Reviewer's report

Title: Determinants of Hypertension in a Young Ugandan Population in Epidemiological Transition- The MEPI-CVD Survey

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Reviewer: Tian Jingyan

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Major Compulsory Revisions

1. The authors state that prehypertension was defined as “systolic blood pressure between 120 and 139mmHg and/or diastolic between 80 and 90mmHg” and hypertension was defined as “a systolic blood pressure greater than 140 mmHg and/or a diastolic blood pressure of 90 mmHg or treatment with anti-hypertensive medication.” I suppose that they mean diastolic blood pressure of prehypertension between 80 and 89mmHg.

Furthermore, The authors state that “treatment for high blood pressure including diet, exercise, weight loss, smoking cessation and pharmacological therapy”, then how the proportion of participants whose blood pressure were controlled by taking measures other than anti-hypertensive medication were defined, or no controlled blood pressure without anti-hypertensive medication?

2. The authors did not mention the proportion of different ways of treatment and their control rates. It would be interesting to reveal how much beneficial do lifestyle treatment (diet, exercise, weight loss, smoking cessation) bring to hypertensive patients. Also, it is essential for the ultimate goal of your manuscript -- to develop a more coherent policy for the control of hypertension and mitigation of its adverse outcomes.

3. Have the authors analyzed what factors were associated with control of hypertension? It may be valuable for policy making.

Minor Essential Revisions

1. In methods the authors say “Univariable associations between hypertension and potential risk factors were assessed using logistic regression and all variables demonstrating an association at a 20% significance level were included into a multivariable logistic regression model.” I am interested in what factors specifically were included in the model. Have table 2 demonstrated all the factors in the model, or only partial?

2. The first sentence of RESULTS “A total of 3920 between 18 and 40 years and were participants aged 18 years or more were screened during the survey. Of these 3685 (94%) and gave complete data on hypertension and its determinants and were included in the analysis.” There are redundant “and”, please correct.
3. In the first paragraph of RESULTS, please add reference to “while HIV infection was found in 9.1% of our study population which was higher than the national prevalence of 7.3%.”

4. Y-axis was absent in Figure 2. Please add it.

**Level of interest:** An article of limited interest

**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