Reviewer's report

Title: Characteristics of randomized controlled trials of yoga: a systematic review

Version: 1 Date: 15 May 2014

Reviewer: Donna M Dryden

Reviewer's report:

This is a descriptive analysis of the RCT-evidence related to yoga as an intervention. It is well written and organized, and is a good summary of the state of the science in this area.

Major Compulsory Revisions

1. This is not a systematic review and should not described as such. I agree that it was done systematically, but that is not sufficient for a systematic review. For example, the Cochrane Collaboration glossary defines a systematic review as follows: A review of a clearly formulated question that uses systematic and explicit methods to identify, select, and critically appraise relevant research, and to collect and analyse data from the studies that are included in the review. Statistical methods may or may not be used to analyse and summarise the results of the included studies.

The current manuscript does not (and did not intend to) critically appraise individual RCTs nor analyse/summarise results of the RCTs. This paper is a descriptive analysis.

2. What was the nature of primary outcomes for the RCTs? How many are self-report? How many use validated tools? How many are surrogate outcomes (eg, blood pressure) vs. patient-important outcomes (eg, myocardial infarction)?

3. The authors allude to this, but the paper would be stronger if there was more discussion on how to improve the quality of research in this area. For example, better reporting, better choice of outcomes, longer follow-up or duration of intervention?

Minor Essential Revisions

1. Searching: You did not use one of the validated search filters (eg, Cochrane) to locate RCTs. Consider whether this is a limitation and comment in the manuscript.

2. Bibliometrics: The unit of analysis in this section is the number of studies rather than the number of RCTs. It makes more sense to use RCTs.

3. The results and discussion around multiple publications is good and important. A recommendation to researchers in the area on how/whether to publish multiple publications would be a useful addition to the manuscript.

4. Include interquartile ranges whenever you give medians. It is more informative
than simply giving the "most common" XXX (eg, sample size).

5. What was the post-intervention follow-up period? What are the implications for research if most do immediate post-intervention assessments?

6. In the discussion you say that Indian interventions are often longer than western interventions, but you don't give any data to support this assertion. Add the information on the different durations by setting in the results (eg, Indian vs NA and Europe)

Discretionary Revisions

1. Can you comment on why there was such a big jump in RCTs between 2011 & 2012? Do you have any reason to believe that this is a trend? Or, was there a policy/funding change for research in this area that may have had an impact?

2. How many RCTs focused on children only? older adults only?

3. In the discussion you note that 52 studies (approx. 25%) had mostly female participants. Is this important? What implications might it have for generalizability or other issues? Why highlight it?

4. In the discussion you comment on the current guidelines for designing yoga interventions. A major contribution to the literature would be an assessment of how many of the RCTs in your paper meet the guidelines. as well as an assessment of the major strengths and weaknesses. Consider adding this as a part of a "future directions" paragraph.

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