


NURSING CARE QUALITY FROM THE CHILD'S PERSPECTIVE: CROSS-CULTURAL ADAPTATION OF THE CHILDREN CARE QUALITY AT HOSPITAL FOR BRAZIL

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ABSTRACT

Objective: to perform the cross-cultural adaptation of the *Children Care Quality at Hospital* instrument to the Portuguese language spoken in Brazil.

Method: this is a methodological study on the adaptation of an instrument designed to assess the quality of nursing care from the perspective of school-aged children. For content validity evidence, 13 experts participated, and in the pre-test phase, the instrument was applied to a sample of 40 hospitalized children. The analysis was done using the Content Validity Coefficient and the second-order agreement coefficient to verify inter-rater agreement; while in the pre-test, reliability was calculated using the Intraclass Correlation Coefficient and Cronbach's alpha.

Results: the total content validity evidence coefficient regarding the assessment of equivalences and content ranged from 0.876 to 0.993, and the second-order agreement coefficient ranged from 0.935 to 0.951, demonstrating an almost perfect agreement. In the pre-test with children, both the Intraclass Correlation Coefficient of 0.60 and Cronbach's alpha of 0.690 were considered satisfactory. In the adapted version, some terms were improved, and others were kept with the addition of explanatory notes.

Conclusion: the Brazilian version of the *Children Care Quality at Hospital* showed adequate content validity evidence to measure children's satisfaction with the quality of nursing care. In the clinical context of pediatric nursing, the instrument strengthens care paradigms that take into account the child's dignity, respecting their right to be heard and to evaluate the care received.

DESCRIPTORS: Children's health. Hospitalized child. Patient satisfaction. Nursing care. Patient rights. Validation studies.

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QUALIDADE DO CUIDADO DE ENFERMAGEM NA PERSPECTIVA DA CRIANÇA: ADAPTAÇÃO TRANSCULTURAL DO *CHILDREN CARE QUALITY AT HOSPITAL* PARA O BRASIL

RESUMO

Objetivo: realizar a adaptação transcultural do instrumento *Children Care Quality at Hospital* para a língua portuguesa falada no Brasil.

Método: trata-se de um estudo metodológico sobre a adaptação de um instrumento destinado a avaliar a qualidade dos cuidados de enfermagem na perspectiva das crianças em idade escolar. Para evidência de validade baseada no conteúdo participaram 13 especialistas e na fase do pré-teste o instrumento foi aplicado em uma amostra de 40 crianças hospitalizadas. A análise deu-se pelo Coeficiente de Validade de Conteúdo e o *second-order agreement coefficient* para verificar a concordância interavaliadores; enquanto no pré-teste, a confiabilidade foi calculada utilizando o Coeficiente de Correlação Intraclasse e o alfa de Cronbach.

Resultados: o coeficiente de evidência de validade de conteúdo total referente a avaliação das equivalências e do conteúdo, alcançou valores entre 0,876 e 0,993 e *second-order agreement coefficient* entre 0,935 e 0,951, demonstrando concordância quase perfeita. No pré-teste com as crianças, tanto o Coeficiente de Correlação Intraclasse de 0,60 quanto o alfa de Cronbach de 0,690 foram considerados satisfatórios. Na versão adaptada alguns termos foram aprimorados e outros mantidos com o acréscimo de notas explicativas.

Conclusão: a versão brasileira do *Children Care Quality at Hospital* apresentou evidências de validade de conteúdo adequadas para medir a satisfação das crianças com a qualidade dos cuidados de enfermagem. No contexto clínico da enfermagem pediátrica, o instrumento fortalece paradigmas de cuidado que levam em consideração a dignidade da criança, respeitando o seu direito de ser ouvida e de avaliar os cuidados recebidos.

DESCRITORES: Saúde da criança. Criança hospitalizada. Satisfação do paciente. Cuidados de enfermagem. Direitos do paciente. Estudos de validação.

CALIDAD DE LA ATENCIÓN DE ENFERMERÍA DESDE LA PERSPECTIVA DEL NIÑO. ADAPTACIÓN TRANSCULTURAL DEL *CHILDREN CARE QUALITY AT HOSPITAL* PARA BRASIL

RESUMEN

Objetivo: realizar la adaptación transcultural del instrumento *Children Care Quality at Hospital* a la lengua portuguesa hablada en Brasil.

Método: estudio metodológico sobre la adaptación de un instrumento diseñado para evaluar la calidad de la atención de enfermería desde la perspectiva de niños en edad escolar. Para la evidencia de validez de contenido participaron 13 expertos y en la etapa de pretest se aplicó el instrumento a una muestra de 40 niños hospitalizados. El análisis se realizó utilizando el Coeficiente de Validez de Contenido y el coeficiente de concordancia de segundo orden para verificar la concordancia entre evaluadores; mientras que en el pretest la confiabilidad se calculó mediante el Coeficiente de Correlación Intraclase y el alfa de Cronbach.

Resultados: el coeficiente de evidencia de validez de contenido total referente a la evaluación de equivalencias y de contenido alcanzó valores entre 0,876 y 0,993 y el coeficiente de concordancia de segundo orden entre 0,935 y 0,951, demostrando una concordancia casi perfecta. En el pretest con niños se consideraron satisfactorios tanto el Coeficiente de Correlación Intraclase de 0,60 como el alfa de Cronbach de 0,690. En la versión adaptada se mejoraron algunos términos y se mantuvieron otros con el agregado de notas explicativas.

Conclusión: la versión brasileña *Children Care Quality at Hospital* en el Hospital presentó evidencia adecuada de validez de contenido para medir la satisfacción de los niños con la calidad de la atención de enfermería. En el contexto clínico de la enfermería pediátrica, el instrumento fortalece paradigmas de atención que tienen en cuenta la dignidad del niño y respetan su derecho a ser escuchado y a evaluar los cuidados recibidos.

DESCRIPTORES: Salud infantil. Niño hospitalizado. Satisfacción del paciente. Atención de enfermería. Derechos del paciente. Estudios de validación.

INTRODUCTION

The provision of health care is equated with promoting the safety and efficacy of care, with patient satisfaction being a significant aspect of quality assessment. Nursing care in child health requires the team to have specialized skills in creating action and interaction strategies based on the improvement of practice, intersubjectivity, and essential interdisciplinarity to care for the child and their family in their complexity¹.

Seeing and hearing children involves a constant integration of all facets of their experiences, encompassing biological, relational, and ethical aspects. The difficulty in allowing the child to express themselves represents a gap in the provision of nursing care for child health. In some healthcare services, it is uncommon to consider the child's input when redirecting care or to encourage their active participation. Understanding the entire context that involves their impressions, opinions, and satisfaction, especially when related to care quality, becomes a powerful evaluation tool to be used to plan, improve practice, and expand research in the health field²⁻³. Participation does not strictly mean decision-making power, but involving them in the therapeutic process and sharing information.

In the realm of child care, parental satisfaction has been used to measure the quality of child health care and is linked to the adequacy of the child's therapy and the performance of nursing professionals. However, there should be an approach to evaluating satisfaction with care during hospitalization that includes the child's perspective⁴. By allowing children to express their concerns, preferences, and experiences, a child-centered approach is promoted, respecting their autonomy, dignity, and mitigating the negative impacts of hospitalization⁵.

Dignity in child health care involves protection and support, especially in situations of fragility resulting from hospitalization⁶. To legitimately embrace the dignity of children, they must be seen as individuals that deserve to participate in decisions that affect them, giving them choices and recognizing them as individuals with guaranteed rights, as well as being based on emotions, behaviors, and respect for privacy⁷. Children's rights to good health care have been documented in various international publications and documents, with recommendations regarding respectful approaches and offering options that are aligned with promoting their dignity in a hospital environment, with nurses being agents of promoting and preserving this right⁸.

The literature highlights the scarcity of quality assessment tools specifically designed for children, especially in hospital settings⁴. The challenge for researchers is to identify sensitive and developmentally appropriate instruments for measuring children's perspectives on health and illness, with the aim of giving them a voice. The use of such measurement tools aims to enhance the quality of pediatric nursing care, promote innovations in professional practice, expand understanding of children's experiences, and ensure that these practices are guided by their aspirations⁹.

From a literature review, the *Children Care Quality at Hospital* (CCQH) tool was identified. Developed in Finland, this tool is designed for hospitalized children and has noteworthy characteristics, as it involved the children in the development process. The children participated as research partners, providing their perspectives on nursing care¹⁰.

Therefore, the study's objective is to perform the cross-cultural adaptation of the *Children Care Quality at Hospital* (CCQH) instrument into Brazilian Portuguese.

METHOD

This is a methodological study of translation and cross-cultural adaptation (CCA) aiming to validate an instrument aligned with the original but adapted to Brazilian culture. The version used in the CCA was extracted from the Lusitanian language. The adaptation followed Beaton's (2000) protocol¹¹, including the following steps: translation/adaptation, synthesis of translations, content validity evidence by a panel of experts, and pilot testing with the target audience. To proceed with the study, prior contact was made with the authors of the original instrument, in Finnish and Portuguese versions, via email, obtaining the necessary authorizations.

The instrument in question is the *Children Care Quality at Hospital (CCQH)*, which aims to measure the quality of nursing care from the children's perspective, valuing their experiences during hospitalization¹⁰. This tool has undergone adaptations in other countries such as Italy¹² and Portugal¹³, and we used the Portuguese version as a basis for the Brazilian version. The CCQH has three domains: *Nurse characteristics*, *Nurse activities*, and *Nursing environment*.

The instrument consists of 49 items categorized on a Likert scale of 1 to 3 in 30 items (5 items for *Nurse characteristics* and 25 for *Nurse activities*), using words and faces, with a happy face representing "always," a neutral face representing "sometimes," and a sad face representing "never." The remaining 19 items in the *Nursing environment* domain are rated from 1 to 4, using an agreement scale and teddy bear icons. A higher score suggests higher quality of nursing care. The final part of the instrument has 2 open-ended questions asking the child about what is "best" and "worst" in the hospital and requesting the classification of nursing care on a scale of 1 to 10.

Two translations/adaptations from Portuguese from Portugal to Brazilian Portuguese were performed by two bilingual translators/adaptors, with Translator 1 (T1) being a linguist with experience in child education and Translator 2 (T2) being a professional in psychology with clinical experience with children. After the delivery of the two versions by T1 and T2, a consensus was reached between the translators via the *Google Meet* virtual platform to build a synthesis of the translations compiled into a single file (T12). After reaching a consensus, the synthesis was sent for evaluation by the panel of experts.

The content validity evidence stage (according to the Standards for Educational and Psychological Testing concepts)¹⁴ involved a multidisciplinary panel of 13 female referees in the field of child health, with academic and healthcare profiles from various regions of the country. They were registered on the Lattes Platform and were selected for convenience. The experts received, via email, a material containing two evaluation instruments regarding the following parameters: a) Equivalences: semantic (1-spelling, 2-word similar to the original, and 3-grammar), idiomatic, cultural, and conceptual; b) Content: language clarity, practical relevance, and theoretical relevance.

To achieve consensus among the referees, the Nominal Group Technique (NGT)¹⁵ was used, which is used to resolve discrepancies among the panel of experts. Two virtual meetings were held with the referees, as some items in the evaluation instruments sent to them had an agreement below 80%. During the aforementioned moments, tables were presented with items that showed significant divergence, resulting in improvements or maintenance of the same, with or without the addition of explanatory notes, provided that all agreed.

For inter-rater agreement, the Content Validity Coefficient (CVC) was calculated, aiming to clarify uncertainties regarding this type of validation. This calculation considered the average response for each item by the referees, dividing each average by the maximum value attributable to each question (CVC_i), calculating the error to discount possible biases, and calculating the total CVC (CVC_T) for each criterion used in the validation. The authors chose to adopt a minimum agreement of 80%¹⁶ for

the study. Additionally, the binomial test for small samples was used to estimate statistical reliability to the CVC, with a significance level of $p > 0.05$.

Additionally, the second-order agreement coefficient (AC2 by Gwet) was also applied to assess agreement among the referees, with a 95% confidence interval (CI95%). This method involves the participation of two or more referees and uses a rating scale with two or more categories. The parameters range from zero to one; the closer to one, the higher the probability of agreement occurring by chance. The interpretation of an agreement is classified as “insignificant” (less than 0), “weak” (0 to 0.2), “reasonable” (0.21 to 0.4), “moderate” (0.41 to 0.6), “substantial” (0.61 to 0.8), and “almost perfect” (0.81 – 1)¹⁷.

The final stage involved the pre-test/pilot study of the version adapted for Brazil with 40 children aged between 6 and 11 years, i.e., in school age and already initiated in the process of reading and writing, following the National Curricular Guidelines for Basic Education¹⁸. These children were hospitalized in three state public hospitals of reference in pediatric care, had at least 24 hours of hospitalization, visual and intraverbal communication, as well as logical understanding of the instrument according to their age group. Children with neurological disorders, in critical clinical condition, in outpatient care, and those with cognitive development impairments that could hinder the completion of the instrument were not included in the research.

After prior contact with the supervision of the pediatric wards, the instrument was administered by four researchers (one master's graduate student, one resident, and two undergraduates) with prior training to obtain expertise in test administration. The criteria for participating in the research were confirmed through the verification of medical records. Subsequently, the researchers introduced themselves to the guardians and children, providing information about the study's objective, how the application would be conducted, and presenting the terms. It is worth noting that authorization to participate in the study was granted by both parties (guardians and children).

The first part of the instrument consisted of questions with written answers about the child's sociodemographic profile and health-disease process. To identify the profile, mean, standard deviation (SD), minimum, and maximum were calculated. Tests were applied from the items that make up the domains to ensure the reliability of the responses at the pre-test: Intraclass Correlation Coefficient (ICC) of bidirectional random effects for one evaluator, considering values equal to or greater than 0.6 as satisfactory, and Cronbach's alpha to determine the internal consistency of the items, with a parameter indicated by the literature as greater than or equal to 0.70¹⁹. However, Streiner considers it possible to accept values close to 0.60 as satisfactory in exploratory research²⁰.

The research complied with the ethical assumptions of Resolutions 466/12 and 510/2016. It is important to note that authorization for participation in the study was granted through the signing of the Informed Consent Form by the referees and parents/guardians, as well as the Informed Assent Form by the children.

RESULTS

Among the referees, all were female, with ages ranging from 30 to 72 years, and held doctoral level education 8 (62%) and master's degree 5 (38%). Regarding the healthcare field, the team is multidisciplinary, composed of nursing professionals 10 (76.9%), medicine 1 (7.7%), physiotherapy 1 (7.7%), and psychology 1 (7.7%). There was regional diversity, with referees representing three regions of the country (northeast, 66.7%; southeast, 22.2%; and south, 11.1%) and nine Brazilian states (Pernambuco, Bahia, Rio Grande do Norte, Ceará, Minas Gerais, São Paulo, and Paraná).

The evidence was obtained through positive responses, i.e., “agree” and “fully agree,” to the equivalence assessment instrument. The CVC_T values ranged from 0.960 to 0.993 and Gwet's AC2

from 0.935 to 0.951. In the content evaluation instrument, agreement was measured by combining the categories “very” and “very much,” achieving a CVC_T for the three global evaluation criteria: language clarity (0.876), practical relevance (0.915), and theoretical relevance (0.914), with *Gwet’s* AC2 ranging from 0.843 to 0.878. In both evaluations, the CVC values showed high agreement, and *Gwet’s* AC2 demonstrated almost perfect agreement. In the evaluated criteria, *Gwet’s* AC2 values indicated a high probability of not occurring by chance, as shown in Table 1.

Table 1 – Values of the Content Validity Coefficient and *Gwet’s* AC2 for the semantic and content evaluation criteria of the adapted version of the *Children Care Quality at Hospital* instrument. Recife, PE, Brazil, 2022 (n=13).

Evaluation criteria	Agreement statistics		
	CVC_T^*	AC2†	AC2 at CI 95%‡
Equivalences			
Semantic 1	0.989	0.935	0.894 – 0.972
Semantic 2	0.960	0.938	0.907 – 0.968
Semantic 3	0.993	0.951	0.927 – 0.975
Idiomatic	0.972	0.939	0.908 – 0.970
Cultural	0.978	0.935	0.903 – 0.968
Conceptual	0.972	0.938	0.907 – 0.968
Content			
Language clarity	0.876	0.843	0.770 – 0.912
Practical relevance	0.915	0.873	0.805 – 0.941
Theoretical relevance	0.914	0.878	0.808 – 0.948

* CVC_T = Total content validity coefficient; †*Gwet’s* AC2= *Gwet’s* Coefficient; ‡CI: Confidence interval

Regarding the semantic evaluation, the following items were improved: item 8 (my parents or another person stay with me in the hospital) for semantic equivalence 2, cultural, and idiomatic (each with a CVC_i of 0.77; $p=0.747$ by the binomial test); item 10.2 (competent) for semantic equivalence 2 (CVC_i 0.62; $p=0.970$); and the header of item 14 (contains four explanatory statements in which the child responds about what they think of the hospital), with three of them showing disagreement in semantic equivalence 2 (CVC_i between 0.69-0.77; p -value ranging from 0.747 to 0.901). It is worth noting that the disagreements were related to vocabulary with divergent meanings from the original version of the scale. There was a concern to preserve the item’s meaning but also make it comprehensible to Brazilian children. The most significant changes permeated grammatical aspects, involving the replacement of pronouns and verb conjugations to align the instrument with colloquial language, and semantic aspects with the addition of explanatory notes for some terms such as “competent” (i.e., they do their job well) and “honest” (i.e., they always strive to do what is right). There was also the addition of the term “person” in addition to “parents” in the statement of the questions.

Regarding content evaluation, the items improved according to the three criteria were: item 7 (have you been hospitalized before?) for clarity (CVC_i 0.62; $p=0.970$); item 8 (do my parents or someone else stay with me in the hospital?) for clarity (CVC_i 0.54; $p=0.993$) and theoretical relevance (CVC_i 0.69; $p=0.901$); item 9 (is there a nurse who always takes care of you?) for clarity (CVC_i 0.77; $p=0.747$); item 10.2 (competent, that is, they do their job well) for clarity (CVC_i 0.69; $p=0.901$), practical relevance (CVC_i 0.69; $p=0.901$) and theoretical relevance (CVC_i 0.77; $p=0.747$); item 10.5 (honest, that is, they always try to do the right thing) for clarity (CVC_i 0.77; $p=0.747$); item 11.6 (give me courage) for clarity (CVC_i 0.77; $p=0.747$); and item 11.9 (encourage me to take care of myself) for clarity (CVC_i 0.69; $p=0.901$).

In item 13.7 (how long will I stay in the hospital), there were discrepancies in the criteria of practical relevance and theoretical relevance (both with CVCi 0.62; $p=0.970$). The header of item 14 contains four explanatory statements where the child responds with their opinion of the hospital, with the last three showing disagreement regarding clarity (CVCi 0.62; $p=0.970$). Finally, item 14.4 (is there material for crafts, such as modeling clay, paints, and building blocks for you to use?) showed disagreement regarding the criterion of clarity (CVCi 0.69; $p=0.901$), and item 14.14 (do the other children hospitalized with me keep me company?) also regarding clarity (CVCi 0.77; $p=0.747$).

Although these items had agreement values below the adopted criterion, they remained statistically insignificant in the binomial test, indicating a positive judgment for retaining them in the instrument. Therefore, during the consensus phase, modifications were suggested such as: inclusion of explanatory notes and theoretical support to maintain the item. For example, in item 13.10, which concerns the information provided by nurses to children about returning to their play activities, it was considered important to keep it, as playing is a pleasurable activity for the child. In item 14.8, which asks the child if it is easy to find places like a bathroom, it was pertinent to keep it due to regional differences, especially in areas where this space is not inside the ward.

However, there were items that, despite showing disagreement, were not modified due to their theoretical importance for the study of child satisfaction. After discussion, the consensus considered the possibility of keeping the items for evaluation during the pre-test. These are: the heading of item 10 (how are the nurses who take care of you in the hospital); item 13.4 (my exams); item 13.6 (how to move around the hospital); item 13.9 (when can I return to my school); item 13.10 (when can I return to my play activities); item 14.1 (time passes quickly); item 14.8 (is it easy to find places like a bathroom and space to play?) and item 14.9 (is there privacy).

The next step was the application of the pre-test with the target audience, which involved the participation of 40 children. Items 1 to 9 of the instrument correspond to their characterization, with some discursive questions answered based on the child's understanding of their illness process.

Regarding the sample profile data, 23 (57.5%) were male, with an average age of 8.3 years ($SD = 1.7$). Regarding the reason for hospitalization, the most frequent response was "because I got very sick," with 27 (77.5%) cases, and the majority knew the reason for hospitalization, totaling 32 (80%). The length of hospital stay was five days or more for 32 (80%) of the children, and most of them, 23 (57.5%), did not recognize having had a previous hospitalization. Regarding the type of hospital accommodation, wards were more frequent, with 36 (85%) cases compared to individual rooms. Regarding monitoring, all children were accompanied by a guardian, and 31 (77.5%) of them noticed the presence of the nurse as a participant in their care in the hospital unit.

From item 10 onwards, the instrument is subdivided into domains that include the following items: *Nurse characteristics* (items 10 to 10.5); nurse activities (items 11 to 13.10), subdivided into subscales that assess caring, entertainment, support, physical care, treatment, and education; and the nursing environment domain (items 14 to 14.19), subdivided into factors involving the social, physical, and emotional environment. The Cronbach's alpha value obtained in the pre-test stage was calculated and followed the grouping of existing domains, as shown in Table 2.

Table 2 – Analysis of internal consistency by Cronbach’s alpha coefficient of the pre-test phase of the adapted version of the *Children Care Quality at Hospital*. Recife, PE, Brazil, 2022 (n=40).

CCQH domains	Cronbach’s Alpha
1. Nurse characteristics	0.827
2. Nurse activities	0.715
3. Nursing environment	0.620
Global Cronbach’s alpha	0.690

The *Nurse activities* domain presented an item (11.3 – They do not tell my secrets) which children showed difficulty understanding. This question refers to the evaluation of confidentiality, respect, and intimacy with nurses, being the only sentence that was formulated as a negative question, which confused the children when filling out the Likert scale.

In the *Nursing environment* domain, in the wording of the statements, in items 14 and 14.9, there were difficulties related to comprehension by the children. This domain also corresponded to the category in which the Cronbach’s alpha showed the lowest internal consistency (0.620) compared to the others. The Brazilian version of the CCQH remained with the 49 items from the original version (supplementary material). The ICC values (0.60; 95% CI 0.40-0.70; $p < 0.000$) and the overall Cronbach’s alpha (0.690) were considered satisfactory for the reliability of the responses.

In item 14, the child responds about the hospital environment, also on a Likert scale, by coloring or marking X on the bears ranging from 1 to 4. The difficulty arose in the wording of the question, as children were confused with the measurement of the terms “everything is fine,” “most things are fine,” “many things are wrong,” and “everything is wrong.” After the pre-test, it was changed to “agree with everything,” “agree with most things,” “disagree with most things,” and “disagree.” The suggestion for the change came from the explanation given by the administrators. Thus, the instrument became closer to the children’s understanding.

Regarding item 14.9, the difficulty revolved around the understanding of the term “privacy.” When asked if the child knew what this word meant, the vast majority responded that they did not know, requiring an explanation through examples by the administrator. After the pre-test application, the item was supplemented with an explanatory note, presenting as follows: “there is privacy,” (i.e., they respect when I want to be alone and only with my family).

Items 15 and 16 also consist of discursive responses, in which children answered what was the best and worst thing about the hospital in their opinion, respectively. In the “best” thing about the hospital, children pointed out healthcare professionals using terms like “nurses and doctors.” The infrastructure and services of hospital units were also mentioned, such as “the view from the room window, playroom, bed, elevators, and food.” They also mentioned recreation as a positive aspect of hospitals, citing activities like “watching cartoons, playing, television, painting, and the presence of clowns.” In the “worst” thing about the hospital, they listed invasive devices like “IV access and needles,” invasive procedures like “surgery, injections, and taking medication,” and hospital infrastructure like “heat and lack of chairs.”

At the end of the instrument (item 17), the children assigned an overall rating of the care provided to them in the hospital, which could range from 0 to 10. The average was around 9.14, with a SD of 1.4 and minimum and maximum values between 4.5 and 10. The average time to complete the CCQH was 30 minutes.

DISCUSSION

This study enabled the CCA of an instrument that evaluates nursing care from the perspective of children, reinforcing the idea that children are not only capable of evaluating the quality of care, but also should have their expectations considered regarding how they wish to be cared for. The existence of instruments designed for the pediatric population in specific age groups is a challenge, considering aspects of language, comprehension, and context of use.

The independent work of the translators ensured that interpretative errors and peculiarities in writing were avoided, reflecting the Brazilian context. In the analysis of content-based evidence, most of the items that generated disagreement among the referees and had a lower overall CVC compared to other criteria were related to language clarity. An example of this was the use of the terms “competent” and “honest.” During the consensus, the inclusion of detailed explanatory notes was discussed in order to ensure that the children adequately understood the meaning of the words.

More than just using friendly language, pediatric nurses need to strive to meet the needs of children and become accessible, based on holistic concepts of child well-being³. By giving children a leading role in hospitalization, the nurse becomes a support network and receives recognition from children through positive descriptors such as “kind,” “caring,” “friendly,” “sincere,” “attentive,” and “intelligent,” becoming relevant to them when it comes to this professional category^{8,10,12}.

The CCQH allowed hospitalized school-aged children to be recognized as capable of expressing their opinions about the nursing care received, following an approach that recognizes the child as an active agent in their own care. This is aligned with studies that demonstrate that by encouraging communication and listening to children, nurses create a safe relational environment, contributing to the hospital adaptation process⁷⁻⁸. Thus, the instrument contributes to strengthening the defense of child-centered care (CCC) as an essential requirement in the clinical practice of nurses in child health, who can mutually learn from children’s experiences²¹.

In the context of children’s healthcare, being efficient involves addressing the interests of the patients, allowing for the capture of key aspects of care and guiding service reforms to make safe and comprehensive decisions, thereby safeguarding children’s rights in healthcare²². Listening to children’s voices increases satisfaction rates and enhances the quality of care provided, as well as instilling trust, promoting respect, and autonomy²³.

It is emphasized that the CCQH, in its original version, was an instrument created to be self-administered by school-aged children¹⁰. However, taking into account the Brazilian context, it is important to consider the educational difficulties faced by children, many of whom have limited reading and writing skills. This study observed that the majority of children could only write their names, and even then, not in a complete manner.

This highlights the decline in literacy rates in the country, reflecting the impact of the post-COVID-19 pandemic period. According to data from the Brazilian Institute of Geography and Statistics, about 41% of Brazilian children between 6 and 7 years old did not have reading and writing skills in 2021²⁴. Despite this reality, children demonstrated logical reasoning skills in understanding and responding to the instrument, with most of them receiving assistance from the researchers.

The heterogeneity in the age range of the sample (6-11 years) emerged as an important point for discussion. It was evident that children aged 6 to 8 required more time to understand and respond to the questionnaire, necessitating greater attention from the researchers. On the other hand, younger children tend to establish a stronger trust relationship with professionals, perceiving them as honest and empathetic. This represents a promising opportunity to strengthen communication and increase adherence to nursing care, as children perceive professionals engaged in their world²⁵.

It was also possible to observe a greater interference of parents and/or guardians in the responses of the youngest, similar to the findings of the original research¹⁰. Another study also reports the presence of parents as a factor that can facilitate or hinder communication, often developing excessive protection and inhibiting the child from engaging with the professional². Including children in mutual negotiations, where the child, parents, and healthcare professionals contribute their own perspectives, advocating for their rights and being in line with the principles of the CCC^{9,23}.

During the pre-test, it was emphasized that the responses should reflect the understanding and opinion of the child, in order to respect their point of view. Therefore, this is a crucial consideration in the application of the CCQH, ensuring an environment where the child's voice is heard. Although the participation of parents and other adults is allowed, it is important that the will and opinion of the child are not suppressed.

The pre-test results revealed Cronbach's alpha values similar to those of the original study and the Portuguese adaptation, indicating promising data for the instrument to be subjected to an evaluation of its psychometric properties. The domain that evaluates the *Nurse characteristics* presented the highest Cronbach's alpha value (0.823), standing out in the analysis of internal consistency compared to the other domains. The inclusion of explanatory notes suggested during the consensus with the referees improved children's understanding, highlighting the importance of the nurse who recognizes the essence of the child and the comprehensive conception of their voices.

The lower Cronbach's alpha values of the second and third domains, named *Nurse activities* and *Nursing environment*, respectively, deserve some clarifications. The first domain refers to a category that encompasses caring, entertainment, support, physical care, treatment, and education. Depending on the cultural context and service organization, children may not perceive the actions of the nurse, which can result in limited interactions. Studies indicate that welcoming, interaction, and communication play a crucial role in reducing the suffering and anxiety of the child, as well as promoting a positive attitude towards the hospital^{4,26}. This can affect the child's satisfaction with nursing care, as also demonstrated in the study of the Portuguese adaptation¹³.

It is worth noting that there was a modification in an item of the second domain, regarding the protection of privacy by nurses. After this perception of the application practice, the item was changed to "respect my privacy," thus following a logical sequence of questions in a positive format, in order to increase the reliability of the responses. In the context of pediatric service, safeguarding the child's body, objects, and toys means ensuring a basic right of the patient in a dignified manner⁶. In some situations, professionals do not remember that this is a care demand raised by children and their families²⁷.

The CCQH is a relatively extensive tool, especially in the last domain, the *Nursing environment* (social, physical, and emotional). It was noticed that children showed some restlessness when answering questions in this domain, which may explain the lower Cronbach's alpha value in this area, especially when compared to the original and Portuguese adaptation studies. Additionally, cultural differences in the structural and architectural conditions of some pediatric services in Brazil are discussed, including limitations of spaces for interaction among children, availability of toys encouraged by nurses, and attention to their dietary preferences. These aspects are positively valued by children and are associated with their best experiences during hospitalization²⁸⁻²⁹.

Nurses demonstrate sufficient competence to protect the rights of children in healthcare. However, they face challenges related to organizational structure, which highlights that implementing child-centered care requires effective involvement, leadership, and management²². In summary, nurses need to deal with the gap between individual values and organizational decisions, as well as ensure that their actions are aligned with the best interest of the child.

Another consideration in this domain is related to the physical aspect, as most hospital wards were communal. Only one hospital had individual ward rooms, and interestingly, this same hospital did not provide a playroom in its facilities. In this context, communal wards become a challenge for professionals to safeguard the child's privacy. Safeguarding physical privacy (space) is one of the categories of dignified care in child health, along with respectful treatment, involvement of parents/guardians, practices centered on the child's integral needs, communication and information delivery, hospital environment, equipment, infrastructure, and autonomy²⁹. The nurse, in her professional practice standards, becomes a protector of the child's right to confidentiality as a direct care professional.

Similarly, in item 14.9, when asking children if they knew the meaning of the term "privacy," the majority of them responded negatively, which was also observed in the Portuguese adaptation. This led to the inclusion of an explanatory note, added not with the aim of underestimating the child, but rather expanding their opportunities for understanding and awareness. It was highlighted that the right to privacy stems from autonomy and respect for the child and their wishes³⁰.

It is essential to enhance nurses' verbal and non-verbal communication skills, knowledge, and continuous education on the rights of children receiving healthcare services, as well as to direct the professional language to listen to the voices of these children, respecting the different stages of development^{1,3,21}.

Study limitations include the instrument's length, evidenced by children's fatigue during completion, especially the younger ones (6 to 8 years old), which may have affected the reliability of the responses. This suggests the possibility of considering a reduced version in the future. Self-application was also a challenge, especially for children who could not read or write, requiring greater sensitivity from the administrators. Future analyses will be conducted to obtain evidence of validity based on the internal structure in a representative sample of Brazilian children, including its application in different clinical settings.

CONCLUSION

This study is pioneering in Brazil by adapting a tool for evaluating nursing care from the perspective of children. The Brazilian version of the *Children Care Quality at Hospital (CCQH-BR)* instrument (supplementary material) showed adequate content validity evidence for measuring children's satisfaction with the quality of nursing care in a hospital setting, confirmed by the excellent CVC and Gwet's AC2 values. In the pre-test with children, a satisfactory Cronbach's alpha was obtained, demonstrating clear, relevant, and easily understandable content. These results highlight the potential of the instrument to provide space for children to voice their expressed preferences and moral experiences.

It is important to emphasize that this tool was built by and for children, giving the instrument greater sensitivity when subjected to evaluative processes similar to those used for adults. Therefore, it is worth noting its notoriety in raising relevant aspects to transform nursing care with an approach centered on children's perspectives and, thus, contribute to indicators that, added to assessments conducted with parents, allow for overall improvements in healthcare provision.

This work provides a useful tool for identifying key issues in nursing care for hospitalized children, respecting their right to be heard and their participation as active agents in decisions that affect them, in order to guide education, research, and clinical practice centered on this paradigm.

REFERENCES

1. Santos MR, Nunes ECDA, Silva IN, Poles K, Sylit R. The meaning of a “good nurse” in pediatric care: A concept analysis. *Rev Bras Enferm* [Internet]. 2019 [cited 2023 Jul 20];72(2):494-504. Available from: <https://doi.org/10.1590/0034-7167-2018-0497>
2. Davison G, Kelly MA, Conn R, Thompson A, Dornan T. How do children and adolescents experience healthcare professionals? Scoping review and interpretive synthesis. *BMJ Open* [Internet]. 2021 [cited 2023 Jul 20];11(7):e054368. Available from: <https://doi.org/10.1136/bmjopen-2021-054368>
3. Carnevale FA. The VOICE Children’s Nursing Framework: Drawing on childhood studies to advance nursing practice with young people. *Nurs Inq* [Internet]. 2022 [cited 2024 Jan 23];29(4):e12495. Available from: <https://doi.org/10.1111/nin.12495>
4. Loureiro F, Figueiredo MH, Charepe Z. Nursing care satisfaction from school-aged children’s perspective: An integrative review. *Int J Nurs Pract* [Internet]. 2019 [cited 2023 Aug 20];25(6):e12764. Available from: <https://doi.org/10.1111/ijn.12764>
5. Coleman LN, Wathen K, Waldron M, Mason JJ, Houston S, Wang Y, et al. The child’s voice in satisfaction with hospital care. *J Pediatr Nurs* [Internet]. 2020 [cited 2023 Aug 12];50(1):113–20. Available from: <https://doi.org/10.1016/j.pedn.2019.11.007>
6. Isaacs D. Dignity. *J Paediatr Child Health* [Internet]. 2020 [cited 2024 Mar 28];56(6):831-832. Available from: <https://doi.org/10.1111/jpc.14789>
7. Noghabi FA, Yektatalab S, Momennasab M, Ebadi A, Zare N. Exploring children’s dignity: A qualitative approach. *Electron J Gen Med* [Internet]. 2019 [cited 2023 Jul 12];16(2):em129. Available from: <https://doi.org/10.29333/ejgm/94093>
8. Petronio-Coia BJ, Schwartz-Barcott D. A description of approachable nurses: An exploratory study, the voice of the hospitalized child. *J Pediatr Nurs* [Internet]. 2020 [cited 2023 Apr 12];54(1):18-23. Available from: <https://doi.org/10.1016/j.pedn.2020.05.011>
9. Lulgjuraj D, Maneval RE. A phenomenological study exploring pediatric hospitalization: The voices of accompanied and unaccompanied hospitalized children. *J Pediatr Nurs* [Internet]. 2023 [cited 2023 Jul 23];70(1):68-78. Available from: <https://doi.org/10.1016/j.pedn.2023.02.007>
10. Pelander T, Leino-Kilpi H, Katajisto J. The quality of paediatric nursing care: Developing the Child Care Quality at Hospital instrument for children. *J Adv Nurs* [Internet]. 2009 [cited 2023 Jul 18];65(2):443-53. Available from: <https://doi.org/10.1111/j.1365-2648.2008.04875>
11. Beaton DE, Bombardier C, Guillemin F, Ferraz MB. Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine* [Internet]. 2000 [cited 2023 May 15];25(24):3186-91. Available from: <https://doi.org/10.1097/00007632-200012150-00014>
12. Comparcini D, Simonetti V, Tomietto M, Leino-Kilpi H, Pelander T, Cicolini G. Children’s perceptions about the quality of pediatric nursing care: a large multicenter cross-sectional study. *J Nurs Scholarsh* [Internet]. 2018 [cited 2023 Jun 12];50(3):287-95. Available from: <https://doi.org/10.1111/jnu.1238>
13. Loureiro F, Araújo B, Charepe Z. Adaptation and validation of the instrument ‘Children Care Quality at Hospital’ for portuguese. *Aquichan* [Internet]. 2019 [cited 2023 Apr 10];19(4):1-13. Available from: <https://doi.org/10.5294/aqui.2019.19.4.7>
14. Menold N, Bluemke M, Hubley AM. Validity: Challenges in conception, methods, and interpretation in survey research. *Methodology* [Internet]. 2018 [cited 2024 Mar 28];14(4):143-5. Available from: <https://doi.org/10.1027/1614-2241/a000159>
15. Olsen J. The Nominal Group Technique (NGT) as a Tool for Facilitating Pan-Disability Focus Groups and as a New Method for Quantifying Changes in Qualitative Data. *Int J Qual Methods* [Internet]. 2019 [cited 2024 Apr 19];18. Available from: <https://doi.org/10.1177/1609406919866049>

16. Nascimento KG, Nascimento JSG, Raponi MBG, Pires PS, Fonseca LMM, Barbosa MH. Development and Validity of Serious Game for Teaching-Learning in Surgical Site Infection prevention. *Texto Contexto Enferm* [Internet]. 2024 [cited 2024 Apr 21];33:e20230198. Available from: <https://doi.org/10.1590/1980-265X-TCE-2023-0198en>
17. Gwet KL. *Handbook of Inter-Rater Reliability*. Gaithersburg: Advanced Analytics; 2014.
18. Ministério da Educação (MEC). *Diretrizes Curriculares Nacionais Gerais da Educação Básica* [Internet]. Brasília: MEC, SEB, DICEI; 2013. [cited 2023 Nov 10]. Available from: <http://portal.mec.gov.br/docman/julho-2013-pdf/13677-diretrizes-educacao-basica-2013-pdf/file>
19. Souza AC, Alexandre NMC, Guirardello EB. Psychometric Properties in Instruments Evaluation of Reliability and Validity. *Epidemiol Serv Saude* [Internet]. 2017 [cited 2024 Jan 10];26(3):649-59. Available from: <https://doi.org/10.5123/S1679-49742017000300022>
20. Streiner DL. Starting at the Beginning: An Introduction to Coefficient Alpha and Internal Consistency. *J Pers Assess* [Internet]. 2003 [cited 2023 Jul 21];80(1):99-103. Available from: https://doi.org/10.1207/S15327752JPA8001_18
21. Gimenes BP, Maia EBS, Ribeiro CA. In the Playful Universe of Therapeutic Play: Who Am I? Nurses Attributing Meaning to Their Role in This Process. *Texto Contexto Enferm* [Internet]. 2023 [cited 2024 Apr 19];32:e20230056. Available from: <https://doi.org/10.1590/1980-265X-TCE-2023-0056en>
22. Sahlberg S, Karlsson K, Darcy L. Children's Rights as Law in Sweden-Every Health-Care Encounter Needs to Meet the Child's Needs. *Health Expect* [Internet]. 2020 [cited 2023 May 15];23(4):860-69. Available from: <https://doi.org/10.1111/hex.13060>
23. Foster M, Quaye AA, Whitehead L, Hallström IK. Children's Voices on Their Participation and Best Interests During a Hospital Stay in Australia. *J Pediatr Nurs* [Internet]. 2022 [cited 2024 Jan 27];63:64-71. Available from: <https://doi.org/10.1016/j.pedn.2022.01.003>
24. Instituto Brasileiro de Geografia e Estatística (IBGE). *Pesquisa Nacional por Amostra de Domicílios Contínua (Pnad Contínua) – Nota técnica: impactos da pandemia na alfabetização de crianças*. 2021 [cited 2023 Nov 20]. Available from: <https://todospelaeducacao.org.br/wordpress/wp-content/uploads/2022/02/digital-nota-tecnica-alfabetizacao-1.pdf>
25. Sheehan R, Fealy G. Trust in the Nurse: Findings from a Survey of Hospitalised Children. *J Clin Nurs* [Internet]. 2020 [cited 2023 May 15];29(21-22):4289-99. Available from: <https://doi.org/10.1111/jocn.15466>
26. Giacomello KJ, Melo LL. The Meaning of the Care of Hospitalized Children: Experiences of Nursing Professionals. *Rev Bras Enferm* [Internet]. 2019 [cited 2023 Jun 11];72(Suppl 3):251-8. Available from: <https://doi.org/10.1590/0034-7167-2018-0597>
27. Eg M, Jensen CS. The Challenges of Maintaining Patient Confidentiality in Pediatric Settings. *J Pediatr Nurs* [Internet]. 2023 [cited 2023 Aug 18];69:18-23. Available from: <https://doi.org/10.1016/j.pedn.2022.12.022>
28. Loureiro FM, Antunes AVDRA, Pelander T, Charepe ZB. The Experience of School-Aged Children with Hospitalisation. *J Clin Nurs* [Internet]. 2021 [cited 2023 May 14];30(3-4):550-58. Available from: <https://doi.org/10.1111/jocn.15574>
29. Casseiro LKDS, Okido ACC, Furtado MCC, Lima RAG. The Hospital Designed by Hospitalized Children and Adolescents. *Rev Bras Enferm* [Internet]. 2020 [cited 2023 Jun 13];73(Suppl 4):e20190399. Available from: <https://doi.org/10.1590/0034-7167-2019-0399>
30. Ceylan SS, Çetinkaya B. Attitudes Towards Gossip and Patient Privacy Among Paediatric Nurses. *Nurs Ethics* [Internet]. 2020 [cited 2023 Jul 23];27(1):289-300. Available from: <https://doi.org/10.1177/0969733019845124>

NOTES

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The following online material is available for this article:

Questionário – Satisfação das Crianças Hospitalizadas diante dos Cuidados de Enfermagem – *Child Care Quality at Hospital* (CCQH) Pelander (2009).

