Reviewer's report

Title: Factors associated with recognition and prioritization for falling, and the effect on fall incidence in community dwelling older adults

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Reviewer: Angela Yee Man Leung

Reviewer's report:

Thank you for offering me the chance to review this paper. The authors have good intention to fill up the knowledge gap of “adherence to treatment” (which is the actual action) and “prioritization or recognition” (which is a kind of psychological intention or cognitive understanding. This is an important area in gerontology.

There are a few points which authors may need to clarify or explain before the paper can be considered for publishing:

Major Compulsory Revisions

1. Definition of prioritization or recognition. Who makes the final decision in prioritization or recognition? In the Discussion section, it seemed to indicate that this is decision made by patients, but in the Method section, it referred to the joint decision made by general practitioners, nurses, and patients. Since this variable is the dependent variable in this study, its definition is crucial in interpreting the findings.

2. Did you measure adherence? The paper intends to argue patients’ adherence to treatment may make a difference in the outcome (prevent falls). But prioritization does not lead to adherence.

3. Prioritization does not necessarily refer to high motivation. There are many factors affecting individuals’ motivation to undergo a fall prevention intervention. The three constructs ‘prioritization’, ‘adherence’, and ‘motivation to intervention’ should not be mixed.

4. Page 4 population: The inclusion criteria are a bit confusing. The lines “For inclusion in the present study, participants were eligible if they were at risk of functional decline and thus underwent comprehensive geriatric assessment (CGA), if falling was defined as a medical problem and/or if they had received an intervention aimed at falls-prevention” are unclear. Please further explain. Who define “falling as a medical problem”? Doctors? I am concern that if the patients were told by doctors that they had fall problem, the patients were more likely to prioritize falling as the problem that should be treated or prevented. This led to sampling bias.

5. Another concern was about the experience that the patients had in falls preventive intervention. If the patients had already received a preventive
intervention for falling, would these patients be included in this study? How to define “had received”? For how long?

6. Page 4. CGA and Falling: the use of postponed informed consent procedure seems to be odd. All study subjects should sign written consent before the start of the study. Authors may need to clarify which part of the consent was postponed to let the subjects know. Was this strategy agreed by the ethical review board?

7. Page 4. Analysis: In the lines “All covariates that were univariately associated with recognition and prioritization with a p-value of <0.25 were tested for an association after adjustment for potential confounders” and Table 1, p-value <0.25 was used as the criteria for identifying the factors associated with recognition and prioritization. Please justify the rationale for this p-value.

8. Page 5. Determination of intervention: It seems that the determination of intervention was made by three parties: GP’s decision, community nurse’s recommendation, and patient’s prioritization. Which party exercise dominant role in such decision making? This is a point of readers' interest.

9. Page 5. Paragraph 2 of Intervention: how many visits were made? Eight? Seven?


11. Page 6. Statistical analysis: We usually use p<0.05 or at most p<0.1 to identify the factors significantly associated with dependent variable (recognition and prioritization) in bivariate analysis. Justify if you use p-value <0.25.

12. Page 8. Results: If p<0.05 is used, some factors like “less educated, more often divorced and reported better quality of life through EQ5D, stroke/TIA, use of a walking aid” should not be considered as the factors significantly different in the two groups.

13. Page 8. Result: It is unclear which variables were considered as potential confounders. In the multivariate regression analysis (Table 2), different variables were adjusted (for example, anxiety or panic was adjusted in the regression when use of walking stick was identified). Anxiety was not significantly different in Table 1. The strategy of adjusting an insignificant variable (like anxiety) needs further explanation. Same to the strategy of adjusting EQ5D: needs explanation and rationale.

14. Page 11. Discussion. The argument about connecting visiting the ED with priority of falling does not sound. Priority of falling is a cognitive decision while visiting the ED is an actual action which may or may not be related to prioritization.

15. Page 11. Discussion. The sample size of the two groups (Table 3 and 4) was so small that it could hardly draw any meaningful conclusion. The speculation of the prioritized group which are more adherent to the intervention and result in
better effect of the intervention on fall incidence in second half year is not substantiated.

16. This study could hardly draw any conclusion on patients’ adherence to treatment and its possible effect on fall prevention due to the small sample size and its study design (which has not included ‘adherence’ as one of the measures). Consider to avoid the term ‘adherence’, use ‘prioritization’ instead.

Level of interest: An article of limited interest

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests.