

TRANSCULTURAL ADAPTATION AND VALIDATION OF THE INSTRUMENT NURSE PARENT SUPPORT TOOL TO THE PORTUGUESE LANGUAGE

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ABSTRACT

Aim: To realize transcultural adaptation and validation of Nurse Parent Support Tool (NPST) for Portuguese language. **Methodology:** After approval of the ethic committee in research and the assent of the author, the study followed the internationally accepted methodology: transcultural adaptation, retro-translation, evaluation by judges, pre-test and psychometrical properties analysis. **Results:** The adjustments made by the judges led to the final version equivalent to the original and retro-translated versions; as well as validated regarding its content. The internal consistency showed itself highly satisfactory. **Conclusion:** the adapted and validated instrument is a reproducible parameter to be used in the evaluation of the perceived support given to parents of hospitalized babies by nursing staff.

Descriptors: Infant, Newborn; Family Nursing; Intensive Care Units, Neonatal; Validation Studies.

INTRODUCTION

In neonatal care, technological and scientific advancements have brought the improvement of the Neonatal Intensive Care Units (UTIN), essential to the survival of premature newborns (NB) with very low birthweight, with several health problems.

These advancements have brought a broader universe to the sense of assistance to these NBs. These changes have reached the aim of the work in neonatal units, which does not occur only in terms of their rationality and in the recovery of the newborn's anatomical and physiological body, but start to be concerned with the family and life quality⁽¹⁾.

The family bonding with the newborn is not only produced by blood ties, but transcends this precept, and is based on the affectivity continuously developed through the contact between parents and children.

The nursing staff, both individually and in groups, promotes an important environmental context for parents of children who are hospitalized due to some disease, and this

environment defines a large part of reality for the parents. As a result, nursing responsibilities can be decisive on how parents deal with their sick children and their hospitalization, as well as the evolution of their health problems after discharge⁽²⁾.

Miles, Carlson and Brunssen⁽²⁾, through the study of House's conceptual definitions (1981), propose a model of nursing support to parents: Nurse Parent Support Model. This model has gotten as the basis for communication support and information provided to the family, emotional support, encouraging parental support and instrumental support. The authors believe that the pediatric nursing should have the primary role, provide a supportive relationship with parents in order to help them deal with the health problem of their children and their hospitalization. This perspective has underlied the creation of an instrument capable of measuring not only the sub dimensions of the Nurse Parent Support Model, but the construct itself, registering parents' perception in relation to nursing support offered during the hospitalization of their children, which is the Nurse Parent Support Tool (NPST)⁽²⁾.

When you do not have instruments specifically designed for some given language and culture, one of the alternatives is the modification of a measure previously validated in another reality, by saving time, personal and financial resources, plus the possibility of comparing different results from other cultures³. This process aims at obtaining a conceptually equivalent version of the original instrument, to ensure the validity of comparisons between different cultures.

We know that for the progressive improvement of the quality of nursing care, its continuing evaluation is essential. To this end, we propose the cross-cultural adaptation and validation of the survey instrument Nurse Parent Support Tool, developed by Miles, Carlson and Brunssen⁽²⁾, specific to the NICU.

objective

Conduct cross-cultural adaptation and validation of the instrument Nurse Parent Support Tool which evaluates the nursing support perceived by parents of NB hospitalized in NICUs.

METHODOLOGY

In the present study, the methodological proposal for the process of translation and validation respected in general terms the preconized ones by the International Test Commission (ITC)⁽⁴⁾, Beaton *et. al*⁽⁵⁾, Vijver and Hambleton⁽⁶⁾ and Pasquali⁽⁷⁾.

The request for authorization for the cultural adaptation process, as well as a copy of the back-translated version, were sent through e-mail directly to the instrument's author, Dr. Margaret S. Miles, Professor at the School of Nursing - North Carolina University, Chapel Hill, North Carolina, United States of America, which evaluated the final version and gave her agreement.

The research project was approved by the Ethics Committee of the Londrina State University with an opinion CEP/ UEL No 136/07, whose registration number on the National Commission on Research Ethics is 268.

Translation

Initially two simultaneous and independent translations were performed by two nurses, who are teachers and masters. They are both bilingual, with top level domain in the native language of the instrument, English.

After translations, versions were analyzed and evaluated by the researchers to derive a final consensus version of the translated instrument.

Back-translation

This process step was carried out by a specialist teacher and translator in the language of origin of the instrument, English, who had not been informed of the aims of translation, doing it independently.

With the back-translated version, the researchers examined the construct, comparing it with the original instrument. In the end, they have concluded that the version produced presented no semantic flaws; therefore it was semantically equivalent to the original version.

Evaluation by the panel of judges

The procedure adopted consisted of the analysis of the Portuguese version compared to the original and back-translated versions by a committee of judges. This evaluation of the three versions, item by item, was performed to verify the semantic, idiomatic, cultural and conceptual equivalence. The meeting was attended by two nurses and teachers, a specialist and doctor, another professor and a specialist in neonatology and MA student, along with the researchers.

Pretest

In order to assess whether the items were acceptable, understandable, and preserved the same meaning as the original version, the pre-test was applied to 15 parents of NB hospitalized for a minimum of 30 days in the NICU of the University Hospital of Londrina, during the course of 2007.

The interviews were conducted by one of the researchers. Of these, 53% were performed by means of home visits, and the remainder at the Pediatric Clinic of the Hospital das Clínicas. Parents were informed of their anonymity in the participation of the research and of the possibility of withdrawal in case they so desired.

Evaluation of psychometric properties

The evaluation of the reliability of the instrument in Portuguese was performed through the analysis of internal consistency. The statistical test, the Cronbach's alpha, was chosen by its capacity of reflecting the degree of concordance among the items themselves, and the closer the value 1 is from the coefficient, the closer to 100% the correspondence of the items will be.

In the present study, the analysis of the apparent validity as superficial evidence of integrity of measurement the instrument intends to measure was performed by one of the researchers while the instruments were used in the pretest.

However, this cannot be considered in isolation for not providing measurement properties, therefore it was also considered content validity, which was performed comparing the three versions by the body of judges.

RESULTS

The process of cross-cultural adaptation led to an equivalent Portuguese language tool: idiomatically, semantically, culturally and conceptually.

The consensus among the judges allowed the content validation present in the instrument and its construct. The Nurse Parent Support Tool instrument is translated and adapted into Portuguese.

Questionnaire of assessment of support of the Nursing team to parents

We are interested in knowing your opinion about how much the support of the nursing staff helped you during the hospitalization of your child.

For each question below, Please specify the response that indicates how often the nursing staff helped you during this hospitalization.

IN GENERAL TERMS, A NURSING TEAM AT THIS HOSPITAL:

Never

Rarely

Sometimes

Most of the times

Always

01. Helped me to talk about my feelings, worries and concerns.

02. It helped me understand what was being done with my child.
(e.g.: exams, treatments, medications, etc).

03. Taught me how to look after my child.

04. Made me feel important as a mother /father.

05. Let me decide if I wanted to stay or leave during technical procedures.

06. Answered my questions satisfactorily, or appointed someone who could answer them.

07. Informed me about changes or improvements in the condition of my child.

08. Included me in discussions to take decisions on the care of my child.

09. It helped me understand the behavior and reactions of my child.

10. Guided me on how to comfort my child during or after the procedures.

11. Let me know I was doing something good when helping my child.

12. Deu atenção às minhas preocupações ou angústias.

13. Expressed concern regarding my well-being (e.g. sleep, food, etc.).

14. Helped me to know the names and functions of staff members who took care

of my child.

15. Provided good care to my child.

16. Encouraged me to ask questions about my child.

17. Was sensitive to the special needs of my child.

18. Allowed my involvement in the care of my child whenever possible.

19. Showed he/she liked my son.

20. Met the needs of my child at the right time.

21. Was optimistic about my child.

Please add other things that the nursing staff did that helped you as a mother/father.

Are there other things you would like the nursing staff to do to help you do as a mother / father? If so, please list them below:

The verb tense of the original instrument was a dilemma to translation since it was presented in the verbal form "present perfect" of the English language in the translated version, which produced the effect that the actions initiated in the past had not finished. In order to apply the instrument to families during or even after discharge of the babies, the researchers defined the simple past as the verb tense of the translated version into Portuguese. Then it was re-evaluated by the committee of judges, which approved its use.

The evaluation of the body of judges, in consensus, replaced terms and expressions semantically and idiomatically equivalent to the original terms, in order to reproduce the reality of the target culture. At the end of the adaptations, mostly in the heading of the instrument, all questions had 100% agreement among judges.

