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RESEARCH

Evaluation of the hospital accreditation program: face and content validation

Avaliação do Programa de Acreditação Hospitalar: validação de face e conteúdo

Evaluación del programa de acreditación hospitalaria: validación de apariencia y de contenido

Graziela Caldana[I], Carmen Silvia Gabriel[I]

[I] *Universidade de São Paulo, School of Nursing of Ribeirão Preto, Postgraduate Program in Fundamental Nursing. Ribeirão Preto, São Paulo, Brasil.*

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ABSTRACT

Objective: to describe the results of face and content validation of the questionnaire entitled Quality Improvement Implementation Survey, and of two complementary scales as part of the adaptation process to the Brazilian language and culture. **Method**: included the following stages: (1) translation and synthesis of translations; (2) consideration by the expert committee; (3) back translation; (4) evaluation of verbal understanding by the target population. **Results**: the questionnaire was translated into Portuguese and its final version included 90 items. In the pre-test, the target population evaluated all items as easy to understand, with the global average of 4.58 (maximum value = 5). **Conclusion**: the questionnaire is currently translated into Portuguese and adapted to the Brazilian context. The adapted version maintained the semantic, idiomatic, conceptual and cultural equivalence, according to the assessment of the expert committee and the information provided by the target population, which confirmed the face and content validity.

Descriptors: Accreditation; Assurance of Health Care Quality; Validation studies; Outcome Assessment (Health Care); Hospital Administration.

RESUMO

Objetivo: descrever os resultados da validação de face e conteúdo do questionário intitulado *Quality Improvement Implementation Survey* e de duas escalas complementares, como parte do processo de adaptação ao idioma e à cultura brasileira. **Método**: incluiu os seguintes estágios: (1) tradução e síntese das traduções; (2) apreciação pelo comitê de especialistas; (3) retrotradução; (4) avaliação da compreensão verbal pela população-alvo. **Resultados**: o questionário foi traduzido para o português e sua versão final incluiu 90 itens. No pré-teste, a população-alvo avaliou todos os itens como de fácil compreensão, apresentando média global de 4,58 (valor máximo = 5). **Conclusão**: o questionário encontra-se traduzido para o português e adaptado ao contexto brasileiro. A versão adaptada manteve a equivalência semântica, idiomática, conceitual e cultural, segundo a avaliação do comitê de especialistas assim como pelas informações fornecidas pela população-alvo, confirmando a validade de face e de conteúdo.

Descritores: Acreditação; Garantia da Qualidade dos Cuidados de Saúde; Estudos de Validação; Avaliação de Resultados (Cuidados de Saúde); Administração Hospitalar.

RESUMEN

Objetivo: describir los resultados de la validación de apariencia y de contenido del cuestionario titulado *Quality Improvement Implementation Survey* y de dos escalas complementarias como parte del proceso de la adaptación a la lengua y la cultura brasileña. **Método**: incluyó las siguientes etapas: (1) la traducción y la síntesis de las traducciones; (2) la consideración del comité de expertos; (3) traducción inversa; (4) evaluación de la comprensión verbal por parte de la población objetivo. **Resultados**: el cuestionario fue traducido al portugués y su versión final incluyó 90 artículos. En el pre-test, la población objetivo ha evaluado todos los artículos como de fácil compresión, con la media global de 4,58 (máximo = 5). **Conclusión**: el cuestionario se tradujo al portugués y fue adaptado al contexto brasileño. La versión adaptada mantiene la equivalencia semántica, idiomática, conceptual y cultural, de acuerdo con la evaluación del comité de expertos, así como la información proporcionada por la población objetivo, lo que confirma la validez de apariencia y contenido.

Descriptores: Acreditación; Aseguramiento de la Calidad de la Atención de la Salud; Estudios de Validación; Evaluación de Resultados (Atención de la Salud); Administración Hospitalaria.

CORRESPONDING AUTHOR **Graziela Caldana** E-mail: graziela.caldana@usp.br

INTRODUCTION

The discussion on more efficient models of health systems has been gaining new ground after the various reforms implemented since the 1990s in several countries, including Brazil. Thus, health organizations have gone through transformations to meet the needs of an increasingly demanding clientele[1]. However, evaluation of health services can only be conducted by establishing criteria, standards and indicators determined in quality programs that are specific for this purpose, such as hospital accreditation programs.

