Reviewer’s report

Title: Health promotion in individuals with mental disorders: a cluster preference randomized controlled trial

Version: 1 Date: 28 January 2013

Reviewer: Kristin Schneider

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This manuscript examines the effects of a weight loss intervention for individuals with mental health disorders living in sheltered housing. This population suffers from significant health disparities; thus the extent to which health behavior change interventions can reduce weight is an important area of study and likely of interest to BMC Psychiatry readers. Lack of clarity in several key areas dampens enthusiasm for this manuscript.

Major Compulsory Revisions

1. Who made the decision about condition preferences? The SHO administrator? The person that was going to be in charge of the treatment? This is important information to include because the administrator’s preferences may have been different than the group leaders’ or the participants’.

2. More clarification is needed on what participants in the control condition received. What is “treatment as usual” for these participants?

3. More information on the “individual support” is needed. How long were these sessions? Did the sessions occur every week? In the discussion, the authors describe how individual sessions may improve retention. What was adherence like to the individual sessions for this study? Did all participants in the intervention receive individuals support or just ones that requested additional support?

4. Mental health professionals from the SHO delivered the intervention. Although certainly qualified to deliver mental health interventions, these individuals may not have the necessary training for delivering a weight loss intervention. What kind of training did the mental health professionals receive on delivering the intervention? Was supervision provided? Were any data collected on treatment fidelity?

5. Addressing missing data by using the mean change in the control group is not a standard method for addressing missing data. Mixed models, which were used to address the clustering of SHOs, can be used without imputing missing data (since time can be included in the model, negating the need to create change scores). Why not use this analytic strategy and omit the t-tests and ANCOVAs? This would certainly cut down on the number of analyses that were conducted. Mixed models were described in the results of the primary outcomes, but not the
secondary outcomes.

6. The first paragraph of the results describing changes in the primary outcome is missing information on the statistics that these results describe. Are these t-tests? The ANCOVA? The authors stated that “from 10 weeks to the end of the study period, the decrease in the primary outcomes in the intervention group disappeared, except for the outcome “fat mass”.” Did the participants in the intervention go back to baseline on the other 3 outcomes? Or did they, like the control, increase beyond baseline values. Please clarify these analyses.

7. The remaining results for the primary outcomes only list p-values. Please add the relevant test statistic at a minimum, particularly because test-statistics are not included in the table. Also, are all 4 of these outcomes the “primary” outcome?

8. Throughout the results, test statistics are generally absent. Please include, rather than just referencing a table. Consider including effect sizes for your significant effects.

9. The authors report that drop-out was significant. Did participants provide an explanation for why they decided to drop out?

Minor Essential Revisions:

10. Could lean individuals participate (BMI<25)? BMI is not listed as an exclusion criteria.

11. The authors mentioned how medications can impact weight gain. Was a consistent medication regimen consider for inclusion? Were medications tracked during the intervention?

12. Provide additional detail about how fat mass is calculated using the digital scale.

13. It appears that change scores were created for the primary outcomes (instead of including time as a factor in the model). This should be explicitly stated.

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.