Reviewer's report

Title: Characteristics that contribute to good self-rated health of non-disabled elderly living alone in Japan: a cross-sectional study

Version: 1 Date: 20 July 2007

Reviewer: maria victoria zunzunegui

Reviewer's report:

General
Good paper but it would need more data analysis and writing to be ready for publication

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Major compulsory revisions

Title: “Characteristics that contribute” should be changed to “Factors associated with” due to the cross-sectional nature of the study.

Abstract:
More information on response rates of the survey, variables included, statistical analysis should be given. Conclusions are a repetition of results.

Introduction:
An estimate of the percentage of elderly who live alone in Japan should be given in the introduction, and if possible, this figure should be given separated by sex.
There is a lack of conceptual framework. The absence of socioeconomic position indicators (education, occupation, income) is hard to justify since these are known correlates of SRH in most populations.
A list of anticipated results would be useful to understand the choice of predictors (lack of socioeconomic variables but inclusion of social networks and support, hearing and visual problems, chronic diseases, etc) in the model.

Methods:
More details should be given on choice of categorization of variables. Why depressive symptoms are categorized? Why this cutoff point (>=2) has been chosen? Why risk of falling is categorized? Why IADL is dichotomized?
If associations between SRH and its correlates are linear in the logit, continuous variables are preferable to test for interactions. In this work, interactions of sex with SRH associated factors should be tested (see below).
Statistical analysis

A pool model (including men and women) and inclusion of sex*risk factors product terms are needed to test for different associations between risk factors and SRH by gender. The current analysis and separate presentation of results for men and women does not allow comparing sex-specific results.

Stepwise regression methods should be replaced by staggered entry according to some sequential ordering of SRH potentially associated factors. For instance, socioeconomic and social relationships could be entered first, followed by life habits, followed by diseases and deficiencies. This analytical strategy allows for identification of confounding and possibly mediating variables.

Results:

A table with the overall model and interaction terms is needed to compare men and women concerning correlates of SRH.

Is age treated as continuous in the final model? Table 3

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I have no competing interests.