

The PaArticular Scales to quantify the impact of joint contractures on participation in geriatric care

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Background:

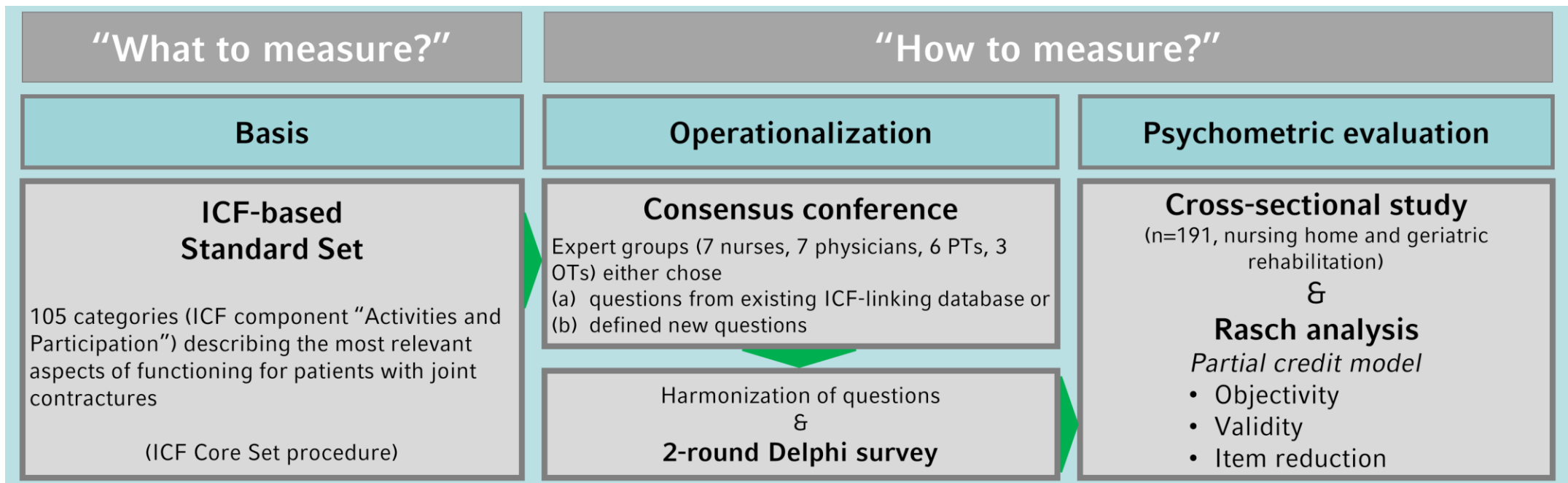
Joint contractures are frequent conditions in individuals in geriatric care settings and are associated with activity limitations and participation restrictions. Relevant intervention programs should address these aspects and the effectiveness of such programs should be determined by showing improvement in activities and participation. However, no patient-centered and psychometrically sound outcome measures for this purpose are available so far.

Objective:

To develop and to validate a new outcome measure to quantify activities and participation in older individuals with joint contractures. Specific aims:

- a) to operationalize the content of an ICF-based standard set to a questionnaire.
- b) to evaluate the psychometric properties of the sets of items.

Methods:



Results:

We developed a valid 2-scale solution with separate scales for Activities (24 items) and Participation (11 items). The ordinal scores of the scales can be transformed into interval-scaled scores which allow parametric statistics (Participation subscale as example).

Participation subscale	No (0-4%)	Mild/moderate (5-49%)	Severe (50-95%)	Full (96-100%)
Do you have any problems/difficulties, ...				
Supporting people who need assistance in different areas of daily life?	0	1	1	1
Bodily contacting others in a contextually and socially appropriate manner (e.g. hugging someone as a greeting)?	0	1	1	2
Engaging and maintaining social relationships with other people?	0	1	1	2
Taking part in community life according to your expectations?	0	1	1	2
Participating in games (e.g. playing cards, memory games, board games)?	0	1	1	2
Participating in exercise and sports?	0	1	1	2
Realizing your cultural interests?	0	1	1	1
Doing handycraft or needlework?	0	1	1	1
Pursuing your hobbies?	0	1	1	2
Taking part in social gatherings / getting together with friends or relatives?	0	1	1	2
Practicing your religion?	0	1	1	2

Conclusion and further work:

- The PaArticular Scales are valid patient-centered outcome measures to assess the impact of joint contractures in nursing home residents.
- The scales will serve as primary outcomes in a subsequent project to improve participation and quality of life in nursing home residents with joint contractures.
- Properties of the use as proxy-rating instrument have to be evaluated in future studies.

References

- Bartoszek, G.; Fischer, U.; Clarenau, S. C. von; et al. (2015): Development of an International Classification of Functioning, Disability and Health (ICF)-based standard set to describe the impact of joint contractures on participation of older individuals in geriatric care settings. Arch Gerontol Geriat 61 (1):61–66.
- Müller, M; Oberhauser, C; Fischer, U; et al.. (2016): The PaArticular Scales – A new outcome measure to quantify the impact of joint contractures on activities and participation in individuals in geriatric care. Development and Rasch analysis. Int J Nurs Studies 59:107–117.