**Reviewer’s report**

**Title:** Psychotropic and Anti-dementia treatment in Elderly with Clinical Signs of Lewy Body Dementia: A Cross Sectional Study in 40 Swedish Nursing Homes

**Version:** 0  **Date:** 03 Nov 2017

**Reviewer:** Kate Irving

**Reviewer's report:**

Thank you for the opportunity to review this paper on the very important topic of antipsychotic prescription in elderly people. The paper is well written and does not over claim based on the data. It is very clear that people with more LB symptoms get more of the types of medications that may well be detrimental to them. This is an important risk but it is not clear how many of the people with LB symptoms might actually have LBD or that these symptoms may be side effects from the medications. Is there literature to predict a diagnosis gap with LBD? This would help the argument. You note this as a limitation but it is quite a large limitation such that it seems to me there are other points to make? It is certainly the case that there can be some LB features in someone with AD for example. The diagnostic categories are not as black and white as we might like to think. However, either the person has LBD (or some mix) and are inappropriately medicated or they are very likely over medicated, neither is a good outcome. Also interesting to me is the length of prescription of psychotropic drugs as we know there is no evidence for their benefit after 14 weeks - for any person with dementia, with or without LB. Did you collect data on the length of prescription?

I think the discussion could do with some reworking and rather than just naing the limitation some argumentation that might mitigate if this is possible or at least some indication of how big a limitation this may be.

I think the findings need some further contextualisation, how do the descriptive stats compare with published figures of psychotropic prescription in similar populations in other countries?

There is considerable literature now involving the voice of people with dementia that they do not want to be referred to as 'dementia sufferers'. They do not wish to be defined by their suffering. It is more respectful to this voice now prevalent in European and various national working groups that we simply say - people with dementia. This is a small but important point.

**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.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?
4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?
5. Do you have any other financial competing interests?
6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests
I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal