Reviewer's report

Title: A Systematic Review of the Psychometric Properties of Quality of Life measures for primary school aged children with Cerebral Palsy

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Reviewer: Annette Majnemer

Reviewer's report:

The purpose of this manuscript is to review the evidence on the reliability and validity of condition-specific quality of life measures for children with cerebral palsy. This paper is well written and succinctly reviews the available literature in this area. Appropriate systematic review methods were rigorously applied. Overall, this manuscript provides a good overview of the topic of interest. However, a number of issues should be addressed to further clarify the rationale for this review and interpretation of the findings. These points are highlighted below.

- Abstract: include 'inter-rater reliability for DISABKIDS'.
- Introduction: in definition of CP, include other associated problems (i.e. non-motor) as per consensus definition (e.g. behavioral, language, epilepsy). The introduction should clarify the advantages and limitations of generic versus condition-specific quality of life measures, with emphasis on the clinical utility of the latter. Some of the unique attributes measured in a CP-specific quality of life measure should be specified. This would be beneficial to the readership.
- Inclusion/exclusion criteria: second sentence- clarify if 'lower limit' refers to age limit. To my knowledge, the Child Health Questionnaire should be excluded because it is a generic measure, as opposed to condition-specific. I am not sure I agree with the arguments suggesting that it is a health status measure. Although this measure collects information on health symptoms, this information is not part of the physical or psychosocial summary scores of this measure. Perhaps another measure of health status could be used as an example.
- Results: in the last paragraph, percentages by GMFCS level are provided. Were these pooled values across studies? This distribution is compared to the distribution of another study, but perhaps should also be compared to CP registry data (where level I-II percentages are even higher), derived from population-based samples.
- Theoretical constructs: are you suggesting that measures of suboptimal well-being (items framed in the negative) would not be considered as a measure of well-being?
- Construct validity: It appears that preliminary studies on construct validity have chosen to examine the relationship between CP-QOL measures and GMFCS level. Can you clarify why you might expect a condition-specific quality of life measure would correlate with GMFCS level, when generic quality of life
measures typically do not?

- Discussion: Definition of construct validity (page 12) should be a definition of the term, not the way it is tested. I am not sure I agree with the arguments put forward in criticism of the PedsQL, with respect to overemphasis of physical function domains. The range and cluster of items on the condition-specific module (as tabulated in table 3) appear similar to the CP-Child. Furthermore the generic module has one subscale on physical functioning, and three subscales related to psychosocial well-being.

In the discussion, it is suggested that further examination of the relationship between generic and condition-specific measures of QOL is warranted. Would you expect there to be a strong association? If so, why use condition-specific measures?

In the discussion, you refer to data on responsiveness of the C&CHQ but this was not summarized in the results.

The theoretical underpinnings of quality of life remain somewhat controversial, and lack consensus definition. This should be considered in the wording of the concluding statements.

This is an excellent overview of measures of quality of life for children with cerebral palsy, and should be useful for clinicians and researchers in the field.

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

**Quality of written English:** Acceptable

**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.

Please note that I will be evaluating the PhD thesis of the 5th author as external examiner. I do not feel that this represents a conflict as this is not part of her thesis topic.