Reviewer’s report

Title: Psychotropic medications in older people in residential care facilities and associations with quality of life: a cross-sectional study

Version: 0 Date: 18 Mar 2017

Reviewer: Jean Yves Le Reste

Reviewer's report:

Thank you for giving me the opportunity to review this interesting article and try to give advices to help improving the paper.

Line 84 85 the authors wrote about anticholinergic drugs but then never use them in the whole survey. This is disruptive and should removed, as it does not add any value to the article. (even if I totally agree with the information).

Try to explain the important number of rebuttal for participation (only 60 % of participants.). this could lead to a selection bias and should be explained.

Line 113 114 not sure this is for methods section. Should be sent to results section where the description of the included population should be highlighted.

Line 127 141 the choice of the different scales should be more justified especially in terms of validity data (internal and external validity if possible). This will help the reader to appropriate if these scales were the best possible to use for the survey. Even if I appreciate (as a European) the EQ5D this scale is mostly use when researchers want to assess efficiency in quality of care and this does not seem that important in this survey.

Line 145 has the German questionnaire be validated in the Australian setting and in English ? if not this could lead to an information bias and should be mentioned. A 33 items questionnaire is
quite long for such setting and could also lead to an information bias. Should be mentioned in the limits.

In results table 1 should show the characteristics of patient in traditional model and in cottage model of care and assess if there is (or not) a statistical difference between the two groups as this is of importance to follow and discuss all the results that compares the two models of care. If populations are comparable it gives a higher impact for the survey. I think this is not the case according to the following elements in the article but the efficient way to assess this is in table 1.

Line 241 to 242 this is only writeable if populations in both models of care are comparable. if not authors should push this like a reasonable hypothesis for further research but not as a suggested truth.

For the limitations section it could be better to cut it in three paragraph (selection, information and confusion bias) to make it more easy to read and eventually discuss.

Nevertheless this is an interesting survey in its field and it should be published with these minor corrections.

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

**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.

Not relevant to this manuscript

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Please indicate the quality of language in the manuscript:
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