Reviewer's report

Title: Safety and efficacy of a lifestyle intervention for all pregnant women to prevent excessive maternal weight gain: A cluster-randomized controlled trial

Version: 1 Date: 18 January 2013

Reviewer: Madelynne Arden

Reviewer's report:

This is an interesting paper on a very important topic. The results presented are encouraging and likely to be of great interest to those working in the field. The finding that GWG reduction can be produced without adverse effects on inadequate weight gain is often particular importance. I feel, however that the paper could benefit from a number of revisions.

Minor compulsory revisions:

1. The paper would benefit from some rewriting in order to ensure that the English used is accurate. In places the tense changes and there is the odd incorrect word/phrase.

2. I think that the authors need to consider and make explicit that the experience of the participants in the control condition was not exactly the same as standard care. These women experienced additional measurements of weight etc. and this may have inadvertently affected their behaviour. Thus the aims listed on page 4 should be amended to make clear that the comparison was with women in a control condition. This should also be listed as a potential limitation in the discussion.

3. The paper would benefit from a more clear description of the activities which occurred in the counselling sessions. It is not clear at the moment whether the focus of these sessions was information giving and advice and feedback, or whether efforts were made to assist the women to make behavioural goals. A detailed description here is vital since it is important to be able to identify the 'active ingredients' of the intervention. The authors may find the behaviour change taxonomy helpful in describing the contents of the intervention in full (Michie et al., 2011, A refined taxonomy of behaviour change techniques to help people change their physical activity and healthy eating behaviours: the CALO-RE taxonomy. Psychology & Health, 26, 1479-98. doi: 10.1080/08870446.2010.540664).

4. Related to point 3 above, it would be helpful if the authors could report variables related to the success of the counselling. For example, how many participants completed the dietary records and PA questionnaires? Also, were measures put in place to ensure the quality and parity of counselling between difference practices? I wonder if the authors took any measures of behaviour change following the sessions. Did the participants actually exercise more, or eat more healthily? It would be very helpful for subsequent intervention to know how
and why the intervention produced the effects. If this was not measured it should be included as a limitation of the study.

5. (p.8) Why was 5kg higher defined as substantial weight retention?

6. I think the authors try to play down the considerable baseline differences in weight categories between the conditions. I think this should be considered more carefully and an explanation for the strategy by which these were controlled for in subsequent analysis provided.

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

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

**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