Reviewer's report

Title: The Prevalence and Correlates of High Aortic Stiffness in North China: a Community-based Study

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Reviewer: Szu-Chia Chen

Reviewer's report:

Wang JW et al. had improved the manuscript a lot. Although no response letters to answer the questions of reviewers, however, I can see the response in the manuscript.

Major Compulsory Revisions

1. Statistical analysis, second paragraph: The authors mentioned that the backward stepwise method was used to perform multiple logistic regression. However, Table 6 showed all the OR (95% CI) and P value (including P > 0.05) in each variables in the multiple analysis. This is not the backward stepwise method. The authors should check again. (May change to “Multiple logistic regression analysis was performed to evaluate the association between risk factors for high baPWV.”)

2. Discussion, second paragraph: The authors mentioned that this suggests that decrease of estrogen in menopause should take effects on the arterial stiffness. However, no menopause age in female of this study group was reported in the Results. The authors should add the menopause age in the Results if the authors have the data, otherwise, the authors should provide the reference about the mean menopause age in North China female.

Minor Essential Revisions

1. Results, fourth paragraph: As was shown in Table 5 and 6 # As shown in Table 4 and 5

2. The abbreviation was used in front of the manuscript, and they should be used afterwards (such as cardiovascular disease # CVD). Authors should carefully check again.

3. Discussion, last paragraph: Finally, the population was from north china # North China

4. Table 4: Low baPWV (baPWV > cut-off) # High baPWV

Discretionary Revisions

1. Discussion, fifth paragraph: The present data showed that a high SBP was a risk factor for high baPWV in both male and female. The baPWV was partially dependent on BP, so it was suggested to adjust for mean arterial pressure at the time of measurement before further analysis. Adjustment was performed by a linear regression of the two variables. The residual values were added to uncorrected baPWV to form the adjusted baPWV. Adjusted baPWV values were
used for analysis.

**Level of interest:** An article whose findings are important to those with closely related research interests

**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'