Author's response to reviews

Title: Nutritional and behavioral determinants of adolescent obesity: a case-control study in Sri Lanka

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Author's response to reviews:

Reviewer #1 (Remarks to the Author):

The authors analysed the risk factors associated with obesity among adolescent in Sri Lankan school girls very well. There is one thing that I cannot understand. The data was cross-sectional in nature and there is no follow up. But they said that they use paired -T test. One can use this test in follow up data in the same group. I think this paper will be useful for the developing countries for planning their community health.

Thank you very much for your comment. The study design of the present study is case-control study which uses retrospective data. In this case control study, we compared the means arising from the matched cases and controls for age and ethnicity in same gender group. Therefore student paired t test was carried out to determine any significant differences between the cases and controls. For further information following reference is included to see how to do mean comparisons in statistics.


Paired data arise in a number of different situations, such as in a matched case–control study in which individual cases and controls are matched to each other, or in a repeat measures study in which some measurement is made on the same set of individuals on more than one occasion (generally under different circumstances).

Reviewer #2 (Remarks to the Author):

Major Compulsory Revisions

1. In our studies (and in other literature) we have found that anthropometry was very sensitive, especially for adolescent girls. Were the girls measured separately from each other, or were they all measured in the same space together? Were there any issues with sensitivity? This should have also been questioned by your ethics board at the University.

Thank you for the comment. The measurements were done separately in all
individuals after having administering interviewer administered questionnaire. There was a separate place allocated in each school to conduct this study without disturbing the normal daily activities of the school and securing the privacy of the individual child. Each child was called separately for the assessment and interview.

This was added in the methods section in the manuscript.

2. Line 146: Am I misunderstanding Table 2, but from the multivariate analysis there is not a relationship with fast food consumption and obesity? Yet in the text, fast food consumption is listed as having an association with obesity. Please check your results.

Thank you very much for the comment and in the text we have listed all the factors that showed association in univariable analysis were mentioned. This was included in the text to get a clear understanding.

3. Line 173: I don't know what the population of Sri Lanka is, so the 1/5 number has no reference value for me. I would suggest including an approximate number of adolescents and also an estimate of the number of adolescent girls to show the amount of the population where obesity will have an impact.

This was included in the manuscript.

4. Lines 208-214: This paragraph should be reworked. The first two sentences appear to be opinions of the authors, but are not actually direct findings of this study. The study cited is not directly related to this study - boys were not compared to girls here and parenting style was not examined. I would suggest revising this paragraph to be clearer about the point that the authors are trying to make or remove the paragraph all together.

The whole paragraph is removed from the text.

5. Line 218: In this part of the discussion section there would be an opportunity for the authors to make suggestions about why fast food consumption was not associated with obesity. Was the sample size too small? Some other potential reason? This finding seems to be in contrast to the high energy intake associated with obesity - why might this be?

Fast food consumption was associated with univariable analysis and maybe due to small sample size or other confounding factors the association may have masked in multivariable analysis. This sentence was modified in the text.

6. Lines 246-248: I would argue that there are already many studies that have examined school food environments and policies and their association with eating patterns in adolescents, just perhaps not in Sri Lanka. If you mean that these types of studies should be specifically explored in Sri Lanka, then please be specific. Otherwise it looks like the literature has not been checked.

This sentence was modified to give a specific idea.

Minor Essential Revisions
1. There are many missing or extra spaces throughout the text. For example before or after punctuation, hyphens, brackets or forward slashes. I'm not sure if it is because the text is fully justified, however I don't think that would affect the spaces before and after periods, etc. The manuscript should be checked over to fix all of these instances.
   This was checked carefully and changed the places where following errors are seen.
2. Line 59: compared to when/what?
   Sentence rephrased to make it more clearer.
3. Line 60: there should be citations provided here on the "studies that have identified adverse consequences of obesity".
   Reference included
4. Line 61: Check grammar at the end of the sentence. A word is missing. Also, you should specify that studies are lacking in Sri Lankan adolescents, since I would argue that there are not studies lacking in this regard in other countries.
   This is mentioned in the text as the given reference study has done in Sri Lanka.
5. Line 69: Should say non-obese children (not "normal children")
   This was changed.
6. Line 100: Spend should be spent
   This was corrected.
7. Lines 126,127,128: I see strange boxes on either side of the < sign. I'm not sure that symbol these were supposed to be, but the boxes don't make sense.
   We are sorry that there are no such boxes in the text and it may be due to transferring of word file to PDF.
8. Line 148: girl should be girls
   This was corrected.
9. Line 152: pattern should be patterns
   This was corrected.
10. Line 164: Missing a word at the end of the sentence for it to make sense.
    This was added.
11. Line 176: Need should be needs
    This was corrected.
12. Line 182: Misconceive should be misconceived
    This was corrected.
13. Line 183: check grammar or for an incorrect or missing word
    This sentence was modified.