Author’s response to reviews

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

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Author’s response to reviews:

Research article
Correlation Between physical activity, eating behavior, and Obesity among Sudanese Medical Students, Sudan

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Respond to Reviewer Dr Apichai Wattanapisit:

Specific comments:
1. Abstract:
   - Background: Please provide some specific details about the problem among medical students.
   We added Specific details were to the background.
- Conclusion: Please state a particular statement from this research rather than a general recommendation.

We added the statements to conclusion

2. Background

- Overall: Please introduce the importance of this research and review about physical activity, eating behaviors, 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/)

We added a statement about prevalence of Obesity among Sudanese population

- 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.

The details regarding data collection questioners IPAQ and TFEQ-r18 were transferred to methodology section.

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

Methods

We added the missing No 7

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

We organized the methods section based on your recommendation
Participants: The sample size calculation formula was stated, but what is the whole population? 
n= sample size.

D=degree of precision (0.05)

N= total population, here it is 1032 student

Thus:

\[ n = \frac{N}{1 + (D^2 \times N)} \]

\[ n = \frac{1032}{1 + (0.05^2 \times 1032)} \]

\[ n = 288 \]

The sample size is 288 students.

Please see the attached Sample size.png image in our file inventory*

We couldn’t collect data from the 288 as stated because of Ramadan (Fasting month for Muslims) and we afraid from confounding effect of Ramadan on study variables.

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

We added details regarding the instruments

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

We stated the variables

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

We transferred to Background section

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

We removed the word regular since all medical students should attend the faculty regularly
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.

  We inserted the data in the table

- 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

  We inserted the data into the first paragraph of the result section

- 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.

  We added some subheadings and state the relationship in both tables and graphs

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.

  We rephrase the sentence

References

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

  We provided the necessary information
Neha Rathi (Reviewer 2):

There are grammatical errors throughout the manuscript. I have highlighted two below:

1. Abstract opening statement could be written as: 'Obesity has emerged as major public health problem.'

We rephrase the sentence based on your recommendation

2. Page 2; Line 9 - Instead of 'data was', use 'data were'

We corrected the statement

Background:

Page 3 - Lines 36-37 - From where is the definition of obesity derived? Reference needed

We insert the reference

Page 3 - Lines 45-46 - You need to insert references for strengthening your argument i.e. 'Reduction in physical activity level in developing countries' Also you need to provide few examples of developing countries.

We refer to WHO report

Page 4 - Line 47 - Provide examples of chronic diseases

We inserted some examples

Page 4 - Line 48 - Poor countries?? Do you mean low-income countries?

We rewrite the sentence

Page 4 - Line 49 - Adults? What is the age group? I don't understand the mention of adults here? This paper is based on university students i.e. young adults?

Yes this general statement. Nevertheless, in our study we focused on young adults.

Page 4 - Lines 56-65 - The description of the two questionnaires is not relevant here. It should be discussed in the Methods section.

We transferred this paragraph to Method section
Page 4 - Line 67 - bad dietary habits - not clear? Did you mean unhealthy dietary habits?

We rephrase the sentence based on your recommendation

Page 4 - Line 68 - Give the reference

We inserted the reference

Page 4 - Line 70 - There is a need to provide a stronger rationale for studying medical students. Is there a high prevalence of obesity in Medical students?

We added justification for choosing medical students.

Page 5 - Line 72 - Check spelling for activity

Corrected

Methodology:

Page 5 - Line 83 - Background data were collected? e.g. gender, age??

We rephrase the sentence for clarity

Page 5 - Line 84 - Reference for questionnaire needed

We inserted the reference.

Page 5 - Line 85 - What were the seven questions?

We added the questions details

Page 5 - Line 90 - Reference for questionnaire needed

We inserted the reference

Page 6 - Line 99 - "The type that had highest score is the participant eating pattern" - Not clear

We removed the statement

Page 6 - Line 100 - A sample size of 5 students was used for pretesting. Is it an adequate sample size for a pilot study?

Our main purpose to test the clarity of the questionnaires. Moreover, make sure that is understandable to our participants. Rather than pilot study
Page 6 - Line 103 - Check spelling 'weighted'
Corrected

Page 6 - Lines 105-109 - Reference needed for BMI
Reference is inserted

Page 6 - Line 110 - Word missing - Descriptive…. - Insert data
Inserted

Page 6 - Line 111 - Check spelling 'chi-squared' It will be 'chi-square'
Corrected

Results:
This section seems a bit sketchy! It could have been written more comprehensively. Also, it would be interesting to observe gender differences.

We rewrite the whole section for more clarity

Discussion:
Page 7 - Line 140 - Try to write in third person. Avoid using first person 'our'
We rephrase the sentence

Page 8 - Line 148 - 'nearby'? Did you mean neighbouring? It is a bit confusing as you compare nearby with developed countries. So do you want to say that the nearby countries are developing or under-developing countries?
We added developing countries

Page 8 - Line 156 - 'Insignificant correlation between gender' This has not been reported this in the Results section.
We added these results in result section

Page 8 - Lines 165-167 - Rephrase the sentence. There are extra words.
Extra words were removed
Overall, the discussion section is very speculative. There is a need to suggest some recommendations for improvement in physical activity levels and dietary behavior among students.

No discussion of strengths and limitations. What about future research pathways?

We added all these statements at the end of discussion section

Chythra Rao (Reviewer 3): The research topic is relevant in the present context.

Overall the manuscript requires English language editing services.

Abstract:

Background - needs to be rephrased

We rephrased the whole section

Methods: This was an observational descriptive cross sectional study - all the words need not be used together for the study design, same should be corrected in methodology section as well

Correct both in abstract and method section

Introduction section needs to be reworked on & written better.

We write the while section

Page 5, line1-2, does not convey the information effectively, the reasons also need to be mentioned

We rephrase the sentence.

Sentences 5-20 on pg 5, with respect to prospective studies would not be the right comparison for the present crosssectional study as the prospective design is better.

Has the TFEQ-R18 been validated for use in Sudan?

We pre tested first and validated before conducting the study
We added the reference

How was chronic disease evaluation done for students to exclude them from the study?

Ask the students and any past medical history and any medication they are currently using.

WHO grading of BMI has to be referenced.

Reference is inserted

Statistical analysis section has to be written better

We wrote the whole section for better clarity

Pg 8, line 32, The highest percentage of students were uncontrolled eaters (45.8%) - 45.8% does not mean highest percentage But represent nearly half of the proportion

We rephrased the statement based on Reviewer recommendation

In the discussion, although comparison with other studies have been done, the reasons for similar or dissimilar results have not been elaborated. The section has to be written better

We write the whole section

Why was the cross tabulation with gender made, was it part of the objective of the study?

To determine if obesity is more common among males or females.

Could medical college faculty being investigators', have influenced the results of the study?

Alneelian IRB ethically approved the study. The principal investigator was not involved in students teaching. To ensure full voluntary participation from the students

Conclusions have to be rephrased

We rephrased the conclusion

What are the limitations & recommendations of the study?

We added them in conclusion section

reference 21 & 24 have been duplicated

We removed the excess one

all the references are not in Vancouver style
We rewrite them in Vancouver style

the details of all the statistical analysis done - chi square & ANOVA have not been depicted in the tables

We added them as footnote

background characteristics of the students' needs to be described as table 1.

We added them as table 1

The other tables described in the article could be combined into a single table, rather than having separate tables (1-4)

Our gratitude and appreciation to the reviewers; for their valuable comments and critics. And for the time and concern they dedicated to improve the article.

Lamis Kaddam

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