

Translation and cultural adaptation of Charing Cross Venous Ulcer Questionnaire

Tradução e adaptação cultural do Charing Cross Venous Ulcer Questionnaire – Brasil

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Abstract

Background: The translation and cultural adaptation are steps that will allow an instrument created in a particular language and culture might be used in another cultural context. The Charing Cross Venous Ulcer Questionnaire (CCVUQ) is a quality of life questionnaire in English for patients with venous ulcers that need to be translated and culturally adapted to be used in Brazil.

Objective: To translate and culturally adapt to the Brazilian the CCVUQ.

Methods: The process consisted of two translations and two back translations performed by freelance translators, evaluation of versions, followed by the development of consensus version and pre-test commented.

Results: In the process of translating some words and expressions were changed in its literal aspect. Pre-test evaluation indicated changes were needed for better understanding of the respondent. The average time to respond to the questionnaire was 5 minutes and 23 seconds.

Conclusion: The Portuguese version of the Charing Cross Venous Ulcer Questionnaire was translated and adapted for use in Brazilian population.

Keywords: questionnaires; translating; cross-cultural comparison.

Resumo

Contexto: A tradução e a adaptação cultural são etapas que permitirão que um instrumento criado em determinado idioma e cultura possa ser usado em outro contexto cultural. O *Charing Cross Venous Ulcer Questionnaire* (CCVUQ) é um questionário de qualidade de vida em portadores de úlceras venosas que para ser utilizado no Brasil é necessária a execução do processo de adaptação transcultural.

Objetivo: Traduzir e adaptar culturalmente para a população brasileira o CCVUQ.

Métodos: O processo consistiu em duas traduções e duas retrotraduções realizadas por tradutores independentes, da avaliação das versões, seguida da elaboração de versão consensual e de pré-teste comentado.

Resultados: No processo de tradução, algumas palavras foram modificadas no seu aspecto literal. A análise posterior dos resultados do pré-teste apontou necessidades de modificações de alguns termos para melhor compreensão do respondente. O tempo médio de aplicação do questionário foi de 5 minutos e 23 segundos.

Conclusão: A versão na língua portuguesa do *Charing Cross Venous Ulcer Questionnaire* foi traduzida e adaptada para uso na população brasileira.

Palavras-chave: questionários; tradução (processo); comparação transcultural.

Introduction

The Charing Cross Venous Ulcer Questionnaire (CCVUQ), in a recent systematic review, was considered to be the most specific instrument to measure the impact of venous

ulcers on the quality of life of patients¹. It presents good psychometric properties, besides being short, simple and with a quick application time², thus being rated as excellent and promising³.

The original version of the Questionnaire presented good reliability, high correlation ($r=0.55$, $p<0.001$) with eight SF-36

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domains, and good sensitivity to changes over time in patients with venous ulcers⁴⁻⁶.

To adjust an instrument previously created, such as CCVUQ, to a new language, population and culture, it is necessary to implement cross-cultural equivalence, which consists of several steps, the first ones being translation and cultural adaptation⁷.

This process is mainly intended to maintain the validity of the original instrument content, in such a way that the local version may provide measurements similar to those obtained with the original instrument⁸.

In Brazil, the lack of valid and reliable methods for this assessment has imposed barriers when it comes to new treatments for diseases such as chronic venous ulcer, which causes great social and economic impact and affects the quality of life of patients⁹.

In order to properly analyze the impact of an intervention on a chronic disease such as venous ulcer, one should use a generic questionnaire related to specific measures of health scales⁴.

Given the need for specific tools to assess new methods of treatment for venous ulcers and because a specific and relevant instrument that measures the quality of life in this disease has already been created, the present study is justified, with the objective of translating the CCVUQ into Portuguese and adapting it to the Brazilian population.

Methods

This research project was approved by the Ethics Committee, protocol No. 836, in compliance with the rules of the National Health Council (CNS) based on Resolution No. 196/96 on research involving human beings.

This is a cross-sectional study on the translation and cultural adaptation of a questionnaire whose data were subjected to quantitative analysis of frequency, and to qualitative analysis.

The sampling method was non-probabilistic, by convenience, in public services of assistance to patients with venous ulcers in the city of Maceió (AL). The subject should meet the inclusion criteria, such as being patient with open venous ulcer for longer than two weeks, had the diagnosis of a vascular CEAP 6 class chronic venous insufficiency made by a vascular surgeon or angiologist, to be clinically stable during 15 days preceding the survey, as well as in the 15 days following the interview with the investigator. Respondents could be of both sexes,

age between 35 and 65 years (in the pilot study, there was a preference for selecting patients with higher prevalence of venous ulcers and, coincidentally, at the study sites, there were no subjects under 18 years with ulcers). Subjects with cognitive alterations and/or could not understand Portuguese were excluded from the study.

The translations into Portuguese and the cultural adaptation of CCVUQ were based on the criteria defined and recommended internationally, applied in some instruments that has already been validated and published in Portuguese^{10,11}.

The primary variables were translation and cultural adaptation, and the secondary variables were time taken to answer the questionnaire, CEAP classification, ulcer size, and additional data such as gender, age, educational level, time of ulcer occurrence, and activities of daily living.

Method of translation and cultural adaptation

Prior to the study, we obtained the written authorization of the author of the questionnaire to the procedure of translation and cultural adaptation.

Initially, an independent translation of the CCVUQ English version into Portuguese was performed by two bilingual translators, resulting in versions V1 and V2. Then a consensus version, V12, was originated in a meeting, being back translated by two other English native speaker translators who had no prior knowledge of the Questionnaire. Versions R1 and R2 were generated, followed by a back-translated consensual version, R12.

All versions (V1, V2, V12, R1, R2, R12) were analyzed by a committee of professionals and researchers in the field of translation. This committee evaluated the versions as to semantic, idiomatic, conceptual and cultural equivalence. In a further meeting, the committee discussed and proposed the Portuguese pre-final version (F1) of the questionnaire for pretest.

The F1 version was then applied as pre-trial to ten patients with venous ulcers, and possible doubts and difficulties in relation to the text were investigated. The respondents were asked about (1) the understanding of the questionnaire (yes or no), (2) understanding of what each item meant, (3) suggestion of changes in case of items that were not understood by them.

The items mentioned as “not understood” by over 10% of the sample was changed.

The time required to complete the questionnaire was also analyzed, so the translation was reviewed based on the

results and, if necessary, modified and updated, originating a final version (F2).

The F2 version was back translated and sent to the author of the original questionnaire for approval and questioning as to semantic and cultural changes that could have altered the purpose and context of the final questionnaire.

Results

In the initial process of translation and back translation, the committee of professionals suggested changes in the literal meaning of some words in order to form simpler expressions more easily understood by the Brazilian population (Table 1).

Subsequently, the F1 version was applied to ten subjects who were asked about doubts and difficulties in the understanding of the questionnaire. Table 2 shows the item mentioned as “not understood” by 20% of the sample.

The sample selected for the pretest had a mean age of 56.2 years, was comprised of 100% of females, and the mean ulcer size was 3.25 cm². In total, 80% of the subjects were away from their work activities, thus performing only household tasks. As to schooling level, 10% of them were illiterate, 60% were functionally illiterate, 20% had not finished primary education, and 10% had completed high school.

Regarding the time of ulcer occurrence, the data collected show that 50% of the sample presented venous ulcer for more than a year, while 20% had been suffering from venous ulcer for a month, 20% from one to six months, and 10% for six months to a year.

From the total number of individuals, 30% of the sample answered the questionnaire, while 70% had the questionnaire read by somebody related to the study without interfering in the response, as suggested by the author of the original version.

The average time of answering the questionnaire was 5 minutes and 23 seconds.

No facts that could determine sample deviation were observed.

Discussion

Not many tools for evaluating quality of life in specific diseases are available in Brazil, so translation and standardization of tools such as the CCVUQ are required.

Table 1. Cross-cultural translation.

Translated terms	Adapted terms
Decorrente	Por causa
Nunca	Nenhuma parte do tempo
Sem frequência	Pouca parte do tempo
Com frequência	Uma boa parte do tempo
Fazer meus passatempos	Realizar meus passatempos
Considere como verdadeiro ou falso	Quanto verdadeiro ou falso
Me deixa fazer minhas atividades de forma mais lenta	Faz com que eu realize minhas atividades de forma mais lenta
Sou triste por causa da aparência da minha úlcera	Sou triste por causa da aparência das minhas pernas devido à úlcera
Ocasionalmente	De vez em quando
Deveres de casa	Tarefas de casa
Cuidar do jardim	Cuidar do quintal

Table 2. Cultural adaptation.

Terms that were not understood	Adapted term
Tenso em relacionamentos pessoais	Preocupado com os relacionamentos pessoais

When performing inadequate translation and cultural adaptation, the results obtained may be biased and erroneous¹². In order to minimize errors, the methodology used in this study follows internationally accepted models¹⁰.

The translation and cultural adaptation procedures used were considered to be satisfactory. The committee of professionals meeting allowed a discussion over the questionnaire with respect to goals, ways of filling and adapting the Questionnaire for an easy understanding and quick filling. The questions were adapted to achieve cultural and semantic equivalence.

This process was necessary and showed a good applicability of the questionnaire, with an average application time of 5 minutes and 23 seconds, confirming the process of cultural adaptation of CCVUQ to Spanish², which considered the instrument as containing simple questions, with a time of administration of not more than ten minutes. This fact had already been reported in the Chinese version of the Questionnaire¹³, which did not exceed ten minutes for its filling even when applied to an elderly population.

In the analysis of translation, some possible answers such as “never,” “not often,” “often” and “occasionally” were modified from the original version after the analysis by the professional committee. The same happened in another study of questionnaire validation,

in which “true” and “false” were replaced by “yes” or “no”¹⁴. However, the cultural adaptations of CCVUQ to Chinese¹³ and Spanish² populations did not reveal the need for changes in response options, so they were deemed appropriate based on the literal translation of the original version.

In the present study, the committee of professionals also decided to modify expressions that were not suited to the habits of the majority of population, such as “doing household chores”, “gardening”, “hobbies”. This procedure was similar to that performed in another study¹⁴ in which some terms were replaced, confirming the results of CCVUQ cultural adaptation in Spain², which required modifications in six sentences to achieve cultural equivalence.

By applying the version established by the committee of professionals to ten individuals, it was necessary to change a single word considered to be not understood by 20% of the sample (for example: strained personal relationships), demonstrating compliance with the criteria established in other studies that determined a maximum of 15% of the sample possibly presenting difficulties in understanding¹⁵ or misunderstanding¹² the questions.

In a study conducted with patients with venous ulcers, Abbade and Lastória⁹ found a mean age of 57 years, inasmuch as 35% were retired and 16.1% were out of work due to the ulcer.

Data referring to samples of the aforementioned studies are consistent with the sample used in the pre-test of this survey, in which a relatively adult population (mean age of 56.2 years) was also away from their work activities.

It's important to mention, however, that the population to whom the original questionnaire was applied had a mean age of 76 years, a predominantly elderly population⁴.

The predominance of venous ulcer among female patients is well known⁹, which resembles the study of validation of the original questionnaire⁴, as well as the sample pre-test of this research.

The pre-test showed that the questionnaire is properly translated and adapted to Brazilian reality. However, it is worth pointing out that the sample was composed of adults with low education level and, although the author mentions that this questionnaire can be applied individually, we found that, in our culture, its application to individuals with low education should be assisted.

It is important to emphasize the need for clinimetric tests with a more diverse population so that the CCVUQ can be used to measure the quality of life of patients with venous ulcer in the Brazilian population.

Conclusion

The process of translation and cultural adaptation to the Brazilian population of the Charing Cross Venous Ulcer Questionnaire followed the recommended steps and was successful. Therefore, the Brazilian version of CCVUQ is currently available.

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*All authors have read and approved the final version submitted to J Vasc Bras.

Annex 1. Portuguese version of Charing Cross Venous Ulcer Questionnaire**Charing Cross Venous Ulcer Questionnaire****1. Eu tenho dor por causa da minha úlcera:**

Nenhuma parte do tempo	Pouca parte do tempo	De vez em quando	Freqüentemente	Sempre
1	2	3	4	5

2. Estar com uma úlcera na minha perna me impede em fazer o seguinte:

	Nenhuma parte do tempo	Pouca parte do tempo	De vez em quando	Freqüentemente	Sempre
a) Reunir com parentes e amigos	1	2	3	4	5
b) Viajar de férias	1	2	3	4	5
c) Realizar meus passatempos(hobbies)	1	2	3	4	5
d) Usar transporte público	1	2	3	4	5

3. Quanto verdadeiro ou falso são as seguintes informações considerando sua úlcera na perna:

	Definitivamente falso	Na maior parte falso	Não sei	Na maior parte verdadeiro	Definitivamente verdadeiro
a) Minha úlcera, geralmente faz com que eu realize minhas atividades de forma mais lenta	1	2	3	4	5
b) Minha úlcera me deixa preocupado em meus relacionamentos pessoais	1	2	3	4	5
c) A secreção da minha úlcera é um problema	1	2	3	4	5
d) Eu gasto muito tempo pensando sobre minha úlcera	1	2	3	4	5
e) Eu fico preocupado que minha úlcera nunca cure	1	2	3	4	5
f) Eu estou cansado de gastar muito tempo tratando da minha úlcera	1	2	3	4	5

4. Eu sou triste por causa da aparência das minhas pernas devido a úlcera e/ou curativos:

Não, definitivamente não	De vez em quando	Frequentemente	Toda hora(sempre)
1	2	3	4

5. A úlcera da minha perna me limita de fazer as seguintes tarefas de casa:

	Nenhuma parte do tempo	Pouca parte do tempo	De vez em quando	Freqüentemente	Sempre
a) Cozinhar	1	2	3	4	5
b) Limpar	1	2	3	4	5
c) Fazer compras	1	2	3	4	5
d) Cuidar do quintal	1	2	3	4	5

6. Eu me sinto deprimido por causa da minha úlcera na perna:

Nunca	De vez em quando	Frequentemente	Sempre
1	2	3	4

7. Com relação aos curativos da sua perna, indique o quanto é um problema para você:

	Nenhum problema	Pequeno problema	Moderado problema	Grande problema	Enorme problema
a) O volume deles	1	2	3	4	5
b) A aparência deles	1	2	3	4	5
c) a influência nas roupas que eu uso	1	2	3	4	5

8. Eu tenho dificuldade de andar por causa da úlcera na minha perna:

Nunca	De vez em quando	Frequentemente	Sempre
1	2	3	4