Reviewer's report

Title: Risk factors for reported obstetric complications and near misses in rural northwest Bangladesh: Analysis from a prospective cohort study

Version: 2 Date: 5 April 2014

Reviewer: Eileen Yam

Reviewer's report:

BMC Pregnancy and Childbirth
Peer review of “Risk factors for reported obstetric complications and near misses in rural northwest Bangladesh: analysis from a prospective cohort study”

Overall comments
This paper is very well written, addressing an important topic with compelling population-based data. The prevalence estimates alone are a worthwhile contribution to the literature, given the paucity of research on maternal morbidity outside of facility settings. My main comments and questions pertain to the description of the analysis of risk factors. A recurring theme is my concern about the way “adverse obstetric history” is defined, seemingly lumping together stillbirths, spontaneous abortions, and induced abortions into a single independent variable. It also was not clear to me why the authors do not discuss or present findings on how the outcomes may have been associated with antenatal care, skilled attendance, or facility deliveries.

MAJOR COMPULSORY REVISIONS

1. Line 94: In the sentence beginning with “Adverse obstetric history,” are the authors using the term “abortion” to refer to induced abortion? Or spontaneous abortion (i.e., miscarriage)? Or both? The suggestion that induced abortion can lead to future maternal morbidity is a lightning rod of a statement and does not seem substantiated. Regardless, it seems inappropriate to combine both spontaneous and induced abortions into one category. What is the authors’ reasoning for creating this variable this way?

2. Line 146: When referring to “women with abortions,” are the authors referring specifically to induced abortion? This confusion persists throughout the manuscript; it is not clear when or whether spontaneous and induced abortions are being combined into one category. I feel quite strongly that for the research questions presented in this study, it is not appropriate to combine them in a single independent variable.

3. Line 181: “Adverse obstetric history” is defined as stillbirth or abortion, but again, it’s not clear what kind of abortion falls in this category. Furthermore, stillbirth is a very different pregnancy outcome compared to induced abortion or spontaneous abortion. The factors associated with spontaneous abortion would be different from those associated with history of induced abortion.
4. Lines 235-243: These findings on skilled attendance, antenatal care, and place of delivery are interesting. Are the data not shown in tables? In addition, what is the authors' rationale for not accounting for these variables in the analyses as potential predictors of the outcomes of interest?

5. Lines 336-340: The authors discuss how antenatal care could be important in identifying and addressing obstetric complications. Given that the authors presumably had access to data on antenatal care uptake among participants, this paragraph invites the question of what association the authors found between antenatal care and the outcomes. Same with skilled attendance and facility deliveries.

MINOR ESSENTIAL REVISIONS

1. The superscript “a” in the flowchart is not defined in the image.

2. Lines 126-135: This paragraph is confusing, and I’m not sure it corresponds to the flow chart on the final page of the manuscript. The text says that women who had stillbirths, miscarriages, or induced abortions were interviewed one month following the pregnancy outcome, but both Table 1 and the flow chart suggest that women with stillbirths underwent the same data collection procedures as those with live births (i.e., postpartum interviews), not the interviews for women who had miscarriages or induced abortions.

3. Similarly, the text implies that only those who had a live birth were interviewed two weeks after delivery, but why wouldn’t those who had stillbirths also participate in that two-week interview?

4. In the flow chart, I see no mention of this two-week interview. Is the “birth assessment form” in the chart referring to this two-week interview?

5. In line 132, it seems that the sentence beginning with “At 1 month postpartum” actually is referring to all women, not just those who delivered. So the use of the word “postpartum” is confusing. Aren’t women who miscarried or induced abortion also being asked about near misses?

DISCRETIONARY REVISIONS

1. Line 121: Why is reproductive age defined as 13 to 45, rather than the more standard 15 to 49?

2. A discussion of induced abortion in Bangladesh seems lacking if menstrual regulation (MR) is not mentioned. There is a difference between MR (which can be quite safe and regulated) and clandestine, unsafe abortion, but this distinction is not addressed in the manuscript. A good overview can be found at: http://www.guttmacher.org/pubs/IB-Bangladesh-MR.html

Level of interest: An article of importance in its field
Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.