Reviewer’s report

Title: Perinatal depressive symptoms among low-income South African women at risk of depression: trajectories and predictors

Version: 0 Date: 24 Apr 2019

Reviewer: Karen Wynter

Reviewer's report:

This is a well-written manuscript which aims to identify trajectories of perinatal depressive symptoms in a LMIC setting, and then analyse possible predictors to help clinicians target women who are most at risk of continuing symptoms during the postnatal period. If my concern about the analysis (see below) can be addressed I think this paper makes a unique contribution to the literature, with some clear clinical implications.

My main concern is with the analysis: only univariate analysis was used to identify predictors of each class. Multivariate analysis would be useful, as some of these factors may no longer be significant when accounting for others. Other risk factors may only be significant in the presence of certain factors eg if food insecurity is severe. I would like to see adjusted odds ratios as well as unadjusted odds ratios.

Further comments and suggestions are provided below:

Formatting:

Please check the journal's requirements for submitting tables, and also the reference style. Some references are not formatted in the current draft.

Background:

Please explain "food insecurity" for the international readers of this journal. Please also explain "problematic" and "hazardous’ drinking (all page 3).
Methods:

Please provide statistical evidence for the baseline difference in food insecurity, between participants excluded from and included the analysis (page 5).

Please provide evidence that 13 is an appropriate cut-off for the EPDS among pregnant women in this setting.

The EPDS is not listed under the measures - was this part of standard practice, and not part of the study protocol?

Please clarify what is meant by a "special person" (the MSPSS, page 7)

Please include the clinical cut-off point for the HDRS in the Methods (currently introduced in the Results on page 10).

It is not clear why the MINI was used in addition to the HDRS - was this only used for the assessment of past depression and suicidality risk? And could you please elaborate about the timing of "past" depression - is it at any time since the participant's birth?

What was the procedure if women were found to be at risk of suicide? Were these women followed up or referred?

It's not clear why two measures were used to assess functional impairment - please explain.

Results

Table 1: What is meant by higher / lower wealth?

Table 1: Where there are only two categories (eg education level), it isn't necessary to present both as the reader can derive the % for the other. (I don't have an objection to the way it's presented, but the table could have fewer rows if my suggestion were implemented),

Table 1: Footnotes refer to reference categories - not relevant here?

Were all the factors listed in Table 3 assessed during pregnancy?

Please explain "The 3-class model … generated a small but relevant class" (page 10)

I would interpret the following statement with caution, it's not significant according to the OR: "… greater level of support from a special person (OR=0.94, 95%CI: 0.88, 1.00; p=0.046). (page 11)
Discussion

The authors state about the study of West African perinatal women, that the study is "likely to have excluded a high-risk group by excluding women whose children were born prematurely or had a low birth weight from their study." However, the current study doesn't seem to have assessed gestation at birth, birth weight or any other infant characteristics at birth. This is perhaps a limitation of the current study.

I suggestion that another limitation is that perinatal anxiety was not assessed (current or past).

A few additional suggestions for clarity of expression:

* Abstract: "…who present with greater risk of depression during pregnancy" - greater than whom / what?

* Please avoid causal language such as "Predictors" (eg in the Abstract) when reporting associations between variables for which the direction of causality is unclear. For example, the associations between sustained symptoms of depression and problematic drinking are likely to be bidirectional in causality, and it is not meaningful to report suicide risk as a predictor of depressive symptoms.

* Abstract: "low income women" - please rephrase as "women in low income settings" or similar.

* Please reconsider the use of these italicised words: "The prevalence of HIV in South Africa is among the highest worldwide, and yet perinatal depression is more common among HIV-positive women" (page 3)

* Please add an apostrophe in the appropriate place: "the participants' / participant's arm allocation" (page 5)

* Please reword "…as previously done" (page 7)

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 recommend additional statistical review

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Please indicate the quality of language in the manuscript:

Acceptable

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