Reviewer’s report

Title: Associations of sociodemographic and clinical factors with perinatal depression among Israeli women: a cross-sectional study

Version: 1 Date: 15 Aug 2019

Reviewer: Sian Harrison

Reviewer's report:

Thank you for responding to the comments made on the previous submitted version of your manuscript. The re-submitted manuscript is much improved. However, I believe that additional work is required prior to publication. My main recommendations are to further improve the structure of the manuscript, the presentation of the results and the level of detail provided. Here are my specific comments:

Abstract

1. The background section of the abstract includes no background to the study, only the objective.

2. The objective states the study is looking for demographic and clinical factors but you refer to demographic, medical and lifestyle factors throughout the manuscript. Try to be consistent.

3. Correct the abbreviation for the adjusted odds ratios for smoking (currently OR suggesting crude odds ratios).

4. Should the conclusion include a sentence about prevalence since this was a main objective?

5. Since depression is the outcome variable, consider rephrasing the first sentence of the conclusion so that it reads that depression was more prevalent rather than the sociodemographic, medical and lifestyle factors being more prevalent.

6. Encouraging women to fill in the EPDS isn't really a main conclusion from your study, which aimed to assess prevalence and risk factors. It is a useful clinical recommendation but perhaps better placed elsewhere in the manuscript. A more appropriate conclusion would perhaps be that women at risk of depression may be identifiable from the risk factors which were found to be associated with peripartum depression in your study?

Background

7. This section has improved following your changes, particularly with regard to the literature on prevalence. However, I think there is scope for further improvement in the presentation of the
literature on factors associated with peripartum depression. The factors you refer to include later psychiatric morbidity, suicide, effects on the child, etc. It is important to highlight the potential longer-term effects that may be associated with peripartum depression. However, there is no mention of any of the risk factors that have been identified for peripartum depression, for example, factors that might increase the likelihood of peripartum depression occurring and which may be identifiable during pregnancy or prior to the onset of a depressive episode. Since this is one of the main objectives of your study, I think it is necessary to include a review of the literature specifically looking at risk factors for peripartum depression, particularly if there is literature on any of the sociodemographic, medical or lifestyle factors you explore in your study.

8. Providing some background on the healthcare system in Israel is useful. However, there are some details included in the background which would be better placed in the methods. Details about the EPDS should also be in the methods section.

Methods

9. The objectives should be stated at the end of the background section following the rationale and aim of the study.

10. Include a section to describe the setting and participants. Some of the information from the background and the 'design' section would be better placed here.

11. Women included in your study completed the EPDS up to 6 weeks postpartum, which contradicts the DSM-5 criteria which has a cut-off up to 4 weeks. I think 4 weeks is a very strict cut-off and it is reasonable to assess peripartum depression later in the postpartum period. However, perhaps comment on the discrepancy since you specifically draw attention to the DSM criteria in the background.

12. Consider including the EPDS (outcome variable) and all the factors (predictor variables) under one section called 'measures' or 'variables'.

13. The order of the existing section entitled 'variables' is a bit muddled. It would be clearer to discuss each of the sociodemographic, medical and lifestyle factors in turn, rather than initially listing them and then later describing how the variables are measured/categorised.

14. Explain why you decided to take the lower of the EPDS scores if it was completed twice, for example, to ensure a conservative estimate?

15. For population group, use Arab, Orthodox Jew and 'Other' (as opposed to 'all the remaining').

16. The statistical analysis section should include an overview of all the analyses you conducted - descriptive and inferential. For example, there seem to be the following steps to your analysis: 1) description of participants 2) comparison of participants with non-participants or general population 3) prevalence of depression in participants 4) association between factors and
depression (univariate analysis) 5) association between factors and depression after adjusting for other factors (multivariate analysis). Ensure all of these steps are described.

17. Clarify that crude odds ratios are calculated from the univariate analyses and the adjusted odds ratios are calculated from the multivariate analysis.

Results

18. Did you compare the participants to the general population statistically? If so, include p-values in Table 1.

19. Report the results of the univariate analyses before the multivariate analysis. For example, report which predictor variables were independently associated with depression before reporting which predictor variables were associated with depression after adjusting for other variables.

20. The results of the regression analyses would be easier to interpret if they were described so that the predictor variables and the outcome variable are clear. For example, rather than 'larger proportions of women with perinatal depressive symptoms were Arabs', consider rephrasing to 'women from Arab backgrounds were more likely to report perinatal depressive symptoms' (as you have done in the first paragraph of the discussion). This applies throughout the results section.

21. It is fine to present the distribution of characteristics (column percentages) for depressed/non-depressed women, as you have done in Table 2. However, related to point 20, you could consider presenting the row percentages rather than the column percentages. For example, the prevalence of depression for women within each subgroup. You could also present the crude odds ratios and 95% confidence intervals for the OR in this table. This would make it easy for the reader to compare the prevalence of depression between subgroups and with the overall prevalence.

22. It is helpful to see the crude and adjusted OR in Table 3. Can you comment on these in your results? (e.g. the magnitude of the effect). Are any variables significant at univariate level yet not at multivariate level?

23. Figure 1 is an excellent inclusion. Ensure it is referenced in the manuscript.

Discussion

24. The discussion reads well and places the findings on prevalence and risk factors in context within the existing literature.

25. You could add a couple of sentences to suggest future research priorities.

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