Reviewer's report

Title: Numbers are not the whole story: a qualitative exploration of barriers and facilitators to increased physical activity in a primary care based walking intervention

Version: 2
Date: 3 November 2014
Reviewer: Kristiann Heesch

Reviewer's report:

The authors conducted telephone interviews to understand the experiences of participants in a physical activity intervention. Qualitative assessment of such intervention is not well represented in the literature but is important for development of future interventions. Below are my comments to help the authors improve the article.

MAJOR COMPULSORY REVISIONS

1. General comment. The paper is written from a quantitative point of use. Generalizability and representative sampling, for example are discussed. It is suggested that a greater reliance on qualitative terminology be introduced. For example, were the credibility, dependability and transferability of the data considered?

Background.

2. The first paragraph is a little difficult to follow as it does not appear to have a clear focus. For example, the idea that primary care is the subject of systematic reviews is a little vague. What types of reviews are relevant to the current analyses? The next sentence broadens the discussion to community settings, but if the focus is primary care, it would be clearer to keep the focus on primary care as the setting. The fourth sentence talks about self-report data indicating information about objective measures. This is not clear as written and not clear how the discussion in this sentence contributes to arguments for the current analyses. The authors may want to note that the PA guidelines were based on self-report data and that comparing objective data with self-report data can be a little tricky given the two ways of measuring are picking up different types of data.

3. The next two paragraphs are about the study from which the data for the current analyses were collected, and as such, could be better placed in the methods sections. For the background it would be helpful to use the space to set the stage about the need for this specific study. For example, the background could focus on what is known about adherence to pedometer-based PA intervention, from quant and qual studies, and then what is not known (what this study adds).

Methods.
4. It would be helpful to have a little more information about the trial, particularly in helping understanding the quotes. For example, it appears that participants were asked to get to 10,000 steps: is this true? Were they asked to do this from the beginning or to gradually increase? What were the ‘graded tasks’ they did? The additional information could be added into a new column in Table 3; here the specific ways that the general behavioural change techniques were translated into specific strategies for this trial could be described and then the results could refer to these strategies and their use as application of the general techniques.

5. It would be helpful to mention what the theoretical basis of the intervention was and to discuss and provide a rationale for the use of Michie’s taxonomy as a framework for readers unfamiliar with it. Also, was there a framework used for the analysis of the data?

6. First paragraph from line 98. Clarify what was done with the spreadsheet of participants to get a sample of participants representing a range of backgrounds.

7. Line 106. Provide a rationale for selection the 200 steps/day threshold.

8. Line 115. Why 40 participants?

Results.

9. Quotes are presented in text and then others in table form. For efficiency and ease of reading, the most important quotes could go only in table 4 (so removed from text), and in Table 4, the bold face bit could also include the information about the participant that is currently provided in text and reference the table. The text would then be used to delve deeper into the interpretation of the themes and subthemes, with reference back to Table 4: “(see Table 4 Quote 1)” and the quotes would be numbered in Table 4.

10. Lines. 160-173 seem to be more about methods rather than results, and would fit nicely into the methods section.

Discussion.

11. In the first paragraph, keep the focus on the qual results from this study and what this study has added to the literature. The discussion about future examination of the impact of the trial on quality of life gets a little too far removed from the current focus.

12. Line 502. It is unclear how the qualitative study had a representative sample, given that purposive sampling was used. With sampling that is not random, as is typically for qualitative data gathering, we don’t usually consider samples truly representative. Also, the selection of participants into the main study would impact how representative the current sample could be compared to the general population at the primary care settings.

13. Line 508. The authors may want to be a little cautious in stating that participants were not self-selecting unless they did not self-select into the major trial as well. Did they volunteer to participate in the larger study?

14. Lines 528 to 532. The authors are encouraged to review the following article,
that examined experiences with a pedometer during a PA trial, as well as other qualitative studies that have examined experiences with PA interventions that use pedometers: Heesch, K.C., Dinger, M.K., McClary, K.R., & Rice, K.R. (2005). Experiences of women in a minimal contact pedometer-based intervention: A qualitative study. Women & Health, 41(2), 97-116.

MINOR ESSENTIAL REVISIONS

15. Wording. Sometimes a statement is made that suggests that certain information has already been provided when it has not. For example, line 88 suggests that the intervention used accelerometers but this has not been mentioned. In line 104, the term ‘pedometer by post group’ is used, but this group has not been mentioned as such previously. If the methods section described the trial more completely, this would help address this issue substantially.

16. Line 180. Here do you mean ‘awareness of walking for these health benefits?’

17. Lines 535-539 repeat previous statements in the Discussion. It is suggested that the overview of the results be discussed once.

DISCRETIONARY REVISIONS

18. Appendix 2: Is the last column needed? This could be described briefly in text (xxx% had no health conditions and xxx% reported conditions such as xxxx-xxx’). Is it possible that such information could help re-identify individuals along with the other information provided? If so, it would be best to cut it.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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.