Reviewer’s report

Title: Perceived Stress, Unhealthy Eating Behaviors, and Severe Obesity in Low-Income Women

Version: 0 Date: 08 Aug 2015

Reviewer: Shervin Assari

Reviewer’s report:

The manuscript "Increased Stress May Lead to Poor Eating Behaviors and Severe Obesity in Low-Income Women" is very important. Although it uses local data, which is not representative, and although the sample size is not high, the approach and findings are relevant. Only a few comments for improvement of the paper:

1- Eating behaviors are only one of the mechanisms by which stress causes obesity among women who live in poverty. So, the lack of full mediation makes sense. This should be discussed clearly. What are the other possible explanatory factors?

2- Ethnicity and other contextual factors may modify the complex associations between actual obesity, perceived obesity, body image, eating, being on diet, intention to reduce weight. This could be a part of the discussion, particularly because the sample is local, and not representative. Please consult these papers for some of the examples of the ethnic variation in the above associations (2)

2- a) Gender and Ethnic Differences in the Association between Obesity and Depression among Black Adolescents, J Racial Ethnic Health Dispar. 2015. 2 (1): 1-13,


3- Interestingly, the study (figure 2) has shown differential paths of eating (as potential mediator of stress) to obesity based on the severity of obesity. This to be discussed in more details. Is it a power issue, or the theory supports this finding? Is it a moderation of level of obesity?
4- Although figure 2 only suggests that the effect of stress on diet score exclusively passes through eating (sounds reasonable to me), figure 1 also proposes a direct path from stress on diet, which does not pass through diet quality. This needs further explanation. How stress can change diet through paths other than eating?

5- In the statistical note, authors mention:

We addressed confounding of associations between perceived stress and weight status by controlling for income, age, race/ethnicity, whether the dietary recall day was a typical day, and if the respondents had one or two 24-hour dietary recalls.

However, the models do not show SES factors. I understand that all women are low income. Still income has a distribution, which makes a difference. Socioeconomic factors and age should be included in the model. Marital status needs to be addressed too.

6- Summary of the models (path estimates, standard errors, p values) should be shown in a table. More details of the modeling strategies should be also added to the methods.

Level of interest
Please indicate how interesting you found the manuscript:

An article of importance in its field

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?
6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

'I declare that I have no competing interests'

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal