Reviewer’s report

Title: The Prevalence of Obstructive Sleep Apnea in Mild Cognitive Impairment: A Systematic Review

Version: 0 Date: 06 May 2019

Reviewer: Abdelrahman Abushouk

Reviewer’s report:

The authors performed an interesting review to assess the prevalence of obstructive sleep apnea in patients with mild cognitive impairment. They used a comprehensive search method, rigorous study selection and data extraction processes, as well as detailed quality assessment for included studies. Although they provide no quantitative outcome on the topic, their study is a good re-evaluation of the published literature on the topic. I have few concerns:

- I understand the author's inability to conduct a meta-analysis due to the significant heterogeneity both in the used diagnostic methods and outcomes; however, the way they presented their data with a prevalence rate ranging between 11% and 70% does not really give much information to the reader. This work should only be described as preliminary to guide future work.

- Another limitation that should be added to the discussion is that the majority of included studies were cross-sectional study that are prone to multiple confounders and the chicken-egg dilemma.

- Did you apply any restrictions (filters) to your search?

- "When relevant, study authors were contacted for clarification and provision of additional information for the systematic review". Did you get any response?

- You specify in the methods how OSA was diagnosed, but you do not do the same for MCI.

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:

Acceptable

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