Reviewer's report

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

Version: 0 Date: 10 Mar 2017

Reviewer: Xuewen Wang

Reviewer's report:
This is an interesting study in an interesting population. The paper will benefit from extensive clarification in many places.

Abstract:
"Local healthy control" was used to refer to controls. If they really are healthy, it is not useful to use this control group. I suspect the controls are simply different in age with the study group. Clarify what "dyslipidymia" means. Isn't low-HDL part of it? This term was used in other sections of the paper as well. Need to clarify.

Introduction:
There is interesting information in Introduction, however, as it is written now, it is confusing and hard to follow, and doesn't indicate how this study adds to the literature.
It might worth mentioning the population as it is one of the longest live populations in the world.

Methods:
Need to separate the definition of metabolic syndrome from waist measurement and BMI.
The word "expiration" just before "Laboratory measurements" needs to be clarified, replaced, or removed.
Why is genomic DNA mentioned? Is it ever used in the paper?
Results:
Suggest re-structure Tables 1, 3, 4 to make clear what each row/column is. Add units to where is applicable in tables.
Table 1 results, TG was different between groups, but was not mentioned in the text. This result is quite interesting, but was not discussed anywhere in the paper.
When data are stratified by gender/age, data are presented very confusing, in the text and in tables.

How was age used to stratify data?
should add analysis to compare the study group with controls with adjustment for age and sex.

Discussion
Why is women having longer life expectancy than men a reason for women having higher prevalence of metabolic syndrome? The discussion regarding menopause needs re-consideration.
The discussion regarding population differences relating to hormonal regulation is hard to believe.

The discussion "metabolic syndrome was a protective factor" needs more evidence to support.
No data need to be repeated in discussion.

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.
Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
No
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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