Reviewer’s report

Title: A pedometer-based walking intervention with and without email counseling in general practice: a pilot randomized controlled trial

Version: 0 Date: 05 Feb 2018

Reviewer: Sophie Baumann

Reviewer's report:
The manuscript entitled “A pedometer-based walking intervention with and without email counseling in general practice: a pilot randomized trial” provided data on recruitment efficiency, retention and potential effectiveness of pedometer-based interventions promoting physical activity with vs. without email counseling among general practice patients. It is important to conduct pilot studies prior to large RCTs. Based on this study, important implications for the design and conduction of future trials can be drawn. However, there are many areas where more precise details would be helpful. Also, findings should be discussed more critically, especially from a public health view.

Introduction
1. The statement about limitations of previous studies on page 5 (i.e. "most of these studies were pilot studies or contained small sample sizes […]") appears to be awkward given that the current study reports findings from a pilot study.
2. The qualitative part of the study is not well introduced.

Methods
3. Inclusion based on self-reported physical activity (p. 7) might be problematic given that people tend to overestimate their level of physical activity. This should be discussed.
4. Given that this pilot study was not powered to detect differences between study groups, the p < 0.05 criterion may not be appropriate to decide on potential intervention effects. Effect sizes may be a more informative basis for conclusions.
5. More details on the structured interviews with the GPs would be helpful.
Results

6. Please avoid appraisal of results in the results section, e.g. "The results have shown […] trial is both feasible and meaningful" (p. 13), "Of the 37 recruited, only 23 (62%) patients were randomized" (p. 13), or "the patients manifest surprisingly high adherence […]" (p. 14).

7. Figures would be helpful, particularly figures showing the development of variables over time, e.g. % persons with valid days and number of steps for each day during the study period (separately for each study group).

8. Although interesting, the qualitative findings reported in this study do not significantly add to what is already known. Considering that this was not the main focus of the manuscript, I would suggest shortening this subsection (15-17).

Discussion

9. The statement "Opportunistic recruitment […] results in reduced self-selection bias" (p. 23) comes with a surprise. Rather, high rates of non-participation may indicate a highly selective sample of participants. As a result, participants are likely to be motivated to change behavior/ reduce BMI. This is one possible explanation for high retention rates.

10. Likewise, the statement "The recruitment process needs to be accelerated, possibly by complementing an opportunistic approach with systematic recruitment" is surprising. First, seven months of recruitment were needed to identify 93 eligible patients. Second, the invitation to study participation depended on BMI. Third, participation rate was low. This indicates (i) a failure of the opportunistic recruitment procedure and (ii) a reduced public health impact of the intervention.

Are the methods appropriate and well described?

If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?

If not, please specify which controls are required in your comments to the authors.

Unable to assess
Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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