Reviewer’s report

Title: Correlation Between physical activity, eating behavior and Obesity among Sudanese Medical Students Sudan

Version: 0 Date: 16 Jan 2018

Reviewer: Apichai Wattanapisit

Reviewer's report:

The manuscript entitled, 'Correlation Between physical activity, eating behavior and Obesity among Sudanese Medical Students Sudan', presents three main outcomes regarding health behaviours and health status (physical activity, eating behaviours, and obesity) among a group of medical students in Sudan. Overall, the manuscript is interesting. However, there is a need to improve the quality of the manuscript, in terms of significant information and scientific presentations.

Specific comments:

Abstract

- Background: Please provide some specific details about the problem among medical students.

- Conclusion: Please state a particular statement from this research rather than a general recommendation.

Background

- Overall: Please introduce the importance of this research and review about physical activity, eating behaviours, and obesity. The Background should include the rationales and objectives of the research. Most importantly, please notify the reasons to conduct this research among medical students.

- Page 3, Line 27-32: Please present a clear statement of the prevalence of obesity. Which population? If the sentence mentioned about the global prevalence of obesity, please review the data from credible sources besides ref #1, for example, WHO report (Global
Health Observatory (GHO) data, http://www.who.int/gho/ncd/risk_factors/overweight/en/)

- Page 4, Line 7-48: Please emphasise the importance of the problem and provide the concise information to show a gap of knowledge. The in-depth details about the research instruments should be inserted in the Methods.

- Page 4, Line 53: Please correct the reference. ‘… more than 3 days per week(REF).’

Methods

- Overall: The Methods does not provide sufficient information. Please organise this section with clear and concise information to present the readable and understandable statements.

Participants: The sample size calculation formula was stated, but what is the whole population?

Research instruments/tools: Please clarify the details about the tools.

Data collection: How to collect data? What are the variables? - Please present the simple explanation.

- Page 5, Line 9-10: The aims of the study can be stated in the Background.

- Page 5, Line 21: Please specify 'regular Sudanese students'.

Results

- Overall: This section is too short. The tables provide a small amount of data. Please consider to present all findings relating to the data collection and analysis in the Methods section.

- Table 1: As the participant's demographic data shown in the first paragraph, this information (e.g., gender, age, level of study, socioeconomic status, etc.) can be inserted in the Table 1 to present the overall characteristics.
- Page 7, Line 1-3: Please consider to insert this data, including the data in Table 2, into the first paragraph as well as Table 1.

- Page 7, Line 9-42: Please reorganise the paragraphs and tables. Please consider to group the findings into different paragraphs or headings, for example, 'Relationship between physical activity and obesity'; and 'Relationship between eating patterns and obesity'. Please consider to provide the details about relationships between variables in both texts and tables.

Discussion

- Overall: The Discussion presents only the summary of the findings and comparisons of results among studies. This section can offer explanations of the findings or analyses of the phenomena. Please take this opportunity to analyse and debate the research findings. Strengths and limitations of the study are not mentioned in the Discussion. This should be informed.

- Page 9, Line 52: Please consider to use more appropriate terms of 'low physical activity' and 'bad eating behavior' to clarify the meanings.

References

- Reference # 21: Please provide the year of publication, issue, and pages.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

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

Unable to assess

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

No
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
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