Reviewer's report

Title: Association of weight misperception with weight loss in a diabetes prevention program

Version: 1 Date: 11 August 2013

Reviewer: Gastón Perman

Reviewer's report:

Dear researchers,

I think your research focus is very interesting. It is a good thing to try to shed some light on this topic. Nevertheless, I believe that publishing your work as it is will have the opposed effect. I will give you several suggestions in order to try to re-write (or re-do) your work for publication in another journal.

The major issues that seriously threaten the internal validity are related to many potential biases and confounders that you do not systematically address. In addition, a better description of the methods used is fundamental. For example, the study design seems to be a cohort. Nevertheless, as the Diabetes Prevention Project was probably designed for other purposes, the design could have been a retrospective one, perhaps after a post-hoc hypothesis arose. I am not implying this. You simply have to give enough space for the reader to understand what this Project was about, what were the interventions, etc.; and if these interventions have something to do with the results observed.

Please state if the reference population was urban or rural and, if possible, ethnicity, education level, income level, etc. A detailed description of the selection process is fundamental. Major selection biases could have arisen (due to “opportunistic screening” and “individuals (…) presenting at local general practices”). So, you also need to at least try to assess whether these biases (there are many more, also information ones) could have influenced results. Special care is to be taken regarding their direction and magnitude. Although their complex interaction might be impossible to predict, at least a sincere acknowledgement will give the readers the opportunity to make their own judgments.

Similar problems are related to many possible confounders. You report three regression models that do not contribute to the understanding of your work (actually they add confusion to it). Please try to describe possible confounders and explain what you did to try to address them (for example, adjustment). If you do include regression models, please take time to describe how you built them (criteria for including variables, etc.), why you chose one model over others, and especially what variables were included and what other possible confounders could not be measured and included. Of course, a detailed discussion of possible implications is mandatory.

There are other minor issues, but if you can address these major ones, you will
have a very good paper.
Good luck.
GP

**Level of interest:** An article of limited interest

**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'