Reviewer's report

Title: A cross sectional study of upper extremity strength ten days after a stroke; relationship between patient’s perception and capacity measure

Version: 2
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Reviewer: Birgitta Lindmark

Reviewer’s report:

Reviewer’s comments to: “A cross sectional study of upper extremity strength ten days after a stroke; relationship between patient’s perception and capacity measure”.

This is to most parts a good description of a cross sectional study that compares the patient’s perception and strength measure in the early stage after a stroke and is an article of importance in its field. I agree to most of what is said and discussed, but I do have some remarks.

Major revision: The authors have found that the correlation between the patient’s perception and a clinical strength measure was quite good but not perfect and mean that this may be due to that the patients still were in hospital, resulting in reduced need or cause to use the upper extremity, which might be one reason. But they do not discuss for instance what impact reduced sensibility or reduced co-ordination might have.

It is also unclear why the perception of arm strength is compared with a clinical measure of hand strength. Are there no clinical measures for arm strength? This has to be explained.

They should also stress more that the studied group was cognitively quite clear and that the results could only be generalized to that group.

Minor essential revisions:

Abstract: Describes the study quite clear. Last sentence under Backgrund: The objective was to investigate the relation between perceived strength and clinical measures…. But is it not just one clinical measure of strength? The objective stated here are not exactly the same as stated in the Background, page 4, bottom.

Conclusion: It should be added that this conclusion could only be generalized to patient who are not cognitively disturbed.

Background: Short but gives enough information, why the study was important to accomplish.

First paragraph, line 61-62: Why is it important to study self reported measurements “in the case of stroke versus other diseases”?

Methods: The design, the participants, the measurements, procedures and statistics are well described. Maybe the description of the arrival score on page 6, last paragraph should be presented before the main measurements at ten days.
Results: Short but the essential facts are presented. Page 8, 2nd paragraph, line 155-156: "Correctly classified patients were (change was to were) in arm strength 0.81 and grip strength 0.84". What do 0.81 and 0.84 stand for? Is it percentage or what?

Discussion: The authors discuss their results quite well and try to compare them with what other researchers have found. First sentence under Discussion, page 8: The authors should state which strength capacity measure they used.

Page 9, 1st paragraph, line 171-172 the authors refer to one study (29) who reported reduced self-perceived function although fully recovered based on strength measurements. Did they give any explanation?

Page 9, line 175-176: Is strength capacity and self-reported measurements within the same constructs? Strength measurement only measures one dimension while self-reported assessment is based on several dimensions.

Next sentence in the same paragraph, line 177-179: The authors should discuss more reasons why the correlation between the two ways of measuring was not as high as they expected.

Page 9, 2nd paragraph, line 183-185: The sentence that starts with “The proportion of patients…” should be rewritten, as it is hard to really understand.

Line 187: What does 0.81-0.84 stand for?

Tables and figures: Table 1: NIHSS, COG4, FMA-UE, Pre-BNIS: Is high or low score good. This is explained in the text but could be of help here.

Figure 1: The text in the figure is impossible to read.

References: There are some small errors in some of the references. The first letter in the names of the Journal should be a capital: Check ref. 1, 18, 26, 30, 31 and 33.

Level of interest: An article of importance in its field

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.