This external evaluation program emerges as the possibility of instituting a culture of safety and quality within an institution that strives to continually improve the processes of patient care and the results obtained, resulting in a path to quality management in health services[2].

Accreditation is defined as the certification of a program, service, organization, institution or agency by an authorized external body according to predetermined criteria, generally characterized as standards, structures and typical measurement processes[3-4]. It is a periodic, voluntary and reserved evaluation method that seeks to guarantee the quality of care by means of previously established standards. Note that accreditation is essentially a continuing education program, and should not be interpreted as a form of inspection[5].

With the increasing complexity of health care, accreditation contributes to ensure these are provided according to the highest standards of quality, decision-making and prevention[6]. Since health is everyone's right, which includes the guarantee of dignified, quality and safe care, accreditation represents a means to implement this constitutional right by helping to reshape the scenario of insecurity that currently permeates health institutions[1].

There are different models of hospital accreditation in Brazil, namely: the National Accreditation Organization (ONA – Organização Nacional de Acreditação) model, the model proposed by the Joint Commission International (JCI), the Canadian Accreditation model and the National Integrated Accreditation for Healthcare Organizations (NIAHO). In the universe of hospitals in the country, only a small number of institutions is accredited (about 4.5%)[7].

It is still not clear how the accreditation process affects health services or the results of its assistance for the health team, patients, families, community and society. A document prepared by the organization responsible for accreditation of Canadian health services indicates that organizations participating in accreditation confirm their commitment to quality improvement, risk mitigation, patient safety, efficiency and responsibility. These organizations also send an important message to key decision makers and the community, showing their ability to contribute with the sustainability of the health system. However, the document emphasizes the need to perform studies to measure the results of the accreditation program for those interested in the health system[8].

Studies published in Portuguese on an instrument to evaluate the results of the implementation of quality improvement programs in health organizations, namely in the scope of accreditation, were not found. This indicates the need to broaden the dissemination of the results of such programs. It is necessary to use an instrument properly adapted and validated for the Brazilian reality to understand how this process affects the hospitals, and the results of its implementation from the professionals' perspective.

Thus, the objective of this study is to describe the results of the semantic and content evaluation of the questionnaire that evaluates the results of quality improvement programs for health services.

METHOD

Ethical aspects

This is a methodological study initiated in agreement with the authors' original version, approved by the research and ethics committee of the University of São Paulo at Ribeirão Preto College of Nursing (EERP/USP) and by the co-participant institution in the study.

Type of study

In order to collaborate with future studies investigating hospital accreditation programs for a better understanding of changes related to its implementation in Brazilian hospitals, and of the influence of this external evaluation process in the quality and safety of care, we chose the cultural adaptation and validation of the Quality Improvement Implementation Survey (QIIS) and of two scales from another study[9]. The QIIS was created and used in a study that analyzed the relationships between organizational culture and results of the quality improvement program in 61 hospitals in the United States[10]. The instrument has five dimensions that evaluate the culture of the hospital, and seven related to the actions of the hospital for quality improvement. In that study, the author mentions the significant relation between organizational culture and the implementation of quality improvement, and that such improvement was positively associated with greater patient outcomes and human resource development.

Study scenario and data source

The questionnaire was also used in another study performed in 68 hospitals in Lebanon, in which was evaluated the accreditation program impact on the quality of care from the perspective of nurses[9]. The two complementary scales adopted in this

study come from the questionnaire named "*Preparation D´um de Sante A l´Accreditation*"[11]. Through this questionnaire, the author evaluated the following aspects related to the accreditation process: self-assessment, interpersonal relationship and actions focused on patient safety. For the development of the present study, were selected scales evaluating the dimensions on Accreditation and Benefits of Accreditation. Note that the complementary scales were adapted and validated from French to English, which was the version adopted in this study[9].

Data analysis

We followed the steps proposed by authors who are reference in validation studies. The first author[12] recommends the following steps: translation, translation synthesis, back-translation, peer review, and pre-test. For this study, the authors also adopted a reference that proposes inversion in the stages of cultural adaptation so, after the synthesis of translations, they are analyzed and reviewed by a committee of experts to validate the content. This is justified by the possibility of detecting errors or problems of comprehension at that moment, which may not be noticed after the back-translation. In addition, the objective of back-translation is ensured: to observe possible errors of meaning in the first translated version[13].

Thus, the following steps were followed in this study: translation, synthesis of translations, appreciation by the expert committee, back-translation and pre-test with the target population. The other steps necessary for the instrument validation, which include the instrument application and analysis of the psychometric properties are developed later.

Translation and synthesis of translations

The instrument was translated from the original in English into Portuguese by two independent Brazilian translators (one of them with knowledge on the subject), generating two translations called T1 and T2. A committee of five specialists with expertise and experience in the subject, and knowledge of the English language (a teacher with training in Statistics, two nurse assistants, a doctor and a teaching nurse) appreciated the translated versions. The items were approved when there was agreement above 80% regarding the presented translations. A scholar on validation research[14] suggests an agreement of at least 80% among the judges in the adopted deliberations. After consensual decisions, the synthesis of translations was performed by the researcher and the research advisor. Finally, was generated a pre-final version with the items in Portuguese, called T12.

Evaluation by the experts committee

To perform the face and content validation, the T12 version was analyzed by a committee of three specialists (a nurse assistant and two nurse managers), all with knowledge on the language of the original instrument, specialists in hospital management and patient safety. The approval of items occurred in cases of agreement above 80% in relation to the proposed changes. After verifying the conformity of semantic, idiomatic, cultural and conceptual equivalences, the T12 version was back-translated.

Back-translation

It was performed by two independent translators, native English speakers, without prior knowledge of the original instrument, and who had not participated in the first stage of the translation process. Then, two back translated versions for English were generated (R1 and R2).

The back translated versions (R1 and R2) were compared with the original instrument by the researcher, research advisor, and author of the complementary scales[11]. The versions were confronted, and the divergences were appropriately solved by the researcher and research advisor to allow changes in the synthesis version called R12.

Pre-test with the target population

The R12 version was translated into Portuguese to perform the pre-test. In this stage, a sample of the population answers the pre-final version of the instrument to check for any errors or deviations in the translation, which allows the evaluation of face validity and semantic equivalence of the instrument[12,15-16].

The pre-test was performed with a non-random sample of 31 professionals from a large hospital located in the countryside of the state of São Paulo. The hospital belongs to the state government, is maintained with resources from the Unified Health System and is accredited by the ONA (level III) and Canadian International Accreditation.

The professionals were asked to indicate their comprehension of each item based on a Likert scale: 0 (I did not understand anything); 1 (I understood only a little); 2 (I understood more or less); 3 (I understood almost everything, but had some doubts); 4 (I understood almost everything) to 5 (I understood perfectly and had no doubts). They were also requested to describe any difficulties in understanding the questions.

The Statistical Package for Social Sciences, version 17.0 was used to perform the descriptive analyzes of the pre-test data.

RESULTS

Comparing the translations into Portuguese, the divergences were discussed by the researchers and decisions were made by consensus. According to the theoretical-methodological reference, the specialists considered a level of agreement of at least 80%.

The following professionals participated of the pre-test: four nurses, five technicians and six nursing assistants, three doctors, two nutritionists, a pharmacist/biochemist, two pharmaceutical assistants, two receptionists, a human resources manager, a planning assistant, an engineering manager and three administrative assistants. The professionals came from different units, namely: Clinic, Surgery, Intensive Care, Pediatrics, Laboratory, Pharmacy, Administration/Direction, Hospital Infection Control and others.

The questions were easy to understand. The overall mean of understanding reached 4.58 (maximum value = 5). The average degrees of verbal comprehension in table 1 demonstrate mean values above 4.30.

Table 1 – Evaluation of the verbal understanding of the quality improvement implementation survey, São Paulo, Brazil, 2016

Questions	Target population (n = 31) Number of valid responses	Mean (standard deviation)
Dimensions	Parte I Seção A- Cultura do Hospital	
Hospital culture		
1	96.7%	4.63 (0.72)
2		4.33 (0.92)
3		4.30 (0.84)
4		4.37 (0.96)
Hospital management		
5	100%	4.32 (1.08)
6		4.39 (0.92)
7		4.58 (0.89)
8		4.48 (0.90)
Team cohesion		
9	100%	4.29 (1.13)
10		4.58 (0.72)
11		4.48 (0.85)
12		4.35 (1.05)
Hospital emphasis		
13	100%	4.45 (0.89)
14		4.58 (0.85)
15		4.58 (0.76)
16		4.58 (0.85)
Hospital rewards		
17	100%	4.52 (0.99)
18		4.48 (1.18)
19		4.65 (0.75)
20		4.55 (0.99)
	Section B – Actions of the hospital for quality improvement.	
Leadership		
21	100%	4.65 (0.61)
22		4.29 (1.01)
23		4.48 (0.72)
24		4.52 (1.03)
25		4.29 (1.01)
26		4.32 (1.08)
27		4.58 (0.67)
28		4.52 (0.81)
29		4.42 (0.76)
30		4.35 (0.87)
31		4.55 (0.62)
Information and analysis		
32	100%	4.45 (0.92)
33		4.55 (0.67)
34		4.58 (0.72)
35		4.23 (1.12)
36		4.39 (0.76)
37		4.32 (0.75)
38		4.39 (1.05)
Quality strategic planning		
39	100%	4.48 (0.89)
40		4.74 (0.63)
41		4.55 (0.92)
42		4.61 (0.84)
43		4.71 (0.74)
44		4.26 (1.29)
45		4.32 (1.32)
Use of human resources		
46	100%	4.48 (0.85)
47		4.52 (0.85)
48		4.65 (0.71)
49		4.35 (1.23)
50		4.45 (0.89)
51		4.61 (0.71)
52		4.61 (0.76)
53		4.61 (0.67)
Quality management		
54	100%	4.61 (0.76)
55		4.32 (1.01)
56		4.58 (0.67)
57		4.48 (0.92)
58		4.58 (0.72)
59		4.68 (0.54)
60		4.55 (0.72)
61		4.68 (0.47)
62		4.61 (0.71)
Quality results		
63	100%	4.48 (0.85)
64		4.58 (0.76)
65		4.61 (0.71)
66		4.58 (0.85)
67		4.65 (0.61)
68		4.55 (0.85)
69		4.55 (0.81)
Customer satisfaction		
70	100%	4.61 (0.76)
71		4.55 (0.77)
72		4.61 (0.84)
73		4.45 (1.09)
74		4.65 (0.61)
75		4.55 (0.67)
76		4.61 (0.84)
77		4.52 (1.03)
78		4.42 (1.12)
	Part II –Complementary scales	
Accreditation		
79	100%	4.35 (1.23)
80		4.55 (0.89)
81		4.61 (0.89)
82		4.74 (0.57)
Benefits of accreditation		
83	100%	4.55 (0.96)
84		4.68 (0.91)
85		4.77 (0.62)
86		4.68 (0.79)
87		4.71 (0.74)
88		4.81 (0.60)
89		4.74 (0.63)
90		4.81 (0.60)

To be continued

Table 1 (concluded)

The final version of the questionnaire has14 dimensions with 90 items.

Chart 1 – Presentation of the main items adapted after evaluation by specialists, target population in the pre-test, and study researchers, Ribeirão Preto, São Paulo, Brazil, 2016