Pretest

The instrument was administered to 15 parents of newborns, who were hospitalized in the neonatal intensive care unit of a large university hospital, with the purpose of evaluating the relevance of the questions, the understanding and preservation of the same meaning as the original version, as well as the internal consistency.

After completion of the pretest, families were questioned as to the understanding of the questions, and no one expressed any difficulty in answering them.

Table 01. Socio-demographic characteristics of the families interviewed.

Londrina, 2007.

Characteristics	No of participants	Percentage %
Gender		
Female	14	93
Male	01	07
Age (years)		
Until 19	04	27
20 to 34	08	40
35 or more	03	33
Marital Status		
Single	01	07
Married	14	93
No of children		
1 child	08	53
2 children	05	33
3 children or more	02	14
Education		
Elementary school	05	33
Incomplete high school	04	27
high school	05	33
University graduates	01	07
Employment		
householder	09	60
day-worker	02	13
others	04	27

Evaluation of psychometric properties

The reliability analysis as a process of measurement, has in its original English version Cronbach's alpha coefficient average value of 0.94 (2) and in the present study the average coefficient of 0.93; both highly satisfactory, since they have presented more than 90% agreement regarding those areas when analyzed in total.

Of the sample interviewed, four parents suggested adding the encouragement to breastfeeding as nursing support, which was not mentioned in the questions posed by the instrument. This is a particularity of our country that can be considered as one of the strengths in health care, unlike other cultures.

DISCUSSION

This instrument allows us to evaluate and measure how supportive the nursing staff is in the neonatal intensive care units, since their average Cronbach alpha coefficient was 0.93 and only 0.01 lower than the original instrument.

A study conducted by Gorgulho and Rodrigues⁽⁸⁾ talks about the risk that the establishment of the relationship and attachment are at when being constrained by the lack of mother's opportunity to interact with her child, which may cause disorders in the their future relationship. Because of this the authors emphasize that professionals working in the NICU must have an accurate perception and sensitivity to understand the moment in the lives of these families, helping them as best as possible. In this context, the use of NPST allows us to be aware of how our guidelines are carried out and are being, or not, effective for the needs of each family.

Araujo, Rodrigues and Rodrigues⁽⁹⁾ claim that the dialogue with parents in the NICU is a unique element to the construction of the relationship between the team and the family, which may reduce parental stress.

The study of Souza et al⁽¹⁰⁾ interviewed 28 mothers of premature newborns admitted to a NTU in the northeast of Brazil and during the first visit of the mothers to the NICU an important feeling that was detected was the fact that they commented about the environment with many technological resources and fragile babies that were submitted to different invasive treatments within incubators that served as barriers to the direct contact between mother and child. The authors also observed parents' perception to the fact that health professionals were the holders of knowledge and depending on how they stood, they might promote maternal competence in caring for the child or contribute to making the mother stay away.

In the process of hospitalization of the newborn, nursing should not measure efforts to establish effective communication with the family so that it feels empowered and instrumentalized to participate in child care⁽¹¹⁾.

The results obtained in this study showed satisfactory values of reliability and validity confirmed that allows us to suggest the use of the instrument translated and adapted in it to measure the support of the nursing staff to parents of newborns hospitalized in

neonatal ICUs. The implementation of this systematic evaluation shall guide future strategies to be adopted, which contributes to improving the quality of nursing care for these families.

The lack of studies of the "gold standard" type in the country for comparisons of criterion validity suggests new researches within the subject, as well as the validation of the instrument translated in other culturally different regions in a country with continental properties like ours. One must consider the limitations of the present study as the limited number of properties of measures tested and certified.

Moreover, the suggestion of parents to include a specific question about breastfeeding requires the development and validation of this construct. These and other reasons call our attention to the necessity of constantly assessing and validating the instrument, for the more evidences that it measures what is proposed, the greater the confidence in its use.

CONCLUSION

The adjustments and replacements of terms and expressions were mainly related to semantic and idiomatic equivalence, which were of paramount importance for the understanding of the instrument by the target culture. Trustworthiness as internal consistency was highly satisfactory, which gives us the confidence to assert it as a means of assessment. This instrument, now translated into our language, has become an important tool available to the nursing staff to continuously assess the quality of care provided to families of newborns admitted to NICU.

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