Reviewer's report

Title: Quality of physical therapy from a patient's perspective; factor analysis on web-based survey data revealed three dimensions in patient experiences with physical therapy

Version: 2
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Reviewer: Jo Geere

Reviewer's report:

- Minor Essential Revisions

In the Abstract
1. ‘A web-based survey yielded data of 2.221 patients’ replace full stop with comma
2. ‘the number of items by almost a quart.’ Quart should be ‘quarter’

In the Background
1. ‘Related to this is the lack of consent regarding the definition of separate dimensions’ ‘consent’ should be ‘consensus’

In the Results section
1. ‘In the factor analysis of the rest of the unique items, 13 components were extracted (see Table 4).’ Should be Table 5

In the Methods section
1. Explain in much more detail how the patients scored each item and what instructions they were given for scoring items; ‘average degree (in%)’ as described in Table 1 is not sufficiently clear and therefore it is not clear how patients might interpret and respond to the questionnaire items
2. Explain how the sample of physiotherapy practices, and the patients within each practice were selected. This is addressed as a limitation in the discussion, but the actual method of practice selection and patient recruitment should be stated or explained here

In the Discussion
1. ‘and as a result the number of items can be reduced by 11, which is more than a quart.’ Please check the value 11 as it does not seem to tally with original number of items minus the remaining items according to Table 1; quart should be ‘quarter’
2. ‘May[4] was the only to distinguish a separate key area on ‘clinical outcome’.’ After only insert ‘study’ or similar
3. ‘A second option is to randomly select patients for invitations from the databases from health insurance companies or directly from the EMRs,’ write out
EMRs in full before using the abbreviation for the first time

- Discretionary Revisions

In the Abstract
1. ‘Factor analysis is a necessary step in the development process.’ Suggest expanding the sentence to state what is being developed (e.g. survey tool/questionnaire) and why (e.g. to improve quality of data collection and reduce respondent burden).

In the Background
1. After listing the ten quality indicators the authors state that ‘A patient questionnaire covering 40 items was developed to measure these dimensions.’ It would be helpful to clarify whether this refers to a questionnaire developed during the project by Neeleman-van der Steen et al (ref 6), or to a questionnaire developed or modified in any way by the authors.

2. In describing Neeleman-van der Steen et al’s consensus based process, the authors state ‘Based on literature, an agreement was reached in three rounds on ten quality indicators from the patient’s perspective focusing on the following dimensions: …’; it would be useful to state what method was used, for example whether it was three rounds of a Delphi survey or another process?

3. After stating ‘a factor analysis at item-level to clarify the number of dimensions is much less common.’ a brief sentence to explain the benefit or added value of performing a factor analysis over examination of internal consistency would strengthen the rationale for the study

4. ‘In these patient surveys, high rates combined with low variance[3];’ indicate which ‘rates’ are referred to; I suggest ‘satisfaction rates’ or ‘item scores’ adds clarity

5. ‘should be part of the development process to ensure high quality data.’ Suggest adding ‘collection of’ prior to ‘high quality data.’

In the Statistical Analyses section
1. The authors state ‘The indicator scores were calculated as the ratio of the sum of the scores of the rated items to the total of possible items scores’ yet in Table 3 ‘Domain scores’ is used; It seems that the terms ‘indicators’, ‘indicator scores’, ‘domain scores’ and ‘dimension scores’ are used synonymously and I suggest that only using the term ‘Dimension scores’ is more consistent with the rest of the text and would aid clarity

In the Methods section
1. Clarify what is meant by the sentence ‘The outcomes of the empirical test were analysed using descriptive statistical analysis’. Does this simply mean that a summary of descriptive statistics for the therapist and practice level item or dimension scores was generated (i.e. Table 3)?

2. In the text it states that the item scores were transformed to therapist and practice level by determining the ‘median’ item score per therapist and practice; I suggest that ‘mean’ therefore be replaced with ‘median’ in Table 3
3. To explain the scores reported in the final paragraph of results section, a brief statement of how the practice level mean scores and standard deviations (should these actually be median scores and IQR?) were derived for each of the final three ‘distilled’ dimensions would be helpful as these final dimensions are different to the original 10.

In the Results section

1. In ‘The population of the field study was representative with respect to gender, direct access vs. referred patients, and acute vs. chronic patients (see Table 2).’ State which population the study was representative of; although stated in the table it would be useful information to include here for the reader.

2. The sentence ‘The latent concept or dimension ‘practice organization’ can therefore be considered a causal indicator[13]’ can in light of the point of view and approaches expressed in the reference cited, this interpretation needs more explanation and perhaps rewording; is it not the items 18-26 which could be considered ‘causal indicators’ of the latent concept or dimension ‘practice organization’?

In the Discussion section

1. The author states ‘Besides patient experiences, the quality of the clinical reasoning process, with respect to the screening and diagnostics process, the intervention process, and the outcome, was also measured.’ It would be useful to clarify by whom this was done; whether in this study or in Neeleman-van der Steen et al’s (ref 6) study.

2. ‘Secondly, most quality indicators are developed consensus-based.’ I suggest ‘are developed through a consensus-based process’ or ‘through consensus-based methods’ is more grammatically correct.

3. ‘In trying to satisfy the patients and meet their needs, the consensus procedure has led to too much differentiation between dimensions.’ Differentiation between dimensions is presumably a good thing as it clarifies distinctive concepts. Should this read that the consensus process creates too many items or too many dimensions?

In the Tables

1. Table 3: I suggest
   a. Title should be ‘Dimension scores’
   b. mean and SD should be median and IQR because calculation described in text as ‘The calculation was performed at the patient level and then transformed to the physical therapist level and the practice level by determining the patients’ median score per therapist and practice.’
   c. replacing ‘Domain’ with ‘Dimension’ as column heading for consistency

2. Table 5: suggest ‘component’ should be ‘factor’; item 2 was removed from PCA, therefore should not be in the table?; on page 19 ‘indicator has replaced ‘dimension’, retain the term ‘dimension’ for consistency

In the conclusions
1. I suggest that you incorporate some statement here about evaluating quality with different methods, as it is quite a substantial suggestion in the discussion. As supplementary material

1. I suggest that you provide the questionnaire or a section of the questionnaire as an additional file to illustrate how the questions were presented and asked (which can influence responses)

**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