Reviewer’s report

Title: Outcomes for patients with advanced medical illness: a multicentre study of validity and predictors of response to change

Version: 3  Date: 25 June 2015

Reviewer: Carlos Paiva

Reviewer’s report:

Major Compulsory Revisions

Lines 202-203 – “The comments were transcribed verbatim, grouped according to question and common themes were identified. The POS was then modified accordingly for formal testing.” The authors should better describe the qualitative analysis. How was it done? Content analysis according to Bardin, Thematic analysis, etc.

Authors used two widely used instruments for the convergent and divergent analyses (EORTC QLQ-C15Pal and Facit-sp); however, their psychometric properties were not previously evaluated in Italy. It is a potential bias for the study. The authors could discuss the limitation of using non-validated instruments for the convergent/divergent analyses and also the inclusion of patients to the retest without confirmation of clinical stability.

The authors did not discuss adequately several problems during the validation. It should be a better contribution to the literature if they show clearly the limitations of the tool and further discuss them. For example:

- The Cronbach’s alpha was only marginally adequate (~0.70), and should be presented with the 95% confident intervals.
- There was clearly a floor effect regarding “Wasted time” and “Personal affairs” and also “Information” and “Share feelings”. It should be discussed.
- There was a problem in the test-retest of “share feelings” with regards to the patients and to a lesser extent in relation to the staff. Why? They should discuss it better.

Minor Essential Revisions

Line 215 - To assess test-retest reliability of the POS, we asked inpatient hospices an additional POS assessment 24-48 hours after T1 assessment (T2). The authors need to explain why 24-48h was chosen for the retest. In general it is a very short time to retest patients. The reference (or some similar reference) could be used to explain why to retest patients so fast (PMID: 24447633).

Why performing the Preliminary field-testing and assessment of feasibility, content and face validity of the version 1? The author could go directly to the translation process using adequate translation methodology (version 2)…
Line 215 - To assess test-retest reliability of the POS, we asked inpatient hospices an additional POS assessment 24-48 hours after T1 assessment (T2). The authors need to explain why 24-48h was chosen for the retest. In general it is a very short time to retest patients. The reference (PMID: 24447633, or some similar reference) could be used to explain why to retest patients so fast.

An important thing to be considered in test-retest is clinical stability. Authors assumed “that the quality of life of the patients should be rather stable”. How did they assume it?

Line 246 – “A Cronbach’s alpha of around 0.70 indicates good internal consistency without homogeneity”. The authors should correct the phrase, since “around” 0.70 is not correct. It should be higher than 0.70! Or between 0.70 and 0.95. Please use the recommendations of Terwee et al. (ref 21).

Lines 249-250 - Responsiveness to change – Why not use an anchor-based method asking patients if they were better, the same or worse? It would be easier to conclude responsiveness to change in this case. ES could be calculated for each group of response.

Line 256 – “A regression analysis was flitted to the data…”Please cite the type of regression used. Linear regression?

Lines 261-262 – Please cite the independent variables.

Lines 308-309 There was little missing data for POS assessments; the highest was for the items ‘information’ and ‘personal affairs’ (3.3% each). The authors should include in the Methods section an assessment about the acceptable percentage of missing items. Is 3.3% acceptable?

Lines 313-314 – “Cronbach’s alpha for the 10 POS items at admission was 0.67”. It is quite a low score. It should be presented in a table (supplementary at least) together with the Cronbach’s alpha if items deleted. Are there any item that excluded improves score?

Lines 381-385 – This paragraph should be referenced and improved.

Discretionary Revisions

Lines 118, 119: there is an extra comma “(10 inpatient hospices, 10 home-based PCTs,)”

Lines 152-153 – The following phrase could be deleted...“The European Organisation for Research and Treatment of Cancer quality of life core 15 palliative questionnaire (EORTC QLQ-C15-PAL).”

Line 211 - …the functional status through the Eastern Cooperative Oncology Group (ECOG) scale.COG. The authors should correct the name of the PS scale.
Lines 407-408 – “Five percent of patients declined to take part in the study”. In fact, there was fifty percent of refusal…and it was not a low percentage. I believe it was a typo.

The authors could discuss the limitation of using non-validated instruments for the convergent/divergent analyses and also the inclusion of patients to the retest without confirmation of clinical stability.

Additional file 7. There is a lack of point in the number 028 (last column to the right).

Level of interest: An article of importance in its field

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