Reviewer’s report

Title: Metabolic syndrome and its predictors in an urban population in Kenya: A cross sectional study

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Reviewer: Indulekha Karunakaran

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Journal: BMC Endocrine Disorders

Title: Metabolic syndrome and its predictors in an urban population in Kenya: A cross sectional study

The study investigates the prevalence of MetS in a healthy population of Africans using the using the 2009 harmonized criterion. The optimal WC cut-off for diagnosing MetS are also derived. There are some issues in the study which should be addressed.

1. The introduction section is too lengthy. It should be shortened to 1 to 1.5 pages approximately

2. It is mentioned in the methods section that "exclusion criteria included participants with a BMI greater than 35 kg/m2.....Towards the end of the study, a few individuals with a BMI greater than 35 kg/m2 but less than 40 kg/m2 were recruited due to difficulties in recruiting healthy participants in the older age groups". Since participants with a BMI greater than 35 kg/m2 are included, this can be removed from the exclusion criteria.

3. It is mentioned in the methods section that a single measurement of BP was performed. BP is highly variable and therefore 2 measurements at least 5 minutes apart should be taken and the average of the two provided.

4. Table 1: The intra and inter assay co-efficients of variation of the biochemical parameters should be provided

5. Table 2: variables like the height and weight of the study participants can be removed as providing BMI would be sufficient
6. Table 3 provides both crude and adjusted ORs. What are the confounders adjusted? There is no information in the footnote on the confounders and this should be provided.

7. Since measured and calculated LDL-C are included in the analyses, the values of calculated LDL-C could be included in Table 2.

8. Table 1 mentions that ALT, AST and ALP are measured. However, there is no further information on the levels of these parameters in the subsequent tables. They are also not included in any analysis. They can be removed from the methods section or data on these parameters can be provided.

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

Yes

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

Yes

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

Yes

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 assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable
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