

Author's response to reviews

Title: Searching for observational studies: what does citation tracking add to Pub Med? A case study in depression and coronary heart disease

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Author's response to reviews:

Dear Editor,

I would like to thank you for your e-mail of April 22, 2005, informing us that you would welcome a resubmission of our manuscript.

Please find below a detailed description of how each of the comments of the referees was addressed, which changes were made and where. If you have any further queries, please do not hesitate to contact me.

Thank you for your time and attention. I look forward to hearing from you soon.

Best wishes,

Margaret Sampson

Major Compulsory Revisions

1. Reporting: The search strategy for the original paper was based on forward and backward citation tracking from an earlier review, rather than on a PubMed search. This has now been mentioned in the text [Methods, paragraph 2]. The PubMed search strategy for the current paper has been included as Table 1.
2. Statistical analysis: We now report medians and ranges of publication year and journal impact factor in Table 2. The analyses for differences in publication year and impact factors between the three groups were revised using non-parametric tests (Kruskal-Wallis) and the findings for impact factor were no longer significant. The text has been modified appropriately [Methods, last paragraph; Results, last paragraph].
3. Conclusion: The second paragraph has been modified. We hope that it is no longer overstated.
4. Conclusion: The comment that "The gains from citation tracking or another search methods depend, of course, on the sufficiency of the rest of the search strategy (both electronic and non-electronic) used in the systematic review." has now been incorporated into the text [Conclusion, final paragraph].
5. Papers identified through SCI may be more likely to show null results, because studies that found no association between depression and CHD may emphasise other relationships explored in the paper and so would not include the appropriate indexes for depression in PubMed. This has now been incorporated into the text [Conclusion, paragraph 1].
6. We agree with the reviewer that a potential conclusion is that more exhaustive searching is required and this has now been mentioned in the text [Conclusion, last paragraph].
7. The statement on how many of the studies in the index review were not indexed in PubMed has been clarified [Methods, paragraph 3].
8. The original index review included 56 papers. Through the PubMed and citation tracking we identified another 52 eligible papers. This has now been clarified [Results paragraph 1]. The language use has been modified to clarify that the review was of papers, rather than studies.

9. PubMed is now written as one word throughout the manuscript.

10. We have mentioned in the results that citation tracking added 2 person-weeks of reviewer's time to a review [Results, paragraph 1]. Ten of the 12 papers that were identified through Science Citation Index alone were within the PubMed database. They were not detected by the PubMed search because they did not include depression or depressive in key words or MeSH headings (n=6) and/or did not include the relevant heart disease terms (n=5). This meant that expanding the PubMed search to identify these papers would add thousands of unique titles. This has been clarified in the text [Methods, paragraph 3].

Kay Dickersin

Major Compulsory Revisions

1. Papers investigating the role of depression in the aetiology and prognosis of coronary heart disease were sought through two methods: a) PubMed, and b) citation tracking where Science Citation Index was searched for all papers which cited ("forward citation tracking") or were cited by ("backward citation tracking") any of the papers in an index review. This has been clarified in the text [Abstract, methods section; Background, paragraph 1; Methods, paragraph 3].

2. We searched the bibliographies of the "index papers" through the Science Citation Index. This has been clarified in the text [Methods, paragraph 2]. A reference has been given to the index review [Methods, paragraph 2].

3. The "index review" has been defined [Methods, paragraph 2].

4. The original index review included 56 papers. Through the PubMed and citation tracking we identified an additional 52 eligible papers. This has now been clarified [Results paragraph 1]. Backward citation tracking was performed by searching the bibliographies of all the papers in the "index review" through the Science Citation Index. This has been clarified in the text [Methods, paragraph 2]. Since coronary disease may also cause depression we chose a priori to examine aetiological and prognostic studies separately. [Methods, paragraph 1].

5. The index review included 56 papers (previously called index papers). This has been clarified in the text.

6. The PubMed search was designed to be able to identify all the 56 papers in the index review. The final search presented identified all but 6 of these papers. Five of the papers either did not include a heading for 'depression/depressive' or 'coronary heart disease'. This meant that expanding the PubMed search to identify these papers would add thousands of titles. Expanding the search to identify the sixth paper would have added 500 titles. This has been clarified in the text [Methods, paragraph 3].

7. The methods have been expanded on how the "Summary of association" was assessed [Methods, final paragraph]. "Classification of outcome" has been used rather than "Summary of association".

8. Papers identified through the Science Citation Index were published in higher impact journals than those identified through PubMed or both PubMed and Science Citation Index. They were also less likely to show positive results. This does not necessarily mean that the papers published in journals with higher impact factors are least likely to show a positive association. This section has been expanded in the discussion to improve clarity [Conclusion, paragraph 1].

9. The suggested change in terminology has been incorporated according to the reviewer's suggestion (i.e. consistently writing that papers identified through the Science Citation Index were less likely to show positive results) [Conclusion, paragraph 1].

10. This section has been rephrased for improved clarity "However, starting the review with an index review that included a smaller number of papers would mean that the citation tracking search would not take as much time but may yield fewer eligible papers. The relative efficiency and time taken by the two methods may therefore depend on the index review used in citation tracking." [Conclusion, paragraph 1]. The sentence on "forward citation tracking offers the integral of multiple searches...." Has been rephrased for improved clarity [Conclusion, paragraph 1].

11. The section on MeSH headings has been moved to the results according to the reviewer's suggestion [Results, paragraph 2].

12. The sentence on possible bias has been rephrased for improved clarity [Conclusion, paragraph 2]. The two reviews were included because we believe that their search was insufficient and so their results may be biased. This has been clarified [Conclusion, paragraph 2].
13. The suggested limitations have been included in the text [Conclusion, paragraph 2].
14. "Classification of outcome" has been used rather than "Summary of association" in the table.
15. The definition of classification of outcome has been moved to the methods section [Methods, final paragraph].
16. This sentence has been rephrased to read "Citation tracking is wholly independent of the need to specify search strategies or use MeSH headings, which are a potential limitation of MEDLINE. " The term "MEDLINE" is used rather than PubMed [Conclusion, paragraph 1].
17. The title of the table has been modified according to the reviewer's suggestion. It was difficult to calculate the total number of unique titles that were found in: both PubMed and Science Citation Index, PubMed alone, Science Citation Index alone, and so this modification has not been included. [Table 2]
18. Medians and ranges of values have been included in the table, as the reviewer suggested. [Table 2]