Reviewer's report

Title: Non-use of health care service among empty-nest elderly in Shandong, China: a cross-sectional study

Version: 2  Date: 5 May 2015

Reviewer: Elvira D'Andrea

Reviewer's report:

Major Compulsory Revisions

The paper is reasonably well organized and the quality of written English is acceptable but there are several language issues throughout the paper that require attention (e.g. line 202 “didn’t” is “did not” etc.). Overall, this paper appear to provide a useful contribution to knowledge but several arrangements should be performed.

- Introduction

This section should detail the purpose of the study exhaustively, or rather explaining all the features and issues of the hypothetical question research. In the present form, the introduction needs reworking: the first and second paragraphs are too general and are not finalized to explain the real challenge of research. I suggest to summarize the introduction into 3 paragraphs following the keywords of your research question: 1. elderly and empty-nest (summarizing and reworking 1st par and 4th par, giving the definition of empty-nest); 2. non-use of health care in elderly and risk factors (explaining more clearly the meaning and the impact of “non-use” using parts of 3rd pa. - when you said at 91 line “few studies have explored non-use” I will aspect the references of these studies! If you do not find specific papers from China, it would be appropriate to search from other setting ) 3. Aim of the study (5th par – in a systematic view reasons and factors could be the same, you should explain the differences, otherwise you should refer to reasons as factors too).

- Methods

The sample is representative of the Shandong population (geographically representative, demographically representative, same household characteristics [wealth, net worth, income, RANGE of income, RANGE of home value, RANGE of net worth, home value, home ownership rate] etc.) and the random selection appears appropriate. Data collection and data analysis are well described and the ethics aspects were considered. Some deficiencies should be edited as follows:

- at line 125: “Figure 1” has not been included in the manuscript.
- at line 150: “Anderson models” should be changed in “Andersen model”.

- Results
This part is clearly organized and the statistical analysis is well conducted but it would be more appropriate to perform a chi-square test also for comparing reasons of “non-use” between empty-nesters and no-empty-nesters.

-Discussion and Conclusions
Good motivations were presented to justify empty-nesters prevalence, on the contrary the association between financial difficulties and empty-nesters compared to no-empty-nesters is weak without performing a statistical analysis (and actually finding a significant result).

Limitations of the work are clearly stated (in this case very important is the self-reported bias for the “reasons”).

Minor Essential Revisions

-Discussion and Conclusion
The authors should attempt to consider other interesting implications related to their research, this would certainly appeal policy makers. I would expect a more thoughtful examination of the implications of this research.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests