Author's response to reviews

Title: Framing Maternal Morbidity: WHO Scoping Exercise

Authors:

Rachel C Vanderkruik (rachel.vanderkruik@gmail.com)
Ozge Tuncalp (tuncalpo@who.int)
Doris Chou (choud@who.int)
Lale Say (sayl@who.int)

Version: 4 Date: 2 October 2013

Author's response to reviews: see over
Dear Editor-in-Chief,

In response to the peer review comments for our submission entitled, “Framing Maternal Morbidity: WHO Scoping Exercise”, we have included the following comments and edits:

**Referee 1 Comments:**
**Reviewer:** Yadira Roggeveen

**Reviewer’s report:**
I find this article an interesting and valuable contribution to the discussion on measuring maternal morbidity. I do however have some comments. I would be looking forward to the author's responses.

- **Minor Essential Revisions**
  1. p4: “To accurately monitor and improve maternal health, a definition for maternal morbidity is first needed, which will then drive development of tools and classifications to measure and monitor complete maternal health.” Comment: I do not agree that for maternal health improvement definitions are first needed, as the improvement of maternal health is a process that can take place without being measured. I would suggest “...and improve maternal health indicators...” etc. Moreover, definitions are important when comparisons are made between different settings. Local definitions of maternal morbidity would not be of concern when only used for local use.

  - We have revised the language to say “to accurately monitor the improvement of maternal health”.

  2. p 6: Please specify how the thematic qualitative analysis was done, and if any (then which) research software assisted this process. Did themes emerge from the qualitative data or was a preset thematic framework used? It seems that the themes from the literature study guided the thematic analysis of the qualitative data. If so, could you describe if any other interesting data emerged from the qualitative study, beyond the thematic analysis?

    - The themes from the literature review guided the thematic analysis. As described in the methods section, we used a charting approach to synthesize and interpret the data collected in the literature review. This charting of key themes also guided the thematic analysis. To clarify, we expanded upon the description of the qualitative thematic analysis in the methods section by adding the following language: “Themes were derived from this scoping exercise using a thematic analysis of the qualitative data from open-ended questions in the survey. The themes identified in the literature review and charting approach described above guided the thematic analysis of qualitative data collected.”

  3. p15: “Only after this work is completed, can there be reliable monitoring of sustainable progress towards MDG 5 and beyond.” Monitoring of “sustainable” progress seems a selected portion of progress or decline that could be measured. Sustainability is a goal in itself. I would suggest to omit the word sustainable.

    - The word sustainable was omitted

  4. p16 Conclusion: “Accurate and routine measurements of maternal morbidity”. The word “accurate” suggests that there is only one accurate way to measure maternal morbidity, whereas the paper also clearly indicates that this up for debate. I would find a reflection on the comparability of maternal morbidity across settings much more interesting.

    - We agree with the reviewer that our scoping exercise confirmed that currently there are different methodologies and measurements used for maternal morbidity. However for improved systems of measurement which would allow for comparisons over time and settings, we believe
that the next step is identifying a scientifically rigorous and acceptable definition and criteria for maternal morbidity. To clarify this, we edited the text to include “rigorous” instead of “accurate”. We also provided further reflection in our conclusions.

5. p 17, reference 12: adhere to style format
   - Reference has been reformatted

6. General comment: I would be interested to know the author’s reflection on future operationalization of maternal morbidity registration systems. How could this important process take place without overburdening the health workers or policy makers that would need to implement and monitor these registration systems?
   - We agree with the reviewer that the operationalization of maternal morbidity registration systems without overburdening the systems in place, while still producing quality information informing policies and programs will be very important. We did not include this discussion in this paper, as the upcoming papers, currently in preparation, from the working group will delve into this issue in more detail.

Referee 2
Reviewer: Stuart Anderson
Reviewer’s report:
Discretionary Revisions
1. This is a well-written and appropriately constructed paper which reports the results of a scoping study of maternal morbidity. This is part of a much bigger project to develop common definitions, a validated assessment tool and a set off indicators of maternal morbidity. The question posed is original, important and well defined.
   - No action needed

2. The scoping study has two components; it would be useful to indicate this early on (e.g. after ‘scoping exercise’, p.4 last para). Likewise it would be helpful to explicitly indicate on page 4 that it has three objectives; to explore, to identify and to determine etc.
   - The three objectives and two components of the scoping study have been explicitly indicated in the last paragraph of page 4.

3. The literature review and survey of expert opinion are clearly explained. The key words selected are stated, as are the databases accessed (p.5). The review is limited to the last twenty years. However no indication of the number of papers searched is given, and no inclusion/exclusion criteria are mentioned.
   - Details have been added on the literature review; literature was limited to English-only publications. The literature review on maternal morbidity definitions was used for the purpose of developing the scoping exercise questionnaire, and different than a systematic review methodology, studies were reviewed until data saturation was obtained around themes pertaining to the components of a maternal morbidity definition. We further highlight this distinction while discussing the limitations.

4. A charting approach is used to synthesise and interpret the data collected, which identifies key themes. The data collection process is sound and thorough, although it could usefully be explained in a little more detail. The discussion and conclusion are well balanced and supported by the data.
   - As stated above in response to Referee #1, further detail has been included around the data collection/analysis process.
5. Expert opinion is sought by means of a survey. The questions in the questionnaire were appropriately revised and finalised using a modified Delphi method among ten health experts. The approach used is sound. This provides a robust mechanism for ensuring that the questions asked address the key issues.

- No action needed

6. It was sent to 130 people in all, and replies were received from 55 of them in five regions. The response rate should be stated in the text as well as the box.

- Response rate was added to the text as well

7. Use of a scoping study provides valuable information which can be used on the basis of more extensive research designs. The limitations of the study are clearly spelled out on page 15. The paper is well written in good English.

- No action needed

8. It contains a single box which is clear and concise. There is a single additional file which provides the survey questionnaire.

- No action needed

Typos etc

- Revisions are in italics next to stated typo

  p.2 ‘comprise a continuum’ or ‘consists of a continuum’ – revised to ‘comprise a continuum’
  p.4 top line, ‘these are: the’ – revised to “these are”
  p.4 bottom para, ‘gaps in current research’ – eliminated the “are” to read “gaps in current research”
  p.5 bottom line, ‘purpose of assessing’ – added the “of”
  p.6 bottom para, paper not manuscript – changed to paper
  p.6 bottom para, ‘studies, and are thus’ – added the “and are”
  p.7 second para, ‘Others do not include’ .... ‘only consider’ – changed considers to consider
  p.8 second para, ‘nearly all respondents’ – deleted “of”
  p.10 line 2, ‘comprise a spectrum’ – deleted “of”
  p.10 second para, ‘However, a majority of the respondents agreed that there should be a scoring.’ – added “a” majority
  p.12 line 1, ‘in this study’ – revised to this
  p.12 4 lines up, ‘some women have to discussing’ – added “to” discussion
  p.13 first para, ‘morbidity is that it allows’ – changed “such allows” to “it allows”
  p.14 second para, ‘maternal mortality. However’ – made a new sentence
  p.15 second para, ‘helped to direct’ rather than ‘facilitated in directing?’ – changed to “helped to direct”
  p.17 ref 12, check font – changed font to Times New Roman

We are confident that the content of this proposed manuscript would be of significant interest to readers of *BMC Pregnancy and Childbirth*, and look forward to hearing your response to our submission. Thank you very much for your consideration.

Sincerely,
Rachel VanderKruik, MSc

On behalf of:
   Özge Tunçalp MD PhD
   Doris Chou MD
   Lale Say MD

1 National Initiative for Children’s Healthcare Quality (NICHQ). Boston, MA, USA.
2 Department of Reproductive Health and Research. World Health Organization. Geneva, Switzerland