Reviewer’s report

Title: Randomized Trial of a Mind and Body Technique for Weight Loss Maintenance

Version: 1 Date: 8 November 2011

Reviewer: Robin Callister

Reviewer’s report:

This study investigated the effects of two weight loss maintenance (WLM) interventions following a weight loss trial. It is a substantial trial in terms of numbers of participants, is well designed and executed.

The primary concern is the reluctance of the investigators to accept that there is really no statistical or meaningful difference between the interventions. It is also not clear whether either of the programs should be regarded as successful in terms of maintenance of lost weight.

Major Compulsory Revisions

Abstract

P2, line 52 – there is some confusion here and in the main document regarding the time frames of the WL and WLM phases. In the abstract, recommend the following: ‘lost weight in a prior behavioural weight loss program’.

P2, line 60 – use of the term randomization as a time point – it would be clearer to state this as the start of WLM; also state that the WLM interventions had a 6 month active stage and a further 6 month follow up.

P2, lines 64-67 – report mean ±SD for age, BMI and weight loss. I disagree with the statement ‘arms differed by 1.24 kg’ – rather the statement should read ‘the arms did not differ (p<0.097)’.

P2, line 68-69 – there is no sense of how many participants are in the group with the most initial weight loss or the extent of that weight loss. Is this an artefact of multiple comparisons?

P2, lines 72-74 – a conclusion about the effectiveness of either WLM interventions is required

Methods

P5, lines 134-147 – recommend calling this section Study Design. Start with the participants in the WL phase and use terms like phase to distinguish the WL and WLM phases. Recommend referring to the start of WLM as WLM-0 or something rather than RAND; this would make it clear what that the 6 and 12 months assessments reported relate to this time 0.

P7, lines 185-189 – more details regarding the randomization process are required. Also, what WL stratification categories were used? Was there no
consideration of sex or age?

P9, lines 244 – statistical methods – Was a sample size/power calculation undertaken? Was the study sufficiently powered?

P9, line 255 – the critical values for statistical significance were not adhered to in the reporting of results.

Results

Table 1 – BMI category – states that the units are kg but presume are %

Weight regain – the mean weight regain in each WLM group is modest, suggesting that both might be regarded as effective?

The wording needs to make it clear that there were not significant differences when this was the case.

Better ways to present the more meaningful findings of the study should be sought.

Discussion

P14 lines 352-359 – the statements here clearly reflect the true outcomes of the study and should be the focus of any revised manuscript.

While it is clearly disappointing to the investigators that the TAT intervention was not more effective, the tendency to overstate a possible random finding (that those who lost more weight initially benefited more from the TAT WLM intervention) suggests serious bias in interpretation.

Conclusions

Overstated. Revise to be consistent with opening paragraph of discussion.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests