Reviewer's report

Title: Yoga for Managing Knee Osteoarthritis in Older Women: A Pilot Randomized Controlled Trial

Version: 4 Date: 11 January 2014

Reviewer: Alyson Littman

Reviewer's report:

The authors have generally done a satisfactory job of addressing my critiques. Upon re-review of the manuscript, there are still a number of issues that they should consider addressing.

Major Compulsory Revisions:

Page 19 In making the statement “Results from this pilot study will provide the effect size needed for calculating the sample size for a future RCT which will be adequately powered to detect expected differences in efficacy outcomes.”, consider revising based on the work by Kraemer et al [Ref: Kraemer, HC, J Mintz, A Noda, J Tinklenberg, and JA Yesavage. Caution regarding the use of pilot studies to guide power calculations for study proposals. Arch Gen Psychiatry. 2006; 63(5): 484-9.[PMID:16651505]].

Minor Compulsory Revisions:

Methods:

Page 6: Please revise this sentence “Participants in the wait-list control had a second baseline data at the end of the first eight weeks before participating in the yoga intervention.” There is a missing word after “second baseline data” – collection? Consider revising this sentence to improve clarity.

Page 11: The description of the timing of data collection is confusing. In the methods, the authors state, “Data were collected from both groups at baseline, 4 weeks (during active treatment only), 8 weeks, and 20 weeks.” It seems that the parenthetical statement “during active treatment only” is meant to alert the reader that the data were not collected from both groups at this time. Also, it is not clear whether data were collected from the wait list control group at 20 weeks (meaning 12 weeks after they started the intervention or 16 weeks. It might be most straightforward to explain the data collection timing separately for the two groups. Furthermore, this description contradicts what was stated on page 6.

Page 10 – Spelling error – change “presence” to “present” as in “present in all yoga classes”

I suggest moving information on sample size to the methods rather than the discussion. This would be helpful as the authors state in the results on page 13 that the study was not powered to detect significant changes in outcomes.
Page 13 – Revise “12 weeks follow-up” to 20 weeks as elsewhere in the revised manuscript.

The results are a bit hard to follow as the authors go back and forth between Results presented in Tables 2 and 3. I would recommend either reorganizing their tables to better reflect how they would like to discuss in the text or reorganizing the text.

CONSORT checklist

- To address the item “Dates defining the periods of recruitment and follow-up” -- While the authors state how long recruitment lasted on page 12, I did not see mention of when recruitment took place.

Table 2: Consider reordering this table so that it better aligns with the text and makes it clear which outcomes were the primary outcomes (OA symptoms) and which ones were secondary. BMI is listed first even though it is not a primary outcome.

To make the tables more understandable, consider writing out acronyms or including a list of abbreviations at the bottom.

There are a number of grammatical errors throughout (e.g., p14, “no significant” instead of “not significant”). The authors and the editors should carefully review the manuscript to correct them.

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: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.