Reviewer’s report

Title: Reasons for participation and non-participation in a diabetes prevention trial among women with prior gestational diabetes mellitus (GDM)

Version: 1  Date: 18 October 2013

Reviewer: Emily Blood

Reviewer’s report:

This is a very well written article with an important research goal—maximizing participation in lifestyle interventions in women with prior GDM. In order to improve the paper and present the results in a clear and concise format, several revisions are detailed below.

General comments:
For clarity, focus either on consenting or non-consenting rather than switching descriptions between factors related to consenting and factors related to non-consenting. Also, I assume the goal is to increase participation of all women with prior GDM rather than just to target those who will consent, so the background and results should read in this way. The discussion is clearer on this point. Also, choosing one terminology ‘consenting’ vs. ‘participation’ would be recommended.

Major Compulsory Revisions:

Methods:
1. 1st paragraph, briefly describe the recruitment process and intervention arms even though they are described elsewhere they are also relevant here. They are referenced later in the paper and the reader should not have to read a separate article to access the basic relevant information about the trial.
2. Clarify whether the logistic regression analysis included multiple factors at once as predictors or just one predictor at a time. If the logistic regressions only included one factor at a time they duplicate the chi-square and t-test results already given.

Results:
3. The classification tree analysis does not significantly add to the paper to justify its inclusion. A sufficient set of analyses of this data would be the chi-square and t-test results followed by logistic regression analysis that included multiple significant factors related to consenting.

Lessons Learned:
4. Appropriate trial design section, I would be hesitant to throw out the idea of using an RCT just yet and would argue that non-randomized designs have just as many problems with interpretation of efficacy as RCTs of lifestyle/behavioral interventions. I would instead focus on what within an RCT could be changed so
that participants are not receiving what they consider to be an undesirable or less desirable intervention. Perhaps making sure that the control arm of an intervention trial is an attractive option (and that investigators have equipoise regarding which intervention is best) for participants makes more sense than completely abandoning the concept of an RCT. I would suggest further thought of this discussion point.

Minor Compulsory Revisions:

Abstract:

5. Non-consenter n=72, but in manuscript text n=73. These should be reconciled.
6. Clarify why there is a difference in consenters (73 vs. 156) in abstract. In the methods this is made clear, but is unclear when reading the abstract.

Results:

7. 1st paragraph, last sentence. The comparison should read: “Of those that consented, only 20% used insulin compared to 77% of those that did not consent used insulin”.
8. Move the last sentence of the ‘classification tree analysis’ section to the previous section describing the t-test results and remove CI. This sufficiently describes the age differences between consenters and non-consenters.
9. Related to the earlier point, it may be reasonable to describe the logistic regression results in terms of modeling non-consenting rather than modeling consenting.
10. 4th paragraph of the Barriers section mentions individuals disliked the baseline test procedures, but those have not previously been described. Briefly mention here or in the methods section what these procedures consisted of.
11. 5th paragraph of the Barriers section, add a percentage after the n of “23”.

Table 1:

12. Remove all “100%”s in the “All” column.

Figures:

13. Remove Figures 1, 2, and 3.

Discretionary Revisions:

Background:

14. 8th paragraph, I might re-frame the stated intention of the paper to be on increasing participation rather than identifying those who are more likely to participate.

Results:

15. The second paragraph of the binary logistic regression section would fit better in the discussion section than in the results section.
16. 7th paragraph of the Barriers section may fit better in the discussion section than in the result section.
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 have not competing interests.