Reviewer's report

Title: Prevalence of Coronary Artery Disease and its Risk Factors in Kerala, South India: a Community-based Cross-sectional Study

Version: 0 Date: 12 Nov 2015

Reviewer: Zsolt Bagyura

Reviewer's report:

The paper fulfills the criteria to be considered for publication in BMC Cardiovascular Disorders. The conclusions are supported by the data. Syntax and grammar of the article needs to be reviewed, I've found multiple typographic errors, that must be due some technical issues:

- page 2, line 21: decimal point is missing. "was 3·5%" instead of "was 3.5%"
- page 2, line 3. space after full stop is missing
- etc

Ethical issues: informed consent was obtained, but mentioning Helsinki declaration is missing from the text. Methods are clear and well described. However, regarding physical activity clarification of the classification (and reference) is needed. In definitions section page 5, line 30, "definitive CAD" and "probable CAD" is defined, but in the text "any CAD" and "definitive CAD" is used. It is recommended to unify these definitions.

In the results section, authors write: "The overall prevalence of any CAD was higher in rural (13·2%) than urban (11·3%) area (p=0.038). However, there was no difference between urban
and rural areas in the overall.." (page 7). Regarding risk factors, the authors state: "all other major risk factors were higher in urban men as compared to rural men. This pattern was also observed in urban women as compared to rural women. This seems to be a contradiction: higher rate of CAD in rural area, but lower rate of risk factors. It is recommended to mention this in the discussion. What would be the possible answer for this question?

At page 8, authors write "It is well known that coronary artery disease occurs in Indians 5-10 years earlier" but according to the results "The age-adjusted prevalence of CAD in young subjects in our study was similar to the US data on prevalence of CAD in the young (1.2%). Please elucidate why there is no higher prevalence of CAD found in the study population than the US data.

**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 recommend additional statistical review

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

Needs some language corrections before being published

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