**Reviewer’s report**

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

**Version:** 0  **Date:** 24 Mar 2019

**Reviewer:** Dana Barthel

**Reviewer's report:**

This manuscript examines different trajectories of depressive symptoms in ante- and postpartum women from a low income setting in South Africa. The writing of the manuscript is very clear and the statistical analysis is thoroughly performed.

**Major concern**

I am not happy with the examination of suicidal risk as associated factor since it is a symptom of depression itself and also included in the HDRS. So that this factor was found to be associated with the criterion (class membership of the high risk class) is quite circular and I would recommend to exclude suicidal risk from the regression analysis, or if you have good reasons for the inclusion, then please discuss it in the discussion section.

**Minor concerns:**

- Perceived disability or impaired functioning, measured by the WHO DAS II and FAI belongs to the mental health section in the method, but to the health section in the results.

- Page 5, line 16: the citation of Lawrie et al is not inserted by the reference manager.

- Page 5, line 24: "included IN the analysis…”

- Page 6: I was a bit wondering why you used two instruments for the assessment of functional impairment - could you please comment shortly on this fact (maybe in the discussion or here in the methods)

- Page 6: I am not very content with the differentiation between "mental health" factors and "health" factors, especially since alcohol misuse is also a mental health problem.
- Are there any data concerning the clinical history of these women, e.g., previous pregnancies, previous complications during pregnancies or births? If so, I would recommend to include those variables in the regression analysis, this would be very interesting.

- Page 7: I would encourage you to use more comprehensive headlines, such as social characteristics, factors or variables (the same for economic).

- Page 7, line 38: could you please give some more information and maybe some examples for the items that contribute to the SES measure. Is income of the family part of this index or the educational background of the women?

- Page 8, line 12: I would suggest to state very clearly that the manuscript examines four measurement points. And also, as the authors state later, that women with only three measurement points are included in the analysis.

- Page 10, line 51 and line 53: please state a bit clearer the measurement points of the means reported, e.g. "… by moderate levels of depressive symptoms at recruitment (mean=15.0,…)"

- Page 11: could you please report the correlations between the predictors or state that you assessed multicollinearity, for example I am curious whether SES and food insecurity are associated and also employment status and food insecurity.

- Page 13, line 14: this sentence is a bit confusing since the symptoms in your "antenatal only" class were not "initially severe" (as you state correctly on page 14, line 16 - 19).

- Page 13, line 21 - 28: this sentence is quite complex and not easy to understand. Maybe two sentences would be clearer. Please state also when the "initial decline in symptom severity" appears.

- Page 13, line 54 - 58: I do not understand the meaning of this sentence.

- Page 14, line 32: "two" LMICs instead of "an"

- Page 14: since your study had not excluded high-risk women (e.g. women with preterm babies or babies with low birth weight) it would be very interesting when you could include those variables into your regression analysis?
Page 15: you suggest that the 3-class model might be more optimal and in the results you state that this model "generated a small but relevant class" - it would be very interesting for the reader to know how this third class looks like

**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

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

Acceptable

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