Author's response to reviews

Title: Easier said than done!: Methodological challenges with conducting maternal death review research in Malawi

Authors:

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Version: 4 Date: 14 October 2013

Author's response to reviews: see over
Date: 11 October 2013

To: BMC Health Research Methodology

Re: Re-submission of the manuscript

Dear Ms. Arlene Pura

Thank you for yet another opportunity to improve the manuscript, “Easier said than done!: Methodological challenges with conducting maternal death review research in Malawi” (MS: 5908942368535994) for consideration for publication in BMC Medical Research Methodology. In response to the detailed comments provided, we have made major revisions which are itemized in the next six pages. We were disappointed to read that Dr. Lori’s decision. We respect it; however, we strongly disagree. We have done our best to address the reviewers’ comments. Please let us know if you need anything clarified.

As stated earlier, this manuscript has not been previously published. Nor is it currently under review elsewhere. The research herein adheres to basic ethical considerations for the protection of human participants in research. There are no real or potential conflicts of interest related to the manuscript.

Lastly, all of the authors listed in the byline have consented to the byline order, and have agreed to the submission of the manuscript in its current form.

Thank you for the consideration!

Sincerely,

Viva C. Thorsen, PhD
Tarek Meguid, MD
Address Malata, PhD
Johanne Sundby, MD
Reviewer's report
Title: Easier said than done!: Methodological challenges with conducting maternal death review research in Malawi
Version: 3 Date: 24 April 2013
Reviewer: Jody Lori
Reviewer's report:
Major Compulsory Revisions
Thank you again for the opportunity to review the revised manuscript entitled: "Easier said than done!: Methodological challenges with conducting maternal death review research in Malawi"
While this is important information that would be of interest to the readership of BMC: Medical Research Methodology, it lacks coherence and sound scientific knowledge to be of added value to the field.
Response: Based on the first review and revision, we believe the manuscript has been improved significantly. Based on discussions with colleagues in the field and reading the current literature on maternal death audit methodologies, there is a need for this type of article. It fills a knowledge gap, especially for junior researchers and maternity unit management in low-income countries. We strongly disagree with the assessment that "it lacks coherence and sound scientific knowledge to be of added value to the field."

It is apparent the authors put a tremendous amount of time and energy into this manuscript. The paper still needs major, significant revisions.
Response: Based on the other three reviewers, we have made significant revisions. The conclusions are vague and do not add significantly to the literature.
Response: We revised it but do not agree that it does not add to the literature.

When assessing this paper using the 9 criteria of BMC, I unfortunately, do not feel it meets the requirements for publication.
Response: The criteria listed under the instructions for authors state, “[r]esearch articles should report on original primary research, but may report on systematic reviews of published research provided they adhere to the appropriate reporting guidelines which are detailed in our Editorial Policies.” Our article is based on primary data/research and does provide useful insight into the maternal death review process. The criteria used by reviewers appear to be more in favor of quantitative, experimental which then puts our article at a disadvantage. Perhaps Dr. Lori put more weight some criteria than others which may have played a role in her reversing her decision. We respect her decision but do not agree with it at all.

Reviewer: Sue Fawcus
Reviewer's report:
The paper has been considerably reworked and reorganised.
The purpose and methodology specifying that this paper represents a reflection of the 5 stages of conducting the audit process in Lilongwe; is much clearer and distinguishes this paper from the main study which presents the audit results. The authors have separated Results (reflections of the Lilongwe audit process)
from theoretical discussion and literature from other sites which is now in a Discussion section. This makes the manuscript much clearer and allows better focus on the problems encountered in the actual study site. The addition of Table 2 illustrates some of the problems in assigning cause of death and is a useful addition.

The discussion presents a balanced in formative review of the value and logistical challenges of conducting maternal death reviews. The addition of specific recommendations on solutions to improve the audit process makes the paper much more valuable and some of these solutions are summarised in Table 3 which is an important addition to the article.

Minor revisions that the authors can do are:
1. Page 3, line 5; 'ff' should be 'if'
   **Response:** Done.

2. Page 6, under Methodology, line 1. delete "was"
   **Response:** Done

3. Page 28, final paragraph. This is written as an instruction but should be a full sentence eg For researchers, there is a need to allocate more time ........ and to solicit feedback from.....
   **Response:** The sentence has been revised to read as, “For researchers, it is critical to allot more time to share findings with all stakeholders, including community members, solicit feedback and involve them in the formulation of recommendations.”

4. I suggest that you refer to Table 3 in the Discussion. It is a useful table and currently is only referred to at the end of the Conclusion
   **Response:** Done. We refer to Table 3 on page 19 at the end of the first paragraph of the Discussion section.

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**Reviewer:** Catherine Pirkle  
**Reviewer’s report:**  
The authors have made a genuine attempt to respond to many of my concerns. The article still needs substantial revision, but much of this is in regards to its organization and length.

**Major revisions:**
The organisation of the paper is highly disjointed and therefore hard to follow. The paper needs streamlining and shortening. The authors need to focus on the most salient issues and avoid providing tangential information that does not support the main aims of the paper and distracts the reader (e.g. remove information about the statistical software used, remove the paragraph describing how they built upon Thaddeus and Maine’s framework; the paragraph summarizing the recommendations of Gregory and Radovinsky is unnecessary as the reader can be pointed to the reference; same thing for Squire’s 14 methodological recommendations, Table 2, etc.).
Response: We removed the following from the manuscript: information about the statistical software used, the paragraph describing how we built upon Thaddeus and Maine's framework, the paragraph summarizing the recommendations of Gregory and Radovinsky, and Squire’s 14 methodological recommendations. We did not remove table 2 because it was recommended by Dr. Lori in the first review that we should link the causes of death and ICD-10 with “results from this study and not ‘cases’ in general.” Moreover, in the current review, Dr. Fawcus stated that the “addition of Table 2 illustrates some of the problems in assigning cause of death and is a useful addition.”

The language is overly flowery at times (too many adjectives) and once again, the article needs a good edit (there is a fair amount of verb-noun confusion, there are incomprehensible sentences such as first phrase of the Methods, and there is misuse of capital letters).

Response: first sentence in the Methods sections was revised and reads as, “For this paper, the salient components of the five-step maternal death surveillance cycle used to carry out the facility-based maternal death review study in Lilongwe, Malawi were critically reflected upon” (p. 6).

Also, there is no indication in the text where the tables are supposed to go.

Response: According to BMC’s Instructions for Authors, “[s]maller tables considered to be integral to the manuscript can be pasted into the end of the document text file, in A4 portrait or landscape format”. There is no mention of having to state where the tables should be placed.

I would suggest a dramatic reorganisation of the paper along the following lines. At the very least, merge the results and discussion section (this is acceptable according to journal guidelines). In this section, continue to present each step of the audit cycle as you have (including the relevant subheading, such as “identification of maternal death cases”). However, divide each of these steps in three sections: methods used by the audit teams and researchers to achieve the step; obstacles encountered in the field while carrying out these methods; and recommendations. This will entail moving some details from the Methods section down to the Results & Discussion section.

Response: Originally the results and discussion were together, then Dr. Fawcus suggested that they should be separated which we did. Now it is being recommended that we merge them again, with which we do not agree. In the current review Dr. Fawcus has acknowledged the separation and stated that “[t]his makes the manuscript much clearer and allows better focus on the problems encountered in the actual study site. Moreover the other two reviewers did not make any comments on merging these two sections or that the two separate sections were difficult to read, etc. Therefore we decided not to merge them.”

Given that this is a critique of maternal death audit methodology, the Methods section of this article could be written to describe: (briefly) the design of the study that is being critiqued (including the eligibility criteria for being a maternal death as the authors cite 58 maternal deaths but only use 33 32, or 39 depending on which part of the text one is reading), the setting and population, and any methodology that was
used to arrive at this critical reflection (literature review, systematic review of study notes and diary entries, interviews with data collectors, etc.).

Response: We have added a short paragraph regarding the methodology used to arrive at the critical reflection (bottom of p. 8). We also added a sentence that explains the varying number (bottom of p. 9 and top of p. 10). Due to the fact that the methods section is already rather lengthy and we provided the reference where readers can read more details about the methodology, including inclusion criteria, upon which this study is based, we did not add any more text about the methods.

