Reviewer's report

Title: Analysis on associated factors of uncontrolled hypertension among elderly hypertensive patients in southern China: a community-based, cross-sectional survey

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Reviewer: Xi Zhang

Reviewer's report:

This manuscript aimed to assess the management or treatment of hypertension in south of China by using a community-based cross-sectional study. The aims and questions were clearly described. However, there are some limitations of data analyses and study design which hampered their efforts to find the real influence factors of hypertension control. Besides, there are some grammatical errors and the language needs to be improved. I would like to make following comments/observations.

1. Examples for grammatical error: “hypertension is considered accounted for approximately 50% of the coronary”, “Recently, we conducted a survey including of 10644 elderly hypertensive patients living in”, “we excluded 356 subjects from our analysis because missing information.” “And the control rate tended to be higher among those with lower educational and those with higher BMI” and “and these linear trends were statistically significant”.

2. There was no mention of the quality control about the physical measurements and the biochemical examination, which need to be specified in the method section of manuscript. Another thing need to be detailed is the collection, storage and measurements of the blood specimens.

3. The sampling method was cluster sampling, there was no mention of the response rate in different clusters. The characteristics of participants in different clusters also should to be clearly described.

4. In the manuscript, 356 subjects were excluded from the final analysis because of missing information. Was there any heterogeneities between these patients and the included patients?

5. In the discussion, some sentences copied from section of results need to be removed.

6. Some statistical comments:
   1) $P<0.05$ should be “$P=?$”
   1) “Mean values and proportions were compared by the Student’s t-test and Fisher’s exact test, respectively”. Were all the tests for categorical variables using Fisher’s exact test? In my opinion, chi-square test may be a more appropriate selection.

2) Adjusted variables in the adjusted logistic regression models should be
specified in the section of statistical method.

3) Due to the cluster sampling, the characteristics of patients from the same cluster were more similar than that of the patients from different clusters. Therefore, the patients in the same cluster were not the independent samples which does not obey the assumption of independency for general statistical methods. So it needs to be considered in the statistical analyses and the statistical methods should be modified.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.