Reviewer's report

Title: Interventions aimed at improving the nursing work environment: a systematic review

Version: 3 Date: 23 September 2009

Reviewer: Duncan Chambers

Reviewer's report:

- Major Compulsory Revisions

1. I am reviewing this paper from the point of view of systematic review methods and reporting rather than as an expert in the subject of the review. I think there is scope for improving the synthesis and presentation of the evidence to make the paper more useful for the reader. Most of my comments relate to this.

2. A table to show which quality components were met by each included study would be more useful than either the scores presented or the summary in Table 4.

3. I think there should be clearer reporting of what outcomes were evaluated and how, and more detailed reporting of results. It is not very helpful to report the results simply in terms of whether there was or was not a significant difference. Where significant differences are shown, are they relative to control group or pre-intervention?

4. A clearer presentation of the results could replace the existing Tables 5 and 6, which I find confusing because they seem to present similar information in slightly different ways and in some cases with different terminology.

5. The synthesis should incorporate the results of the quality assessment more fully so that readers have a clearer idea of the overall strength of evidence for different interventions.

- Minor Essential Revisions

1. P9, the description of screening is confusing. The authors state that two reviewers each screened half of the studies and then go straight on to talk about how discrepancies were resolved.

2. In a few places the authors use the word intrapersonal where I think interpersonal is meant.

3. On page 15, you state that three studies used randomization. Please add the reference numbers of the studies concerned.

4. It should be noted in the discussion that language bias is another potential (albeit probably minor) limitation of the review as only studies published in
English were eligible.

5. Following ‘data extraction’, the methods section should contain a description of how the authors set about synthesising the extracted data.

- Discretionary Revisions

1. I think it would be helpful for readers to be able to see the list of studies excluded for insufficient validity (could be appendix or available on request).

2. Add reference numbers beside author names in Table 3.

3. Table 2 seems redundant, because the same search strategies seem to have been used across all databases. The detailed listing of search results is probably of limited interest for most readers.

4. On p18, the authors discuss future research and state that ‘the optimum research design would be controlled studies with pre- and post observations’. In principle this type of intervention could be studied using randomisation by clusters and perhaps the authors could acknowledge and discuss this.

5. In view of possible differences of opinion regarding eligibility in dealing with a concept like ‘nursing work environment’, it would be interesting to know whether there was much disagreement between reviewers in selecting studies for the review.

6. Perhaps the authors could do more in the background and/or discussion sections to make clear why their review is relevant to the field of implementation science as distinct from general nursing research.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests