Reviewer's report

**Title:** Pre-pregnancy predictors of hypertension in pregnancy among Aboriginal and Torres Strait Islander women in North Queensland, Australia: a prospective cohort study.

**Version:** 1  **Date:** 29 October 2012

**Reviewer:** Frank Spradley

**Reviewer's report:**

Major compulsory revisions:

**Background**

1. The authors built a case for examining risk factors that promote the increased prevalence of preeclampsia in their population. Among these risk factors, hypertension is mentioned in the third paragraph and the authors’ data support this notion. However, diabetes is also mentioned, which is not the focus of this manuscript, and in fact, the data from the authors’ population do not support this statement. Please add information to the background regarding obesity as a risk factor for the development of preeclampsia, which is a main focus of this study.

2. Last paragraph, sentence 3: remove the word ‘among’.

3. Please use your background statements, which should focus around hypertension and obesity as risk factors for preeclampsia, to generate a hypothesis statement.

**Methods**

1. In the first sentence, please define what these ‘factors’. Also, it is unclear what ‘hypertension in the next pregnancy’ means. This just means those individuals who became pregnant after their baseline health check from the three data sets, correct? How many of these patients had multiparous pregnancies?

2. Statistical analysis section: please state that data will be presented as both unadjusted and adjusted. What statistical tests were used?

**Results**

1. Please move paragraph two to the first paragraph position. Please provide a heading for this paragraph, something like ‘study sample at health check’ or something along these lines.

2. Move your first paragraph to the second paragraph position. Please provide a heading for this paragraph highlighting that this data is specifically about the prevalence in the study sample that development hypertension in pregnancy. Place the sentence ‘22 had hypertension in their next pregnancy’ as the last sentence and please do not start the sentence with a number.

3. In the third paragraph, place a heading indicating that the data in this paragraph is unadjusted. It is not clear what ‘subsequent pregnancy’ means.
Please define.

4. For the last paragraph, please place a heading indicating that the data in this paragraph is adjusted for age and ethnicity. Begin this section by moving the second half of the last sentence from the second paragraph ('Adjustment for ethnicity and age greatly diminished many protective...'). Also, rephrase this sentence because it is confusing, ie, ‘diminished many protective’. Next, state the hypertension data and albuminuria data. Then start a new paragraph stating the obesity and metabolic syndrome (you need to define what is meant by metabolic syndrome) data. I don’t think you should mention central obesity in this paragraph because you did not examine this directly; however this should be mentioned in the discussion. End the paragraph with a sentence detailing the glutamyl transferase activity

5. Is it possible to get blood levels of the adipokines leptin and adiponectin?

Discussion

1. The discussion needs to be totally rewritten. The first paragraph should detail the main findings as they relate to what was written in the background section and follow the order of the results section. Is BMI representative of central adiposity or obesity as a whole? Please remove the transferase data from this first paragraph; this data should be discussed later. End this paragraph with a sentence summarizing what your findings mean in the big picture; this sentence should represent what will be presented in the remainder of the discussion.

2. The second paragraph starts of nicely. However, this paragraph should state why it was important for the authors’ to conduct this study. From the way the authors have written this paragraph, it seems that these authors’ data are not novel.

3. For the third and fifth paragraphs, the authors should not focus on physical activity because the data presented in this manuscript do not warrant a lengthy discussion of this.

4. A new third paragraph should discuss hypertension as a risk factor for preeclampsia.

5. The next paragraph should discuss obesity as a risk factor for preeclampsia.

6. The next paragraph should combine paragraphs 3 and 4.

7. Paragraph 6 should be the limitations paragraph.

8. Paragraph 7 should be the conclusions paragraph.

Figures

1. Figure 1 should be numbered.

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

**Quality of written English:** Acceptable
**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**
I declare that I have no competing interests.