Reviewer’s report

Title: The selection of search sources influences the findings of a systematic review of people’s views: a case study in public health

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Reviewer: Christopher Carroll

Reviewer’s report:

This is an interesting and very useful paper. It makes several important points.

There is the vital nature of searching or interrogating a very wide range of sources to identify “views” studies for systematic reviews. This is not entirely new (Papaioannou et al 2009) but this case study provides an excellent demonstration of this principle.

Secondly, it highlights the issue of “database selection bias” in terms of geographical bias, which to my knowledge has not before been considered for reviews of qualitative data.

Finally, it is a very good example of the sizeable impact on a thematic synthesis of

(i) studies that would have been missed if no attempt had been made to control for database selection bias and

(ii) studies deemed to be of higher quality.

Again, the latter is not completely original (Noyes & Popay 2007, and the original study on which this one is based, by Harden et al 2004, both found this, as have others), but is very much worth restating and demonstrating.

Minor essential revisions:

I have only a few issues with this paper. All easily addressed:

p.3: The first sentence – I think the authors should provide a clear description and definition of “views” studies. These consist of more than traditional qualitative study designs, but this is never defined clearly (p.5 just mentions, briefly, “other study designs”)

p.3: The need for searching a wide range databases and other sources has been demonstrated for a “views” review previously (Papaioannou D. et al, HILJ 2010; 27(2): 114-22) – this should really be cited.

p.5 “checking studies that cite …” should be “looking for studies that cite …”

p.16: “additional searches … have been limited in use because of their low quality[22].” What was low quality exactly? The searches themselves (if so, how was this determined?) or the studies that were found by these searches?
General: I struggled with the terminology “search source”. I think this is an unnecessary adjoining of terms that obscures its actual meaning. It also gives rise to tongue-twisting, near tautological phrases such as pp.6-7 “the impact of searching different types of search source, the sources …”. Can the authors not simply expand “search source” to “the sources searched”, simply “sources” (the context of the paper, well-outlined, requires no more really) or the equivalent?

General: The study demonstrates both the need to control for “geographical bias” and the impact on a synthesis of the higher quality studies found as a result of the action taken to minimise this bias. In my opinion, the paper makes an implicit connection between these two elements. This may simply be my reading of it and the authors intended no such connection. However, I think the authors should state explicitly that these two issues are unconnected. The attempt to minimise database selection bias, by utilising AG’s expertise and supplementary sources was successful: five unique UK studies were identified. The synthesis was affected as a result of adding these studies. This paper offers an example of how failure to control for this bias, and identify these studies, could affect actual findings.

However, these could have been five poor-quality studies, which added little to the synthesis; this would not have mattered, it would still have been a successful attempt to minimise geographical bias. The “fact” that these 5 had such an impact is coincidental as far as attempts to minimise geographical bias is concerned. I think there are two quite separate issues here: the quality of the search and the quality of the studies. The former can minimise database selection bias; the latter determines whether or there is any impact on the synthesis; in other words, you can achieve success in minimising bias and finding additional studies, but there may be no impact on the synthesis. These two elements are not intrinsically connected (or at least I have never seen this demonstrated).

Discussion: The point about needing to control for database selection bias is well-made and demonstrated. The method the authors chose to achieve this was non-reproducible, to use the advisory group (or rather a single member of it, AG). Is not the next stage to develop a systematic strategy or approach for identifying local information sources for searching? I appreciate that the authors state that advisory groups should be used, but I think they could explore this further.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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