Reviewer’s report

Title: Association between health behaviors and mood disorders among the elderly: a community-based cohort study

Version: 0 Date: 09 Jan 2019

Reviewer: Yung Liao

Reviewer's report:

This study examined identify the prevalence of mental disorders among the elderly in Taipei City and to elucidate risk factors contributing to mental disorders. This paper addresses a worthwhile question that is certainly in line with the aims of the journal, but I think several revisions and improvements need to be made before the manuscript is suitable for publication.

Major revision:

1. Introduction. Firstly, the introduction/literature review is extremely brief and does not offer much explanation for why it is important to examine the association between health behaviors and mood disorders among the elderly.

2. Introduction. Please add citations for this sentence
"There are multiple risk factors for mental health problems in the elderly, such as demographic characteristics, e.g., being female, unmarried, living alone, or children not being around."

3. Introduction. Please clarify why drinking milk, smoking, exercise and alcohol consumption were selected as health behavior in this study but not other health behaviors. Any reference support?

4. Introduction. What is the research gap? Please clarify.

5. Methods. Please add the detailed information of demographic variables and health behavior. What tool? What is the criteria of classification? And please also report the reliability and validity of the items.

6. Methods. Please explain why "frequency of exercise" was included, since physical activity has been recognized as an important indicator of mental health in older adults.

7. Discussion. The discussion can be improved. Please add possible explanations for each finding.

8. Discussion & conclusion. Please provide several potential intervention strategies to inform health policy makers based on your findings.
To sum up, the work is interesting and important. However, its theoretical background is partial. I wish the authors good luck in their revision

**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.

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:

Needs some language corrections before being published

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