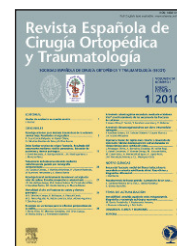


Revista Española de Cirugía Ortopédica y Traumatología

www.elsevier.es/rot



ORIGINAL ARTICLE

Translation, transcultural adaptation to Spanish, to Valencian language of the Foot Health Status Questionnaire

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Received December 8, 2009; accepted February 6, 2010

KEYWORDS

Foot health status questionnaire;
Health-related Quality of life;
Questionnaire;
Foot

Abstract

Objective: The Foot Health Status Questionnaire (FHSQ) is a foot-specific health-related quality-of-life instrument that evaluates foot pain, foot function capacity, footwear and general foot health. This questionnaire was developed and validated for the English culture and has been used in different foot conditions. Our goal is to present the Spanish version of FHSQ after conducting a cross-cultural adaptation.

Materials and methods: We used the translation-back-translation method recommended for cross-cultural adaptation of questionnaires. Several bilingual translators, one with a degree in Spanish Philology and the authors of the work participated. First, the questionnaire was adapted to Spanish and then the procedure was repeated to obtain the Valencian version of the FHSQ.

Results: In general, there were no problems in the translation of the questions on the questionnaire, except for that related with the pain domain. Adapting the term "feet ache" as "dolor continuo en los pies" was achieved after the second meeting and thanks to the advice of the author of the original questionnaire. The other items required minimal adjustments. The pilot tests showed good understanding of both the questions and the questionnaire scale descriptors.

Conclusions: The method used in the cross-cultural adaptation of the FHSQ questionnaire allows us to confirm the conceptual equivalence of the original version with the Spanish versions obtained in this work. Although the evaluation of its clinimetric characteristics is still pending, the Spanish adaptations presented can be used for clinical research.

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PALABRAS CLAVE

Foot health status questionnaire;
Calidad de vida relacionada con la salud;
Questionario;
Pie

Traducción y adaptación transcultural al castellano y al valenciano del Foot Health Status Questionnaire

Resumen

Objetivo: El Foot Health Status Questionnaire (FHSQ) es un cuestionario de calidad de vida relacionada con la salud específico para el pie, que valora dolor, capacidad funcional, calzado y salud general del pie. Es un instrumento desarrollado y validado para la cultura anglosajona que se ha utilizado en diversas enfermedades del pie. Nuestro objetivo es presentar la versión española del FHSQ tras haber realizado su adaptación transcultural.

Material y método: Se utilizó el método de traducción-retrotraducción recomendado para la adaptación transcultural de los cuestionarios. Participaron varios traductores bilingües, una licenciada en Filología Hispánica y los autores del trabajo. En primer lugar se realizó la adaptación al castellano y, posteriormente, se repitió todo el procedimiento para obtener la versión en valenciano del FHSQ.

Resultados: La mayoría de las preguntas del cuestionario no plantearon dificultades, salvo las relacionadas con el dominio "dolor". La adaptación del término "*feet ache*" como "dolor continuo en los pies" se logró después de la segunda reunión y gracias a los consejos del autor del cuestionario original. Para el resto de los ítems se requirieron mínimas adaptaciones. Las pruebas piloto evidenciaron una buena comprensión, tanto de las preguntas como de los descriptores de las escalas del cuestionario.

Conclusiones: El método utilizado en la adaptación transcultural del FHSQ permite afirmar la equivalencia conceptual de la versión original con las versiones españolas obtenidas en este trabajo. Aunque queda pendiente la valoración de sus características clinimétricas, las adaptaciones que se presentan pueden ser utilizadas para la investigación clínica.

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Introduction

Problems relating to the feet are frequently the reason for consulting a specialist in orthopaedic surgery. The main complaints are pain, deformities and problems with footwear, and they usually affect mostly elderly and middle-aged women. These have been shown not to be minor or banal conditions, as they negatively influence these patients' functional ability and their quality of life.^{1,2} In the end, this demand for health care is going to produce a considerable number of medical interventions, both conservative and surgical, all of which must be adequately measured to be able to generate clinical evidence.

