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Original article

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

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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.

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

RESUMO

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 d 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.

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.[1]

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.[2] 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.[3,4]

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.[5]

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).[6]

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), but it is not appropriated to use in Brazil because of cultural differences.[7] 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).[8,9] 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

single version after consensus between the two translators and the researchers. After this, the Brazilian Portuguese version was retro-translated to the original language for comparison by two other native English-speaking translators, whose native language is English and who did not know the purpose of the study. These two English versions underwent a new process of consensus between translators and researchers to reach an English version, which was compared with the original version to see if there were significant differences. Then the Brazilian Portuguese version of the instrument was reviewed by a committee of experts composed of a physician and two physical therapists, with over five years of clinical experience and knowledge of the two languages, to verify content validity. For this review, the committee was asked to compare the version of reconciliation, item by item, with the original version in English, to note its agreement and suggest changes that could improve the translation. Each item was also evaluated for its relevance in the evaluation of the content instrument, checking the equivalence. After this revision, the second version was prepared for reconciliation.

The third step involved the assessment, using the translated version, of eight patients (one man and seven women) with shoulder injury and who were beginning with, or undergoing physical therapy. In this interview, the following objectives were defined: 1) examine the presence (or absence) of questions or items that could be considered relevant or irrelevant; 2) identify questions or items that could be considered redundant; 3) analyze, in general terms, acceptability and understandability of the measuring instrument. The interview began with a brief explanation of the work to be developed and its rationale. Later, the patients interviewed were asked to complete the questionnaire, remembering that the interest did not lie in the answers, but in the formulation of the questions. As a result of the interviews, an analysis was made to prepare the final version of the SRQ, in Brazilian Portuguese, to be used in the fourth step. These three steps constituted the process of linguistic and cultural adaptation of the SRQ.

The fourth phase of data collection consisted of application of the final version to the 102 selected patients at four reference centers for treatment of shoulder function. The questionnaire was applied on two different occasions with an interval of four weeks between them.

Participants were selected according to the following inclusion criteria: 1) providing a clinical diagnosis of the injury to the shoulder (according to the International Classification of Diseases); and 2) being enrolled in a physical therapy program for shoulder injury at the selected reference centers. The exclusion criteria were: 1) being unable to read, filling out and understand the translated questionnaire; 2) having any type of neuromotor deficit or cognitive impairment.

After obtaining approval from the Ethics Committee of the Bahian Foundation for Development of Sciences (Protocol N° 121/2010) and formal authorization from the institutions enrolled in the work, which were four reference centers for the treatment of shoulder dysfunction in Salvador, Bahia, participants were recruited from a selection of records.

After being informed about the study objectives, procedures used in data collection and clarification of doubts, the volunteers gave their written consent to participate in the study. Patients were selected for a convenience sample and sample size was estimated, based on other articles on validation.[1,5,10]

The fourth phase included analysis of the reliability, construct validity and sensitivity to clinical changes of the Brazilian Portuguese version of SRQ. For the reliability analysis, it was necessary to analyze the internal consistency and reproducibility. To assess the internal consistency of the items in the instrument, Cronbach's alpha was used. Reproducibility was tested by applying the pre-final version of the SRQ on two occasions (test-retest). Spearman's correlation test and the intraclass correlation were used to measure the association of the first with the second application of the instrument.

For construct validity, the Brazilian Portuguese version of the American Shoulder and Elbow Surgeons Standardized Shoulder Assessment Form (ASES) was used for comparison with the results of the SRQ. Spearman's correlation test was used to evaluate correspondence between the results of the instruments used (ASES and SRQ). The factor analysis by principal components method was used to evaluate the validity of the composition of the SRQ domains.

In the factorial analysis, the sample was divided into two sub-samples. The first, involved all the patients (n = 102), and excluded the work related items, as they should be answered only by those patients that were working during the assessment period. In the second sub-sample, only the questions that involved work activities were used, and answered only by those who were working during the assessment period (n = 46). KMO and Bartlett's tests were used to assess adequacy of the sample. The Alpha of Cronbach was made with Hill and Hill classification (1999).[11,12]

To evaluate the ability of the instrument to capture the changes resulting from the treatment, the T test for repeated measures and Cohen's d was used. The scores in the SRQ total score of the first and second evaluations were compared. Analyses considered an alpha value of 5%.

Results

Of the 102 patients involved in the study, 29 were men (28.40%), and 73 were women (71.60%), with mean age of 56.90 ± 12.10 years, with variety in clinical, educational level, socioeconomic and cultural aspects. As regards shoulder dysfunction, 34 (33.30%) reported having impingement, 31 (30.40%) rotator cuff tear, 19 (18.60%) adhesive capsulitis, 7 (6.90%) proximal humerus fracture, 2 (2.00%) shoulder instability, 3 (2.90%) glenohumeral joint arthritis and 6 (5.90%) acromioclavicular joint arthritis.

In spite of the similarity of the versions presented by the translators, there were some conflicting issues that were discussed and, after arriving at a consensus, reconciliation between the SRQ in Portuguese and the first version of the Shoulder Rating Questionnaire was achieved. The decisions are summarized in Table 1.

All the experts rated the reconciliation version as well translated, accurate, with correspondence between their items of content, in plain language that was easy for patients to understand, and only a few amendments were proposed, which are summarized in Table 2.

Table 1 – Decisions made in building reconciliation of SRQ.		
Part of the questionnaire	Original Expression	Semantic Equivalence
Item 2	During the past month, how would you describe the usual pain in your shoulder at rest?	Durante o mês passado, como você descreveria a sua dor do ombro em repouso?
Item 2 e 3	A) Very severe B) Severe	Muito intensa Intensa
Item 11	Lifting or carrying a full bag of groceries (8 to 10 pounds [3,6 to 4,6])	Levantar ou carregar uma sacola cheia de mantimentos (5 quilos).
Item 18	During the past month, on the days that you did work, how often did you have to work a shorter day because of your shoulder?	Durante o mês passado, nos dias que você realmente trabalhou com qual frequência você teve que trabalhar menos horas do que o normal por causa do seu ombro?

The interview with the target audience resulted in a consensus that the questionnaire was a little long, but understandable; could be answered; and was helpful. All patients considered the extent appropriate to their conditions. Then we proceeded with an individual analysis of each question and answer, to check the ease/difficulty in understanding the terms used, the instructions, questions and their response options, as well as the alternatives proposed by respondents who always identified the existence of any problem.

Thus, with regard to clarity, three individuals considered the issue confusing in the question 21, and had to read it again to understand the text. Because of this, it was decided to change the answers to the question 21, which are summarized in Table 3. After this step, a Brazilian version of the SRQ was prepared (Appendix 1).

The factor analysis revealed the adequacy of the sample by means of both the KMO test (0.81 in the 1st sub-sample, and 0.79 in the 2nd sub-sample) and Bartlett's test ($\chi^2 = 490.25$; $p < 0.001$ in the 1st sub-sample, and $\chi^2 = 122.85$; $p < 0.001$ in the 2nd sub-sample). Moreover, it became clear that the factor loadings were above 0.30, ranging between 0.43 and 0.97, which indicated a high degree of validity of the items (Table 4).

In the first sub-sample, the total variance explained by four factors was 74.84%, and the factor loadings were above 0.30, ranging from 0.43 (item 6) to 0.97 (item 4). The total variance explained by a single factor was 42.76%, and the factor loadings were above 0.30, ranging from 0.31 (item 1) to 0.78 (item 6), which indicated a high degree of validity of the items in a single factor, thus justifying the use of the overall scale score as a measure for the assessment of shoulder function. In

the second sub-sample, with only the questions that involved work activities (four items), the total variance explained was 80.17%, and the factor loadings were above 0.30, ranging from 0.88 (item 16) to 0.91 (item 17). When all items were used, the total variance explained by a single factor was 46.10%, and the factor loadings were above 0.30, ranging from 0.43 (item 14) to 0.88 (item 17), which indicated a high degree of validity of the items in a single factor, thus justifying the use of the overall scale score as a measure for the assessment of shoulder function.

As regards the results of the internal consistency of the SRQ, it was observed that in the overall assessment of all the items the Cronbach's alpha in the first sub-sample was 0.79, which is considered as good/reasonable. If item 1 was removed, the internal consistency was 0.89. In the same way, the Cronbach's alpha was 0.89 for the total scale when considering only the second sub-sample, and if item 1 was removed the internal consistency was 0.92 (Table 5). A similar index of internal consistency was found in the original, in which Cronbach's alpha was 0.86.

In assessing the reproducibility of the instrument, there was a high association of the first with the second application of the instrument with a Spearman correlation coefficient of 0.82 between the total scores ($p < 0.001$) and an intraclass correlation of 0.83 ($p < 0.001$).

In assessing the correspondence between the results of the SRQ with the ASES, there was a significant association between the total scores of the instruments in the first ($r = 0.49$; $p < 0.001$) and the second application of the instrument ($r = 0.67$; $p < 0.001$). There was also a significant positive

Table 2 – Changes obtained after the back translation of the Portuguese version and the changes proposed by the expert committee of the new version of Shoulder Rating Questionnaire.		
Item	Consensus after the initial translation	After the committee meeting
1	Muito bem_____Muito mal	Muito bem 10_9_8_7_6_5_4_3_2_1_0 Muito mal
7	Vestir ou tirar um pulôver ou camisa.	Colocar ou tirar um casaco ou camisa.
12	Considerando todas as formas que você usa seu ombro durante atividades recreativas ou desportivas (ex.: beisebol, golfe, atividades aeróbicas, jardinagem) como você descreveria a função de seu ombro?	Considerando todas as formas que você usa o seu ombro durante as atividades esportivas ou de lazer (ex. vôlei, natação, atividades aeróbica, jardinagem, etc.), como você descreveria a função do seu ombro?
13	Durante o mês passado, quanta dificuldade você teve em arremessar uma bola sobre a mão ou fazer um saque no tênis por causa de seu ombro?	Durante o mês passado, quanta dificuldade você teve em arremessar uma bola com a mão ou algum movimento parecido com arremesso sobre ombro devido o seu ombro?

Table 3 – Change to the question 21 after analysis of the target audience.		
Item	Version Reconciliation	After analysis of the target audience
21	Dor ＿＿＿	Melhora da Dor＿＿＿
	Atividades diárias pessoais e domésticas ＿＿＿	Melhora para realizar as atividades diárias pessoais e as atividades de casa ＿＿＿＿
	Atividades recreativas ou atléticas ＿＿＿	Melhora para realizar as atividades esportivas ou de lazer＿＿＿＿
	Trabalho ＿＿＿	Melhora para realizar as atividades do Trabalho＿＿＿＿

association between the domains of the SRQ with the ASES total score, ranging from 0.27 to 0.66. Only the field of General Assessment was not significantly associated with total score on the ASES.

Note that, after the treatment period, the patients experienced a significant improvement in SRQ scores (t = -9.86, p < 0.001). The effect size for this mean measured for Cohen's d was 1.057, indicating a very large effect, implying that the means are likely very different. This indicates that the instrument is suitable for monitoring and can identify improvements in shoulder function.

Discussion

Assistance with emphasis only on the curative treatment of the disease, based on the biomedical model, has also led to revealing how the disease affects the individual and one's social functional levels. The model proposed by the World Health Organization (WHO), which unifies the concept of function and dysfunction, suggests a common taxonomy for classifying the impact of the disease on people's lives, helping to establish goals for rehabilitation.[13] In this context, the need for adequate functional measures in clinical practice becomes apparent, in addition to research to determine damage, predict outcomes, enable functional rehabilitation planning, and indicate any treatment and functional changes.

The measures of functional status are essential to assess the performance of activities that are important in everyday life. Runquist et al. having the functionality of the shoulder as object of evaluating, used the SRQ in patients with loss in the range of motion of this region, because of the good psychometric properties of the instrument.[14]

Other authors have shown the advantages of using the SRQ compared with other instruments that assess the function of the shoulder, as it is an instrument with good sensitivity to clinical change.[15] Based on these advantages, it has been used to monitor the results of treatment proposals made for a longer period of time, or to follow-up the stage of the chronic disease (eg. adhesive capsulitis).[16,17]

Currently, there are many questionnaires that have been developed in the English language to evaluate the symptoms

Items	Factors					Communality
	1	2	3	4	1 (Work)	
Item 1 – 0 to 10				0.92		0.86
Item 2 – Pain		0.69				0.74
Item 3 – Pain		0.55				0.67
Item 4 – Pain		0.97				0.85
Item 5 – Pain		0.83				0.86
Item 6 – AD	0.43					0.63
Item 7 – AD	0.81					0.68
Item 8 – AD	0.70					0.74
Item 9 – AD	0.90					0.79
Item 10 – AD	0.55					0.68
Item 11 – AD	0.85					0.74
Item 12 – ARE			0.91			0.80
Item 13 – ARE			0.81			0.73
Item 14 – ARE			0.86			0.71
Item 16 – Work					0.88	0.78
Item 17 – Work					0.91	0.83
Item 18 – Work					0.89	0.80
Item 19 – Work					0.89	0.80
Sample Size	102	102	102	102	46	
Eigenvalues	5.99	2.21	1.29	1.01	3.21	
% of variance explained	42.76	15.75	9.19	7.15	80.17	

Table 4 – Load Factor and Commonality of the items.

KMO (1th sub-sample) = 0.81.
KMO (2nd sub-sample) = 0.79.
Bartlett's Test = χ^2 = 490.25; p < 0.001 in the first sub-sample.
Bartlett's Test = χ^2 = 122.85; p < 0.001 in the second sub-sample.

Itens	Values of alpha if the item is removed					
	1	2	3	1 (Work)	Total	Total (Work)
Item1 – 0 a 10					0.89	0.92
Item 2 – Pain		0.77			0.77	0.87
Item 3 – Pain		0.79			0.77	0.88
Item 4 – Pain		0.80			0.79	0.88
Item 5 – Pain		0.72			0.77	0.86
Item 6 – AD	0.86				0.77	0.88
Item 7 – AD	0.85				0.78	0.88
Item 8 – AD	0.84				0.77	0.88
Item 9 – AD	0.83				0.77	0.88
Item 10 – AD	0.87				0.77	0.88
Item 11 – AD	0.85				0.77	0.88
Item 12 – ARE			0.73		0.77	0.88
Item 13 – ARE			0.80		0.78	0.88
Item 14 – ARE			0.80		0.78	0.88
Item 16 – Work				0.90		0.87
Item 17 – Work				0.88		0.87
Item 18 – Work				0.89		0.87
Item 19 – Work				0,89		0.88
Alpha of Cronbach of scales	0,87	0,82	0,84	0,92	0,79	0,89
Sample Size	102	102	102	46	102	46

Table 5 – Internal consistency of scales and if any item removed.

and/or functional status of the upper limb. Many of these questionnaires are applied in specific situations and disorders of the shoulder, and for overall evaluation of the upper limb.[18–20]

The semantic validation and content of the Brazilian SRQ was obtained and revealed only a few adjustments in the areas of pain, daily activities and in sports and leisure. The authors of the Dutch version of the SRQ also made some adjustments in some areas.[21] However, it draws attention to the area of sports and leisure, which has changed, and suggests possible differences between the American, European and Brazilian culture when it comes to sports and leisure.

In the first item of the semantic analysis, a numerical scale suggested by clinical experts was used, based on studies showing that this type of scale was easier to complete and evaluate.[22] This method of presenting the numbers has shown that patients tend to remember to fill in the numbers.

Studies conducted in the original language of the SRQ had internal consistency coefficients ranging between 0.71 and 0.90, and replication rates that ranged between 0.94 and 0.98.[23] Recently, in the cross-cultural adaptation of the original SRQ into to the Dutch language, the authors reported levels of internal consistency of 0.89 for the questionnaire, and total values of 0.81 for the field of pain; 0.80 for the field of daily life activities; 0.72 for the field of sports and leisure activities; and 0.84 for field work. The results of the test-retest of the Dutch version of the SRQ and its subscales (domains) ranged between 0.63 and 0.86.[21] These results are consistent with the results of the SRQ in Brazil.

Currently, the SRQ is available in English, Dutch and Portuguese from Portugal. Due to cultural differences between Brazil and Portugal, we translated the Questionnaire into Brazilian Portuguese, validated it, and established its psychometric characteristics at the same time as the version in Portuguese from Portugal was being validated.[7,21,23]

When the two versions are compared, there are clear differences between them in all items. In the version from Portugal,

the item 1 could not be adapted to use a numerical scale, as it was done in the Brazilian version. In the field of pain (items 2 to 5), daily activities (6 to 11) and sports activities (12 to 14), in the version from Portugal, uses some words that are not usual in Brazil, such as "*dor ligeira*", which is best translated as "*dor leve*" (light pain) in Brazilian Portuguese. In the item 15, subitem "g", the term "*reformado*" is best translated into Brazilian Portuguese as "*aposentado*" (retired).

In the present study, an evaluation of the correspondence between the results of the Brazilian SRQ and another validated instrument (ASES), there was a significant association between the total scores of the instruments and those of all the SRQ domains with the overall ASES scores. These results are similar to other studies using ASES.[24–28]

As regards the level of test-retest reliability, the present study showed high association of the first with the second application (ICC = 0.83). When compared with other shoulder assessment instruments, the SRQ had one of the highest levels of test-retest reliability.[18]

Pain is an important parameter that has been addressed by several shoulder scales and measured by various methods.[15–18,28] Many shoulder scales include only one pain question, which is generally not specific to activity or arm position. The SRQ has a field with four questions related to pain, which assesses pain in different situations. The pain subscale of the SRQ demonstrated excellent reliability.

The SRQ was developed to evaluate the outcome of patients with different disorders of the shoulder. The aim of the study was to adapt and validate the psychometric properties of the SRQ questionnaire for the Brazilian population. However, future research should concentrate on the validity of the SRQ to assess individual shoulder pathologies. Comparisons of the performance of shoulder outcome measures in patients with specific shoulder disorders would help the clinician to choose the best tool for a specific disorder outcome.

Conclusion

After analyzing all the data, it can be said that the Brazilian version of SRQ has psychometric properties that allow for its use in functional evaluation of the shoulder. In addition, the questionnaire was classified as easy to understand and use, which reinforces its suitability.

Conflicts of interest

The authors declare that this work is not associated with any financial nor other relationships which might lead to conflict of interest.

Appendix 1. SHOULDER RATING QUESTIONNAIRE

Por favor, responda às seguintes questões a respeito do ombro**para o qual você tem sido avaliado ou tratado.**
Se uma questão**não** for aplicada a você,**deixe-a em branco.**
Se você indicou que ambos os ombros foram avaliados ou tratados, por favor, complete um questionário**separado para**cada ombro e marque o lado correspondente (esquerdo ou direito) na parte superior de cada questionário.

Qual é o seu braço dominante?
() esquerdo () direito
Por qual ombro você foi avaliado ou tratado?
() direito () esquerdo () ambos

1 Considerando todas as maneiras que seu ombro lhe afeta, marque um X sobre a escala abaixo para saber como você está se sentindo.
   Muito bem 0__1__2__3__4__5__6__7__8__9__10 Muito mal
   As questões seguintes referem-se à**dor**.
2 Durante o mês passado, como você descreveria a sua dor do ombro em repouso?
   a) Muito intensa
   b) Intensa
   c) Moderada
   d) Leve
   e) Nenhuma
3 Durante o mês passado como você descreveria a dor usual em seu ombro durante as atividades?
   a) Muito intensa
   b) Intensa
   c) Moderada
   d) Leve
   e) Nenhuma
4 Durante o mês passado, com que frequência a dor em seu ombro dificultou seu sono a noite?
   a) Todos os dias
   b) Vários dias por semana
   c) Um dia por semana

d) Menos de um dia por semana
e) Nunca
5 Durante o mês passado, com que frequência você teve dores fortes em seu ombro?
   a) Todos os dias
   b) Vários dias por semana
   c) Um dia por semana
   d) Menos de um dia por semana
   e) Nunca
   As questões seguintes referem-se às**atividades diárias**.
6 Considerando todas as formas que você usa o seu ombro durante as suas atividades diárias pessoais e domésticas (p. ex. se vestir, tomar banho, dirigir, as tarefas domésticas etc.), como você descreveria a sua habilidade em utilizar seu ombro?
   a) Limitação muito severa; incapaz
   b) Limitação severa
   c) Limitação moderada
   d) Limitação leve
   e) Sem limitação
   Questões 7-11 – Durante o mês passado, quanta dificuldade você teve em cada uma das seguintes atividades devido ao seu ombro?
7 Colocar ou tirar um casaco ou camisa.
   a) Incapaz
   b) Dificuldade severa
   c) Dificuldade moderada
   d) Leve dificuldade
   e) Sem dificuldade
8 Pentear ou escovar seu cabelo.
   a) Incapaz
   b) Dificuldade severa
   c) Dificuldade moderada
   d) Leve dificuldade
   e) Sem dificuldade
9 Alcançar prateleiras que estão acima de sua cabeça.
   a) Incapaz
   b) Dificuldade severa
   c) Dificuldade moderada
   d) Leve dificuldade
   e) Sem dificuldade
10 Coçar e lavar a parte inferior de suas costas com sua mão.
   a) Incapaz
   b) Dificuldade severa
   c) Dificuldade moderada
   d) Leve dificuldade
   e) Sem dificuldade
11 Levantar ou carregar uma sacola cheia de mantimentos (cinco quilos).
   a) Incapaz
   b) Dificuldade severa
   c) Dificuldade moderada
   d) Leve dificuldade
   e) Sem dificuldade
   As seguintes questões referem-se às atividades esportivas ou de lazer.
12 Considerando todas as formas que você usa o seu ombro durante as atividades esportivas ou de lazer (ex. vôlei, natação, atividades aeróbicas, jardinagem etc.), como você descreveria a função do seu ombro?

a) Limitação muito severa; incapaz
b) Limitação severa
c) Limitação moderada
d) Limitação leve
e) Sem limitação

13 Durante o mês passado, quanta dificuldade você teve em arremessar uma bola com a mão ou algum movimento parecido com arremesso devido ao seu ombro?
a) Incapaz
b) Dificuldade severa
c) Dificuldade moderada
d) Leve dificuldade
e) Sem dificuldade

14 Escreva uma atividade (esportiva ou de lazer) que você particularmente gosta e então selecione o grau de limitação que você tem, se alguma, devido ao seu ombro.
a) Atividade _____
b) Incapaz
c) Limitação severa
d) Limitação moderada
e) Limitação leve
f) Sem limitação

As questões seguintes referem-se ao trabalho.

15 Durante o mês passado, qual foi a sua principal forma de trabalho?
a) Trabalho remunerado (liste o tipo de trabalho) _____
b) Trabalho em casa
c) Trabalho escolar
d) Desempregado
e) Incapacitado devido ao seu ombro
f) Incapacitado secundariamente a outras causas
g) Aposentado

Se você respondeu **d**, **e**, **f**, ou **g** na pergunta acima, por favor, pule as questões 16, 17, 18 e 19 e vá para a questão 20.

16 Durante o mês passado, com que frequência você ficou incapaz de fazer alguma coisa do seu trabalho habitual por causa do seu ombro?
a) Todos os dias
b) Vários dias por semana
c) Um dia por semana
d) Menos de um dia por semana
e) Nunca

17 Durante o mês passado, no dia em que você realmente trabalhou, com que frequência você ficou incapaz de fazer seu trabalho tão cuidadosamente ou eficientemente quanto você gostaria por causa do seu ombro?
a) Todos os dias
b) Vários dias por semana
c) Um dia por semana
d) Menos de um dia por semana
e) Nunca

18 Durante o mês passado, nos dias em que você realmente trabalhou, com qual frequência você teve que trabalhar menos horas do que o normal por causa do seu ombro?
a) Todos os dias
b) Vários dias por semana
c) Um dia por semana
d) Menos de um dia por semana
e) Nunca

19 Durante o mês passado, nos dias em que você realmente trabalhou, com qual frequência você teve que mudar a forma como seu trabalho habitual é feito por causa do seu ombro?
a) Todos os dias
b) Vários dias por semana
c) Um dia por semana
d) Menos de um dia por semana
e) Nunca

As questões seguintes referem-se a satisfação e áreas de melhoria.

20 Durante o mês passado, como você avaliaria seu grau médio de satisfação com seu ombro?
a) Ruim
b) Razoável
c) Bom
d) Muito bom
e) Excelente

21 Por favor, marque abaixo duas áreas em que **você mais gostaria** de ver a melhora (coloque o **número 1 para o mais importante** e o **número 2 para o segundo mais importante**).

a) Melhora da dor _____
b) Melhora para realizar as atividades diárias pessoais e as atividades de casa ____
c) Melhora para realizar as atividades esportivas ou de lazer _____
d) Melhora para realizar as atividades do trabalho _____

Muito obrigado pela sua cooperação!

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