Author’s response to reviews

Title: Magnitude of Sedentary Behavior and Associated Factors among Secondary School Adolescents in Debre Berhan Town, Ethiopia.

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Author’s response to reviews:

Dear Assistant Editor we would like to thank you for your help in improving our manuscript.

Assistant Editor comments:

1. Reviewer comments
   Please respond to Reviewer 2’s original comments, pasted below. Please ensure that each reviewer point is addressed in the point-by-point response letter. Any changes to the text must be acknowledged, and the location of each change (e.g. page or line numbers) must be stated. If you disagree with any comments raised, please provide a detailed rebuttal to help explain and justify your decision.
   Response: We have responded to the two round comments raised by the Marzieh Araban (Reviewer 2) as listed below unfortunately failed to include in the submission system.
   As listed below and we now have included in the submission system.

2. Title page
   a) Please clearly indicate the corresponding author on the title page.
   Response: it is indicated now
   b) please ensure that both the corresponding author email addresses, provided on the manuscript title page and in the submission system, are matching.
   Response it is corrected

3. Abstract
   Your abstract should include the following headings: Background, Methods, Results, Conclusions and Keywords. The keywords section should contain 3-10 keywords.

Responses to review two
Round One
I would like to thank you for your time and selfless effort to review and provide very constructive comments.

Marzieh Araban (Reviewer 2): Please include all comments for the authors in this box rather than uploading your report as an attachment. Please only upload as attachments annotated versions of
manuscripts, graphs, supporting materials or other aspects of your report which cannot be included in a text format.

Please overwrite this text when adding your comments to the authors.

Abstract, method section; study measurement tools should be mentioned. How did you define sedentary behavior?
Response: amendments were made as per the request and recommended points are incorporated. (Page=2, Line number=30-33)
“Sedentary behavior was measured using time spent on four activities (watching TV, listening music, using internet and playing game). Adolescents are considered sedentary if they spend two or more hours in one or all listed activities per day.”

Introduction: the world wide prevalence of sedentary behavior with respect to age ranges should be stated. Why the study focused on students?
Response: we have tried to make the amendments based on the request as follows.
“23% of adults aged 18 years and above and 81% of adolescents (84% female and 78% male) are insufficiently physically active(3). Screen time (ST) among high school students is higher compared with elementary (4)” (Page=3, Line Number=57-60)
“Furthermore, the gross school attendance ratio in Ethiopia is 91%. School attendance rate is high among adolescents in the urban area and the physical inactivity level is also high globally among these age group (3, 23).” (Page=3-4, Line Number=77-79)
Response:
Method:
Operational definition: Positive for Sedentary Behavior needs reference.
Response: the definition is adopted from a book “sedentary behavior epidemiology” and citation is provided. (Page=4, Line number=107)

The items for demographic sheet should be stated.
Response: sociodemographic characteristics are included in the method section.
“Sociodemographic variables like sex, age, grade level, residence, housing type, parent education, household monthly income, occupation, access to TV, access to mobile-phone, access to internet, access to playground and gymnasium were assessed.” (Page=5 Line Number=116-119)

The sentence Sedentary behaviours was assed using four items: needs check for writing errors. The indices for questionnaire validity should be mentioned.
Response:
The sentence is edited as
“Sedentary behavior was assessed using four items which includes watching TV/Video, listening music, playing computer or mobile game and using internet. The internal validity of the items were assessed using Cronbach alpha test during the pretest (α-coefficients 0.76).” (Page=5, Line Number =113-116)

How the sample size estimated to be 580?
Response: the article was based on the research we are doing on physical activity and sedentary behavior. Sample size determination was done for different objectives and the largest was obtained for the physical activity level which considered a proportion of 37.1, 95% confidence interval, 5% level of significant, design effect 1.5 and 10% none response rate and yield 591 total sample size.

How many students were contacted? What was the reason for non-participants?
Response: information for non-participant is incorporated as:
“The reason for non-participants were absenteeism at the time of data collection and reluctance to respond during repeated attempts made to communicate after the data collection time. (Page=6, Line Number =141-143)

Please add the questionnaire as a supplementary file.
Response: attached

A table for including associations among sedentary behavior and demographic variables should be added.
Response: we have done binary logistic regression before conducting multiple logistic regression and the unreported sociodemographic variables like sex, residence etc. fail to be associated with sedentary behavior. Therefore, we avoid reporting factors which at least didn’t show association during the binary logistic regression at p-value <0.2.
“Binary logistic regression was conducted between status of sedentary behaviours and all dependent variables. Dependent variables with P-Value less than 0.2 like, grade, Family monthly income, mothers’ education, Fathers’ Education, mother occupation, father occupation, family residence, house status, access to TV, access to satellite dish, access to mobile and social media use were included to multiple regression analysis.” (Page=7 line number=167-182)

Results: please merge table 1, 2, and 3.
Response: tables are merged as per the recommendation.

Discussion: the first sentence should be edited for English language.
Response: the sentence is edited as follows
“This study tried to measure the magnitude of sedentary behavior and associated factors.” Page=7 line number=166-183)

Please clarify which items are positively associated with sedentary behavior, and which items are not.
Response: positively associated factors are indicated but there is no negatively associated variable which can reduce sedentary behavior.
“A Number factors were identified to be positively associated with sedentary behavior and they are consistent with past researches. These includes family monthly income, maternal education, access to media, access to mobile internet and social media utilization.” (Page=7, Line Number=184-186)

I think the reason claimed for inconsistency between this study and study from Canada is not logical, since the study did not assess the knowledge and attitude and policy influence by the government. Please re-write.
Response: we have re-read the paper and change the reason as follows
“The inconsistency might be due to differences on the measurement of sedentary behaviours and the cut of point considered.” (Page=8, Line Number=193-194)
Response:
The sentence "This may be due to educated mother seeks information making them close to media so as their children and wealth makes media facilities accessible to the family." Needs reference.
Response: References are provided. (Page =8, Line Number=200-201)
The manuscript should be edited by a native English speaker.
Responses: Editorial of the manuscript was done by people from the foreign language department.
NB:
All the editions of spelling and some grammatical errors and other changes are highlighted with yellow in the whole document.
I would like to thank you for your time and selfless effort to review and provide very constructive comments.
Round Two
Marzieh Araban (Reviewer 2):
Question:
Please follow the recommendations I have provided in the first round of review.
Response:
We have tried to consider all the recommendation. If you have any unanswered point we are ready to reconsider it.