Author’s response to reviews

Title: Socio-demographic characteristics and co-occurrence of depressive symptoms with chronic diseases among older adults in China: the China Longitudinal Ageing Social Survey

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Author’s response to reviews:

5 September 2019

Dear Editor,

On behalf of my colleagues, I would like to resubmit a manuscript (ID: BPSY-D-19-00520_R1) entitled “Socio-demographic characteristics and co-occurrence of depressive symptoms with chronic diseases among older adults in China: the China Longitudinal Ageing Social Survey” for publication in BMC Psychiatry. In this submission, we have checked and addressed all previous and current reviewers’ comments.

Thank you for considering our manuscript.

Yours sincerely,

Zhenjie Wang on behalf of authors

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Response to Reviewer 1

Dear Reviewer,

We are extremely grateful for your review of the manuscript. You have raised a number of important issues. We agree with your comments and have modified our manuscript accordingly, as documented
Reviewer's report

Title: Socio-demographic characteristics and co-occurrence of depressive symptoms with chronic diseases among older adults in China: the China Longitudinal Ageing Social Survey

Reviewer: Ben Carter

Reviewer's report:

This is an interesting and useful manuscript
Major comments:
1) Abstract/Methods: Describe the analysis method,


Main manuscript
Methods
1) highlight the structure of the probabilistic sampling methods
2) Describe how you deal with missing item and domain level missing data
3) Recruitment strategy- this is currently unclear
4) How do you deal with geographical clustering ?
5) Describe the case definition and was this consistent throughout the entire dataset?
6) replace the trend test with a method more consistent with modern epidemiological methods.

Response: Thank you for your comment. The case definition was consistent throughout the whole entire dataset. The sampling of the study as following: “The 2014 CLASS was a large-scale nationally representative survey, covering 28 of 31 provincial areas in China. It examined physical health, mental health, intergenerational relations, and social care resources of adults aged 60 years or older. The survey was conducted face-to-face by trained interviewers. The 2014 CLASS used a stratified, multi-stage, probabilistic sampling method to select respondents. In the first stage, 134 counties were randomly selected as the primary sampling units. In the second stage, 462 communities (administrative villages in rural areas and neighborhoods in urban areas) were randomly selected from the primary sampling units. In the third stage, all households in each selected community were mapped and a random sample of 25 households was selected. Finally, one older adult aged over 60 years in each household was randomly surveyed. Overall, 11,511 older adults were surveyed.” Because the description of survey was similar with previous published article, we added this description “Details of the design and conduct of the study have been described elsewhere [24]” into “Methods”. Page 4 line 10-11

Results
1) describe the missing data and population under investigation
2) including p-values in all analyses in the results section.

Response: Thank you for your comment. We described the missing data at “Setting and sample” in the “method”. Page 4 line 11-14. And we added p-values in the results section. Page 6 line 24
Discussion
1) consider the implications for public health, and future research

Response: Thank you for your comment. I add some implications for future research in “conclusions”. Page 9 Line 2-3.

Response to Reviewer 2

Dear Reviewer,

We are extremely grateful for your review of the manuscript. You have raised a number of important issues. We agree with your comments and have modified our manuscript accordingly, as documented below.

Reviewer's report

Title: Socio-demographic characteristics and co-occurrence of depressive symptoms with chronic diseases among older adults in China: the China Longitudinal Ageing Social Survey

Reviewer: Asuka Koyama

Reviewer's report:

This paper deals with the association between depression and socio-demographic characteristics and chronic diseases among older adults. The sample size is large enough and the paper is well-written. I have some proposals. 1. Please insert footnotes for each table, e.g., statistical analysis, covariates. 2. This study was conducted cross-sectionally and cannot explain causal relationship, so the authors should use the word "association" instead of "risk"

Response: Thank you for your comment. I inserted footnotes for each table as reviewer suggested. And I used the word “association” instead of “risk” as much as I can.

Response to Reviewer 3

Dear Reviewer,

We are extremely grateful for your review of the manuscript. You have raised a number of important issues. We agree with your comments and have modified our manuscript accordingly, as documented below.

Reviewer's report

Title: Socio-demographic characteristics and co-occurrence of depressive symptoms with chronic diseases among older adults in China: the China Longitudinal Ageing Social Survey
Reviewer: Te-Jen Lai, MD, PhD.

Reviewer's report:

The aim of the current study is to assess the cross-sectional association of chronic non-communicable diseases (hypertension, diabetes mellitus, arthritis, and cerebrovascular) with depression among older adults in China. The followings are my comments.

1. Did you consider the cognitive impairment and hearing impairment in your study subjects?

Response: Thank you for your comment. In the current study, I did not consider the cognitive impairment and hearing impairment in our current study.

2. The participants were also asked whether they had one of the following health problems. It was not from chart review. How can you confirm the answers were right?

Response: Thank you for your comment. During the survey, the participants have to answer a list of diseases by trained interviewers. After survey, all the information was strictly re-checked by different investigator and supervisor of local field investigation.

3. The associations between subjects' characteristics and depression risk were presented in Table 2. However, you did not control for most important confounders like Table 3. It is better that you may show the adjusted odds ratio.

Response: Thank you for your comment. I inserted the information of confounders as footnotes for Table 3 Page 19.

Response to Reviewer 4

Dear Reviewer,

We are extremely grateful for your review of the manuscript. You have raised a number of important issues. We have modified our manuscript accordingly, as documented below.

Reviewer's report

Title: Socio-demographic characteristics and co-occurrence of depressive symptoms with chronic diseases among older adults in China: the China Longitudinal Ageing Social Survey

Reviewer: Maria T. Caserta

Reviewer's report:

This paper attempts to address an important question in the field of geriatric psychiatry which is what risk factors are associated with depression or depressive symptoms in the older population? The China Longitudinal Ageing Social Survey (CLASS) forms the basis of the analysis. The tool for assessing depressive symptoms was the CES-D which is not as specific as the GDS for older populations. The main results are predictable in that chronic diseases such as hypertension, diabetes and CVD
demonstrate high correlations with depressive symptoms, which has been reported in many papers across different populations. As the authors report, there is no information on other lifestyle factors that are very relevant to the development of depressive symptoms in older adults such as smoking, alcohol use, weight, exercise, diet and current medications etc. which may also affect the expression of the chronic diseases being measured. I don't think this paper adds any new knowledge to the current body of literature in this field.

Response: Thank you for your comment. There were some previous published articles which were using CES-D for assessing depressive symptoms for older population. I mentioned the lifestyle factors were not included in CLASS in the limitation of this study (P8 line 16-21).