Reviewer's report

Title: The prevalence of underweight, overweight, obesity and associated risk factors among school-going adolescents in seven African countries

Version: 2 Date: 3 January 2014

Reviewer: Haleama Al Sabbah

Reviewer's report:

Major Compulsory Revisions

- Abstract
  1- Add the sample size, age groups and the percentages by sex
  2- The method should be re-written in more professional and scientific way
  3- Add the software name and version used to analyze the data
  4- The level of significance and confidence interval
  5- The criteria used to classify the students weight status
  6-

- Introduction

The first three lines of the last paragraph (the purpose of the study) should complete the previous paragraph (The significance of this study), while the rest of the paragraph should be revised and moved under the measures in the method section. “This survey collects self reported data on school going children to assess key behavioral risk and protective factors [34]. Unlike adults, Body Mass Index (BMI) cut offs for different weight status in children and adolescents vary with……….etc”.

- Methods

1- Language used in each country and is the questionnaire reliable and valid in all countries and for all ages of the target groups? This needs more explanation.

2- What is the percentage of non-respondents? And the students who refused to participate in this study? The provided website didn’t provide enough information and there is contradictory information regarding the age group? It mentioned that in the GSHS the target group was from 13-17 years old and not from 11-16?

3- Statistical analysis

There is a critical problem in writing this section and needs to be written in more scientific way. The first paragraph is too long and not clear The statistical analysis didn’t mention which software they used to analyze the data? The statistical test? The significance and the confidence interval? How did the students Parental consent obtained? Needs more details
- Results
1- The number and percentage of students for each age group and sex should be included
2- The titles for tables are not complete and missing some information e.g: the prevalence and the confidence interval?

Minor Essential Revisions
- Abstract
1- The Abstract is too long, the background needs to be shorter
2- The confounding factors that have been controlled when analyzing the data
3- The conclusion: As the main objective of this study was to understand the associated risk factors for obesity, overweight and underweight and the study found no significant associations from the available data, then what is the recommendation? What other factors still need to be investigated?

- Introduction
1- In the second paragraph of the introduction “…..In Africa, the estimated prevalence of childhood overweight or obesity increased from 4% in 1990 to 7% in 2011…”
Do you mean “overweight and obesity” combined? If its overweight or obesity then what is the percentage each?

- Methods
1- The method section should be started by the study design, the settings and then the population and sampling.
2- Under the sample “…aged 11-16 in these countries…” add “years old” after 16
3- Under the methods- sample, the data has been collected during four years period and not at the same time as mentioned: “A total of 25815 students were surveyed in these countries between 2006 and 2010”, this will make the comparison too difficult, As cross-sectional should be conducted at the same point of time in order to be able to assess the prevalence rate, during four years period a lot of changes can happen? This needs more clarifications and explanation.
4- There is no need for table 1, just need to mention the main measures and how did you code each of them under the measures.

- Results
1- its not clear puberty has been controlled which affect the adolescents weight status
2- Problem in analyzing the data and mixing all age groups and both males and females in the analysis
overweight was more prevalent among younger (#12) adolescents and
decreased with age
10-12 years is the period of puberty for girls

Best Wishes,
Dr. Haleama Al Sabbah

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests