Reviewer's report

Title: Factors related to functional prognosis in elderly patients after accidental hip fractures. A prospective cohort study.

Version: 2 Date: 23 August 2014

Reviewer: Sarianna Sipilä

Reviewer's report:

This study describes factors associated with functional recovery after a hip fracture. The purpose of the study is scientifically and clinically important. Research on this topic has been done extensively, but it is still important to continue high quality research on this area to learn more about the functional recovery after hip fracture and to be able to design rehabilitation strategies promoting recovery. Data has been collected in six public hospitals and the total number of participants included in the analysis is 557 which is a relatively large number and enabling more sophisticated and advanced statistical analysis.

The manuscript has been written in a little bit untidy and sloppy way

Major Compulsory Revisions

1. The text would benefit from language revision.

Abstract

2. The abstract includes terms which remain unclear to the reader, e.g. functional prognosis and treatment period.

3. Grouping of variables is also unclear in both abstract and in the methods. In addition to independent (socio-demographic etc variables) and main outcomes (Barthel Index and Lawton IADL Scale) there are other measures done like Health related QoL and Osteoarthritis Index.

4. Data analysis remains unclear in the abstract.

5. Baseline data collection time needs to be defined in more detail. The authors write that “data was collected at the moment of the fracture”.

6. In the results, multivariate analysis includes variables which are not clearly mentioned in the methods.

Introduction

7. Last sentence in the introduction should be deleted or removed into the discussion.

Methods

8. Method section would benefit from reorganization (may be subtitles) of the text.

9. Baseline data was collected from medical records and by personal interviews
but follow-up data with questionnaire. Change in data collection method may have significant impact on the results (it may even be that the measurements are not reliable).

10. It is also important to point out that the baseline PADL and IADL information assesses prefracture, not current condition.

11. What do the authors mean by “validated Spanish language version of SF-12 was used when available”?

12. It remains unclear how independent variables were selected for the multivariate model.

13. Do the authors have any information on rehabilitation prescribed for the participants after the fracture.

Results

14. Flow chart and tables are clear.

Conclusion

15. Conclusion is appropriate and well written and limitations of the study stated. I would add in the limitations the collection of the main outcome (interview at baseline and questionnaire at follow-up). Conclusion is the best part of the manuscript.

Discretionary Revisions

16. Statistical analysis could be more sophisticated with such a nice number of participants. Is there a reason, why main outcomes were dichotomized for the statistical analysis?

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

'I declare that I have no competing interests’