Reviewer's report

Title: Sedentary lifestyle and Framingham risk scores: A population-based study in Riyadh city, Saudi Arabia

Version: 0 Date: 11 Sep 2018

Reviewer: Xuemei Sui

Reviewer's report:

This is a cross-sectional study conducted among 2997 Saudi adults. The authors aim to measure the probability of 10-year cardiovascular disease (CVD) risk based on FRS and to explore the latter's association with sitting time, central obesity and physical inactivity. They did sex-seperate analyses for men and women and concluded that prolonged sitting time of >6 hours per day accompanied by low physical activity and high central obesity defined by WC were related to high FRS in men and women.

I have some comments to improve the manuscript:

1. Statistical analysis: Page 9, Line 170, it is not clear to me what are the hypothesized variables and what is the outcome. It is neither clear what variables were entered into the multiple logistic regression modeling. I assume this analysis is directly related to the results in Table 4. Can I assume that the odds ratios in Table 4 were adjusted for these variables? Please add these variables in footnote of Table 4.

2. Table 4: the authors combined physical activity and sitting time. Based on the objectives of the study, I believe you want to look at the independent association of physical activity, sitting time with FRS. So I suggest that you enter physical activity and sitting time as separate variable in the multiple regression model.

3. Table 4: it will be better to provide the numbers and outcomes in each cell. For example, how many men were normal WC, among these normal WC men, how many were having a FRS >=10. It helps understand the power of these analyses.
4. If you want to show the joint association between physical activity and sitting time with FRS, I think you should provide an additional table or figure to present a joint analysis result after adjusting the confounding factors.

5. Abstract: Page 2, Line 28, Multivariate is wrong here. The analysis that the authors performed is Multivariable regression which is very different from Multivariate regression.

6. The English needs to be proofreading by a Native English speaker. Many places are hard to understand.

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:

Needs some language corrections before being published

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