Author’s response to reviews

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

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The same information is also attached in a file named "Response to reviewers comments_171215"

Friday 15 December 2017

To Editor Aurel Popa-Wagner,

BMC Geriatrics

Thank you for your decision letter of the 5 December 2017 on our manuscript:

“Psychotropic and anti-dementia treatment in elderly persons with clinical signs of dementia with Lewy bodies: a cross-sectional study in 40 nursing homes in Sweden”.

We have pleasure of resubmitting the above paper after the reviewer’s comments.

In the text below and in an attached file “Manuscript 20171215” we have marked changes in yellow.
Please address all correspondence concerning this manuscript to me, at Clinical Memory Research Unit, and feel free to contact me by e-mail iris.zahirovic@med.lu.se.

Thank you for your consideration of this manuscript.

Best wishes,

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Detailed response to reviewers’ comments

Reviewers comments
The authors changes and explanation’s

Reviewer 1
“This study makes a good effort, but there are any revisions to be made. 1) In the Material and Methods section, the authors should define better the inclusion/exclusion criteria.” We agree and have incorporated the following sentence under Methods Data collection first paragraph.

“The inclusion criterion was all residents living at NHs ≥65 years. The exclusion criterion was residents in a palliative state of treatment”.

Reviewer 2
“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.”

1) We do not know how many of the residents with DLB signs actually have DLB. However, we know that 22 had a formal DLB diagnosis according to the medical records.

This was commented on in the Discussion Study population first paragraph, but not under the result section.

Therefore, the following sentence has been added under Results Study population second paragraph.

From: ”Finally, of the residents already diagnosed with DLB/PDD, 91% were classified with 2–4 DLB signs (Table 1)” Changed to: “Finally, 22 of the residents were already diagnosed with DLB/PDD, 20 (91%) of these were classified within the 2–4 DLB signs group (Table 1”).

2) In the Manuscript the issue about side effects was addressed in the Discussion psychotropics medication antipsychotics last paragraph.

“The association between drug use and the number of DLB signs is difficult to establish because the potential side effects of antipsychotics are identical to DLB signs, which represents a limitation.” This sentence has not been changed.

“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.”

Fujimi et al 2008 showed that the number of DLB signs (parkinsonism, fluctuations, visual hallucinations and RBD) were correlated to the amount of LB pathology which means that a higher number of the DLB core symptoms probably indicate a more correct DLB diagnosis. This could be an argument for prediction of the diagnosis.
For clarity, we have incorporated the following sentences under Background - first paragraph.

“The relation between DLB signs and DLB pathology is illustrated in a study which showed that the amount of Lewy body pathology correlated to the number of the four core DLB signs (10).”

And also added:

“The definite DLB diagnosis usually consists of Lewy bodies, Lewy neurites and amyloid plaques in different proportions (7-9). “ to address that diagnosis is often mixed.

“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? “

We agree that this would be interesting. Unfortunately, this information was not available in our medical lists from the Swedish National Medication Dispensing System.

“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.”

We understand the reviewers comment and have added the following sentences:

1) Discussion - Study population - last paragraph: ” Since severe dementia according to ICD-10 is defined as a need of permanent support and caregiving from others, all residents of this study were classified as having severe dementia.”

2) Discussion - Psychotropic medication - Antipsychotics - Last paragraph: This was however not practically possible to carry out. The reports from nursing staff is of a longitudinal character in relation to a doctor’s examination. Against this background, the limitation must be considered as minor.

3) Discussion - antidementia: Other minor limitations, beside lack of clinical examinations, were that CT/MRI findings and family data were not available.

“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?”
We understand the reviewers comment and have clarified and inserted more percentage details in following sentences: under Discussion - antipsychotics-

In our study population, risperidone was the most common antipsychotic used in residents with dementia (11,5%) followed by haloperidol (6,6%); this could be considered a good treatment policy.

However, the relatively large usage of haloperidol and the low percentage of quetiapine and olanzapine are not in line with recommendations by either the Swedish NBHW, the EMA or the FDA (21, 22, 43). For example, in a similar population in US NHs, haloperidol treatment was 1,9% and in a study from Sydney, Australia, the usage of conventional antipsychotics was 7,4% (44, 45).

We also added the following sentences: under the same paragraph under Discussion – antipsychotics -

Snowdon compared psychotropic medication use in NHs and noted frequencies of antipsychotics 42,6% (Finland), 23,8% (Norway), 28,0% (Australia) compared to our 21,6% (45).

“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.”

We agree and have changed this accordingly.

Friday, 15 December 2017

Reviewer 2 noted “Needs some language corrections before being published” Our manuscript has been reviewed by editing service Online English Superior Editing

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