Original document	Pre-final version (T12)	Final version (After pre-test)
Title		
Quality Improvement Implementation Survey	Quality Improvement Implementation Survey	Survey on the Implementation of Quality Improvement
Part I Section A – Hospital culture		
Hospital Character	Hospital Environment	Hospital Environment
Item 2: Hospital B is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.	Hospital B is a very dynamic and modern/ entrepreneurial place. People are willing to expose themselves and take risks.	Hospital B is a very dynamic and entrepreneurial place. People are willing to dare and take risks.
Hospital Cohesion	Team Cohesion or Hospital Cohesion	Team Cohesion
Item 17: Hospital A distributes its rewards fairly equally among its members. It's important that everyone from top to bottom be treated as equally as possible.	Hospital A distributes its rewards fairly evenly among its members. It is important that everyone from top to bottom be treated as equally as possible.	Hospital A distributes its rewards fairly evenly among its members. It is important that everyone, regardless of function or hierarchy, be treated as equally as possible.
Section B – Actions of the hospital for quality improvement.		
Item 21: The senior executives provide highly visible leadership in maintaining an environment that supports quality improvement.	Senior executives demonstrate highly visible leadership in maintaining the environment that encourages quality improvement.	Top management demonstrates highly visible leadership in maintaining the environment that encourages quality improvement.
Item 24- The senior executives consistently participate in activities to improve the quality of care and services.	Senior executives participate in activities to improve the quality of care and services in a consistent and coherent manner.	Key executives consistently participate in activities to improve the quality of care and services.
Item 39: Hospital employees are given adequate time to plan for and test improvements.	Hospital workers have enough time to plan and test improvements.	Hospital staff have enough time to plan and test improvements.
Item 58.The hospital works closely with suppliers to improve the quality of their products and services.	The hospital works closely with suppliers to improve the quality of its products and services.	The hospital maintains a close relationship with suppliers to improve the quality of its products and services.
Item 59: The hospital tries to design quality into new services as they are being developed.	The hospital seeks to implement quality in new services as soon as they start to be provided.	The hospital tries to plan the quality of the new services as they are being developed.
Item 61.The hospital views quality assurance as a continuing search for ways to improve.	The hospital sees quality assurance as a continuous search for ways to improve.	The hospital sees quality management as a continuous way of improving.
Part II – Complementary scales		
Item 79. During the preparation for the last survey, important changes were implemented at the hospital.	During the preparation for the last survey, important changes were implemented in the hospital.	During the preparation for the last accreditation visit, important changes were implemented in the hospital.
Item 83. Accreditation enables the improvement of patient care.	Accreditation enables better patient care.	Accreditation enables better patient assistance.
Item 88. Accreditation enables the hospital to better respond to its partners (other hospitals, diverse hospitals, private clinics, etc.)	Accreditation enables the hospital to better respond to its partners (other hospitals, diverse hospitals, private clinics, etc.).	Accreditation enables the hospital to better respond to its partners (other health services).

DISCUSSION

Based on the findings in the literature review and in technical discussions, the present study satisfactorily fulfilled the initial and essential stages of the cross-cultural adaptation of QIIS and its complementary scales to the Portuguese language and the Brazilian hospital context. The translated and adapted questionnaire had satisfactory values of verbal comprehension.

The face and content validity provided semantic, idiomatic and conceptual equivalence to the instrument by means of the committee of experts and the participation of research subjects. The first stage refers to the comprehension and acceptance of people regarding what is being measured, and the analysis of the instrument items after its elaboration. Some questions may help in the evaluation: What do individuals think the scale measures? Do they understand the questions? Do they identify themselves with the items and the answers?[17-18]. The content validity demonstrates if the content of an instrument is appropriate in terms of number and scope of its items. It evaluates the relevance of each domain, considering the conceptual definition of the constructs to ensure the sensitivity and comprehensiveness of the questions[19].

Note that both scales were not subjected to the psychometric analysis process and presented only the Cronbach's alpha. Thus, for the psychometric evaluation of this study, the authors will perform the confirmatory and exploratory factor analysis with the objective of identifying the pattern of correlations or covariance between the variables.

This is the first questionnaire in Brazilian Portuguese that specifically evaluates the results of the implementation of the Hospital Accreditation program. It is also important to perform the psychometric analyzes of the questionnaire to complete the validation process.

CONCLUSION

This study addressed the initial stages of the development and validation of the two questionnaires' new version. The objective was to develop an instrument to measure the potentialities and weaknesses of the Hospital Accreditation program for professionals and the institution.

The results of this study demonstrate that the adapted version of the QIIS and the complementary scales maintained semantic, idiomatic, conceptual and cultural equivalence, according to the evaluation of the expert committee and based on the information provided by the target population, therefore confirming the face and content validity of the instrument.

However, it is still necessary to perform further testing to evaluate other psychometric properties, including internal consistency, reliability, and construct validity. It is expected that the new version can faithfully evaluate the results of the quality improvement program.

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