Reviewer's report

**Title:** Exercise in obese pregnant women: The role of social factors, lifestyle and pregnancy symptoms.

**Version:** 2  **Date:** 9 September 2010

**Reviewer:** Renée Fortner

**Reviewer's report:**

**Minor Compulsory Revisions**

1. Abstract: Under conclusions, the authors state “Women who were in better health prior to pregnancy ...”. “Better health” is a subjective term and should be avoided as it is unclear as to what constitutes better health in this context.

**Major Compulsory Revisions**

2. Page 3, Background, first paragraph, second sentence: As previously indicated, “better” is somewhat subjective. Also, who is the comparison group? (i.e. Women who are physically active and meet physical activity guidelines during pregnancy have improved outcomes as compared to women who are sedentary? Do not meet the guidelines?)

3. Page 3, Background, first paragraph, third sentence: The authors refer to “exercise requirements”, but do not define these “requirements” (or recommendations). Please define and provide a reference for the requirements/recommendations.

4. Page 5, Methods, first paragraph: It is unclear from the methods whether the women included in the sample for this analysis are the entire sample from the RCT, or just a subsample. Please clarify.

5. Page 5, Methods: Given that the intervention/control group status of participants is likely an important factor, more information about the intervention and control protocols needs to be provided.

6. Page 8, Results, first paragraph: Data presented here should also be shown in a table presenting data on the study population.

7. Results, general comment: The authors use data from a randomized controlled trial, without controlling for trial group in the analysis. It appears there was more loss to follow-up in the control group as compared to the intervention group (at 36 weeks, control n=16; intervention n=19 vs. 25 in each group at 12 weeks), and this uneven distribution may have affected the results.

8. Results, general comment: While this paper has the potential to present important information, the lack of any multivariable methods make the results questionable. It would be preferable to evaluate these associations, while controlling for other potentially confounding factors (i.e. age, BMI). Given the dichotomous outcome, this could be done with multivariable logistic regression.
9. Results, general comment: The study is under-powered to see an association between these factors and physical activity, particularly at 26 weeks with only 36 of the initial sample of 50 women contributing data. Please address power.

10. Discussion, general comment: A discussion of the loss to follow-up is warranted here, given that a substantial number of women no longer contributed data at 36 weeks, and, importantly, that this loss to follow-up differed by study group. Are the characteristics of the women lost to follow-up the same as those retained in the study?

11. Page 16, Table 1 can be eliminated as this information is essentially duplicated in Table 2. I would suggest that this Table 1 be replaced with a table as indicated in item #5.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.