Reviewer's report

Title: The effect of antenatal education in small classes on obstetric and psycho-social outcomes - a systematic review and meta-analysis protocol.

Version: 1 Date: 7 January 2014

Reviewer: Ann E Sprague

Reviewer's report:

This is a very interesting topic and one which needs further investigation. However, I’m not sure the review will be able to come up with specific answers because of the diversity of antenatal education and the aims of educating women/partners during pregnancy. I’ll provided some specific feedback first, but then also provide some other general comments for consideration.

I should first say that this is very well written and an important topic!

Background: You talk about measuring effects on relevant outcomes - who defines what is relevant. If you pay for these classes out of pocket, as most would, then what you define as relevant may be a decrease in your anxiety or an increase in your knowledge rather than improvement in breastfeeding rates, or change in pain relief used during labour. If you are a care provider your context might be different than the woman herself

Your research question talks about 'couples' in a Western setting. How will you define couples? Why does it have to be couples as opposed to other participants - how will you ensure that women with a partner - who are not couples are excluded from trial results? In fact - should it matter unless you are measuring some outcomes of the support person?

Under types of studies - you say any language, but this might not go with your emphasis on a western setting. How are you defining Western?

Types of Outcomes Measures - Although I understand the need for quantitative data in a systematic review, I’m betting a lot of the benefit of antenatal classes would be reflected in qualitative data. I don’t know if you can find a way to use this or not. The issues with some of the outcomes you have chosen is that they may not be affected by the intervention. For example, pain relief in labour is largely due to the circumstances surrounding labour - if someone needs to be induced or have a cesarean section, they are much more likely to have had a labour complication then somebody not undergoing these interventions. Do we know if this will be controlled in the RCTs. Will you look at the studies for these kinds of issues? You are hoping that randomization done properly will even this out, but it will be important to consider. Same thing for obstetric interventions. Will the population be controlled to ensure that the groups are relatively equal on these events. And, the question becomes, how would antenatal education help if you develop problems like abnormal FHR rate in labour or preeclampsia that
necessitates intervention.

It is my gut feeling that your secondary outcomes are likely where you might find a difference, yet these are somehow seen as perhaps less important. Would be interested to know how you will define breastfeeding success (most trials would not measure this very well), and infant care abilities.

I don't think I'm well qualified to judge the analysis section as meta-analysis isn't something I have a great deal of experience with. However, I can comment that timing of classes (early, concentrating on healthy lifestyle, and late, concentrating on preparation for labour and birth) as well as parity are important potential modifiers and need to be considered in whatever models are used. As well, you probably need to control for maternal age and other socio-demographic factors as you have indicated. Also any previous health conditions that might lead to different obstetric outcomes should be considered.

Finally - some general comments. Although there probably are not any studies yet, I know of a lot of people getting antenatal education via webinars, and weekend web classes. This different learning modality should probably be commented on if not included yet.

Just for the discussion - what recommendations to you see making if you find from the trials that antenatal education doesn't improve any of your primary outcomes? Would you say that women/families shouldn't spend money on this, we should find a different way to do it, or more studies are needed? What if all it does is make people feel better and more prepared? Is that a good thing? It seems to me that in many NA places the public health system isn't funding this (not sure about Europe) - so is there a health policy implication?

Thanks for the opportunity to review. Hope I've provided some food for thought.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests: No disclosures or conflict of interest