Reviewer’s report

Title: Prevalence and clinical profile of metabolic syndrome in longevity: study from Guangxi Zhuang Autonomous Region, China.

Version: 0 Date: 23 Feb 2017

Reviewer: Ryuichi Kawamoto

Reviewer's report:

Dear Sir,

In the current study, Authors investigated the prevalence of metabolic syndrome (MetS) and its components among nonagenarians and centenarians in Zhuang population from Bama, Guangxi Zhuang Autonomous Region, China. This study was cross-sectional in China. Their efforts for this epidemiological work were actually huge. The overall writing style, study methodologies and statistical analysis are well. The study was carefully done and reported. However, there are some defects, which should be resolved, in this manuscript.

Major critiques

1. The major problem of this study is cross sectional study.

Introduction:

2. Authors should describe more new concepts about this study in Introduction.

Materials and Methods:

3. What kind of reason did this study participants consult for?

4. Did authors exclude chronic disease such as malnutrition, hepatic disease, and cancer et al., which could effect on various parameters? They must explain the categories of disease of those subjects.

5. On the issue of recruitment, I did not see any mention of ethics/IRB review, approval, or exemption.
6. Authors should mention prevalence of antidyslipidemic, antihypertensive, and antidiabetic medication.

7. Authors should show the daily alcohol consumption and smoking status which could effect on lipids and hematological parameters.

8. Authors should mention prevalence of cardiovascular disease which was included in this study.

9. The author's policy for selection of confounding factors in the multivariate analysis is not well described.

10. Also in all analyses, parameters with non-normal distributions (e.g., FPG, TG, glucose) were used after log-transformation and then the data are shown as median (interquartile range).

11. Author should show LDL-cholesterol.

Results

12. Author should also describe medication

Discussion

13. Some limitations of this study must be considered. First, since some of the study population had several risk factors including hyperlipidemia, the authors could not eliminate the possible effect of underlying diseases and medications used for these diseases on the present findings. Second, The prevalence of various lipid and hematological parameters is based on a single assessment of blood, which may introduce a misclassification bias. Further prospective population-based studies are needed to investigate the mechanisms in order to answer these questions.

Are the methods appropriate and well described?

If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?

If not, please specify which controls are required in your comments to the authors.

Yes
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

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?
4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?
5. Do you have any other financial competing interests?
6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

No

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report
including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal