Reviewer's report

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

**Version:** 2  **Date:** 18 February 2013

**Reviewer:** Catherine Pirkle

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- Major Compulsory Revisions

This paper brings up a number of important obstacles to conducting maternal death review (MDR) in a resource-limited setting and could be informative to others attempting MDR in the future. However, as written, the paper is not in a publishable form. My biggest criticism of the paper is that it is overly vague. This is particularly true of the methods section, which needs substantial expansion.

In regards to the methods section of this paper, the authors do not provide enough information for the reader to judge if the MDR performed in this setting was rigorous and adequate. They state that the methodology and findings upon which this study were based have been described in detail elsewhere, but they do not provide any references. Much more detail is needed about the MDR process employed in this study in order for the reader to judge if the criticisms about the MDR process are legitimate or rather, reflect poorly conducted MDRs. For example, it is unclear in this paper whether the authors are describing facility-based audits, community audits, or a combination of both. They do not mention who performed interviews with healthcare staff, family members, etc. (middle of the paragraph on page 7). They mention that the causes and characteristics of maternal deaths were assessed by descriptive analysis but do not define what descriptive analysis is. From their description, it is unclear if this study was conducted at one health structure or several. We do not know what kind of health structure was involved (rural or urban, university, regional, district, health post). No description of context is provided. Moreover, we do not know what preliminary steps were taken to prepare medical professionals for the MDR process, including arriving at a mutually understood definition of maternal mortality and the main obstetrical complications that lead to a maternal death; establishment of an audit team and the composition of that team; how data collectors were select, who were the data collectors, and what training they received, etc. No information is given on how data from the audit process were collected, such as whether standardized data collection forms were used. We highly recommend that the authors return to key publications on maternal death review, such as Beyond the Numbers (which they cite), and structure their methods according to the guidelines mentioned in such works. If they did adhere to the WHO recommendations on how to conduct MDR, a detailed explanation of why their methods differed is needed.
For the results, the authors present a laundry list of problems encountered while conducting MRD. However, they do not provide enough information for the reader to judge just how serious these problems were, describe what they did to manage these problems, nor provide possible solutions. For example, they state on page 8 that the number of maternal deaths reported in the sources varied and presume that maternal deaths were underestimated. However, they do not provide numbers that allow the reader to judge just how varied the numbers of recorded maternal deaths were. Was one source of data better than another? Finally, I struggle to understand why the authors would presume that the admission registry, the delivery room registry, and the operating theatre registry would all record the same numbers of maternal deaths, as not every case of maternal death would be sent to the surgical theatre, for example. Similarly, the authors state on page 9, “in some instances the charts themselves were missing.” Approximately 18% of medical charts were missing, but the authors do not state what steps they took to locate the records and whether or not these records were missing at random or in a systematic fashion. They complain about the use of abbreviations in the medical charts. However, most medical staff understands common abbreviations and it is easy enough to create a lexicon of these terms for audit staff to refer back to. There are many more examples of issues encountered where the authors do not provide enough information for the reader to judge the seriousness of the problem and what steps audits teams can take to deal with those problem. The authors may want to consider adding a table that lists difficulties, provide a judgement on the seriousness of the issue (with an explanation), and offer solutions. In any respect, the authors need to closely consider each obstacle described and ask themselves, is this problem insurmountable, how serious was it, and what can be done about it. For many of these problems, I suspect that the MDR process itself was not well conducted and the problem would have been entirely avoided had the MDR been better carried out.

Finally, I do not understand the point of the Recommendations section and would suggest removing it all together as there are almost no recommendation in that section. The paper could also use a good edit.

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'