Reviewer’s report

Title: A CROSS SECTIONAL STUDY OF MATERNAL NEAR MISS AND MORTALITY AT A RURAL TERTIARY CENTRE IN SOUTHERN NIGERIA

Version: 1 Date: 30 Aug 2016

Reviewer: Stacie Geller

Reviewer’s report:

This article presents findings from a cross-sectional study conducted in a rural, private tertiary care hospital in Southern Nigeria. The study examined severe maternal outcomes, near miss indicators, and associated healthcare and patient factors. The authors found that of 262 deliveries that occurred during the study period, 52 women (19.8%) had a near miss event, and 5 women (1.9%) died. Given that there have been significant global declines in maternal mortality, a shift to examine maternal near misses and severe morbidities may provide a better foundation to improve maternal health. While this article can provide valuable insight as to the possible contributors to severe maternal outcomes, the authors may consider making revisions to clarify findings and to strengthen the manuscript. These are listed below.

ABSTRACT

1) For clarity, I suggest the following revisions to the Background: The study evaluated the pattern of severe maternal outcomes, near miss indicators and associated patient and healthcare factors at a private referral hospital in rural Nigeria.

2) For clarity, I suggest the following revisions to the Results: Of the 262 deliveries, 52 women had a near miss event, and 5 women died.

3) In the Results, the correct percent of deaths in the age category 20-24 years is 60% (3/5), and not 75%. Please correct or clarify.

BACKGROUND

4) (Paragraph 1, Sentence 1) In the first sentence, the authors describe that "substantial progress towards reduction of maternal mortality and attainment of the Millennium Development Goals in Nigeria" has been made. This sentence would be more meaningful if this progress was quantified. This can be done by presenting the MMRs from different years.

5) (P2, S2): Please provide references for the multiple interventions that have been effective in reducing mortality rates.
6) (P4, S1): It is not clear what this sentence is trying to convey. I believe that the authors are stating that evaluations of maternal deaths and near miss cases provide opportunities to examine social, economic, and structural factors that increase the risk of maternal mortality and morbidities, and these findings can be used to plan interventions that are contextually appropriate. Please clarify.

7) (P5, S1): Please define the "other epidemiological parameters."

8) In general, the authors provide adequate justification for using a private hospital as the study site. Is it possible to provide the % of women in rural Nigeria that deliver at private facilities?

METHODS

9) Study area: Can you provide additional information on what a "new private teaching hospital" implies? Can you provide the year that the hospital was open?

10) Study population: It would be appropriate to first describe the population as the group of people from which the smaller sample was drawn. Can you provide basic demographic information of the women that live in the region?

11) Inclusion criteria: Consider using a table to present this information

12) Maternal vital status: Consider including this information as an appendix

RESULTS

13) Traditionally, the sample characteristics are presented in the first paragraph. Please consider rearranging your presentation of results. In line with this, consider combining tables 1 & 2. Furthermore, in the text, you include women's religion, but this information is not included in Table 1. Please consider adding this information to table 1.

DISCUSSION

14) (P9, S3): The authors write, "The issue of poverty and ignorance also contributes greatly as 60% of the maternal mortality occurred in women who were unemployed." Please consider a revision of this sentence. First, claiming that ignorance was a contributor to maternal death does not consider the structural barriers that women in rural Nigeria may face related to education attainment. An an alternative could be to saw "low education level"

TABLES
15) In general, the tables should include more description, including sample sizes for all tables, description of abbreviations, and more context. The tables should provide enough information so that the reader could look at the table, without any text, and understand the study context.

16) There are multiple errors in the table percentages. Please double check the calculations and totals are correct.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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