Reviewer’s report

Title: Cross-sectional study of prevalence of dementia, behavioural symptoms, mobility, pain and other health parameters in nursing homes in Austria and the Czech Republic: Results from the DEMDATA project

Version: 0 Date: 14 Mar 2018

Reviewer: Steffen Fleischer

Reviewer's report:

Many thanks for your manuscript.

I think it is written well and very understandable. However, the manuscript lacks some important information on the one hand and has some redundancy on the other hand.

It is very positive that the researchers used direct assessment methods to investigate cognitive impairment. Unfortunately they mistake the results of their assessments as diagnoses this is a mistake the authors have to account for throughout the whole manuscript. The GDS used by a psychologist or a "trained evaluator" (line 122-124) definitely is not the goldstandard for dementia diagnostics.

The authors indicate there is another publication that describes the methods more detailed (line 98-99). I think that does not suffice, I want to read more about the study design and sampling (especially a justification for the sample size) in this article (random sampling, stratification etc.). The description of the test instruments is not consistent, some instruments are described very detailed (e.g. specification of reliability) and some not. Perhaps a table could help here.

In my view, the section data management plan has not to be included in the manuscript.

R-Studio is only a GUI, the analysis software is R (line 200).

Results: There are some redundancies in tables and text. I would rather prefer the tables. In my opinion T-values are not necessary, they have no meaningful additional information in this context, cluster-adjusted confidence intervals would be of more use and should be added (totally missing now). It should be stated whether the QoL-AD was used as a proxy or self-rating or both. Generally the term proxy assessment should be used more cautious as most assessments used are "proxy" assessments (e.g. the GDS).

Discussion: This section is lacking the most as the response rate is not described throughout the whole text and not mentioned in the discussion. The value of the results by no mean can be appraised by the reader. In line 429 to line 430 care stages are introduced, this has to be explained: What does stage 3 mean?
In-text citations: have to be revised (e.g. 1 440, 57, 80, 81).

Tables: the GDS in table 1 should be moved to table 2

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.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

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:

Acceptable

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