Reviewer’s report

Title: Depression among HIV positive pregnant women in Zimbabwe: a primary health care based cross-sectional study

Version: 0 Date: 01 Nov 2018

Reviewer: Angela Lupattelli

Reviewer's report:

This is a cross-sectional study investigating the prevalence of depressive symptoms in HIV-positive women in Zimbabwe. The study is relevant, given the scarcity of data in Zimbabwe on the topic. However, I do have some concerns that should be addressed by the authors.

The introduction could be amended with prevalence estimates of antenatal depression in HIV-positive women in African countries other than Zimbabwe - if these are available in the literature. This could be informative.

Because the study is also exploring factors associated with antenatal depression in HIV-positive women, the authors should consider adding one-two sentences about the factors most strongly associated with this outcome as found in prior studies.

Methods, Participants: please rephrase the word "handicapped". The authors could use the wording "intellectual disability".

Please indicate at what gestational week women were enrolled in the study. This information should also be presented in Table 1, since symptom severity prevalence can vary across the stages of pregnancy.

Has the EPDS been validated only in postpartum women in Zimbabwe? Please clarify.

Please specify whether the cut-off of 12 on the total EPDS score has been validated in the population in Zimbabwe. If not, this is an important point (limitation) to address since it is well established that the validity of EPDS cutoff values differ across populations/cultures.

The authors performed univariate analysis using chi-square test; however, in some instances, it seems that an exact test is necessary given the low number of expected counts per cell. Could the author address this issue?

Also, the method part on the binary logistic regression is insufficiently described; there is no information on steps in model building, model robustness, presence of potential interaction, criteria as to how variables were excluded from the model. Please amend this section as appropriate; the work done by Prof Hosmer may be of help for this.
It would be relevant to provide the 95% CI of the prevalence estimate for antenatal depression. As shown in Table 1 an 2, there are many variables with zero cells. This could be an issue in the multivariate analysis. How did the author handle the zero cells problem? Please clarify.

Please indicate how missing values on one or more of the EPDS items were handled, and so missing values on sociodemographic variables.

One important limitation is that the EPDS was administered only one time. So, these results could in fact be an overestimation of the true antenatal depression prevalence.

**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

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal