Reviewer’s report

Title: Mood and Quality of Life Changes in Pregnancy and Postpartum and the Effect of a Behavioral Intervention Targeting Excess Gestational Weight Gain in Women with Overweight and Obesity: A Parallel-Arm Randomized Controlled Pilot Trial

Version: 0 Date: 10 Oct 2018

Reviewer: Louise Brough

Reviewer's report:

This manuscript describes the effect of a behavioral intervention to prevent excess weight gain in pregnancy and to quantify changes in mental health and physical quality of life.

The paper is on the whole well written. However, there are a number of areas where clarification is required.

The authors state that in a previous paper the tool was effective for weight loss. However they do not show in the results the magnitude of the weight changes between the tool and usual care in the current study.

In the introduction the authors state weight restriction tools have been effective and restricting excess weight gain but have had little effect on adverse pregnancy outcome. This seems an important point, if they do not improve health outcomes, then why use them at all?

In the methods there is no sample size calculation so it is unclear if this research was adequately powered (there are only 11 in the placebo group). Please could the power calculation be added to the methods.

Could you add the actual cut-offs used to define overweight and obesity.

How was gestational age determined, was this via ultrasound or using the date of LMP, could this be added to the methods.

Where in the US was the study carried out? How were the women compensated.

was the income data maternal income or mother plus partners income?
In table 1, what is pre-gravid BMI, when was this measured. Was this estimated by the mothers or is actually baseline BMI? Should the postgraduate be education rather than work.

The results needs to include how the weight gain differed between treatment and usual care.

In the discussion the authors state the sample size was too small to assess the extent of lifestyle intervention on mood etc and another larger study is needed. if this is the case then what is the value of this current study, if it is not adequately powered to find anything and you find nothing then it could just be the sample size is too small rather than lack of actual effect.

**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.

No

**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

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

Acceptable
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