Reviewer’s report

Title: Plasma glucose in screening for diabetes and pre-diabetes: how much is too much? Analysis of fasting plasma glucose and oral glucose tolerance test in Sri Lankans

Version: 0 Date: 20 Dec 2018

Reviewer: Indulekha Karunakaran

Reviewer's report:

Title: Fasting plasma glucose in screening for diabetes and pre-diabetes: how much is too much? Analysis and comparison of fasting plasma glucose and oral glucose tolerance test from a resource limited setting in South Asia

Journal: BMC endocrine disorders

The study was done on a population of 4031 subjects and arrives at the conclusion that a lower FPG cut off of 5.3 mmol/L has a better sensitivity and acceptable specificity in screening for diabetes

1. The manuscript uses two abbreviatons FBG and FPG to indicate fasting plasma glucose. This should be modified.

2. The title of the manuscript could be shortened

3. What is SLDCS? This is not explained in the manuscript.

4. The authors claim that 'FPG cut off of 5.3 mmol/L showed better sensitivity and specificity than 5.6 mmol/L in detecting diabetes and pre-diabetes'. It is not clear what the authors are trying to convey from this statement. If a subject has 5.3 mmol/L of fasting plasma glucose, will he/she be classified as having diabetes or prediabetes?

5. It is mentioned in the methods section that samples were collected at fasting and at 2 hours. Why was a 2 hour cut point not derived for the population?

6. The methods used for measuring fasting plasma glucose are not detailed in the methods section. The intra and inter assay co-efficients of variation for the measurement of biochemical parameters should be provided in the methods section

7. In the discussion section, there are statements about the negative correlation of body height with glucose tolerance. These studies are not relevant for the findings of the present study. The references on gestational diabetes mellitus could also be removed
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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

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Please indicate the quality of language in the manuscript:

Acceptable

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