Author’s response to reviews

Title: Optimal database combinations for literature searches in systematic reviews: a prospective exploratory study

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Author’s response to reviews:

Reviewer reports:

Reviewer #2: The paper is much better for the revisions the authors have made. The clarification of the types of reviews included in the sample will improve the applicability of the study's findings and provide a more nuanced interpretation of the results. There are still a few additional suggestions that the authors should consider.

Background

1. Para 1, sentence 2. Suggest additions IN CAPS: "The Cochrane Handbook, FOR EXAMPLE, recommends the use of at least MEDLINE and Cochrane Central and, when available, Embase FOR IDENTIFYING REPORTS OF RANDOMIZED TRIALS."

We changed that phrase accordingly

2. The last two sentences of paragraph 1 should come immediately before the Methods since they are describing the aims/objectives of the study.

We moved these two phrases to the end of the introduction.
Methods

3. Section on Determining relevant references of published reviews

Para 1, last three words of last sentence, to avoid confusion, I suggest you say "…to a particular study design" rather than "a certain publication type."

We changed that phrase accordingly

Results

4. Para 1: although the authors have added Table 2 and the sentence "An overview of the broad topical categories covered in these reviews is given in Table 2" I think it's essential that a brief summary is included here, such as "A third of reviews concerned therapy, a quarter etiology and the remainder concerned epidemiology, diagnosis, management and prognosis."

We added a brief description of the most important outcomes of table 2:

Many of the reviews were initiated by members of the departments of surgery and epidemiology. The reviews covered a wide variety of disease, none of which was present in more than 12% of the reviews. The interventions were mostly from the chemicals and drugs category, or surgical procedures. Over a third of the reviews were therapeutic, while slightly under a quarter answered an etiological question. Most reviews did not limit to certain study designs, 9% limited to RCTs only, and another 9% limited to other study types.

5. Section on Unique references per database, the sentence and statement "A highly recommended database for systematic review searching, Cochrane CENTRAL, is absent from the table, as it did not add any unique included references to the reviews in our research." requires additional context. Cochrane is only highly recommended for reviews of RCTs, i.e. only a small subset of the reviews in the study. A fairer statement would be be say something like "Cochrane CENTRAL is absent from the table, as for the five reviews limited to randomized trials, it did not add any unique included references."

We changed the phrase accordingly
Discussion

6. Para 3: you give one of the journals (Indian Journal of Positive Psychology) that published one of the RCTs not identified by Medline/Embase/Cochrane, what was the journal/source of the other missed RCT?

The other review was published in Journal of Advanced Nursing. We added a sentence on this study:

The other study from the Journal of Advanced Nursing is indexed in MEDLINE and Embase, but was only retrieved because of the addition of KeyWords Plus in Web of Science.

7. Para beginning "Performance of a search can be…” This doesn't seem to fit here. Either it should be incorporated earlier in the Discussion or included in the methods as part of the rationale for choosing recall as the primary outcome.

We moved that paragraph to the methods section

8. Para beginning "Many articles written…”

The sentence "However, when looking at individual reviews, the probability of missing more than 5% of included references found through database searching is 33% when using Google Scholar and 30% when Web of Science is used." I m not clear what this means - are you saying when ONLY these sources are searched??

We were refering to searching Google Scholar or Web of Science together with Embase and MEDLINE. We now clarified that in the article:

However, when looking at individual reviews, the probability of missing more than 5% of included references found through database searching is 33% when Google Scholar is used together with Embase and MEDLINE and 30% for the Web of Science, Embase MEDLINE combination..
9. Section on Status of current practice of database selection

The table referred to here should be Table 5 not 4, please check.

Thank you for noticing this error. We checked all references to all tables and made corrections where necessary.

Conclusions

10. I think Cochrane CENTRAL should be mentioned in the Conclusions, since reference is made to PsycINFO and CINAHL. Consider adding after the first (or second) sentence, something like (if you agree with the sentiment) "In spite of Cochrane CENTRAL not identifying any unique references, the number of systematic reviews of randomized trials in our sample was small, and thus we would continue to recommend that Cochrane CENTRAL is searched for reviews in which RCTs are the desired study design."

We added a similar sentence to the conclusion:

For reviews where RCTs are the desired study design, Cochrane CENTRAL may be similarly useful.

11. The sentence "Ignoring databases from the four key databases we identify will result in more precise searches with a lower number of results, but the researchers should decide whether that is worth the increased probability of losing relevant references." Suggest re-wording the first part of the sentence for clarity, something like "Ignoring one or more of the four key databases identified will result..."

We changed that sentence into: "Ignoring one or more of the databases that we identified as the four key databases"