Reviewer's report

Title: The Implementation of a Community-Based Aerobic Walking Program for Mild to Moderate Knee Osteoarthritis: a Knowledge Translation Randomized Controlled Trial: Part I: The Uptake of the Ottawa Panel Clinical Practice Guidelines

Version: 1 Date: 2 July 2012

Reviewer: Carol Oatis

Reviewer's report:

Thank you for the opportunity to review this interesting manuscript. The authors deserve congratulations for undertaking a study to examine strategies to optimize knowledge translation (KT) so that the existing evidence-based clinical guidelines will be utilized by more individuals with osteoarthritis (OA). The study is important.

Major Compulsory Revisions:

Is the question posed by the authors well defined?

1. I believe the target population for the intervention could be clarified earlier in the manuscript. The authors stated that they wanted to test the differential effects of three different strategies to improve the use of evidence based guidelines for the treatment of OA. It was not completely clear until page 7 in the discussion of "Sample and recruitment" that the target population was individuals with OA rather than the health care providers who treat individuals with OA.

2. Additionally while the authors provide a useful overview of the theory underlying their KT strategies, they provide very little evidence for the need for KT strategies in OA interventions. In the abstract the authors note a need to improve compliance in walking programs but they provide no data about the adherence to treatment in OA to support the need for adherence improvement. Nor do the authors actually tell the reader what the evidence is for KT in other chronic diseases. They note that the evidence exists but briefly presenting the outcomes for such interventions would be useful to reinforce the need for this research.

Are the methods appropriate and well described? The methods are generally well described.

1. Certain additional information would be helpful: What precautions were taken to avoid contamination across the two walking groups since both appeared to participate at specific sites?

2. It appears that the “PA specialist” was responsible for monitoring participants throughout the program. However the manuscript states that the PA specialist was “present for a minimum of three weekly scheduled sessions over one year…” How was monitoring occurring the rest of the time?
3. More information about the behavioral intervention is needed. How was the fidelity of the behavioral intervention maintained? Who gave the intervention; was it a single person or multiple counselors? How was it delivered? The “summary” of the behavioral intervention on page 11 would have been helpful if presented earlier; ie “The behavioral intervention consisted of…”

4. The details of this intervention need clarification as well. On page 10 it suggests that the behavioral component lasts the length of the program, but on page 11 it is reported to last the first 6 months.

5. It appears that all walkers had attendance recorded by a third-party but that the control used only self-report. If correct, please make that more clear in the methods section. And consider discussing this in your limitation section. Self-report of physical activity is notoriously overstated.

6. Apparently all participants were paid for their participation. Please provide additional explanation of this (paid when? and were there any pre-conditions for payment?) Please consider discussing participant payment in the limitation section because payment could effect the generalizeability of your results.

Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes, the dropout and retention rates are clearly delineated and explained.

Are the discussion and conclusions well balanced and adequately supported by the data?
1. You note on page 17 regarding behavior change that “[a]s expected, there were no statistically significant results among the three groups at 12 months.” However your 3rd hypothesis suggests that you expected more behavior change in the behavior intervention group. Please clarify.

2. I found the logic of the discussion sometimes difficult to follow. For example, the last paragraph on page 17 (“In this study, KT facilitators…” did not seem to follow logically from the preceding paragraph. Additionally it was often difficult to separate your comments about your own findings from those about others’ findings. Please review and make more explicit the comparisons between your findings and others.

Are limitations of the work clearly stated? Yes the authors list limitations.
1. I believe additional limitations should be included. As noted above the participants are paid and the findings may not reflect the outcomes in an unpaid sample.

2. Additionally the participants appear to have only mild OA involvement and have lower BMI. So the results are unlikely to be generalizable to a more typical OA population.

Do the authors acknowledge any work upon which they are building? Yes

Do the title and abstract accurately convey what has been found?
1. As noted above it would help if the authors indicate earlier that the target of
this intervention is at the patient level rather than at the health care provider.

I have a few additional questions and areas of confusion that, if addressed, will make the manuscript more understandable.

1. The authors refer to Parts I and II in this manuscript. It appears that this manuscript addresses only Part I, ie the results of the KT intervention on compliance and behavior change. Part II purportedly addresses the effects of the intervention on outcome variables such as pain and quality of life. Perhaps the current manuscript was part of a larger manuscript which has since been divided into separate manuscripts. Whatever the cause, the introduction made reading the manuscript very confusing. A reduction of the introduction to a single paragraph addressing the single issue of the current manuscript and then putting the section on theory as a subheading within background would help the readability of the manuscript.

Minor Essential Revisions:

1. Is the writing acceptable? The manuscript is generally well written however there are a few instances where a word seems to be missing or the sentence structure seems rather convoluted.
2. In Table 4 please indicate the meaning of the scores from the Stanford Questionnaire and whether high or low is better. Additionally is an MCID available for these scores?
3. In the Appendix with medication data, are the data really mean and SD as noted in the legend or actually n (%) which seems to make more sense in this table?
4. The table of dropouts includes dropout and retention rates which seems unnecessary because the total of these two is 100%. I think it is easier to choose one of these variables.

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: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I have no competing interests.