Brazilian Journal of Physical Therapy 2017;xxx(xx):xxx–xxx

abrapg·ft
Associação Brasileira de Pesquisa e Pós-Graduação em Fisioterapia

Brazilian Journal of Physical Therapy

https://www.journals.elsevier.com/brazilian-journal-of-physical-therapy

ORIGINAL RESEARCH

Cross-cultural adaptation to Brazilian Portuguese of the Activity Measure for Post-Acute Care (AM-PAC) short forms for outpatients in rehabilitation

Mariana Angélica Peixoto De Souza[a], Marisa Cotta Mancini[a,b], Wendy Jane Coster[c], Renata Noce Kirkwood[a], Elyonara Mello De Figueiredo[a,d], Rosana Ferreira Sampaio[a,d,*]

[a] *Graduate Program in Rehabilitation Science, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, MG, Brazil*
[b] *Occupation Therapy Department, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, MG, Brazil*
[c] *Graduate Program in Rehabilitation Science, Department of Occupational Therapy, Boston University, Boston, USA*
[d] *Physical Therapy Department, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, MG, Brazil*

Received 4 March 2017; accepted 22 June 2017

KEYWORDS
Instrument;
Functioning;
Translation;
Cultural adaptation;
Assessment;
Rehabilitation

Abstract
Background: The Activity Measure for Post-Acute Care was developed to evaluate the limitations of activities of adult individuals with different health conditions.
Objectives: To translate and cultural adapt the Activity Measure for Post-Acute Care short forms for outpatients into Portuguese–Brazilian, to verify the comprehension of the items and categories of the responses by users of the rehabilitation services and to analyze the reliability indices of the instrument.
Methods: Translation and back-translation were conducted by two independent teams. Cognitive interviews ($n = 2$) evaluated the comprehension of the translated version among patients. Item reliability and consistency was also investigated.
Results: There was conceptual equivalence between the translated and original versions. For some items, the information was modified in order to attend to the measurement units used in Brazil. Comparative analyses of the translated versions chose the most appropriate term to capture the English content. The few discrepancies identified in the back-translation were solved by consensus. The cognitive interviews detected few comprehension problems, which were solved by means of repetition of the item statement and use of examples to clarify the specificity of the information. The final translated short forms of the instrument showed excellent test-retest reliability and inter-examiner reliability indices, as well as high internal consistency.

* Corresponding author at: Physical Therapy Department, School of Physical Education, Physical Therapy and Occupational Therapy, Universidade Federal de Minas Gerais, Antonio Carlos Avenue, 6627, Campus Universitário, Pampulha, CEP: 31270-401, Belo Horizonte, MG, Brazil.
E-mail: rosana.sampaio@pq.cnpq.br (R.F. Sampaio).

http://dx.doi.org/10.1016/j.bjpt.2017.07.003
1413-3555/© 2017 Associação Brasileira de Pesquisa e Pós-Graduação em Fisioterapia. Published by Elsevier Editora Ltda. All rights reserved.

Please cite this article in press as: Souza MAP, et al. Cross-cultural adaptation to Brazilian Portuguese of the Activity Measure for Post-Acute Care (AM-PAC) short forms for outpatients in rehabilitation. *Braz J Phys Ther.* 2017, http://dx.doi.org/10.1016/j.bjpt.2017.07.003

Conclusion: The Portuguese version of the Activity Measure for Post-Acute Care short forms will provide Brazilian clinicians and researchers with an up-to-date instrument for the evaluation of functioning of adults with various clinical conditions who attend outpatient rehabilitation settings.
© 2017 Associação Brasileira de Pesquisa e Pós-Graduação em Fisioterapia. Published by Elsevier Editora Ltda. All rights reserved.

Introduction

The use of functional approaches by rehabilitation team requires instruments to evaluate different components of human functioning. After the publication of the International Classification of Functioning, Disability and Health (ICF),[1] there has been growing effort toward the development of standardized functional tools to be used in rehabilitation. Most of these instruments were developed in foreign countries and their use in other cultures requires a careful process of translation and adaptation.[2–5] The cross-cultural adaptation of questionnaires is a challenging process, requiring skills and experience in order to successfully generate a conceptually-appropriate version of the original instrument with adequate psychometric properties.[6,7]

The Activity Measure for Post-Acute Care (AM-PAC) was developed to assess functioning of adults with different health conditions in rehabilitation services that offer post-acute care, from hospital discharge up to community integration.[8] The AM-PAC is grounded on the ICF model, focusing on the activity component and developed according to innovative measurement theory and method: Item Response Theory (IRT) and Computerized Adaptive Testing (CAT).

The IRT creates models to estimate the probability of individuals being successful in one item according to their ability. It compares individuals within a functional dimension despite answering different questions.[9] The CAT presents to individuals the most appropriate questions to their abilities, allowing an individualized evaluation to the level of proficiency of each examinee. Thus, with a smaller number of items applied, the CAT obtains accurate information about the individual's position in a continuum of a particular ability.[10]

The complete version of the AM-PAC is an IRT-Based test that utilizes CAT to present the items to the individual. It includes three domains: ''Basic Mobility'', with 131 items that inform about basic movements and functional mobility activities; ''Daily Activity'', which includes 88 items addressing basic self-care and instrumental activities of daily living; and ''Applied Cognition'', with 50 items that evaluate cognitive activities considered necessary for an independent life.[11] The individual or a close acquaintance such as a family member or caregiver is asked to respond on the degree of difficulty or amount of help needed to carry out the activities, using an ordinal scale.[8,11]

Administration of the original AM-PAC uses the CAT methodology and thus requires a computer with specific software. The AM-PAC generates a score for each domain – the higher the score, the better the individual's functioning. The user's manual[11] provides a classification for interpretation of the final score of each domain, with ranges based on functional stages.

In addition to the original electronic CAT format, two short forms were developed, one for inpatient care and one for rehabilitation in community services, i.e. outpatients. AM-PAC short forms were created through careful selection of subsets of questions from the banks of calibrated items of the domains Basic Mobility and Daily activities and Applied Cognition.[12,13] By relying in the item's standardized scores it was possible to compare the complexity of the short forms and CAT versions.[8] Contrasting with the original version, in the short forms the items are in a fixed format on paper, and require that the respondent answer all questions.

Although CAT format has advantages over fixed-point instruments, reliance on a computer with specific software could make it unfeasible for short-term use in services with limited resources, such as the public rehabilitation services in Brazil. Therefore, it was initially decided to translate the short forms of the instrument.

The purpose of the present study was to describe the process of translation to Brazilian-Portuguese and cultural adaptation of the AM-PAC short form for outpatient care, and to verify if the items and response categories of the translated version were adequately understood by patients from rehabilitation services. In addition, we also evaluated the instrument's reliability.

Methods

Description of the AM-PAC – outpatient short form

The short form for outpatient care, translated in this study, has 18 items of Basic Mobility domain; 15 items of Daily Activity; and 19 items from the domain of Applied Cognition.

The short forms require that individuals (or proxy informants) answer questions about their difficulty to perform the activity described in the item (i.e., ''How much difficulty do you currently have...''), based on an ordinal 4-point scale (Unable, A Lot, A Little, None). For the final score, the raw score must be obtained from the sum of the values of the response categories for difficulty, that is: unable = 1, a lot = 2, a little = 3, none = 4. In order to compare scores across domains, it is necessary to converted raw scores into standardized scores, using a specific conversion table for each domain, available in the short forms user's manual.[8] The interpretations are provided for the final score of each domain, with ranges of functional stages.

Please cite this article in press as: Souza MAP, et al. Cross-cultural adaptation to Brazilian Portuguese of the Activity Measure for Post-Acute Care (AM-PAC) short forms for outpatients in rehabilitation. *Braz J Phys Ther.* 2017, http://dx.doi.org/10.1016/j.bjpt.2017.07.003

Download English Version:

https://daneshyari.com/en/article/8928937

Download Persian Version:

https://daneshyari.com/article/8928937

Daneshyari.com