Reviewer's report

Title: Assessment of hypertension management and control: a registry-based observational study in two municipalities in Cuba

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Reviewer: Leopold Aminde

Reviewer's report:

Londono and colleagues have explored hypertension treatment and control among adults with hypertension in two Cuban municipalities. They found that 58% of those on pharmacological treatment had a controlled BP and identified a number of predictors of BP control. The team should be commended for exploring this area which is of great public health relevance, with BP being the leading risk factor worldwide and CVD a major cause of NCD deaths globally. Their manuscript is mostly well written however, a few issues need to be considered in order to improve it's quality.

1) In Abstract, line 46 - 47; what do you mean by 'living in specific health area'? This sounds unclear and authors should be more specific. The direction of association also needs to be mentioned.

line 50-51: 'white skin color' doesn't sound very appropriate. I believe authors might be making reference to ethnic differences? This should be worded in a more appropriate way.

2) Introduction;

This has been mostly well described, however, authors cite hypertension prevalence estimate of 2010 in line 51. Are there no recent estimates?

3) Methods;

a) It appears only urban areas were selected for the study. This has implications for selection bias and generalizability of your findings. Authors should consider discussing this in the limitations section of the discussion.

b) It is not okay to just mention that height and weight were measured. Describe in detail how this was done, the instruments used and units of measurement, etc. Provide a complete categorization of BMI as well and support with appropriate references.
c) page 6 line 112, you probably meant "p<0.1" and not "p>0.1". Authors should also justify why a cut-off of p-value of 0.1 was considered?

d) Who did the data collection? Was any training provided to data collectors to enhance harmonization/consistency?

4) Results & Discussion;

a) Presentation of results especially in table 1 makes it difficult to read. Authors should consider presenting numbers/frequencies in a separate cell/column while the percentages and 95% confidence intervals are in another column/cell.

b) We suddenly see a number of variables appear in the results e.g. paid job, diabetes, coronary heart disease, etc appear in the results. Authors should clearly define all these variables in the methods section to enable the reader better appreciate what is being measured and tested for association. Where these by self-report or not, etc. Please provide details in the methods section.

c) Presence or not of obesity is mentioned. Authors should consider providing or showing all the BMI categories and mean BMI in their results for the reader to have a better appreciation of the BMI distribution of the study participants. By the way, overweight has been shown to be associated with high blood pressure. So authors should present their BMI findings more completely and consider testing the association of overweight with BP control in the regression model.

d) Why was a cut-off of 65 years used in the logistic regression model? Was this just arbitrary? Please, clarify.

e) Could the significance levels (p-values) be shown for each of the categories, or at least an indication of the strength of statistical significance?

f) Authors need to comment on other non-pharmacological approaches to blood pressure control. Fruit and vegetable consumption, potential sources of potassium in the diet, which is associated with lowering blood pressure should be discussed.

g) It is strange that pharmacological treatment was not associated with BP control. Could authors explicitly comment on this? This is potentially in line with previous comment above
regarding other lifestyle characteristics like diet rich in fruits/vegetables and physical activity, non-smoking habit, etc which may contribute to BP control. Authors should discuss this further.

h) Consider discussing the limitations of your study in light of above, including selection bias and generalizability of the study findings.

Thank you.

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.

No

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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