Author’s response to reviews

Title: Rural definition of health: A systematic literature review

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Version: 3 Date: 25 February 2015

Author’s response to reviews: see over
February 27, 2015

Editors BioMed Central
Re: MS: 1388221331450834

Dear Editors;

As requested in your email of January 28, 2015, we have revised our manuscript and retitled it “Rural definition of health: A systematic literature review.” We have responded to each of the reviewers’ comments, as described below.

We appreciate your consideration of our manuscript. Please do not hesitate to contact me if you have additional questions or need further information.

Sincerely,

Stephen Waring, DVM, PhD
Senior Research Scientist
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Reviewer's report

Title: Rural definition of health: A literature review

Version: 2Date: 27 January 2015

Reviewer: Daniel Exeter

Reviewer's report: Minor essential revisions

Explain to the readers why other countries with very large areas of rurality are excluded? It seems that the authors allude to key occupational-driven definitions of health. Granted, some of these are agrarian, or farming communities, but a more proximal definition of rurality would enable important research from other countries (UK, others from Europe, Asia, Africa etc) to be included in the study. Perhaps the inclusion of rural, vs remote rural would better delineate (and better cover) key international papers from the past 40 years. The focus on patient centred care is contemporary and important, but warrants a stronger discussion in relation to the findings.
Given the global coverage of the BMC series, a focus beyond America in the conclusions is warranted.

The reviewer raises an important issue regarding the selection of countries for inclusion in this study. This literature review was undertaken to determine the extent and the strength of evidence for a distinctive rural definition of health, with the long-term goal of improving patient engagement and patient activation among residents of rural communities in the United States. We included research from the Canada and Australia – in addition to the US – because rural health issues have attracted significant research attention in Canada and Australia. However, we recognized from the outset that concepts of health are affected by many economic and cultural variables. Accordingly we elected to restrict this review to these three countries with significant economic and cultural similarities. We recognize that this approach limits the generalizability of the study, and that further studies will be needed in other settings to corroborate our findings. We have edited the Discussion section and added a study limitations paragraph to make this clearer.

As noted by another reviewer (below) patient-centered care is now a familiar concept. As suggested, we have edited the Discussion section to clarify the implications of different definitions of health for the successful implementation of patient-centered care.

Reviewer's report

Title: Rural definition of health: A literature review

Version: 2 Date: 27 January 2015

Reviewer: Amanda Kenny

Reviewer's report: Thank you for the opportunity to review your manuscript that presents a ‘systematic’ literature review on a rural definition of health. Overall, it was well written and an enjoyable read.

Major Compulsory Revisions

1. The rationale for the study is that ‘some rural populations appear to approach health differently’. The meaning of this is slightly unclear. It would be helpful to provide some examples of the ways in which this occurs. Whilst some descriptions are given of studies that report the views of rural people it is not clear how these vary from their urban counterparts.

   We agree. Before we embarked on the review, our familiarity with the literature suggested that direct rural-urban comparisons of health beliefs or health definitions were uncommon. Thus the search for such comparisons was one of
our objectives. We have edited the Abstract and the last two paragraphs of the Background section to clarify our interest in determining the extent and strength of the evidence for a distinct rural approach to health, and in identifying and assessing direct rural-urban comparisons.

It is noteworthy that many studies that purport to examine urban health beliefs are in fact studies of the beliefs of specific urban populations, usually defined by socioeconomic status, ethnicity, race or other characteristics. This makes comparisons of findings from studies of rural populations with those of urban populations difficult, or in some cases meaningless. In our literature search and review, we did not include articles that addressed urban health beliefs only (research that did not include a rural population).

As we report in the Results section and in Table 1, we found that few studies actually compared rural and urban attitudes toward health directly. We believe that our review contributes to the literature on rural health because we identified both (1) a consistent set of constructs that many different investigators have associated with rural thinking about health, and (2) a paucity of well-designed research on this potentially important subject. We have edited the Discussion section to clarify this point.

2. Patient centred care is described as a very new concept. I am not sure that this is correct as the literature on patient centred care is well established.

We agree that patient-centered care is not new as a concept. We have changed the wording in the Background section accordingly. In fact, we conducted this review because we believe that there may be significant opportunities to use health beliefs in designing and implementing effective patient-centered care programs. We have clarified this in the Discussion section as well.

3. Some clarity is needed around the method used in the study and exactly what type of review was conducted. The review does not appear to be a systematic review as all types of studies seem to have been included and there is limited discussion of quality. It appears to fit better with a scoping review or critical review – a paper by Grant and Booth that describes typologies of reviews is a good guide to different review approaches.

We appreciate the Reviewer’s suggestion to consider a more specific review subtype. We examined the Grant and Booth paper as suggested and, despite our broad study eligibility criteria, we believe that our study is best described as a systematic review. Per the editor’s discretion, we are not closed to the idea of a more descriptive term for our methodology, but we also note that the editor requested that ‘systematic review’ be included as part of the manuscript title. We
have changed the title as requested, and added a citation in the Methods section to the typologies of reviews by Grant & Booth.

