Reviewer’s report

Title: Intervention to improve the appropriate use of polypharmacy for older patients with hip fractures: an observational study.

Version: 0 Date: 31 May 2017

Reviewer: Gülistan BAHAT

Reviewer's report:

In this article Komagamine and Hagane aimed to evaluate the effectiveness of an intervention to improve appropriate polypharmacy for elderly patients admitted to the hospital for hip fractures. After intervention, they observed a reduction in potentially inappropriate medications but not an improvement in clinical outcomes.

Although the study objective is of interest for the geriatric population and it is well designed, there are major statistical drawbacks of the article.

1. Authors stated this was a retrospective observational study but this looks like 'a prospective interventional study'.

2. Regarding statistical analysis; survival analysis is needed for either mortality or primary composite outcomes rather than logistic regression analysis.

3. In results section the authors stated that 'This result did not change after adjusting for confounding factors at baseline (data not shown)'. Regression analysis is of great importance for this study. Therefore the models have been used for regression analysis should be detailed.

The aforementioned analysis should be done, so that I can comment more on discussion.

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 recommend additional statistical review

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