Author's response to reviews

Title: Prevalence of cardiovascular risk factors and socioeconomic level among public-sector workers in Angola

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Author's response to reviews:

Prevalence of modifiable cardiovascular risk factors and socioeconomic status among public-sector workers in Angola. Revised version (v.1)

Reviewer 1

Thank you for your helpfull comments about our article. In this new version of the MS we tried to attend all your suggestions.

Major Compulsory Revisions

- The authors need to provide information on alcohol consumption, quantify this and adjust the HDL levels accordingly. The effect or lack of exercise should also be considered.

Unfortunately, alcohol consumption was not investigated in our study because we were afraid that information about this habit could not be reliable. Considering that participants were all employed in the institution promoting the study, information about alcohol use (and abuse) could be omitted or modified, thus introducing an information bias. This information is being added as a study limitation (see the last paragraph of Discussion).

More information should be provided on the extent of smoking with reference to the number of cigarettes smoked by the subjects in this study.

Information included in Methods (see p.7 last para) and Results (p.11, line 7-8).

How was the monthly household income validated?

The monthly income was the salary earned by each employee which was confirmed in tables of the UAN administrative sector. This information was added
Detailed information should be provided on the overall number of subjects in each educational class in the public institutions sampled and how representative was the final study sample of the total number of subjects in the institutions studied.

Information regarding representativity of the sample according to education level was included in the Discussion section (see p. 11 – last lines and p.12, first lines).

What measures were taken to increase the participation rate?
Eligibles were stimulated to participate by announcing the Project in all university centers and departments. No information regarding this point was included in Methods (see p.7, last para). The table below shows that participation was well equilibrated in different sectors of UAN.

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Unit Low</th>
<th>Medium</th>
<th>High</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
</tr>
<tr>
<td>Medical School</td>
<td>20 (32.8)</td>
<td>23 (37.7%)</td>
<td>18 (29.5)</td>
<td>61 (100)</td>
</tr>
<tr>
<td>Rectory</td>
<td>57 (48.7)</td>
<td>25 (21.4)</td>
<td>35 (29.9)</td>
<td>117 (100)</td>
</tr>
<tr>
<td>Higher School of Nursing</td>
<td>19 (35.2)</td>
<td>14 (25.9)</td>
<td>21 (38.9)</td>
<td>54 (100)</td>
</tr>
<tr>
<td>Faculty of Sciences</td>
<td>11 (16.9)</td>
<td>15 (23.1)</td>
<td>39 (60.0)</td>
<td>65 (100)</td>
</tr>
<tr>
<td>Law School</td>
<td>12 (37.5)</td>
<td>9 (28.1)</td>
<td>11 (34.4)</td>
<td>32 (100)</td>
</tr>
<tr>
<td>Social Sciences School</td>
<td>10 (21.7)</td>
<td>12 (26.1)</td>
<td>24 (52.2)</td>
<td>46 (100)</td>
</tr>
<tr>
<td>Education Sciences</td>
<td>14 (18.4)</td>
<td>12 (15.8)</td>
<td>50 (65.8)</td>
<td>76 (100)</td>
</tr>
<tr>
<td>Faculty of Engineering</td>
<td>54 (46.2)</td>
<td>26 (22.2)</td>
<td>37 (31.6)</td>
<td>117 (100)</td>
</tr>
<tr>
<td>Faculty of Economy</td>
<td>16 (34)</td>
<td>14 (29.8)</td>
<td>17 (36.2)</td>
<td>47 (100)</td>
</tr>
<tr>
<td>All</td>
<td>213 (34.6)</td>
<td>150 (24.4)</td>
<td>252 (41)</td>
<td>615 (100)</td>
</tr>
</tbody>
</table>

How was the fasting state validated?
Self reporting by participants.

Where were the samples analysed, how were they stored and how soon after the samples were collected were they analysed. Details of all QA procedures including transport should be specified. What specific lab methods were used for each biochemical analyte.

Biochemical analysis was performed at the same place of collection and data were obtained within one to two days (see Methods, p.8, last para). Quality
control was assured by following instructions of the commercial kits used (all from BioSystems Inc).

Similarly how were the measurements of WC validated as they are prone to measurement errors.

We included a brief explanation how WC was measured (see Methods, p.8, second para). All records were provided by the same staff along the studied and all they were submitted to training before data collection (see Methods, p.7, lines 3-5).

The discussions needs to be rewritten. More focus should be given to the association between socio-economic status and cardiovascular risk factors in emerging economies. The authors need to discuss the implications of their results for Angola in some detail especially with respect to stroke prevention.

The Discussion was rewritten as suggested. Unfortunately, we agree that implications of our findings to public health polices is poor because there are no data available for incident stroke, for example. The necessity to extend such investigations to the general population was emphasized at the end of the discussion.

Minor
Limitations of the study should be mentioned. What future studies should be carried out and general recommendations.

These points were included at the end of the article.

Tables can be reduced.
Table 5 was removed.
Manuscript can also be shortened by a third.

The article was shortened.

Level of interest: An article of importance in its field
Quality of written English: Acceptable
Statistical review: No, the manuscript does not need to be seen by a statistician.

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

Thank your for reviewing our article. Your comments were important to improve its quality.

Reviewer: Annamarie Kruger

Reviewer's report:
Minor Essential Revisions

Thank you for the opportunity to read this manuscript. I am excited about the fact that data is coming from Africa on this topic. The publication: Prevalence of cardiovascular risk factors and socioeconomic level among public-sector workers in Angola fulfil a gap in knowledge on this topic in Africa. I have indicated with track changes on the document (included) some comments and issues that should be address by the authors.

Thank your for your helpfull comments and corrections. They were included in the revised version of our manuscript.

In general I personally think the result section is too extensive. Many of the words can be cut as it is visible from the tables. Attention can be given only to significant results and results of importance. In the discussion section I also suggest the authors should prevent duplication of information discussed.

The results section was revised and all redundances in relation to tables were removed. We removed table 5 because all informations were also included in figure 1.

This work should be published, but the document as it is should be revised.

Level of interest: An article of importance in its field
Quality of written English: Needs some language corrections before being published
Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:
'I declare that I have no competing interests

EDITOR COMMENTS:

Abstract
Incorrectly use of incidence at end of results Put in less results and don’t need gender comparison, focus more on Socio-economic differences in risk factor prevalence for specific factors and numbers, and test for trend.

The abstract was rewritten following your suggestions.

Results
Comment on non response to the survey. Focus results on SE differences and comment on both types of gradient as both are observed (some factors > in lower SE groups eg hypertension some > in higher eg glucose, obesity ). Cluster metabolic factors in discussion (glucose, lipids, obesity).
Comment on physical activity by SE group. Were there any medication data for hypertension? Were there any information on whether it was doctor diagnosed? More discussion on what the SE patterns mean in relation to the transition Angola is undergoing.

We tried to attend all these suggestions. However, the necessity to reduce the entire length of the article difficults to include additional analysis and discussion. Clustering of cardiovascular risk factors is being analysed in another article.