Reviewer's report

Title: Risk of death or hospital admission among community-dwelling older adults living with dementia in Australia

Version: 2
Date: 7 March 2014

Reviewer: PN Wang

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This study recruited 354 subjects from the Extended Aged Care At home Dementia program. The aim of this study is to determine risk factors for time to death or hospital admission. Extended information were collected. They found previous hospital admissions and previously worse cognitive status were consistent risk factors for time to death or hospital admission.

Major Compulsory Revisions

1. Authors mentioned "It is important to examine the impact of risk factors on hospital admissions and death at different times since service arrangements may change due to the change of frail older people's functioning and health conditions over time.' in the Introduction. Therefore, to determine the changes of risk factor and their risk ratio over time should be an essential issue of this study. However, authors stated "Given the lack of theoretical and empirical studies exploring the optimum study period for examining risk factors, we were unable to explain why different variables did not emerge or emerged as significant risk factors at different times. " Authors should try to interpret why the risk changed over time.

2. Authors combined death and hospital admission as one endpoint in the analysis. Although authors discussed this limitation in the Discussion, the background meaning for hospital admission and death should be different. Especially authors intended to investigated the risk factors for hospital admission and mortality over time, there would be great differences between short-term and long-term risk for death. Hospital admission could be a risk factor for death. When analyzing the risk for death, hospital admission becomes a confounding factor for other risk factors.

Minor Essential Revisions

1. The intensity of use of care service should affect the outcome of care. How long and how frequent he care service were used should be included in the analysis.

2. Authors only demonstrated the Kaplan-Meier survival curve of previous admission to death or hospital admission, please show the survival curve for other risk factors or the mean and median survival time of all risk factors.

3. Most parts of discussion just repeated the findings in the Results, but did not well interpret and discuss the comparisons of the results in this study and other studies.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.