Reviewer’s report

Title: Epidemiology and outcomes of people with dementia, delirium and unspecified cognitive impairment in the general hospital: prospective cohort study of 10,014 admissions.

Version: 2 Date: 24 Apr 2017

Reviewer: Giuseppe Bellelli

Reviewer's report:

The authors have changed their previous manuscript's version as required by the Editor. However, if I am not wrong, the authors have missed some questions raised by reviewers' comments.

For instance, I do not find their response to the point 1 of my first revision: "Despite many people underwent a comprehensive geriatric assessment, the study does not report data regarding the individual's health, nutritional and functional status. .......Such additional analyses are not intended to lower the importance of this association, but, rather, they might contribute to further strengthen the study finding". If they are not able to provide us with these data, I think that they could clearly state it. Otherwise, please respond to this concern.

With regard to the point 2 of my previous revision: " It's unclear to me how did the specialist nurses provide certain diagnoses of delirium. How is it possible that patients may have been diagnosed with delirium in the absence of a positive score on the CAM? Who are these patients?, the authors answered by adding the following text: "Some cases of delirium are therefore CAM negative but have a positive assessment for delirium". I frankly do not believe that this explanation gives clarity to the point. In fact, it looks like that CAM was less sensitive than clinical assessment to detect delirium. This is counterintuitive and totally in disagreement with previous literature (see, for example Inouye et al 2001). I suggest the authors to reconsider this point.

The concerns at the points 3 (references outdated), 5 (methods to ensure that all specialist nurses had an equivalent level of competence in diagnosing cognitive disorders) and 6 (the study has been carried out in a single hospital) have not been addressed by the authors.

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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