The evaluation of outcomes is a basic requirement of clinical practice and in turn implies a very important tool for the management of health-care resources. Scientifically constructed questionnaires are the main tool in the assessment of health-related outcomes and the most powerful way, from a methodological standpoint, to measure the clinical results.^{3,4} Examples of these are health-related quality of life questionnaires (HRQLQ), that provide information on the clinical outcome from the patient's standpoint and measure the impact of the illness or alteration on the individual. Most HRQLQ have been designed and validated in other countries, normally English-speaking countries, and, in order to use them in Spain, it is necessary to perform a process of transcultural adaptation. A common error when using measurement tools is merely to translate the questionnaire and apply it immediately to a study population without taking into account the socio-cultural

biases of the translation.^{5,6} As with the process of constructing a questionnaire, a precise scientific method is necessary and the use of a questionnaire validated in a language or in a setting different from that used for its development requires a reproducible method. This method or process is called transcultural adaptation and is intended to obtain a version that is equivalent to the original questionnaire from conceptual standpoint. Adhering to a precise translation and transcultural adaptation protocol ensures that the new version of the questionnaire has a behaviour that is equivalent to that of its original (it measures the same, with the same reliability and sensitivity to change). All this is essential in order to compare the results obtained with the adapted questionnaire and those of other studies carried out with the original version.⁷

The Foot Health Status Questionnaire (FHSQ)⁸ is a specific HRQLQ measurement instrument for feet, designed and validated in Australia. In this article we present the Spanish versions in Castilian and Valencian of this Anglo-Saxon questionnaire, produced using the method recommended for the transcultural adaptation of HRQLQ.^{9,10}

Material and methods

Foot Health Status Questionnaire

The FHSQ is a specific HRQLQ questionnaire for feet, designed by the Australian podologist Paul Bennett and initially developed to assess the outcomes of surgical

treatments for common diseases of the foot.^{8,11} However, it has also been validated in different podological conditions such as, for example, in skin diseases, neurological and musculo-skeletal condition, and it has been used to determine the efficacy of orthoses for feet.^{12,13} This instrument has been shown to have good reliability and a high sensitivity to changes; it is easy to complete and can be filled in by the patients on their own, taking only about 15 minutes.¹⁴ In addition, it has been adapted to other languages, including Brazilian Portuguese.¹⁵

The FHSQ comprises 3 sections:

Section I

This has 13 questions that assess 4 health domains of the feet, namely pain, function, general health and footwear (table 1). Each domain has a specific number of questions. Thus, there are 4 on pain, 4 on function, 3 on footwear and 2 on general foot health. The assessment of pain and function is based on physical phenomena, the evaluation of footwear uses practical aspects related to availability and the comfort of the shoes, while the perception of the foot's general health is based on the patients' self-assessment of the state of their feet.

Each question allows several answers and these are placed on a Likert-type ordinal scale (words or phrases corresponding to a numeric scale). The descriptors for these scales vary for each domain and the person completing the questionnaire has to choose only one response, whichever is thought to be the most appropriate, and this one has to be circled.

The questionnaire does not provide a global score, but rather generates an index for each domain. In order to obtain these indices, the responses are fed into a computer programme (The FHSQ, Version 1.03) which, after processing the data, gives a score ranging from 0 to 100. A 0 score represents the worst state of health for the foot and 100 its best possible condition. Furthermore, the software provides graphical images of the outcomes.

Section II

This heading comprises 20 questions with response options that are also Likert-type scales assessing the patient's health in 4 domains: general health, physical function, social function and vitality. These are generic health measurements similar to those in the SF-36 questionnaire.¹⁶ A score is obtained for each domain by typing the responses into the computer programme. The score ranges from 0 to 100; the first is the worst health status for that domain, while the highest score represents the best health status.

Section III

The last section collects socio-demographic data on the patients, such as their medical history, socio-economic status, lifestyle or habits and the level of studies completed.

Procedure: translation and transcultural adaptation

The transcultural adaptation was carried out with the consent of its author, Paul Bennett, who provided us with the original FHSQ 1.03. The version in Castilian Spanish was obtained by means of the translation and back-translation method following the recommendations proposed for the transcultural adaptation of HRQLQ questionnaires.^{9,10} This process involves various stages. In outline, the method is based on obtaining multiple translations of the questionnaire in Spanish from its original language, produced independently by people fluent in both languages. These are used as consensus meetings in order to obtain one or more intermediate versions that are subsequently back-translated into the original language, also independently by bilingual individuals different from the original translators. With the information provided by the translations and back-translations, a consensus is reached regarding the definitive version of the questionnaire, which may still undergo some changes following a pilot test conducted with patients.

Table 1 Basic domains of foot health assessed by the Foot Health Status Questionnaire

Domain	Items	Theoretical concept	Meaning of the lowest score (0)	Meaning of the highest score (100)
Foot pain	4	Evaluation of foot pain in terms of type of pain, severity and duration	Extreme pain in the feet and significant if acute in nature	Free from pain, no discomfort
Function of the foot	4	Evaluation of the feet in terms of impact on physical functions	Severely limited for the performance of numerous physical activities due to their feet, such as walking, working and moving about	Patients are able to carry out all physical activities desired, such as walking, working and climbing stairs
General health of the foot	2	Self-perception of the feet (assessment of body image with respect to feet)	Perception of poor condition and status of the feet	Perception of excellent condition and status of the feet
Footwear	3	Lifestyle relating to footwear and feet	Great limitations to find suitable footwear	No problem obtaining suitable footwear. No limitations with respect to footwear.

Translation

This phase involved the participation of 2 bilingual translators whose mother tongue was Castilian Spanish and who produced independent translations of the questionnaire, thus giving translations T1 and T2.

Afterwards, a meeting was held with the research team and the two translators in order to obtain a first consensus version of the questionnaire. This first meeting sought a conceptual translation rather than the mere semantic translation and an attempt was made to use the simplest expressions that would be most intelligible for the general population. On the other hand, consideration was given to the existing adaptations in Spanish of the SF-36 questionnaire,¹⁷ the Disabilities of the Arm, Shoulder and Hand questionnaire¹⁸ and the Western Ontario Index and the McMaster Universities Osteoarthritis Index.¹⁹ With all these appraisals, an initial version of the measurement instrument was obtained (version 1).

Back-translation

In order to assess the conceptual equivalence of the first version of the FHSQ in Spanish, we obtained the assistance of two other bilingual translators living in Spain whose mother tongue was English and who had not previously participated in the study.

Each of these translators separately produced a back-translation from the Spanish into English (RT1 and RT2) of "version 1" without knowing anything about the characteristics of the original version of the FHSQ.

Pre-final version

Once the two back-translations were available, a meeting was held with the research team and the 4 translators, also including a lecturer with a degree in Spanish Language and Literature. The 2 back-translations (RT1 and RT2) were compared with the original version in English to identify those items or words that were not totally equivalent. As a result of all this, the first version was modified during the meeting and, finally, a pre-final version (version 2) was obtained and deemed suitable for administering to a pilot group.

Pilot test or pre-test

The pre-final version (version 2) of the FHSQ was given to 30 out-patients for completion; these patients had come to the clinic complaining of various feet-related problems.

The patients completed the questionnaire by themselves following a brief explanation. An interview was later held with the patients in order to identify any problems understanding the items, the responses or other problems completing it, such as the incidence of unanswered questions.

After completing this test, the definitive Spanish version of the FHSQ was produced (version 3 or FHSQ-Cast).

Once the adaptation of the FHSQ to Castilian Spanish had been completed, this version was used for its adaptation to Valencian Spanish and the whole process was repeated.

Results

Section I

The results of the adaptations in this section are shown in table 2.

The domain that posed the greatest difficulties in translation was that of pain. In this section, the question that turned out to be most complicated in terms of transcultural adaptation was "*How often did your feet ache?*" In the first 2 translations (T1 and T2), the term "*feet ache*" was defined on the one hand as "*molestias en los pies*" (discomfort in the feet) and on the other as "*pies doloridos*" (sore feet). After the first consensus meeting, it was decided to use "discomfort" for version 1, as "*pie dolorido*" is "*sore foot*". However, after producing the back-translations and during the meeting with all the persons participating in the study, we found that the adaptation of the expression "*feet ache*" was incorrect, in other words it had a doubtful equivalence. One of the back-translators suggested the idea of "continuous pain in the foot" and compared "feet ache" with the term "*headache*" meaning cephalaea, in short a constant or continuous pain. After consulting with the author of the original questionnaire and following his instructions, it was decided to translate "*feet ache*" as "continuous pain in the foot". With regard to item four assessing pain, "*How often did you get sharp pains in your feet?*", we preferred the translation "*dolor punzante*" (piercing pain) rather than "*dolor agudo*" (acute pain) as the first was considered an expression that would be more easily understood by the general population.

With respect to the domain assessing the function of patient's feet, questions 5 and 6 were also a little problematic, not from the semantic standpoint, but from a linguistic one. The translation of the questions "*Have your feet caused you to have difficulties in your work or activities?*" and "*Were you limited in the kind of work you could do because of your feet?*" was not difficult. However, we felt that, if the questions were asked in that way, the possible responses were limited to "yes" or "no". We therefore decided to add the phrase, "if so, how much?" In this way, the question posed fitted better with the possible answers represented by the descriptors: "Not at all, slightly, moderately, quite a bit, extremely".

The translation of the question corresponding to the "footwear" and "general foot health" domains did not present any difficulties.

Section II

The results of the adaptations of this section are shown in table 3.

This part of the FHSQ comprises questions taken from the generic SF-36 questionnaire. In those questions that are identical to this measurement instrument, the transcultural adaptation carried out previously by Alonso et al.¹⁷ was respected. Thus, in question 15b, in which examples of moderate physical activities are given, including "playing golf", this was changed to another sporting activity with a greater tradition in our area, namely "playing bowls".

Table 2 Transcultural adaptation of the items in section I of the Foot Health Status Questionnaire

Original FHSQ	FHSQ in Castilian	FHSQ in Valencian
1. What level of foot pain have you had during the past week?	1. ¿Qué grado de dolor de pies ha tenido usted durante la semana pasada?	1. Quin grau de dolor de peus ha tingut vosté durant la setmana passada?
2. How often have you had foot pain?	2. ¿Con qué frecuencia ha tenido dolor de pies?	2. Amb quina freqüència ha tingut dolor de peus?
3. How often did your feet ache?	3. ¿Con qué frecuencia ha tenido dolor continuo en los pies?	3. Amb quina freqüència ha tingut dolor continu en els peus?
4. How often did you get sharp pains in your feet?	4. ¿Con qué frecuencia ha tenido dolor punzante en los pies?	4. Amb quina freqüència ha tingut dolor punxant en els peus?
5. Have your feet caused you to have difficulties in your work or activities?	5. ¿Ha tenido dificultades en su trabajo o en sus actividades debido a sus pies? Si es así, ¿cuánto?	5. Ha tingut dificultats en el seu treball o en les seues activitats a causa dels seus peus? Si és així, quant?
6. Were you limited in the kind of work you could do because of your feet?	6. ¿Se ha sentido limitado en el tipo de trabajo que podía hacer debido a sus pies? Si es así, ¿cuánto?	6. S'ha sentit limitat en el tipus de treball que podia fer a causa dels seus peus? Si és així, quant?
7. How much does your foot health limit you walking?	7. La salud de sus pies, ¿cuánto le ha limitado su capacidad para caminar?	7. La salut dels seus peus, quant ha limitat la seua capacitat per caminar?
8. How much does your foot health limit you climbing stairs?	8. La salud de sus pies, ¿cuánto le ha limitado su capacidad para subir escaleras?	8. La salut dels seus peus, quant ha limitat la seua capacitat per pujar escales?
9. How would you rate your overall foot health?	9. ¿Cómo calificaría la salud de sus pies en general?	9. Com qualificaria la salut dels seus peus en general?
10. It is hard to find shoes that do not hurt my feet	10. Es difícil encontrar zapatos que no me hagan daño	10. Es difícil trobar sabates que no em facen mal
11. I have difficulty in finding shoes that fit my feet	11. Tengo dificultades para encontrar zapatos que se adapten a mis pies	11. Tinc dificultats per trobar sabates que s'adapten als meus peus.
12. I am limited in the number of shoes I can wear	12. No puedo usar muchos tipos de zapatos	12. No puc usar molts tipus de sabates.
13. In general, what condition would you say your feet are in?	13. En general, ¿en qué condición diría usted que se encuentran sus pies?	13. En general, en quina condició diria vosté que es troben els seus peus?

FHSQ: Foot Health Status Questionnaire.

The “*lifting or carrying bags of shopping*” item was translated as “coger o llevar la bolsa de la compra” in Castilian and “agarrar o portar la cistella de la compra” in Valencian. The term “cistella” (basket) was preferred to “bossa” (bag) because this second term can have other meanings in Valencian.

The reference to “*climbing a steep hill*” was adapted in Castilian as “subir una cuesta empinada” (climbing a steep slope). We opted for the term “cuesta” (slope) rather than “colina” (hill) or “pendiente” (inclination) as it seemed more colloquial and more applicable to an urban setting. With respect to “*showering or dressing yourself*”, we chose the expression “por sí mismo” (by yourself) rather than “solo” (alone) because the question refers to the patient’s autonomy in carrying out these tasks.

Section III

In this section, on socio-demographic data, there were 2 more problematic items requiring adaptation to our culture as there were references to specific terms used in the health-care and educational systems for the Australian population. These were the questions “*Are you a pensioner or health care*

cardholder?” and “*Have you completed a trade certificate or any other educational qualification since leaving school?*” During the last meeting prior to the pilot test, we decided to shorten the first question to “Are you a pensioner?” as all inhabitants in Spain are entitled to publicly-funded health-care under the Spanish system and, in the second case, it was decided to use a simpler expression, namely “¿Ha cursado otros estudios después de dejar la escuela?” (Have you taken any other courses since leaving school?).

Instructions and Likert scales

The translation of the questionnaire’s instructions did not involve any difficulty; however, some changes were introduced.

In order to improve understanding in the Spanish versions, we drew an ellipse around the word circle in the instructions “*circle your answer*” and “*circle the response*”, translated into Castilian as “mark your answer with a circle” and “mark the answer with a circle”. In other sections, the word “*circle*” was translated into Castilian as “rodee” (ring) and in Valencian as “encercler” (encircle).

Table 3 Transcultural adaptation of the items in section II of the Foot Health Status Questionnaire

Original FHSQ	FHSQ in Castilian	FHSQ in Valencian
14. In general, how would you rate your health:	14. En general, usted diría que su salud es:	14. En general, vosté diria que la seua salut és:
15. The following questions ask about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much? a. Vigorous activities, such as running, lifting heavy objects, or (if you wanted to) your ability to participate in strenuous sports b. Moderate activities, such as cleaning the house, lifting a chair, playing golf or swimming c. Lifting or carrying bags of shopping d. Climbing a steep hill e. Climbing one flight of stairs f. Getting up from a sitting position g. Walking more than a kilometre h. Walking one hundred meters i. Showering or dressing yourself	15. Las siguientes preguntas se refieren a actividades o cosas que usted podría hacer en un día normal. Su salud actual, ¿lo limita para hacer estas actividades? Si es así, ¿cuánto? a. Esfuerzos intensos, tales como correr, levantar objetos pesados o participar en deportes agotadores b. Esfuerzos moderados, como limpiar la casa, levantar una silla, jugar a los bolos o nadar c. Coger o llevar la bolsa de la compra d. Subir una cuesta empinada e. Subir un solo piso por la escalera f. Levantarse después de estar sentado g. Caminar un kilómetro o más h. Caminar unos 100 m i. Bañarse o vestirse por sí mismo	15. Les següents preguntes es refereixen a activitats o coses que vosté podria fer en un dia normal. La seua salut actual, el/ la limita per fer estes activitats o coses? Si es així, quant? a. Esforços intensos, com ara correr, alçar objectes pesats o participar en esports esgotadors b. Esforços moderats, com netejar la casa, alçar una cadira, jugar a birles o nadar c. Agarrar o portar la cistella de la compra d. Pujar una costera empinada e. Pujar un sol pis per l'escala f. Alçar-se després d' estar assegut/ da g. Caminar un quilòmetre o més h. Caminar uns cent metres i. Banyar-se o vestir-se vosté mateix
16. This question asks to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbours or social groups?	16. ¿Hasta qué punto su salud física o los problemas emocionales han dificultado sus actividades sociales habituales con la familia, los amigos u otras personas?	16. Fins a quin punt creu vosté que la seua salut física o els problemes emocionals han dificultat les seues activitats socials habituals amb la família, els amics, els veïns o altres persones?
17. These questions are about how you feel and how things have been with you during the past month. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past 4 weeks: a. Did you feel tired? b. Did you have a lot of energy? c. Did you feel worn out? d. Did you feel full of life?	17. Las preguntas que siguen se refieren a cómo se ha sentido y cómo le han ido las cosas durante el último mes. En cada pregunta responda lo que se parezca más a cómo se ha sentido usted. Durante las últimas 4 semanas con qué frecuencia: a. ¿Se sintió cansado/ a? b. ¿Tuvo mucha energía? c. ¿Se sintió agotado/ a? d. ¿Se sintió lleno/ a de vitalidad?	17. Les següents preguntes es refereixen a com vosté s'ha sentit i com li han anat les coses durant l'últim mes. A cada pregunta responga el que més s'asemble a com s'ha sentit vosté. Durant les últimes 4 setmanes amb quina freqüència: a. es va sentir cansat/ da? b. va tindre molta energia? c. es va sentir esgotat/ da? d. es va sentir ple/ na de vitalitat?
18. During the past 4 weeks, how much of the time has your emotional problems or physical health interfered with your social activities (like visiting with friends, relatives, etc.)?	18. Durante las 4 últimas semanas, ¿con qué frecuencia la salud física o los problemas emocionales le han dificultado sus actividades sociales (como visitar a los amigos o familiares)?	18. Durant las 4 últimes setmanes, amb quina freqüència la salut física o els problemes emocionals li han limitat les seues activitats socials (com visitar els amics o familiars)?
19. How TRUE or FALSE is each of the following statements for you? a. I seem to get sick a little easier than other people b. I am as healthy as anybody I know c. I expect my health to get worse d. My health is excellent	19. Por favor, diga si le parece <i>cierta</i> o <i>falsa</i> cada una de las siguientes frases a. Creo que me pongo enfermo/ a más fácilmente que otras personas b. Estoy tan sano/ a como cualquiera c. Creo que mi salud va a empeorar d. Mi salud es excelente	19. Per favor, diga si li sembla CERTA o FALSA cada una de les següents frases: a. Crec que em pose malalt/ a més fàcilment que altres persones b. Estic tan sa/ na com qualsevol c. Crec que la meua salut empitjorarà d. La meua salut és excel·lent

FHSQ: Foot Health Status Questionnaire.

In order to prevent people from choosing multiple answers, we added the word “solo” (only) to the instructions “circle a number”, “circle a number for each question below” and “circle a number on each line”, i.e. “rodee un solo número” (circle only one number), “rodee un solo número para cada una de la preguntas siguientes” (circle only one number for each of the following questions) and “rodee un solo número en cada línea” (circle only one number on each line).

The translation and adaptation of the Likert scales did not pose many doubts. The results can be seen in table 4. An attempt was made at all times to maintain the order of the scales and not to alter the adaptations of scales similar to those in the FHSQ included in other questionnaires already translated and adapted to Spanish. With respect to the English word “fair”, this was sometimes translated (questions 9 and 13) as “regular” (so-so), whereas in question 14 (Section II) it was decided to use “acceptable” (all right). This last question is identical to one in the SF-36 questionnaire and refers to how patients describe their health in general (“In general, how would you rate your health?”) and the descriptors they can choose from are

“very good, fair, poor”. In this case, we chose “acceptable” as the translation of “fair” in order to maintain the structure of the responses, so this scale was adapted into Castilian as “muy buena, aceptable o mala” (very good, all right, bad).

Pilot test

The 30 people (26 women and 4 men) who completed the questionnaire in Castilian had a medium to low level of academic qualifications, and their age ranged between 41 and 75 years. Most of them showed good understanding of the questions and only one needed help to fill in the questionnaire. As for the time spent on this task, it was in no case more than 15 minutes. After the interviews held with each of the participants, we did not detect any question or answer scale that required additional changes. The number of questions not answered or left blank was insignificant.

The pilot test with the version in Valencian was conducted with 31 Valencian-speaking patients, 28 women and 3 men. As in the pilot test for the Castilian version, the level of academic achievement of these individuals was medium to

Table 4 Transcultural adaptation of the Likert scales in the Foot Health Status Questionnaire

	Original FHSQ	FHSQ in Castilian	FHSQ in Valencian
Question 1	None, very mild, mild, moderate, severe	Ninguno, muy leve, leve, moderado, grave	Cap, molt lleu, lleu, moderat, greu
Questions 2, 3 and 4	Never, occasionally, fairly many times, very often, always	Nunca, de vez en cuando, bastantes veces, muy a menudo, siempre	Mai, de tant en tant, prou vegades, molt sovint, sempre
Questions 5, 6, 7 and 8	Not at all, slightly, moderately, quite a bit, extremely	Nada, un poco, regular, bastante, mucho	Gens, un poc, regular, bastant, molt
Question 9	Excellent, very good, good, fair, poor,	Excelente, muy buena, buena, regular, mala	Excel.lent, molt bona, bona, regular, roïna
Questions 10, 11 and 12	Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree	Totalmente de acuerdo, de acuerdo, ni de acuerdo ni en desacuerdo, en desacuerdo, totalmente en desacuerdo	Totalment d'acord, d'acord, ni d'acord ni en desacord, en desacort, totalment en desacord
Question 13	Excellent, very good, good, fair, poor	Excelente, muy buena, buena, regular, mala	Excel.lent, molt bona, bona, regular, roïna
Question 14	Very good, fair, poor	Muy buena, aceptable, mala	Molt bona, aceptable, roïna
Questions 15 (a-i)	Yes, limited a lot; yes, limited a little; no, not limited at all	Sí, me limita mucho; sí, me limita un poco; no, no me limita nada	Sí, em limita molt; si, em limita un poc; no, no em limita gens
Question 16	Not at all, slightly, moderately, quite a bit, extremely	Nada, un poco, regular, bastante, mucho	Gens, un poc, regular, bastant, molt
Questions 17 (a-d)	All of the time, most of the time, some of the time, a little of the time, none of the time	Siempre, casi siempre, algunas veces, sólo alguna vez, nunca	Siempre, quasi sempre, algunes vegades, només alguna vegada, mai
Question 18	No time at all, a small amount of time, moderate amount of time, quite a bit of the time, all of the time	Nunca, sólo alguna vez, algunas veces, casi siempre, siempre	Mai, només alguna vegada, algunes vegades, quasi sempre, sempre
Questions 19 (a-d)	True or mostly true, don't know, false or mostly false	Cierta o bastante cierta, no lo sé, falsa o bastante falsa	Certa o bastant certa, no ho sé, falsa o bastant falsa

FHSQ: Foot Health Status Questionnaire.

low and their ages varied between 22 and 77 years, although more than half of them were over 55 years of age. The 2 eldest participants needed assistance to complete the questionnaire. During the interviews held with each of the participants, we confirmed that the items were well understood and that the number of blank answers was scant. In the light of this evaluation, no changes were made in the questionnaire.

Discussion

This paper presents two Spanish versions, one in Castilian and the other in Valencian, of the FHSQ. So far there is no similar questionnaire available in Spanish and we feel that this measurement instrument has certain characteristics making it ideal for use in clinical practice and research. Thus, it is a simple HRQLQ questionnaire that patients can complete by themselves, it is specific for the anatomical region of the foot, it can be applied for any illness and it can be used on its own, as the questionnaire includes questions from the generic SF-36 instrument.

The process of adapting the questionnaire to our vernaculars was carried out in accordance with the recommendations proposed by researchers and using the method most commonly applied for the purpose, namely translation and back-translation. We also received advice from the author of the original questionnaire, Paul Bennett, from appropriate bilingual translators and from specialists in Spanish who, taken together, ensured that the adapted versions are conceptually equivalent to the original instrument. The next step is the clinimetric validation of the questionnaires, i.e. the verification of their internal, external and conceptual validity. Although the ideal is to employ versions that have completed the translation, transcultural adaptation and validation process, it is usually deemed appropriate to use new versions that have completed the first 2 phases of this process³.

The questions in the questionnaire are not very complicated, hence the low incidence of items with doubtful semantic equivalence. Coinciding with Alonso et al.¹⁷ and unlike the Brazilian Portuguese version,¹⁵ the section on pain was the one that turned out to be most difficult. Thanks to the translators and the advice of the author, we were able to adapt the most problematic terms. The 4 items on pain deal with 4 different dimensions. The first assesses the intensity of the symptom and the other 3 distinguish the type of pain (acute=*sharp* versus chronic=*ache*) and the frequency with which the individual experienced these phenomena. All four questions need to be answered and must be taken together as a single domain for pain. According to Bennett,¹¹ all this produces a high degree of reliability, validity and repeatability.

In comparison with the original SF-36 questionnaire, Section II of the FHSQ only changes 2 of the Likert scales and some examples of physical activities. In the same way as Alonso et al.,¹⁷ we changed "playing golf" to "playing bowls" as an example of moderate physical activity. We coincide with their appreciation that golf is not frequent or representative of the Spanish population and that the change does not alter the concept being measured. It should be mentioned that Ferreira

et al.¹⁵ eliminated the physical activity of "playing golf" from their version of the FHSQ in Portuguese without replacing it with any other more typical of the Brazilian population due to the fact that, for them, the question contained sufficient other examples of suitably moderate activity.

We agree with the Portuguese version¹⁵ regarding the 2 questions in Section III that could not be kept as such in the Spanish adaptations, as they were specific to the Australian health and educational system and could not be applied to the population in Spain.

With respect to the instructions in the questionnaire, we believe that their intelligibility was increased with our contributions and we also avoided multiple answers being given to one of the questions. Landorf and Keenan¹⁴ indicated something similar when they pointed out that, in the original version in English, the phrase "*circle a number for each question below*" should be changed to "*circle one number for each question below*" so as to prevent 2 answers from being marked in cases of doubt.

Finally, the results obtained after the 2 pilot tests in Castilian and in Valencian indicate the correct transcultural adaptation of the measurement instrument.

To sum up, in this paper we present the Spanish version of the FHSQ quality of life questionnaire. The procedure followed in its transcultural adaptation ensured the maximum conceptual equivalence with the original questionnaire. Although it remains to determine the measurement characteristics of the versions produced, clinician can already begin to use them as a complementary method for the assessment of the effects of different treatments on illness of the feet.

Conflict of interest

The authors declare they have no conflict of interest.

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