Reviewer's report

Title: Contextual-relationship and stress-related factors of postpartum depression symptoms in nulliparas: a prospective study from Ljubljana, Slovenia

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Reviewer: Maria Leano

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Overall comments: This study brings to light the importance of measuring attachment styles and other contextual factors when screening women for postpartum depression. These factors can definitely impact women's depressive symptoms. Moreover, this study is conducted among a population where there is not much information available, thus increasing the knowledge in the field about the global prevalence of postpartum depression. Below are some comments to strengthen the study.

Background: The authors do a great job describing PPD and how there are other factors that start during the antepartum period. However, it would be beneficial to organize the introduction around previous literature on how social, environmental, and personality factors have been shown to be associated with PPD, particularly in Slovenian populations. Moreover, more information as to why this study is based solely on first-time mothers would be helpful. Also, the last paragraph of the introduction section is too redundant with the study aim section that follows. It is advised that authors keep one of the two paragraphs; either the last under the introduction section or the study aim section, but not both.

Methods: The authors do a good job describing the study sample and population of the study and the procedure of the study. However, this section can be greatly improved. First, the name and acronym of the tool used to measure depression was the Edinburgh Postnatal Depression Scale (EPDS). The sociodemographic and pregnancy information needs to be more thorough and include more information on level of emotional support received, particularly how it was measured (e.g. using a scale from 0 to 10 or was it a yes/no answer?) and also more information around "stress due to loss of employment/illness/financial problems" is required. It is not clear whether all these stressors were measured separately and the type of measurement used. The main weakness of the study is the the statistical analysis conducted. Analytic sample: although the authors claim that there were 181 women in the study, the final analysis only included 90 women. However, there is no discussion around missing data and it was treated. It seems the authors used listwise deletion in this study, so this information should be provided to the reader. Statistical analysis: in the first paragraph, the authors claim that "no multiple logistic regression was built"; however, it's not clear why that's the case, specially because they do run univariate logistic regression models. Thus, more information around the reasoning not to run multivariable logistic regression is necessary. The authors also claim that a "multiple linear regression model was built with postpartum EDS as a dependent variable", but it seems that what the authors refer
to is that a multivariable linear regression model was built using the EDS continuous variable. It is necessary to clarify these details in the manuscript. The models chosen for the study might not be the most appropriate ones and it is recommended that the authors discuss the most appropriate model with a statistician. Since this is a longitudinal study, the initial measurements need to be taken into consideration when running a regression model. The current model that is being used is usually used for cross-sectional studies. Furthermore, given the model used, the results drawn from it need to be carefully discussed and the authors should avoid using predictive language (e.g. X predicted Y). Moreover, more information needs to be provided around how many models were built and run and whether the authors used Bonferroni corrections to correct for multiple testing.

Results: the authors do a good job providing information around the demographic characteristics of the participants. However, the way that the prevalence of PPD is reported us rather confusing because the response numbers keep changing. For example, the authors mention that 181 women were included in the study, but then they give prevalence rates of (25/156) and (27/166). Thus, it is not clear for the reader how many people were included in the study and how much information was missing.

Results of univariate logistic regression and multiple regression analysis: this section was redundant because the authors first try to provide an overall picture of the findings and then they discuss them more in detail. One suggestion is to start the paragraph describing the results in depth. What were some of the associations found and their direction?

Discussion: The authors do a good job relating their study back to previous literature and situating the findings of their study within the field. However, the summary of results is not completely accurate. The main weakness of the discussion section is that the authors make broad claims from univariate associations. However, the multivariable linear model demonstrated that many of the associations were not present in the full model; thus, they should not be discussed as the main findings of the study because in reality, there is no association, once other factors are controlled for. Overall, only education and anxiety after birth should be discussed as the findings of the study. Moreover, as previously stated, given the analysis, it is imperative that the authors refrain from causal language (“PPDS can be caused by multiple etiologic factors”) since this study does not test causation.

Discussion of results: This section is thorough and revises previous literature. However, it discusses univariate results as results obtained from the full model. This section should only reflect and discuss the results from the full model.

Conclusions: this section should be heavily revised based on the previous comments. Also, the last paragraph of this section is confusing and should be explained more thoroughly and also
why it is advised that risk/no risk of depression might be more important. Also, this section would probably be better after the implications section.

Strengths and limitations: the authors do a good job describing some of the limitations of the study. This section would benefit from addressing issues of data missingness and sample size as well. The sample size of the study was rather small and future studies should focus on trying to have larger sample sizes.

Implications: The authors do a good job describing some of the implications of the study. However, this section would greatly benefit from more clinical discussion of how the results can inform better clinical practices. Also, in this study the authors investigate an issue of importance, considering attachment styles and other contextual factors when screening women for depression, but the significant findings from the univariate analysis and then non-significant findings from the full model suggest that more research needs to be done in the area with larger samples.

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