Reviewer's report

Title: Postpartum Mental Health Outcomes of Mothers who Conceived using Fertility Treatment

Version: Date: 14 January 2014

Reviewer: Lori E Ross

Reviewer's report:

General Comments:
Thank you for the opportunity to review this interesting manuscript regarding postpartum mental health outcomes among mothers who conceived following fertility treatment. The manuscript is clearly written throughout, and in general the design, methods and interpretation are appropriate to address the research question. I have 2 suggestions regarding the analytic approach that I believe would strengthen the interpretation of the findings.

Major Compulsory Revisions:
1. The primary outcomes and associated cut-off scores are entirely appropriate. However, for the secondary outcomes (Perceived Stress Scale and Parenting Morale Index), there appear to be no validated cut-off scores. It cannot be determined whether the cut-off scores used by the authors have any clinical validity. As such, I would strongly suggest analyzing these variables as continuous outcomes and testing for mean differences between groups.
2. I disagree with the authors’ statement that multivariable modelling was not warranted. Considering that age differed significantly between groups, and annual household income closely approached statistical significance, I believe that the findings would be more robust had both of these variables been adjusted for in the analysis.

Minor Essential Revisions:
1. On page 6, please reword “previous mental health” to “prenatal mental health” for specificity.
2. Please describe the method of random selection for the comparison group.

Discretionary Revisions:
1. Based on the description of the recruitment process, the AOB cohort was recruited via convenience sampling. I think it would be appropriate to explicitly describe the sample as such.
2. It would be preferred to give the n for each reason for exclusion of the original 1654 participants to end up with the 1296 participants included in this analysis.
3. It is a common limitation of research in this area that different forms of fertility treatment are combined in the analysis, despite the fact that they may have differential impact on postpartum mental health. Perhaps this could be
acknowledged in the Limitations?

**Level of interest:** An article of outstanding merit and interest in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests