



# REVISTA BRASILEIRA DE REUMATOLOGIA

[www.reumatologia.com.br](http://www.reumatologia.com.br)



## Original article

# Translation, cultural adaptation, validity and reliability of the shoulder rating questionnaire for use in Brazil



Danilo Calmon de Siqueira<sup>a,\*</sup>, Abrahão Fontes Baptista<sup>b</sup>, Israel Souza<sup>c</sup>, Katia Nunes Sá<sup>d</sup>

<sup>a</sup> Faculdade de Motricidade Humana, Universidade Técnica de Lisboa, Lisboa, Portugal

<sup>b</sup> Instituto de Ciências da Saúde, Universidade Federal da Bahia, Salvador, BA, Brazil

<sup>c</sup> Instituto Federal de Educação Ciência e Tecnologia do Rio de Janeiro, Paracambi, RJ, Brazil

<sup>d</sup> Escola Baiana de Medicina e Saúde Pública, Salvador, BA, Brazil

## ARTICLE INFO

### Article history:

Received 19 June 2013

Accepted 10 April 2014

Available online 22 October 2014

### Keywords:

Disability Evaluation

Questionnaire

Shoulder

Validation Studies

Translations

## ABSTRACT

**Objective:** To translate and culturally adapt the Shoulder Rating Questionnaire (SRQ) to the Brazilian Portuguese language, and to determine its validity, reliability and sensitivity to change in patients with functional impairment of the shoulder.

**Methods:** After translation and back-translation of the original version by four independent translators, the instrument was reviewed by a committee of experts and subsequently applied to eight patients with shoulder injury (target audience) to produce the Portuguese version. Then, this version was applied to 102 patients selected from four reference centers for functional treatment of the shoulder, who had a variety of clinical diagnoses, educational levels, socioeconomic, and cultural backgrounds. The evaluation was performed twice with an interval of four weeks between each application.

**Results:** The Brazilian version of SRQ was equivalent in terms of semantics and showed good levels of reliability (Cronbach's Alpha=0.89 and ICC=0.83). The reproducibility was high (Spearman Correlation Coefficient=0.82) and validity of the items that ranged from 0.54 to 0.99 was considered excellent. The Cohen's d and T test for repeated measures showed that the instrument is able to monitor and track improvements in shoulder function.

**Conclusion:** Psychometric criteria were found, which justify the applicability of the Brazilian version of SRQ in individuals with shoulder functional impairments.

© 2014 Elsevier Editora Ltda. All rights reserved.

DOI of original article: <http://dx.doi.org/10.1016/j.rbr.2014.04.006>.

\* Corresponding author.

E-mail: [danilocalmon@hotmail.com](mailto:danilocalmon@hotmail.com) (D.C. de Siqueira).

<http://dx.doi.org/10.1016/j.rbre.2014.04.006>

2255-5021/© 2014 Elsevier Editora Ltda. All rights reserved.

## Tradução, adaptação cultural, validade e confiabilidade do questionário de classificação do ombro para uso no Brasil

### R E S U M O

#### Palavras-chave:

Avaliação de Incapacitação

Questionário

Ombro

Estudos de Validação

Translações

**Objetivo:** Traduzir e adaptar culturalmente o *Shoulder Rating Questionnaire* (SRQ) para o idioma português do Brasil, e determinar sua validade, confiabilidade e sensibilidade à mudança em pacientes com comprometimento funcional do ombro.

**Métodos:** Em seguida à tradução e retro-tradução da versão original por quatro tradutores independentes, o instrumento foi revisado por uma comissão de especialistas, tendo sido subsequentemente aplicado a oito pacientes com lesão do ombro (público-alvo) para a produção da versão em português. Em seguida, essa versão foi aplicada a 102 pacientes selecionados de nossos centros de referência para tratamento funcional do ombro, exibindo diagnósticos clínicos, níveis educacionais e bases socioeconômicas e culturais diversas. A avaliação foi realizada duas vezes com um intervalo de quatro semanas entre aplicações.

**Resultados:** A versão brasileira do SRQ foi equivalente em termos de semântica, tendo demonstrado bons níveis de confiabilidade (Alfa de Cronbach=0,89 e Coeficiente de Correlação Intraclasse [CCI]=0,83). A reprodutibilidade foi alta (Coeficiente de Correlação de Spearman=0,82) e a validade dos itens, que variou de 0,54 até 0,99, foi considerada excelente. Os testes de Cohen e T para medidas repetidas demonstraram que o instrumento é capaz de monitorar e acompanhar melhoras na função do ombro.

**Conclusão:** Os critérios psicométricos foram atendidos, o que justifica a aplicabilidade da versão brasileira do SRQ em indivíduos com comprometimento funcional do ombro.

© 2014 Elsevier Editora Ltda. Todos os direitos reservados.

## Introduction

There is high incidence and prevalence of shoulder musculoskeletal disorders in the general population. Studies have shown that 14% to 21% of individuals have shoulder pain symptoms. It is estimated that two out of three individuals have at least one episode of pain in the neck or shoulders at some time in their lives.<sup>1</sup>

In Brazil, over 80% of the diagnoses that resulted in social security aid grants, accident and disability retirement were due to work-related musculoskeletal disorders and involved mainly the upper limbs.<sup>2</sup> Pain and shoulder dysfunction often compromise motor skills, work activities and quality of life and represent an important socioeconomic problem by interfering with the attendance and productivity of workers and result in high investment in these patients.<sup>3,4</sup>

Most shoulder injuries cause pain and functional limitations. These symptoms are the reasons that lead an individual to seek medical treatment. As the physical examination is an insufficient indicator for evaluating functional and social aspects, it is necessary to have assessment tools that can be used in clinical practice.<sup>5</sup>

To assess aspects of the severity of symptoms and functional status of the shoulder, questionnaires were developed in the English language. At present, there are versions of some questionnaires for evaluation of the shoulder that have been validated and translated into the Portuguese language in Brazil. A recent systematic review showed that there are seven questionnaire for this purpose (DASH, WORC, SPADI, PSS, ASORS, ASES e UCLA).<sup>6</sup>

However, no prospective assessment tool specifically for the shoulder, such as the Shoulder Rating Questionnaire

(SRQ), has been translated in accordance with the appropriate methodological rigor of validation for the Brazilian Portuguese language.

A Portuguese version of the SRQ is available to use in Portugal ([www.ifisionline.ips.pt/media/2jan.vol1.n2/pdfs/artigo.1.vol.n2.pdf](http://www.ifisionline.ips.pt/media/2jan.vol1.n2/pdfs/artigo.1.vol.n2.pdf)), but it is not appropriated to use in Brazil because of cultural differences.<sup>7</sup> For this reason, the aim of this work was to make a cross-cultural translation of the SRQ into the Portuguese language of Brazil and have it validated, in order to provide another tool for assessing the functional status of the shoulder.

## Methods

This accuracy study was developed in four steps: translation and back-translation, evaluation by a committee of experts, evaluation by the target population, and, finally, application to patients with shoulder dysfunction in physical therapy at two time interval, according to the methodological criteria recommended by the European Research Group on Health Outcomes (ERGHO), the Center for Health Research and the University of Coimbra (CEISUC).<sup>8,9</sup> Documentation showing all steps taken for translation and cultural adaptation was sent to the author of the original questionnaire (English version) to ensure the adequacy of the translation process carried out and obtained. This study was preceded by a formal authorization of the authors of the original version of the Shoulder Rating Questionnaire (SRQ) for translation and validation to Brazilian Portuguese.

Initially, the original version in English was translated to Brazilian Portuguese by two independent blinded translators. These two Brazilian Portuguese versions have become the

Download English Version:

<https://daneshyari.com/en/article/3385110>

Download Persian Version:

<https://daneshyari.com/article/3385110>

[Daneshyari.com](https://daneshyari.com)