Reviewer's report

Title: Evaluating the sensitivity and accuracy of instruments used to assess functional status in community-dwelling older adults: a systematic review

Version: 1 Date: 13 May 2011

Reviewer: Nicole Dubuc

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Minor Essential Revisions:

- In the section Construct under-representation (results section), first paragraph, line 4, replace “Coen” by Cohen.
- In the section Construct under-representation (results section), second paragraph, line 12, replace “Dubec” by “Dubuc”.
- In the section Construct under-representation (results section), second paragraph, line 14, replace Jette et al. [52] by Jette et al. [63] or see where is the mistake in the reference.
- In the section Construct under-representation (results section), second paragraph, line 17, replace McHorney & Cohen [55] by McHorney & Cohen [65] or see where is the mistake.
- In the section Construct under-representation (results section), second paragraph, line 17, replace 2-paramter by 2-parameter scaling method.

Discretionary Revisions

It is a good systematic review regarding instruments used to assess functional status of high-functioning older adults living in the community, thus the review of this paper is succinct and positive.

The aim of this paper is well defined. The choice of restricting the review to studies that employed item response theory is a good strategy considering the objective to identify tools with a high degree of sensitivity that will be useful in the earliest stages of functional decline. The method used to compare the manuscript is appropriate and well explained. IRTs are also well presented and could be easily understood for researchers who were not familiar with these analyses. The discussion is well balanced and the limitations are stated.

However, I would like to bring some commentaries. The title and the abstract convey to what has been presented in this manuscript, but I think it would be useful to specify in the title as well as to remind in the conclusion of the abstract that this review concerns the high-functioning older adults (or non-disabled) living in the community. This objective drives inclusion and exclusion criteria of manuscripts and thus the results obtained. In the same way, I do not agree with the last sentence of the Inclusion and Exclusion Criteria Section. It is possible to
misinterpret this sentence. Perhaps that scales strictly examining Basic-ADLs are less relevant to this review because of the principal interest for non-disabled older adults. However, Basic-ADLs are not ineffective in assessing community-dwelling older adults. Basic ADLs were consistently reported as significant eligibility criteria for long-term care (e.g.: home care), and are major factors for variations in resources which make up most available classification systems (case-mix system) supporting the organization of services. Although, the prevalence of disability affecting ADLs appears to have reduced over the last years, we are now confronted with the aging of the population and the fact that more elders with moderate or high level of disability continue to live at home. Thus, community-dwelling individuals do not automatically equal non-disabled elderly. Moreover, the prevalence of 8 % of community-dwelling subjects reporting ADL dysfunction published in 1984 (Branch) do not apply today, in 2011.

I also question the choice of the Nagi model. In fact, I do not question the important contribution of this model and I do appreciate it, but considering efforts made by the scientific community in developing the International Classification of Functioning, Disability and Health (ICF, HMO 2001), I wonder why this model was not chosen, especially in a study which focuses on tools useful for the earliest stages of functional decline. By using this model, it also would have been interesting to discuss how tools developed so far correspond or adapt to this recent model. Face validity is also an important point to consider when choosing a tool for a specific study.

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.