Reviewer’s report

Title: Physical Activity and Central Adiposity in a Cohort of African-American Adults

Version: 0 Date: 17 Aug 2017

Reviewer: Ju-Sheng Zheng

Reviewer's report:

The authors conducted a well-designed follow-up study on an existing cohort of African-American adults with objective measurement on both physical activity and body fat distribution. There are several specific concerns:

1) Statistical section: in the multivariable analysis, the author adjusted for age, sex, and smoking. Given that the authors also measured other potential confounding factors, such as employment status or alcohol intake? It is reasonable to adjust for these additional covariates. In addition, the author presented the sex-specific results for univariate analysis, but combined analysis for multivariable analysis. This is a bit weird. It would be ideal to conduct and present both sex-specific and combined results for both univariate and multivariable analyses.

2) Results section: page 10, line 21-22. "Among women, baseline physical activity...". what does this 'baseline' means? For my understanding, the measurement of PA and DXA data were all at third follow-up time point? Do you also have the PA data at baseline? if this is the case, why not doing a prospective analysis. In addition, it would be nice to present a table to compare characteristics among those loss of follow-up and completers.

3) Conclusion section: page 17, line 11-14, the authors do not need to repeat the strength in the conclusion again, given that this is already highlighted in the above strength section. Line 19, what is the "large-scale" means?

Other comments:

1) Page 11, line 41, please be consistent with the statistical section, using "multivariable" throughout

2) Page 14, line 56, please delete "significantly". Usually, we used this word combined with a P-value or 95% CI.

3) Table 1, is it possible to include some other population characteristics, such as employment status and alcohol drinking etc.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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