Reviewer’s report

Title: Contraceptive use among lactating women in Ganta-Afeshum District, Eastern Tigray, Northern Ethiopia, 2015: A cross sectional study

Version: 0 Date: 01 Sep 2017

Reviewer: Claudia Hanson

Reviewer's report:

Thank you for giving me the opportunity to review this paper. The topic is clearly important. However I think the paper would need major work to increase the importance for policy and practice. Below I mention some points which may help to improve the paper.

Background

This section starts with bold facts, such as about spacing and its effect on health. Such statements would need to be supported by a systematic reviews rather than one publication from Ethiopia. I would expect the introduction to give more essential background information. A background section would need to develop what is known about determinants of uptake of contraception and what not. The research question will need to be developed. This is for me not sufficiently done.

Be aware that for an international journal not only paper from Ethiopia, but what is known from similar settings are expected. I also miss the DHS in the literature review which should provide sub-regional estimation of contraceptive prevalence. A research question is missing.

Method

In view that there is no research question I'm not sure about the sample size. It is unclear how women were approached and selected in the respective Kebeles. This is important to understand the sample and a potential selection bias. It is very surprising that in this sample so many women deliver in a facility, thus I have concerns about a biased sample.

I'm missing a conceptual framework, this is important to prevent over-adjustment. Factors which are rather on the pathway of effects should not be included in the multivariate analysis.
Results

I'm not sure that it is sound to compare normal delivery against a combined group of operative delivery and CS. A comparison group which has not at least 5% of the sample should not be used, so I would recommend to take this analysis/result out.

Discussion

This section needs major revision as the results are not sufficiently reviewed against what is known from similar settings. The discussion is too much repetition of the results section. A section on strength and limitations of the study / study design is missing. This should also discuss that the availability of a radio in households can also be a marker for being "modern", thus the effect could be different from a direct effect of probably receiving more information.

I'm not sure whether the paper adds new knowledge as it is well known that families from a higher wealth background have a higher uptake of contraception

There is no discussion why contraceptive use is so high?

It is difficult to base recommendations of how FP promotion should be done on a cross-sectional study which cannot produce any causality, and in view of this limitation I would recommend to have less bold recommendation.

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.

No

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

No
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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