In the Method’s section, the authors can alert the readers to the organisation of the Results & Discussion section and state that specific methods of maternal death audit that are subject to critique will be presented in the Results & Discussion section for the sake of clarity. It is my opinion that it will be much easier to understand the obstacles encountered if they are presented alongside of the specific methods employed to achieve each step of the audit cycle (e.g. the reader will not have to constantly flip back to the Methods section). Further, this may help to focus the paper and remove redundancies.

Response: In the paper we explicitly state how the findings are organized (i.e. the 5-steps of the maternal mortality surveillance cycle, page 9). We separated the findings and discussion sections, where findings only have the results and the discussion interpretations of the findings in light of other studies. We believe that the two separate sections are easy to understand. We do not believe that there is much redundancy.

As a more general recommendation, I would like the authors to reflect on the difference between fatal flaws (the (mis)classification of the causes of death in the absence of foreign external reviewers) and minor hiccups (tape recorder not working, which, incidentally, is why many qualitative researchers bring more than one to interviews). Some of the obstacles that the authors bring up are very serious (missing records, poor agreement between external obstetrical reviewers in Norway and local staff in regards to the causes on death, inability to locate health professionals) and could entirely bias or invalidate the conclusions of the review (e.g. the recommendations and evaluation steps of an audit). This information would be informative to someone who has never conducted an audit before. There are also important distinctions between what is needed for research and what is needed for continuous quality improvement. Some of the obstacles encountered by the researchers could have been the subject of recommendation in the audit cycle (improving recordkeeping practices while emphasizing the role that records play in quality healthcare or the need to provide training to medical professionals on the causes on maternal deaths).

Response: In conducting reviews of clinical management and disease pathways in developing countries, the main challenge is that almost all data and interpretation is suboptimal. The gold standard for diagnostics (making a proper, flawless diagnosis) are almost never met, and making conclusions is invariably based on the data one actually does have- which may be limited both because of the lack of proper management – tests not being done – lack of adequate record keeping, and lack of experience in making conclusions and a diagnosis. Even making a diagnosis when it is possible to do may be
complicated, especially in an environment which is punitive.

Therefore, there will always be flaws. The duty of a maternal death review is to make a best possible guess – or consensus – on what is at stake. Most often this is sufficient, because the remedies that need to be in place to handle similar situations may be “global” rather than extremely specific, simply because that is the only possible solution. We do NOT think it biases or invalidates the maternal death review; it just stands as it is the best possible outcome. Because there is no way around this, what is found is what can be found. The seriousness is not that data are missing for an attempt to do a systematic review, but that the health system is so poor that data are invariably missing.

As mentioned in the manuscript, the OB/GYN who participated in the review/analysis/classification worked at the study sites intensely. He knows the working culture and the constraints under which healthcare staff work. He established a good working relationship with the staff. He is/was very capable at assessing the deaths critically. Poor agreement between reviewers is an unfortunate choice of words when describing the observation that two reviewers come to different conclusions regarding the cause of a maternal mortality. In the case of this research, the independent reviewer's task was to try and fit my speculated cause of death to a classification system that is recognized and utilized globally, namely the ICD-10 classification of diseases. His attempt to provide a best fit may have altered, or made a little more general the likely cause of death. Added to this is observation that many of the reasons given for “cause of death” were, in fact, modes of death. This will also add to discrepancy in the wording, but not necessarily to the reasons for why a woman died.

Table three summarizes what is needed to improve clinical practices. We've written one line at the beginning of the discussion section to reflect this (page 18). We've added a section reflecting on missing data (pp. 20 & 21). We added a few additional lines to the classification discussion (end of page 29)

Discretionary revision
Finally, I agree with the Sue Fawcus that the objective of the paper was not well-stated and feel that it could still be better presented. In fact, the authors do a better job of stating the objective in the last sentence of the methods than they do in the introduction. I would move that sentence up to the introduction. There is no need to present the objectives twice; the presentation just needed to be clearer. Response: The objective stated at the end of the methods section was moved to replace the one stated in the introduction section (p. 6, before methods section).

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Reviewer: Sally SR Rankin
Reviewer's report:

Minor essential revisions.
Response: which might those be?

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

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