Reviewer's report

Title: Cross-sectional survey of knowledge of obstetric danger signs among women in rural Madagascar.

Version: 0 Date: 14 Nov 2016

Reviewer: Lisa Thompson

Reviewer's report:

Thank you for your efforts to contribute to our understanding of how to increase knowledge of obstetric danger signs, and ultimately to improve maternal and neonatal outcomes by encouraging families to deliver at health facilities. This manuscript needs

Title:

1. Consider specifying study design "Cross-sectional survey of obstetric danger signs knowledge among women in rural and urban Madagascar" This will help readers searching for this topic to find it more easily.

2. What does RENY stand for? This abbreviation isn't used anywhere else in the article.

Abstract:

3. Please include sampling method in Abstract. Randomized? Convenience sampling?

Introduction

4. Grammar edit: "Maternal mortality continues to place an unacceptable burden on low- and middle-income country populations."
5. What are the stats on maternal mortality and complications for Madagascar?

6. "It has been assumed that most of these complications can be avoided if women have skilled birth attendants." This sounds odd. "Assumed" makes it sound like this isn't based on anything.

7. "Similarly, Hailu and colleagues reported that women who received maternal and child health education were nine times more likely to deliver in a health facility" Citations in text do not line up with numbers in Reference section.

8. In general, the Introduction and Discussion sections contain very few references to support the statements made. There is a lot of research on this topic, including reviews. Has any related research been done in Madagascar? Qualitative or quantitative?

9. Grammar edit: "Furthermore, women benefited from structured health education about danger signs during pregnancy childbirth and in the newborn, as well as information about contraception, breastfeeding, and domestic violence."

Methods:

10. No such thing as a cross-sectional cohort study.

11. Since study participants who received this education early in the study (August) period could have shared this information with study participants who were interviewed later (October), couldn't the study results had been biased by your education? Did you compare results from the beginning and end of the study to see if differences existed? This should also be addressed in the Limitations section.
12. Since frequency data are not available, statistics, like odds ratios cannot be calculated. Results are only presented for factors associated with the knowledge of danger signs during delivery and factors associated with the knowledge of danger signs for the newborn. Although knowledge of pregnancy and postpartum danger signs are mentioned in the Methods section as having been collected findings are not discussed.

Results

13. Clarity suggestion: The majorities were single (68.0%), living in rural areas (68.8%), and secondary school entrants (53.8%); 43.0% had not started the last three years of secondary school (Table 2).

14. Clarity suggestion: "Binary and multivariable logistic regression analyses were carried out to identify factors associated with the knowledge of danger signs.

15. Why are homemaker/unemployed grouped? This makes it difficult to compare groups across studies.

16. "100'000" should be 100,000

17. Clarity suggestion: "For 85.7%, a dispensary or hospital was less than an hour's walk away."

18. Typo?: Most (69.7%) had attended at least the WHO-recommended four ANC visits. 69.6% in Table 2

19. Clarity suggestion: "Many women stated that they received information about potential problems that might occur during pregnancy and delivery (70.8%), and nearly all were advised to deliver at the hospital (55.4%) or dispensary (43.7%). Thirty-one percent of
women stated that their pregnancy was unintended, either mistimed (19.9%) or not wanted at all (11.0%)."

20. Analysis? Was a bivariate and multivariate analysis of knowledge of danger signs during pregnancy and postpartum not done? You mention these, but don't report results.

21. Grammar edit: "These results are consistent with findings of other studies in Africa reporting that only 58% of women were able to mention at least one danger sign for the newborn and even fewer women more than three (10,11)."

22. Grammar edit: "This recruitment strategy might have led to a sample with more favorable attitudes towards the health system, who might be more likely to have sought institutional delivery."

23. Reference needed. Or leave out as this is not addressed by the study. "Inclusion of men is also crucial to ensure success in the long run."

24. "However, the rate of unintended pregnancies in our sample was high similar to the rates reported by the Guttmacher Foundation for the African Continent." Was your sample similar to the Guttmacher Foundation or higher?

25. "Provision of contraception services as recommended by WHO represents a unique opportunity to prevent future undesired pregnancies, especially among women who attend regular ANC, as these pregnancies are associated with higher risk for both mother and infant." This seems unrelated to the rest of this study. I would either leave it out or develop it further.
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.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
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No

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I am able to assess the statistics

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