Reviewer's report

Title: The descriptive epidemiology of delirium in a large population-based cohort study: results from the Medical Research Council Cognitive Function and Ageing Study (MRC CFAS)

Version: 2
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Reviewer: Danan Gu

Reviewer's report:

This paper is interesting. I only have some minor or mild comments to share with the authors.

1. The authors have not systematically examined the validity of their proposed diagnostic algorithm. To check its validity, the algorithm should be applied to different populations and/or compared with other similar well-established ones in the same population. Also if possible, the test-retest validity of the proposed algorithm should be presented.

2. Abstract: Methods: Proportional hazard might be better termed as proportional hazard ratios; odds of dementia might be better termed as odds ratios.

3. Page 3, last paragraph: The percentage 0.7% in the first half of the very first sentence is for the general population or for the elderly population? It should be more specific.

4. Table 4: Why is the "severe" category of illness severity omitted as the "none" category is the reference group?

5. Many other health conditions are associated with mortality. Will the relative hazards in Table 3 be altered if these covariates are controlled?

6. Page 6: related to above point, how is the current acute illness defined? what items are included? This should be clarified.

7. Figure 2 and Table 5 reflect the same story. Only one is needed. If Table 5 is needed, age 75-80 should be 75-79, and a table not is needed to indicate whether the odds ratios are adjusted or unadjusted.

8. Page 9, Line 5 from bottom: for the phrase "That delirium": Does this mean there is another delirium?

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

Quality of written English: Needs some language corrections before being published
Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests