Adapting the Scale to Measure Care Ability of Family Caregivers of People with Chronic Diseases in Brazil*

**Theme:** Chronic care.

**Contribution to the discipline:** The caregiver is the central point in the treatment process and is directly linked to the patient. In this context, this study contributes by verifying their ability and/or competence of caring as this variable directly affects the treatment and quality of life of the patient. In the health field, developing the chronic patient’s care cycle based on an instrument adapted and validated for its context is relevant as it helps to analyze the caregiver’s aspects that directly imply the quality of care offered. Regarding teaching, the availability of assessment tools helps to train professionals, implement health and care research, and is essential for compiling preventive and treatment actions for family caregivers.

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**ABSTRACT**

**Objective:** To translate and culturally adapt the Scale to Measure the Care Ability of Family Caregivers of People with Chronic Diseases to the Brazilian context. **Materials and Methods:** This is a methodological study that followed the steps recommended by Dorcas Beaton for translating and culturally adapting this scale in Brazil. All ethical precepts have been respected. **Results:** The first translation of the instrument into Brazilian Portuguese was done by two translators; the consensual version was then established, which was back-translated into Spanish by another independent translator. The committee of specialists comprised seven health professionals, obtaining a content validity index (CVI) = 1.00 in 41 items, CVI = 0.86 in three items and CVI = 0.71 in four items. After adjusting the seven items, a pre-test was applied to 14 family caregivers of people with chronic kidney disease. Based on this, the participants' difficulties were observed.

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and then the items were reviewed. **Conclusions:** After the translation and adaptation process was completed, the Brazilian version of the instrument entitled “Scale to Measure the Care Ability of Family Caregivers of People with Chronic Diseases” was obtained.

**KEYWORDS** (Source: DeCS)

Translation; cross-cultural study; cross-cultural nursing; needs assessment; assessment of health care needs; ability; aptitude; caregivers; Brazil.

Adaptación de la Escala para Medir la Habilidad de Cuidado de Cuidadores Familiares de Personas con Enfermedad Crónica en Brasil*

**RESUMEN**

**Objetivo:** traducir y adaptar culturalmente la Escala para Medir la Habilidad de Cuidado de Cuidadores Familiares de Personas con Enfermedad Crónica para el contexto brasileño. **Materiales y método:** se trata de un estudio metodológico que siguió las etapas preconizadas por Dorcas Beaton para traducción y adaptación cultural de la referida escala en Brasil. Todos los principios éticos se respetaron. **Resultados:** la traducción inicial del instrumento para el portugués se realizó por dos traductores; luego, se estableció la versión consensual, la que se retrotradujo al español por otro traductor independiente. El comité de expertos contó con siete profesionales del área de la salud, obteniéndose Índice de Validez de Contenido (IVC) = 1,00 en 41 ítems, IVC = 0,86 en tres ítems y IVC = 0,71 en cuatro ítems. Tras la adecuación de los siete ítems, se aplicó la preprueba con 14 cuidadores familiares de personas con enfermedad crónica; de ahí, se logró encontrar las dificultades de los participantes y, así, revisar los ítems. **Conclusiones:** terminado el proceso de traducción y adaptación, se obtuvo la versión brasileña del instrumento titulada “Escala para Medir a Habilidade de Cuidado de Cuidadores Familiares de Pessoas com Doença Crônica”.

**PALABRAS CLAVE** (Fuente: DeCS)

Traducción; estudio transcultural; enfermería transcultural; evaluación de necesidades; determinación de necesidades de cuidados de salud; habilidad; aptitud; cuidadores; Brasil.

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Adaptação da Escala para Medir a Habilidade de Cuidado de Cuidadores Familiares de Pessoas com Doença Crônica no Brasil*

RESUMO

Objetivo: traduzir e adaptar culturalmente a Escala para Medir la Habilidad de Cuidado de Cuidadores Familiares de Personas con Enfermedad Crónica para o contexto brasileiro. Materiais e método: trata-se de um estudo metodológico que seguiu as etapas preconizadas por Dorcas Beaton para tradução e adaptação cultural da referida escala no Brasil. Todos os preceitos éticos foram respeitados. Resultados: a tradução inicial do instrumento para o português brasileiro realizou-se por dois tradutores; em seguida, estabeleceu-se a versão consensual, a qual se retrotraduziu para o espanhol por outro tradutor independente. O comitê de especialistas contou com sete profissionais da área da saúde, obtendo-se índice de validade de conteúdo (IVC) = 1,00 em 41 itens, IVC = 0,86 em três itens e IVC = 0,71 em quatro itens. Após a adequação dos sete itens, aplicou-se o pré-teste com 14 cuidadores familiares de pessoas com doença renal crônica; a partir disso, foi possível verificar as dificuldades dos participantes e, assim, rever os itens. Conclusões: finalizado o processo de tradução e adaptação, obtém-se a versão brasileira do instrumento intitulada de “Escala para Medir a Habilidade de Cuidado de Cuidadores Familiares de Pessoas com Doença Crônica”.

PALAVRAS-CHAVE (Fonte: DeCS)

Tradução; estudo transcultural; enfermagem transcultural; avaliação de necessidades; determinação de necessidades de cuidados de saúde; habilidade; aptidão; cuidadores; Brasil.

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Introduction

Chronic Noncommunicable Diseases (CNCD) can be defined as permanent or long-term. Due to pathophysiological changes, they are considered almost or totally incapacitating (1), and therefore can lead to a loss of income, physical dependence, the need for caregivers, among others (2).

A patient, in this condition, feels the changes caused by the disease, which in turn lead to a process of adaptation for the individual and his/her family, especially the family member responsible for caring for the patient (3).

Although the patient has health care assistance, he/she needs a caregiver. Most of the time, this caregiver is a family member, a woman, who is not paid and has no specific knowledge about the disease (4). It is important to emphasize that this caregiver’s daily life changes so that he/she can dedicate him/herself to caring for a loved one (5).

Family caregivers carry out a wide range of tasks related to activities of daily living, ranging from hygiene care, preparing food, household chores, giving attention, providing comfort, treatment, socialization, medication administration, following-up medical appointments, among other activities, such as managing finances (5).

The act of caring causes stress, mental and physical exhaustion, overload, and may even cause difficulties in performing the caring function, which affects the care provided and the carer’s life as a whole. In addition, there is a lack of people to provide physical, emotional, financial support and even technical treatment instructions (6).

Competence needed for care involves several aspects, such as the ability to coordinate treatment, anticipating problems and strengthening the family’s emotional bond. As family caregivers acquire more knowledge and skills to deal with situations where care is needed, coping improves, which increases the quality of care (8).

The caregiver’s skill to care is his/her ability and experience in caring for people with chronic diseases (CD). For these authors, that skill that a caregiver needs to have to care a patient properly, comprises three dimensions: relationship; understanding; and life changes (9). In addition, the family caregiver is the person with the most responsibility for providing basic care to the family who is cared for, supporting both activities of daily living and participation and even decision-making about the patient (9).

At the National University of Colombia, the Chronic Patient Nursing Care Group has been investigating caregiver care skills since 2004. In 2006, Barrera (10) developed and validated the Care Ability Scale for Family Caregivers of People with Chronic Disease (Escala Habilidad de Cuidado de Cuidadores Familiares de Personas con Enfermedad Crónica, in Spanish), which contained 55 items. However, in 2014, after carrying out various studies (11-14) of the psychometric properties of this instrument, another version with 48 items was made available, which included relationship (23 items), understanding (17 items) and change in routine (8 items), and it was called the “Scale to Measure Care Ability of Family Caregivers of People with Chronic Diseases”.

The “relationship” dimension refers to the bond between the person being cared for and the caregiver, to help with guidance and attitudes, seeking support in situations where there is overload, restriction and dependence; The “understanding” dimension indicates the caregiver’s ability to understand the situation, organize what is required of him/her, and consider agility in terms of learning from the patient’s situation, as well as their behaviors and care skills in order to recognize and accept the disease and treatment process. “Change in routine” encompasses the ability to accept the changes brought about in his/her life by being a family caregiver and the personal reward for such an act (14).

In Brazil, there are instruments that assess the physical and emotional aspects of caregivers, but there are few studies which provide normative data for the Brazilian context that assess the care ability of family caregivers of people with CD (15). Thus, it is important to highlight that the translation and cultural adaptation of assessment instruments in different cultures make it easier to compare data in different countries (16).

Therefore, it is of utmost importance to provide an instrument which has been translated and adapted to the Brazilian context that investigates the care ability specifically of family caregivers of people with CD as these skills directly affect the treatment, as well as the caregivers’ lives.
Given the above, this research aimed to translate and culturally adapt the “Scale to Measure Care Ability of Family Caregivers of People with Chronic Diseases” to the Brazilian context.

**Materials and Methods**

This is methodological research that aims to translate and culturally adapt the *Scale to Measure Care Ability of Family Caregivers of People with Chronic Diseases* from Spanish into Brazilian Portuguese. This type of study requires previous planning of all the steps, since the translation and cultural adaptation process is carried out to have equivalence between the source language and the target language (16). The study followed the five steps suggested by Beaton et al. (17), as shown in Figure 1.

After formal authorization was granted by the author of the original instrument to develop the steps of the Brazilian version of the scale, which met the ethical and scientific rigor, the research was approved by the Human Research Ethics Committee of the Federal University of São Carlos, under Report No. 1.435.698, and fully respected the recommendations of Resolution 466/2012 of the National Health Council from the Ministry of Health.

Translation and cultural adaptation included the following steps: initial translation; synthesis of translations and consensus; back-translation; review by a committee of specialists; and a pre-test.

The first step was carried out using the initial translation from Spanish (original version) into Brazilian Portuguese. This step was performed by two independent and qualified translators. Both met the necessary criteria for translation: proficiency in Spanish and mastery of Brazilian Portuguese. Both had expertise in health-related translations, knowledge of specific terms, and knowledge of the research objective. The translators were sent the original version and an explanatory letter; the translated version 1 (TV1) and translated version 2 (TV2) derived from this step.

The second step of the research included the synthesis of translations (TV1 and TV2) and the formation of the consensual version (CV), carried out between translators and researchers. In the third phase, a back-translation was done by a third translator who had expertise in the area and in Spanish. Confidentiality regarding the purpose of the research was maintained in order to avoid interference. Afterwards, the back-translated version (BTV) of the instrument was sent to the author, who approved it.

In the fourth step, cultural adaptation was carried out, which included content evaluation and cultural equivalence analysis. In this phase, a committee of specialists was formed comprising seven members, who all had PhDs and were university professors, working in research and/or with care experience to the caregiver and proficient in Spanish. After agreeing to be part of the Committee, an explanatory letter was sent to clarify doubts about the instrument and the requested analyses. Then, the instrument was analyzed as a whole and the pre-final version (PFV) of the instrument was done in Brazilian Portuguese.

In the fifth step, the PFV of the instrument was pretested on family caregivers of people with Chronic Disease; 14 family caregivers of people with Chronic Kidney Disease (CKD) on hemodi-

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**Figure 1.** Scheme of the methodological model and the phases adopted in the translation and cultural adaptation process of the *Scale to Measure Care Ability of Family Caregivers of People with Chronic Diseases*

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Translation from source language (Spanish) to the language to be adapted (Brazilian Portuguese)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV1*</td>
<td>TV2**</td>
</tr>
<tr>
<td>Step 2</td>
<td>Synthesis of translations</td>
</tr>
<tr>
<td>CV***</td>
<td>BTV****</td>
</tr>
<tr>
<td>Step 3</td>
<td>Review by Expert Committee</td>
</tr>
<tr>
<td>PFV****</td>
<td>Pretest</td>
</tr>
<tr>
<td>Step 4</td>
<td>Final version</td>
</tr>
</tbody>
</table>

TV1 * (Translated Version 1), TV2 ** (Translated Version 2), CV *** (Consensual Version), BTV **** (Back-translated Version) and PFV ***** (Pre-Final Version)

Source: authors’ own work that followed the Guidelines for the Process of Cross-Cultural Adaptation of Self-Report Measures (17).
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Analysis participated in the pretest. The study site was in a Renal Replacement Therapy Unit (RRTU) in the interior of the state of São Paulo. Data was collected between March and April 2017. The inclusion criteria were that they had to be: a family member of a person with CKD on hemodialysis of the referred RRTU; 18 years of age or older; the primary caregiver of the family member; and literate. All participants were interviewed individually in a private room of the RRTU after signing the Informed Consent Form.

Initially, the accompanying caregivers of the patients who were in the RRTU were asked about the degree of kinship with the patient. In addition, it was observed whether the caregivers met the inclusion criteria. Then, the research objectives were presented.

The interview included the application of three instruments. The first was a caregiver characterization questionnaire (sociodemographic information). The second was the pre-final version of the family caregivers’ care ability instrument for people with Chronic Disease, which was added to two columns in order to verify the clarity of the terms and to obtain suggestions. The third was a general questionnaire to assess the clarity of the instrument, adapted from Disabkids (18).

The collected data were entered in Excel for Windows and processed in the Statistical Package for Social Science (SPSS) software, version 20.0, in which descriptive analyses were performed regarding the sociodemographic characteristics of the pre-test participants.

The Content Validity Index (CVI) of the 48 items of the Scale to Measure Care Ability of Family Caregivers of People with Chronic Diseases in Brazil was also calculated. To this end, the judges (committee members) evaluated all items of the instrument on a Likert response scale, which ranged from one to four points. For the CVI analysis, we used the criteria proposed by Lynn in 1986 (18), which states that for six or more judges the expected value is above 0.78 (18).

Results

While translating the original text, which led to TV 1 and TV 2, translator 1 - only this translator had difficulty in the translation process - reported that in some questions of the original scale, the term “family member” was used, and in others the expression “sick family member” was used, hence it was not standardized. The other differences between the translations referred to lexicon, recticon and verb tenses, and did not affect the content.

Next, the researchers, together with the translators, established the consensual version of the scale, which underwent a back-translation process by another translator. Following the process, the back-translated version of the Scale was forwarded to the author, so that she could verify the reliability to the original instrument, which was approved without objections. The author of the instrument did not make any objections and agreed with the version adapted to the Brazilian context.

The committee of specialists analyzed the instrument item by item, based on a Likert scale. When necessary, they suggested changes. Afterwards, the CVI was verified. From the 48 items evaluated, 41 items had CVI = 1.00, three items had CVI = 0.86 and four items had CVI = 0.71. In order to make the instrument available in a clear way which was easy to understand, items with a value lower than 1.00 were reviewed (Table 1), although it is recommended in the literature to review only items with CVI equal to or less than 0.78.

After the specialists, researchers and translators reviewed the instrument, the pre-final version of the scale was submitted to the pre-test. In the pretest, the sample consisted of 14 family caregivers of people with CKD, aged between 27 and 66 years, with a mean of 49.92 (SD = 11.11) years; mostly women (78.58 %), who were married (78.58 %) and had not finished elementary school (78.58 %) (Table 2).

Regarding the time the caregiver takes care of the family member, it ranged from 3 to 96 months, with an average of 29.42 months (SD = 25.16). Regarding the time dedicated to care activities, it was observed that caregivers had an average time of 16.28 (SD = 8.34) hours per day, ranging from 5 to 24 hours per day (Table 2).

When applying the pre-final version of the scale, all participants rated the 48 items of the instrument as clear, and therefore did not suggest changes. Regarding the evaluation of the importance of the theme, as well as the clarity of the pre-final version of the instrument, through Disabkids’ general adapted clarity questionnaire (19), the participants considered the instrument very good (n = 7; 50 %) or good (n = 7; 50 %).
Adapting the Scale to Measure Care Ability of Family Caregivers of People with Chronic Diseases in Brazil  l  Vanessa Almeida Maia Damasceno e outros

Regarding the degree of difficulty of the questions, 11 participants (78.57%) indicated that all items were easy, while three (21.43%) people answered that some items were difficult, but did not report the difficulties, and did not suggest any changes. Finally, we asked if the items were important to assess caregivers’ perceptions and experiences, and most respondents considered them to be “very important” (n = 13; 92.86%), while only one respondent replied that “it is important sometimes”.

Although all the participants did not suggest changes to the items, when the pre-test of the instrument was applied, the interviewer observed that it was difficult for some caregivers to understand the verb tense adopted in the items. Thus, the items on the scale were analyzed again, making the verb tense of the items uniform with the predominant adoption of the present tense.

Discussion

The translation and cross-cultural adaptation processes of measuring instruments are delimited in methodological studies and, in general, are complex because they require, besides the literal translation of words, adapting them culturally (19). This process also includes making semantic, idiomatic, experimental and conceptual equivalences (20).

Based on studies by Beaton et al. (17), in this research, the recommended methodological steps were developed for the cultural adaptation of the measurement instruments, as they are effective for developing the translation, adaptation processes and validating the measurement scales (17). In the Brazilian study conducted by Rosanelli, da Silva and Gutiérrez (15), the translation, adaptation and validation of the Caring Ability Inventory (CAI) into Portuguese were developed. In this study, the authors adopted the same methodology proposed by Beaton et al. because it is a consolidated process and very usual for this type of research (21).

In order to seek high quality standards, it is recommended that the translation be performed by two independent translators who are qualified for this activity and, preferably, both from the country of origin of the instrument to be carried out, therefore, the profes-

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**Table 1. CVI of the items of the Scale to Measure Care Ability of Family Caregivers of People with Chronic Diseases in Brazil adjusted by the Committee of specialists**

<table>
<thead>
<tr>
<th>Item</th>
<th>Translated question</th>
<th>CVI</th>
<th>Revised question</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>I worry that I cannot respond to my sick family member’s expectations.</td>
<td>0.71</td>
<td>I worry that I can’t meet my family member’s expectations.</td>
</tr>
<tr>
<td>13</td>
<td>I felt that I cannot look after my sick family member.</td>
<td>0.71</td>
<td>I feel I can’t take care of my family member.</td>
</tr>
<tr>
<td>33</td>
<td>I am clear about what I will do with my life when I think of the death of my sick family member.</td>
<td>0.86</td>
<td>I am clear about what I will do with my life when I think of the death of my sick family member.</td>
</tr>
<tr>
<td>36</td>
<td>I value that life is important because of the experience I have gained from caring for my sick family member.</td>
<td>0.86</td>
<td>I value the importance of life because of the experience gained from caring for my family member.</td>
</tr>
<tr>
<td>41</td>
<td>I feel comfortable knowing how to fulfill my duty of taking care of my sick family member.</td>
<td>0.86</td>
<td>I feel calm when I think I have a duty to care for my family member.</td>
</tr>
<tr>
<td>44</td>
<td>The tasks of the people nearby have changed because they had to take care of my sick family member.</td>
<td>0.71</td>
<td>The tasks of the people close to my family member have changed because they have to take care of him.</td>
</tr>
<tr>
<td>47</td>
<td>I have applied what I have learned about care to my sick family member.</td>
<td>0.71</td>
<td>I apply what I have learned about caring for my family member.</td>
</tr>
</tbody>
</table>

Source: Own elaboration.
A professional is expected to be proficient in the language, know the culture and have clear concepts. The consensual version of the scale is performed to solve possible divergences or ambiguities (22).

Back-translation is the part of the process that aims to improve the final version and identify translation flaws. The aim of reverse translation is to refine the instrument, and the translator of this step must be fluent in both languages, that is, fluent in the source language of the instrument and into which it will be adapted (23).

Thus, it is clear that the steps developed in the present study (translation, synthesis of translations and back-translation of the Scale to Measure Care Ability of Family Caregivers of People with Chronic Diseases in Brazil) were properly developed.

In order to reach the pre-final version of the instrument, the formation of the committee of specialists was indispensable, aiming to revise and compare the translations, as well as the consensual version, modifying and adapting it until a replica of the instrument was obtained in Brazil. The specialists must master the instrument's source language and have expertise in the area of health with experience in the theme studied (23).

Therefore, in the present research, the committee of specialists had seven members who fulfilled the attributions mentioned in the method. The specialists had to evaluate the instrument generally and individually, verifying it item by item, which ensures that the pre-final version is clear and understandable to the culture. The judges should also suggest and guide changes in the context of the instrument (23, 24).

The CVI verifies the number of judges who agree that the items analyzed in the instrument are clear/equivalent/representative. The calculation is made based on the Likert answers, in which items that obtained answer 1 and/or 2 must be reviewed or excluded, and items with score 3 and/or 4 must be calculated.

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**Table 2.** Sociodemographic and care characterization of family caregivers of people with CKD who participated in the pre-test. Sao Joao da Boa Vista, Sao Paulo, 2017

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Category</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>11</td>
<td>78.58</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>3</td>
<td>21.42</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>11</td>
<td>78.58</td>
</tr>
<tr>
<td></td>
<td>Singles</td>
<td>3</td>
<td>21.42</td>
</tr>
<tr>
<td>Education</td>
<td>Did not finish elementary school</td>
<td>11</td>
<td>78.58</td>
</tr>
<tr>
<td></td>
<td>Did not finish high school</td>
<td>1</td>
<td>7.14</td>
</tr>
<tr>
<td></td>
<td>Did not finish higher education</td>
<td>2</td>
<td>14.28</td>
</tr>
<tr>
<td>Lives with the family member he/she cares for</td>
<td>Yes</td>
<td>7</td>
<td>50.00</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>7</td>
<td>50.00</td>
</tr>
<tr>
<td>Degree of kinship between caregiver and the family member being cared for</td>
<td>Son/daughter</td>
<td>8</td>
<td>57.14</td>
</tr>
<tr>
<td></td>
<td>Spouse</td>
<td>3</td>
<td>21.42</td>
</tr>
<tr>
<td></td>
<td>Mother</td>
<td>2</td>
<td>14.30</td>
</tr>
<tr>
<td></td>
<td>Brother/Sister</td>
<td>1</td>
<td>7.14</td>
</tr>
<tr>
<td>Receives help for care</td>
<td>Yes</td>
<td>11</td>
<td>78.58</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>3</td>
<td>21.42</td>
</tr>
<tr>
<td>The family member receives third-party financial resources</td>
<td>Yes</td>
<td>5</td>
<td>35.71</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>64.28</td>
</tr>
</tbody>
</table>

Source: Own elaboration.
based on the sum of each judge's answers in each item divided by the total number of answers, with the recommended agreement value greater than or equal to 0.78 (23).

The instrument of the present research consists of 48 items; from these, seven had CVI <1, which were reviewed despite only four items reaching CVI <0.78 (18). A study conducted by Blanco-Sánchez et al. (14), in Colombia, aimed to verify the content validity of the Scale to Measure Care Ability of Family Caregivers of People with Chronic Diseases in Brazil and was attended by 10 specialists. They were selected considering academic background and experience. Nine were nurses, two of them had doctorates in nursing, three had a master's degree with vast experience, one had a master's degree and experience in constructing and validating measurement instruments, three doctoral students in nursing, who studied the subject in more depth, and one psychologist who had a master's degree in education and teaching, with experience in clinical psychology, and psychometric measurement of psychological assessment. During the content validity analysis, the Kappa de Fleiss global value, which was 0.78, was verified, which shows a good agreement among the experts and shows that the Barrera scale has content validity, that is, the specialists report that most items are clear and measure what they propose to (14).

After reviewing the scale items in the adaptation process, considering the specialists' evaluations, the final version of the instrument for the pretest was constituted. It applies the instrument in a given sample of the population and aims to detect errors, and confirms the clarity and understanding of the items by the population (22). The target population of the instrument refers to caregivers of family members with Chronic Disease, who, in the case of this research, referred to people with CKD on hemodialysis. In this context, the pre-test phase of the instrument was developed with 14 family caregivers of people on hemodialysis, which enabled the improvement of the measuring instrument.

The sociodemographic profile and aspects related to the care of the pre-test caregivers consisted of women, mostly married, and who had not finished elementary school, with a mean age of 49.92 years. In addition, it was found that 57.14 % of the caregivers took care of their parents (25). It is noteworthy that, with regard to third-party help for the caregiver, 78.58 % reported receiving help from someone else in care. Regarding the patient's financial situation, 64.28 % said that the family member does not receive financial help in care.

Researchers described the experience of caregivers of peritoneal dialysis patients who participated in a program focusing on care ability. The research included a sample of 277 family caregivers, most of whom were female, married and with a similar average age to the present study. The results highlighted seven aspects that the program helped to strengthen: new knowledge; interaction with other caregivers; support; rest; well-being; opportunity to improve care; and, finally, a new perspective for caregivers. The authors concluded that the program broadened caregivers' experiences (25).

Another study conducted with eight family caregivers of patients with CKD undergoing hemodialysis, aiming to investigate the perception of family members regarding the care provided, found that most caregivers were women (62.50 %), with a mean age of 47 years old (26). In the study, the caregivers showed that they learnt some skills concerning the complications that occurred after the treatment session, who constantly receive guidance from the physician on duty, as well as the nurse. In addition, caregivers realize how important it is to talk about the family member's clinical condition and report that they are feeling the burden of responsibility that leads to overload. The authors concluded that caregivers easily adapt to this new life condition, overcoming all limitations and increasing their specific knowledge.

Researchers compared the care ability and overload of caregivers who look after patients with CKD on peritoneal dialysis or hemodialysis who were attended at the Specialized Institution in Ciudad de Cúcuta (Colombia) in 2015 and 2016. It should be mentioned that 25 caregivers of people on peritoneal dialysis and 43 caregivers of people on hemodialysis took part in the study. Among the results, it was observed that most participants were women, who had little education and were married. The results showed that the care skills were similar in the groups, however the “relationship” and “change in routine” dimensions were better in the hemodialysis group, while the caregiver commitment was similar in the groups, with worse overload levels. In addition, caregivers of family members on hemodialysis had greater care ability and a lower overload than caregivers of people on peritoneal dialysis (27).

In this context, it can be seen that, in general, the sociodemographic profile and aspects related to the care of the participants in the pretest of this study resembled the aforementioned research, also developed with caregivers of family members with CKD.
The main purpose of the pre-test of the instrument was to identify problems in understanding the terms used in the questions by the participants. Therefore, when evaluating the instrument items, the participants were asked about the clarity of each item and, if the answer was negative, the respondent suggested changes to improve understanding. This phase aims to investigate the presence of difficulties in understanding how the questions, the content and the answer options were expressed (28).

The clarity/comprehension/relevance of the statements was also verified through the Disabkids adapted general clarity questionnaire (19) for the research, which allowed the 14 participants to evaluate the relevance of the Scale to Measure Care Ability of Family Caregivers of People with Chronic Diseases in Brazil, in the case of CKD on hemodialysis. Thus, the semantic validation of the instrument occurred; each of the questions was evaluated according to its meaning, relevance and understanding.

A group of researchers carried out the translation and adaptation of the Disabkids - Cystic Fibrosis Module, Brazilian version - questionnaire, and the pre-test phase was done by 12 people, who also answered the above questionnaire for semantic validation of the questionnaire. The authors concluded that this clarity instrument was important due to the participants’ assessment of the questionnaire and, as in the present study, there were no suggested changes (29).

The patients in this study rated the Scale as clear and comprehensible, as well as being relevant to evaluate the experiences of family caregivers of people with CKD undergoing hemodialysis, corroborating the findings of other researchers who reported that the pretest step is a proof technique, because it can ascertain the understanding of the instrument by the population, as they mention that it is a proof technique, which makes it possible to ascertain the understanding of the instrument by the population sample (22).

It is worth reiterating that there was still a reanalysis of the content of the items in relation to the verb tense, although the caregivers had not suggested alterations, but during the pretest, the interviewer realized that the standardization of the verb tense for the present tense would make it easier for the participants to understand; as a result, this last adaptation was chosen, reaching the final adapted version of the scale. Situations such as these (item reanalysis) are predicted during the translation and cultural adaptation process of measuring instruments, as can be observed in the investigation by Roediger et al. (30), who adapted the Determine your nutritional health® method to Portuguese with elderly people at home and advocated using a single verb tense, as each question referred to different events, not at a single moment. (30).

Study limitations include the pre-test sample size. Another limiting aspect refers to the respondents being linked to a single RRTU, which prevents gaining more knowledge about care in different cultures and regions of Brazil. Finally, there is a lack of articles on the subject in the population with CKD.

Conclusions

Based on the proposed objective and the results obtained, it can be concluded that the Scale to Measure Care Ability of Family Caregivers of People with Chronic Diseases is duly translated and culturally adapted to Brazil.

After finishing the analysis step of the psychometric properties of the Brazilian version of the instrument, we intend to make it available for care and investigative use regarding the caregivers’ care ability of family members with Chronic Disease by multidisciplinary teams, which would enable the improvement of care and scientific evidence on the subject.

Regarding the use of this scale, professionals will be equipped to propose preventive and educational measures in order to provide the patient with Chronic Disease with quality care that favors adherence to treatment.

Conflict of interest: None declared.
Adapting the Scale to Measure Care Ability of Family Caregivers of People with Chronic Diseases in Brazil  
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