Reviewer’s report

Title: Intimate partner violence against women and its association with pregnancy loss in Ethiopia: Evidence from a national survey

Version: 1 Date: 26 May 2020

Reviewer: Justice Moses K. Aheto

Reviewer's report:

Tiruye and colleagues examined the association between Intimate Partner Violence (IPV) and pregnancy loss using data from the 2016 Ethiopian DHS. They carried out substantial revision to the manuscript, especially the incorporation of the multilevel analysis, which showed substantial cluster-level variation in the outcome. Without accounting for this would have definitely biased our model estimates.

See more details below:

Abstract:
The authors did not report summary results (ICC/VPC) on the contribution of cluster-level variation obtained from the multilevel. It is important for the authors to state whether significant cluster-level residuals/effects were found (which is yes in their case).

Introduction:
a) The revision to this section is satisfactory. background to the study sounds good.

Methods:
b) The authors now incorporated the multilevel analysis which is great, and the results from the multilevel models confirmed the need to do so.
c) The explanation of ICC reported at page 10 lines 222-225 is not clear. In this study, the ICC will measure similarity in the outcome measure considered in this study among women within the same cluster other than they are to women in different clusters under study, NOT just similarity among women from same cluster.
d) Though the authors acknowledged the presence of sampling weights in the EDHS data, they did not explain whether the model took this into account or not as I recommended in my first review. This can potentially bias their estimates and its resultant misleading conclusions/findings. However, I suggest the authors consider this in their future research work.

Results:
e) The revision to the results presented is satisfactory.
f) The title for Table 4 should be revised to incorporate the 'multilevel model' analysis. It could read 'Table 4 Associations between IPV and pregnancy loss among reproductive age women (15-49 years) in Ethiopia from the multilevel model.'

Discussion and conclusion:
g) The revision is satisfactory BUT the residual cluster-level variation must be adequately discussed in the context of Ethiopia and relate that to policy and intervention strategies, and not
only to conduct further studies to search for left-out potential cluster/community-level variables that might explain this. The conclusion section must also incorporate this.

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

Yes

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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Acceptable

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