Reviewer's report

Title: Childhood Obesity Management shifting from Health Care System to School System: Intervention Study of School-Based Weight Management Programme

Version: 5  Date: 21 July 2014

Reviewer: Nicholas Beyler

Reviewer's report:

Summary
This is an interesting paper that would be an important contribution the study of childhood obesity. However, there are some serious issues with the way the manuscript is written, as outlined below, that must be addressed prior to publication.

Major Compulsory Revisions

1. There are grammar and spelling errors throughout the manuscript that must be corrected. Having the manuscript carefully checked for grammar and spelling errors would be highly recommended.

2. The sample size considerations do not seem correct. When I plug in values of \( u = 0.84, v = 1.96, \#0 = 0.15 \) and \( \#1 = 0.1 \), I get a value of \( N \) that is larger than 300 (not 79). Moreover, when I compute a minimum detectable difference (MDD) with treatment and control group sizes of 40 each, I get an MDD of about 20 percentage points, which suggests much less power than the authors contend that they have with a sample of this size. Additional explanation for why a sample size so small (\( N = 79 \)) would provide so much power.

3. There is a significant difference in Age, BMI, and Waist to Height ratio at baseline between intervention group and control group students (Table 2). This seems important and is potentially damaging to the impact findings if not properly accounted for in the analyses. Did the authors properly control for these baseline differences in their analyses? They need to address this more directly in the Statistical analysis section. At a minimum, they need to state clearly why the methods used (McNemar Test, repeated measures analysis of variance, etc.) are appropriate for adjusting for the baseline differences.

4. The authors report results about exercise and not physical activity which seems to be the more appropriate outcome measure. Some discussion about why there is a focus on exercise and not, more broadly, physical activity in the questionnaires and results is warranted.

5. The text about study limitations in the Discussion section is lacking. The authors need to provide more substance about their study limitations. For example, is the small sample size an issue? What about attrition that occurred? Was attrition accounted for in the analyses? The authors suggest that there are
better behavior outcomes that could have been used—why weren’t they used in the current study?

Minor Essential Revisions

1. More information about the Attitude and behavioral changes outcomes would be beneficial. Was the questionnaire given to students a named questionnaire or was it just generic? What are some of the questions students were asked and how were the questions phrases? A table with a list of all the items would may be warranted.

2. Same suggestion for the parent questionnaire—provide a list with the items or at least provide a few examples of how the questions were asked.

3. On page 11, the authors use the term “completer analysis.” Is this the same thing as complete-case analysis? May want to clarify that for the reader.

4. The last sentence of the first paragraph in the discussion section, starting with “One of the challenging observations in this study…” is difficult to understand. Please reword or clarify with additional text the point being made here.

Discretionary Revisions

1. Consider including more and different keywords. Consider keywords that are listed in other similar manuscripts that have already been published.

2. It may be worthwhile to place more emphasis in the introduction and/or discussion sections about what stands out about this study. The authors mention at the end of the introduction that this is one of very few studies delivered in schools that were implementing a broader HPS initiative. Is there something else that sets this study apart entirely? Is this study the first of its kind in the country it is being implemented in, for example?

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

Quality of written English: Not suitable for publication unless extensively edited

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

Declaration of competing interests:

I declare that I have no competing interests.