Reviewer’s report

Title: Refining caregiver vulnerability for clinical practice: Determinants of self-rated health in spousal dementia caregivers

Version: 1 Date: 09 Dec 2018

Reviewer: Ibrahim Abdollahpour

Reviewer's report:

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Please overwrite this text when adding your comments to the authors.

I appreciate the authors' effort for addressing the aforementioned concerns. As it is shown, now, the sparse data issue is well-alleviated in the binary logistic model. I agree with the authors' suggestion to keep both multinomial and binary logistic models in the final manuscript. However, there are still some concerns should be addressed:

* Beside the word cross-section, for better convincing of the readers regarding the validity of the study design, it is necessary to clarify the sampling type as well as the sampling strategy of the study. What was the response rate?

* The clarification of the representativeness of the study sample is good but not sufficient at all. You need an evidence, for example a valid reference, for approving the completeness of the study source as well as a detailed sampling protocol for guarantee the absence of major selection bias.

* The authors have related the former unexpected finding of "Rather unexpectedly, the likelihood of ever smoking was lower in caregivers with poor/fair SRH than in those with excellent health" to a small sample size. I believe that it could not be a reasonable explanation.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Unable to assess
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

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