Reviewer's report

Title: Explaining adverse pregnancy outcomes in South Asians with diabetes: qualitative study using a nested hierarchy approach

Version: 2 Date: 9 March 2015

Reviewer: Helen Murphy

Reviewer's report:

I enjoyed reading this paper which provides a unique insight into the challenges, choices and chances of South Asian women with diabetes or previous gestational diabetes. However there is need for some robust editing to improve the aims and clarity of the take home message.

Main comments

1. The pregnancy status of these 45 women is very unclear - they are described as South Asian women with diabetes or history of GDM in the abstract background and as women with history of diabetes or IGT in pregnancy in the abstract methods. Please use consistent terminology throughout. For the 21 women with GDM please specify the diagnostic criteria used and whether GDM is current or historical. Likewise for the 24 women with pregestational type 2 diabetes - Given their median age I am assuming that all these women have had pregnancies? Later in the text (penultimate para page 10) it states that they became mothers at an early age - pleas provide further biomedical demographic data on their duration of diabetes, numbers of past pregnancies and current pregnancy status. If these data are not available this should be noted as a limitation.

2. The title is misleading and should be revised to more accurately reflect the multiple influences on behaviour of a South Asian mother. There is no description of “adverse pregnancy outcomes” in this qualitative study and this should be removed from title and key words and discussion/summary of findings.

3. The background can be substantially shortened to focus more on factors specific to South Asian women. The second para could be removed.

4. There is a discrepancy between the study aims which are clearly described at the end of the introduction (page 4 last para before methods) and the aims described in the abstract. The current study is not exploring how socio-cultural factors interact with genetic and environmental risks - please abbreviate the page 4 aims a,b, c, in the abstract.

5. Abstract conclusions – the sentence “we offer recommendations…” is not informative Please revise the abstract conclusions to reflect your key results and/or provide 1-2 key recommendations.

Minor revisions

1. Table 1 – there is numerical discrepancy in the number of participants –
second row 21+8+7+3+8=47 not 45. This could be a mistake in number of Bangladeshi women which I think should be 19 rather than 21?

2. Page 3 – Intro last para “This makes glucose metabolism difficult to control….“Please provide a reference for or remove the statement suggesting that there are inherent differences in glucose metabolism in SA women

3. Page 4 – “There is already much published research that describes the problem of adverse pregnancy outcome in SA..” There are no data of which I am aware confirming that SA ethnicity is an independent predictor of adverse pregnancy outcome in GDM or T2D pregnancy. Our own data suggest that maternal HbA1c and BMI at booking are the only independence predictors of adverse outcome.

4. Short term storylines – the experience of pregnancy page 8 . Please stick to the patient storylines and remove the sentence “This seems partly due to the fact that pregnancy is a potentially volatile period for diabetic control because of complex hormonal changes”.

5. Discussion/Summary of findings page 11 . The second sentence “By taking a nested hierarchy approach” is too long and it is not at all clear how the current study captures influences from cellular and bodily level (genome, metabolism, physiology) please stick to study the findings from study storylines.

6. Poor attendance at group sessions should be included in section about limitations.

**Quality of written English:** Needs some language corrections before being published

**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