Reviewer’s report

Title: Effectiveness of text messages for decreasing inactive behaviour in patients with knee osteoarthritis: a pilot randomised controlled study

Version: 0 Date: 10 Jan 2019

Reviewer: Nefyn Williams

Reviewer’s report:

Main Comments

This trial is a small pilot RCT but the objectives and results do not include the feasibility of trial procedures. The results report 95% confidence intervals and p values, but the trial has insufficient power for these tests. It would be useful to set this pilot study in a framework such as the MRC framework for evaluating complex interventions.

Background

OA knee is an important clinical problem and increasing physical activity/exercise is a core treatment principle. Text messages have been used to encourage physical activity. Using text messages to discourage inactivity in people who have been through the GLA:D programme is novel and interesting.

Objective

Clear objectives need to be stated to test the feasibility for a possible, future definitive RCT in terms of recruitment, retention, measurement of outcomes, etc.

Methods

Power calculation is inappropriate for this pilot RCT. Sample size for a pilot RCT needs to be in terms of feasibility (Teare et al 2014). Feasibility outcomes such as recruitment rate and retention rate would be more appropriate. A mixed methods process evaluation would have been very useful.

Results

No feasibility results reported. There is no statistical difference between the two groups but there is inadequate power for this statistical test. I would prefer the use of simple descriptive statistics such as means and SDs. There is baseline imbalance with the intervention group being 6 years
older, less active with worse KOOS scores compared with the control group. I would prefer the reporting of means and SDs at follow-up too. The results report that the time spent inactive increased in the intervention group and decreased in the control group; vice versa for the time spent moving. This is counter-intuitive and is not in agreement with the self-reported change. Is the sign in the results the wrong way round? Reporting the raw mean scores would be clearer. Figure 2 is unclear to me.

Discussion

This needs to be in terms of feasibility of a future RCT. The lack of statistical significance is not a good reason for not performing a definitive RCT. Clear stop/go criteria would help here.

P12 line 21. This last sentence does not make sense. Please re-write.

The lack of a mixed methods process evaluation is a weakness here. Qualitative interviews might have provided some reasons for the lack of effect.

Reference


Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal

Were you mentored through this peer review?

No