTs with random$ in the title or abstract. The trend has been for a steady improvement going back to the early 1980s, and the authors should allude to this when citing the difference made by CONSORT.

   The authors are justified in claiming that the existence of CONSORT has been important in contributing to greater awareness among researchers, authors and editors of the need to improve the reporting randomised trials. However, I'm not convinced that this paper is the appropriate place to present a pre- and post-CONSORT analysis. It's a question that warrants greater scrutiny than is given here.

   Revised by adding a new sentence in second paragraph of Discussion;
   "Whether this is directly due to CONSORT, or whether CONSORT simply accelerated a pre-existing trend, and raised the general awareness amongst authors and editors for better reporting of RCTs, is uncertain."
1. Change Embase to EMBASE throughout for consistency. Correct in background section paragraph 2, line 4 but not elsewhere in the article.
   Accepted - revised to EMBASE throughout.

2. Page 6 paragraph 1 second sentence should read ". . . number of records were found using ‘random$.af’, compared to the HSSS.
   Accepted - revised as suggested

3. Page 6 Discussion section paragraph 4. Line 1. Change to " A strength of this study is that it used Cochrane reviews...." (only one strength mentioned, and this lines up with the following paragraph which starts " A weakness...")
   Response: There were two strengths mentioned. The paragraph in question has been revised and clarified as follows;
   "The strength of this study include firstly that we used Cochrane reviews.....possible. Secondly, we quantified..."

4. p. 7 paragraph 1 line 2 "... a recent study ...... gives general support..."
   Accepted - revised as suggested

5. Methods section paragraph 4, last sentence: Consider omitting parentheses and change to " All non-English articles were translated apart from those in Japanese and Chinese, for which resources were not available."
   Accepted - revised as suggested

6. Results section paragraph 1, second sentence. Consider omitting parentheses and change to "The remaining 21% were from the grey literature, 80% of these being conference abstracts."
   Accepted - revised as suggested

7. Discussion p. 6 paragraph 5 line 4 "regardless" Consider replacing this with " would be identified sooner or later and therefore be included in a subsequent update of the review."
   Accepted - revised as suggested

Issues not mentioned directly by authors which would add balance if included briefly:

8. Note that 78 new reviews considered by the authors, only 57 met the inclusion criteria. As the remaining 21 reviews are a significant proportion of the total (26%) , it would be interesting to know how many of those that did not meet the criteria were because they considered study designs other than the RCT alone. The fact that systematic reviews are including other study designs (see, for example, the Cochrane protocol by Petrie J et al on parenting programmes) weakens the case for the BRSS instead of exhaustive searching. I would like to see the authors qualify the last sentence in their to include the words "When the inclusion criteria demand only RCTS, this study suggests that exhaustive searching is no longer cost effective." (or words to that effect) This is an important point as the demand for systematic reviews of non-clinical interventions is growing and the RCT design not always suitable for evaluation in these cases. It would be a pity if the conclusions of this study were applied across the board to ALL systematic reviews and pressure was put on searchers to save time/money by scaling back the search process when it is not appropriate.
   Response: Have added a line to Results: ‘Twenty one reviews were excluded from our study; 14 because they did not find any RCTs that met their inclusion criteria, and seven because they included other study designs in addition to RCTs.’
   Response: Have amended Conclusion - last para(as suggested) to: ‘When the inclusion criteria demand only RCTS, this study suggests that exhaustive searching is now, in the era of CENTRAL and CONSORT, no longer cost-effective’.

9. The significance of the subject search has not been mentioned by the authors. Could they consider a brief mention of the influence that the subject search has on retrieval of studies. Their study is retrospective - i.e. it established that particular RCTs either would or would not have been located through
their BRSS. They have made the assumption that the subject search itself would have been ideal. In real time searching, however, the subject search may have flaws or the indexing itself be imperfectly applied so that items will be missed. One of the major advantages of more exhaustive searching is that it approaches the topic through different indexing systems, thus leading to a greater retrieval overall than searching just the one database. A prospective study comparing the BRSS with the HSSS would be interesting. I would like to see some comment to this effect.

Response. This study did not examine the effect of changes in subject searches - that would be a different issue for a separate study, but one we agree is important. Our study was solely concerned with looking at the filter applied to retrieve the RCTs, after the subject search had been done. Indeed it was essential to not change any subject search since otherwise that would have been a confounding variable; this study applied HSSS and BRSS searches to each review while leaving other aspects of the search unchanged.