Reviewer's report

Title: Successful aging defined by health-related quality of life and its determinants in community-dwelling elders

Version: 2
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Reviewer: Nancye May Peel

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Major Compulsory Revisions

1. In the Abstract Results, the authors state that: "...relative to those aged less than 70 years old, elders aged between 70–75 were associated with higher prevalence of successful aging (OR: 0.27, 95% CI: 0.13–0.58)." These results would indicate the reverse: In comparison to those aged 70 or less, elders aged 70–75 had a lower prevalence of successful aging. This misinterpretation of results is repeated in the Discussion, first paragraph: "Moreover, elders aged 70–75 years old, who can see their relatives or friends whenever they want to, and had no fall history, pain problem, and sleep disorder were more likely to be successfully aging." Younger age (that is less than 70) would appear to be associated with successful aging from the results in univariate and multivariate analysis.

2. In the Background, first sentence, the authors refer to "the elderly population" without defining what they mean by "elderly" and "older people". For example: "The proportion of older people is projected to increase by almost triple its current number". What age group are the authors referring to? Those 65 and over? Those 85 and over?

3. In the Background, second paragraph, first sentence "An extensive review of 28 quantitative studies..." should be referenced. Presumably this is reference 5 (Depp and Jeste, 2006) but this is not obvious in the text.

4. In the Background, last paragraph, the authors indicate that: "......physical component summary (PCS) and mental component summary (MCS) scores, both corresponding to major researcher-defined criteria." The authors should explain what they mean by "corresponding to major researcher-defined criteria".

5. In the Methods, first paragraph the authors state: "About 4.58% of the Taichung residents have the same age." What age are the authors referring to?

6. In Measures the authors state that: "....the SF-36 PCS and MCS scales were derived following the standard SF-36 scoring algorithms." What population group was used for standardizing the algorithms?

7. In Results, second paragraph the authors state that: "Elders with <= (less than or equal to) 6 years of educational attainment.............had higher prevalence of
successful aging in the unadjusted analysis (Table 2). ” Again the reverse is shown in the Table that elders with > (greater than) 6 years of educational attainment had a higher prevalence of successful aging.

8. In the Discussion, second paragraph, the authors state that: "Studies using the absence of major diseases as one of the domains to define successful aging in elders reported a lower prevalence of successful aging [13, 16, 18] compared with those using this domain. [4, 7, 11,13]." This sentence needs clarification- do the authors mean "...compared with those NOT using this domain".

9. In the Discussion, last paragraph, the exclusion of those with cognitive impairment should be discussed as a limitation to the generalization of results.

**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:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.