Reviewer's report

Title: Change in quality of life and potentially associated factors in patients receiving home based primary care: A prospective cohort study

Version: 0 Date: 02 Aug 2018

Reviewer: Rachel Ambagtsheer

Reviewer's report:

This is an interesting study drawing attention to a worthy focus of ageing research - how the quality of life for frail and/or disabled older people living in the community changes over time, and what factors might be associated with it. I concur with the authors that this is a relatively under-researched area, thus reflecting the important contribution that papers such as this can make. The authors have provided sound justification for the research and the Discussion section, in which the authors link their results to prior research and discuss limitations, is well done. However, I do have some concerns relating to the study design, analysis & its interpretation that I believe require clarification and possible revision by the authors.

1) Regarding recruitment (line 40); the authors do not report the total number of patients invited to participate in the study, the number of patients subsequently excluded due to poor health or the ultimate participation rate. I would strongly encourage the authors to report these figures, perhaps with the aid of a flow diagram.

2) The second concern regards attrition, which is of central relevance to longitudinal studies. I suggest that the authors provide an indication of the attrition rate per year, along with reason for attrition (e.g. distinguishing between mortality and withdrawal), and discuss any expected impact on the study results. Again a flow diagram might be relevant here, and perhaps a table comparing characteristics of those leaving the study with those remaining.

3) The authors do not provide any information on the extent of missing data values or how these were handled in the analysis - this issue should be addressed.

4) I would like clarification regarding which measurements were collected at the annual follow-up; and how follow-up was conducted (by post? Face to face appointment etc?) This is important because it is not clear in the analysis whether change in QoL over time is being analysed against baseline demographics/health variables or whether these are also being updated each year. This has implications for interpretation of the results as a key study finding was that marital status
(specifically being divorced or widowed) was associated with increased QoL over time. Perhaps these participants are re-marrying, hence the increase?

5) One limitation to note might be that carer status was not collected/controlled for. There is a growing body of research exploring the links between carer status and poor QoL; and so being released from caring duties on the death of a partner might be another reason why QoL might increase for the widowed.

6) A minor point - I would counsel against the use of the (uncited) direct quote about the global aging tsunami. I believe this type of hyperbole is best avoided when discussing population ageing.

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.

No

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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

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