Reviewer's report

Title: Effect of physical activity intervention based on a pedometer on physical activity level and anthropometric measures after childbirth: a randomized controlled trial

Version: 4 Date: 1 November 2011

Reviewer: Graham Baker

Reviewer's report:

On the whole the authors have done a good job in amending the manuscript based on editor/reviewer comments as per their detailed responses to each point. I have provided some specific feedback to the authors’ response to my initial review in a step by step fashion below (clarifying major and minor), along with some additional comments.

1. Inclusion of systematic reviews in background section (p5)
Mention of these reviews is a welcome addition to the manuscript in providing justification for method of using pedometers to increase physical activity. However, in regards to ref 16 (NICE, 2006) this sentence appears to be incomplete. The authors’ state that the NICE review shows the evidence but this statement should be more specific – what are the conclusions of this review? Additionally, in regards to 17 (Bravata et al, 2007) I am unsure as to why the authors suggest that only 2 articles contributed to this review? These two points need to be clarified (Minor essential)

2. Change of title and content
I think amending the title and content of the manuscript to exclude any mention of the article is a good decision and is a more accurate reflection of the aims of the article and the described intervention. The authors should double-check to ensure that all mention of the educational programme are removed (for example see Page 12). (Minor essential)

3. The information that the authors provide in their response, as justification and description of the goal-setting targets, is warranted. As indicated in previous reviews there is no consensus as to the most appropriate goal to use in pedometer interventions thus I have no problem with the goals offered as part of this intervention as it is only from the experimentation of different goals will a consensus possibly emerge. However, I do still find the level of explanation lacking in the actual manuscript. For example the authors state that a baseline of 3,249, a 20% increase is reasonable and thus 70 steps/day equates to this. I am still unsure as to how this figure of 70 steps/day arose? I would seek that the authors provide a clear and concise section in the main manuscript describing how the step-goals were developed. With removal of the educational programme content from the manuscript the step-goals are fundamental to this intervention
and therefore should have a fitting description. (Major essential)

Further to this, on page 2 (abstract – methods) it is suggested that women were encouraged to increase until reaching 10,000 steps/day. This initial step-goal was not included in the original manuscript so am unsure why it has been added here – should it have been included in the original manuscript? Also there is no actual mention of 10,000 steps in the main methods section of the manuscript – it appears in the abstract only. (Minor essential)

4. Randomisation and recruitment

I am happy that the authors have responded to this comment appropriately

5. CONSORT

The authors state that the article has changed according to the CONSORT statement. While I am happy that this is the case it is usual practice to report that this has been followed at some point in the manuscript, and also to include the CONSORT checklist with the submission which I suggest the authors do. (Minor essential)

6. Outcome measures

The authors have provided additional information explaining what version of the IPAQ has been used.

7. Statistical analyses

I do understand the purpose of the different tests that the authors use however I think there needs to be a small degree of editing on pages 9-10 (statistics) to avoid any confusion to the reader similar to that experienced by myself. From my understanding ANCOVA were only used to assess changes in health outcomes – this detail could be provided in the statistics section to provide clarity. (Minor essential)

Additional Comments all Minor Essential

Abstract
Page 2 – The words “body” and “mass” should be capitalized along with “Index” which already is
Page 2 – units should be provided for these values – what are 4394 vs 1651?

Background
Page 4 – The authors have changed the units from “kgs” to “lbs” for the weight gain recommendations provided by the Cunningham manuscript (ref 2). I am unsure as to the purpose of this change, especially as in the subsequent paragraph they use “kgs” when presenting results of the mean weight gain retained 6 months after birth.
Page 6 – is it possible to provide information here as to the low and high classification (could be done with single figure and ref here). This is actually provided in detail in the original version of this manuscript (p6) but is missing from the revised version?
Methods
Page 8 – the food frequency intake questionnaire has changed from 69 items to 46? No ref is provided here for this questionnaire.

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 declare that I have no competing interests'