4. The description of how the review searches were conducted could be strengthened. Whilst some search terms were provided, were these used in any particular way? It is unclear whether all of the terms were used in a single string or whether Boolean logic was utilised.

   *Our initial searches were conducted on July 13, 2012 and August 15, 2012, and were updated on January 23, 2014. In each case, Boolean logic was used. We have edited the Appendix to clarify this aspect of our methods.*

5. In the methods section it would be better to describe how many articles were retrieved, how many were excluded and why.

   *We edited the Results section and Appendix A to clarify the number of articles retrieved and excluded. Most articles were excluded because they did not report on original research, or because their subject matter was outside of the scope of the present study. We have clarified these steps in the Methods section.*

Minor Essential Revisions

6. The legends in figure one should be clearer eg. Articles identified from reviews – was this from a review of reference lists?

   *Figure 1 has been revised in compliance with PRISMA requirements.*

Discretionary Revisions

7. Personally, I would avoid the use of the abbreviation RDOH as it interrupted the flow of the text. I would state the term in full at all usages, as it is central to your review question.

   *We have revised the manuscript as suggested.*

8. Some attention should be given to the length of sentences to improve the readability example page 4 line 72.

   *We have revised the manuscript as suggested.*
Reviewer’s report

Title: Rural definition of health: A literature review

Version: 2

Date: 28 January 2015

Reviewer: Rebecca Evans

Reviewer’s report: Thank you for the opportunity to review this research article on an interesting aspect of rural health. The research question regarding definition/s of health amongst rural populations and potential differences in definitions between rural and urban populations is a useful one. The authors appropriately place the research question in the contemporary context of health care systems endeavouring to improve patient centered care and patient activation. The preliminary material (title, abstract etc.) is an appropriate reflection of the article content. The authors’ research question is clear and justification for this question is described well in the introduction. The methods appear appropriate and well-described, supplemented by the PRISMA checklist which is an appropriate guide for reporting on systematic reviews. The writing standard is certainly appropriate for this publication. A major limitation of the findings is the lack of comparison found in the literature between rural and urban groups – constraining the potential to make sound conclusions about any potential differences between the groups or to suggest a RDoH that might integrate all findings. Nonetheless, the findings are informative, bringing together international literature in this area in a systematic fashion. I hope that the below points might be of benefit in further refining this article for publication.

Minor essential revisions: - It is unclear from the article or supplementary material why the authors have not conducted an assessment of risk of bias amongst the included studies/articles. Although the PRISMA checklist might focus more on quantitative research articles, authors should still be able to make comment about risk of bias that may be present in qualitative or mixed methods studies. If this assessment was done, some indication of findings in this regard should be included. If such assessment was not completed, the authors should make comment as to why not.

We agree that the risk of bias is an important consideration in any study. A formal assessment of the risk of bias among all included studies was not performed in this paper because it would yield limited additional information. The majority of studies were qualitative, which does not preclude bias assessment, but does pose complexities in interpreting many forms of bias alongside quantitative studies that employ sampling methodologies. More importantly, most studies failed to include a non-rural comparison group at all, making selection bias the overshadowing concern in this collective body of literature. We added an acknowledgment of this point in the Conclusion section.
Appendix A – please review percentage figures provided on page 3, first paragraph. - The authors appear to mention (around lines 208-210) that there are methodological limitations inherent in the research that contain rural and urban comparison groups. It is unclear what these are and some further elaboration on this would be helpful.

We have reviewed and revised the figures (and percentages) in Appendix A. The limits of the research that contain rural and urban comparison groups are addressed in the Discussion section.

Discretionary revisions: -

For clarity, in the results section, authors could add around line 151 that remaining articles (i.e. of the 125 identified articles) were not included as they did not contain rural definitions of health.

We have edited the manuscript to clarify the reasons that the remaining articles were excluded. In most cases, these articles did not report on original research, or were outside of the scope of the current review.

Unsure whether the study purpose (line 100 and following) is an accurate reflection of the systematic review. This could presently be interpreted as assessing the literature regarding definitions of health in rural and urban groups (essentially comparing two different areas of literature) whereas this systematic review appeared to be concerned with assessing the literature around RDoHs primarily and then also noting any differences between rural and urban populations where possible. –

As described by the reviewer, this review was concerned with assessing the literature around RDoHs primarily and then also noting any differences between rural and urban populations where possible. We have edited the last paragraph of the Background section to clarify this point.

It would be interesting to note the evidence gradings (according to the ADA, as suggested by authors) for each of the 34 studies – a column with this information could be included in Table 1.

We agree with the reviewer, but did not elect to include the gradings in this report. In the Discussion section we discuss the relative weakness of the evidence at present, and note the need for additional research in this arena.