

Validation of a nursing report for a pediatric intensive care unit



Validação de um histórico de enfermagem para unidade de terapia intensiva pediátrica

Validación de un histórico de enfermería para unidad de cuidados intensivos pediátrica

Amanda Valesse Coelho^a
 Rosemeire Moretto Molina^b
 Mariluci Pereira de Camargo Labegalini^b
 Sueli Mutsumi Tsukuda Ichisato^a
 Jussara Simone Lenzi Pupulim^a

How to cite this article:

Coelho AV, Molina RM, Labegalini MPC, Ichisato SMT, Pupulim JSL. Validation of a nursing report for a pediatric intensive care unit. Rev Gaúcha Enferm. 2017;38(3):e68133.
 doi: <http://dx.doi.org/10.1590/1983-1447.2017.03.68133>.

doi: <http://dx.doi.org/10.1590/1983-1447.2017.03.68133>

ABSTRACT

Objective: To validate the Nursing Report for a pediatric intensive care unit regarding its appearance and content.

Methods: A methodological study regarding the validation of a nursing report for a teaching hospital in the Northwest region of Paraná. The instrument, built in a previous stage, was elaborated with information obtained in a review of pertinent literature and empirical evidence pointed out by nurses who experience these units. The temporary version was submitted to a board of evaluators (March–November/2014), whose expertise contributed to the evaluation process of appearance and content (analysis, rearrangement, refinement, finalization).

Results: The Pertinence of Content criterion, relative to the topics of the instrument, reached the highest levels of agreement among the evaluators (78–100%). The topics that did not reach the pre-defined agreement level were replaced, excluded or reformulated. The restructured instrument was revalued by the evaluators, obtaining satisfactory agreement levels in all the criteria (78–100%).

Conclusions: The final version was validated in terms of appearance and content, and is suitable to be used.

Keywords: Nursing. Pediatric intensive care units. Data collection. Nursing processes. Validation studies.

RESUMO

Objetivo: Validar o Histórico de Enfermagem para uma unidade de terapia intensiva pediátrica quanto à aparência e conteúdo.

Métodos: Estudo metodológico para validação de histórico de enfermagem para hospital de ensino na região noroeste do Paraná. O instrumento, construído em etapa anterior, foi elaborado com informações obtidas em revisão de literatura pertinente e elementos empíricos apontados por enfermeiros que vivenciam essas unidades. A versão provisória foi submetida a um painel de juízes (março–novembro/2014), cuja expertise contribuiu para avaliação de aparência e conteúdo (análise, readequação, refinamento, finalização).

Resultados: O critério Pertinência de Conteúdo, relativo aos tópicos do instrumento, atingiu os maiores níveis de concordância entre os juízes (78–100%). Os tópicos que não atingiram a concordância pré-definida foram substituídos, excluídos ou reformulados. O instrumento reestruturado foi reavaliado pelos juízes, obtendo concordância satisfatória em todos os critérios (78–100%).

Conclusões: A versão definitiva foi validada quanto à aparência e conteúdo, podendo ser utilizada.

Palavras-chave: Enfermagem. Unidades de terapia intensiva pediátrica. Coleta de dados. Processos de enfermagem. Estudos de validação.

RESUMEN

Objetivo: Validar el Histórico de Enfermería para una Unidad de Terapia Intensiva Pediátrica en cuanto a la apariencia y al contenido.

Métodos: Estudio metodológico para validación de un histórico de enfermería para un hospital de enseñanza en la región noroeste del Paraná. El instrumento, construido en etapa anterior, fue elaborado con informaciones obtenidas en revisión de literatura pertinente y elementos empíricos señalados por enfermeros que vivencian esas unidades. La versión provisional del instrumento fue sometida a un panel de jueces (marzo–noviembre/2014) cuya experiencia contribuyó para el proceso de evaluación de apariencia y contenido (análisis, readequación, refinamiento, finalización).

Resultados: El criterio Pertinencia de Contenido, relativo a los tópicos del instrumento, alcanzó los mayores niveles de concordancia entre los jueces (78–100%). Los tópicos que no alcanzaron la concordancia predefinida fueron substituidos, excluidos o reformulados. El instrumento reestructurado fue reevaluado por los jueces, obteniendo concordancia satisfactoria en todos los criterios (78–100%).

Conclusiones: La versión definitiva fue validada en cuanto a la apariencia y al contenido, pudiendo ser utilizada.

Palabras clave: Enfermería. Unidades de terapia intensiva pediátrica. Recolección de datos. Procesos de enfermería. Estudios de validación.

^a Universidade Estadual de Maringá (UEM), Departamento de Enfermagem. Maringá, Paraná, Brasil.

^b Universidade Estadual de Maringá (UEM), Hospital Universitário Regional de Maringá. Maringá, Paraná, Brasil.

■ INTRODUCTION

The Pediatric Intensive Care Unit (ICU) is destined to the treatment of children with health needs that demand high complexity assistance and, therefore, needs a team of skilled professionals. The practice of nursing requires not only technical, but also cognitive and attitudinal competences, the organization of work and the planning of activities in care, for the development of an individualized assistance, considering the therapeutic environment experienced by the child under intensive care.

The Systematization of Nursing Care (SNC) is the method used to guide and subsidize the actions of this team of professionals in health services. However, each service has its own characteristics, context and environment, in addition to singular clients, cultural realities and regional customs, aspects that must be considered when a model of SNC is proposed to be implemented in a health unit⁽¹⁻²⁾.

As this type of hospitalization unit includes patients with highly complex clinical frameworks, who demand much care and technical nursing procedures, not to mention the technology used to help in that care, it is paramount to develop, structure and implement the SNC and its respective documents, especially in the case of the Pediatric ICU, in order to improve and guarantee the quality of assistance⁽³⁻⁴⁾.

The SNC involves elements which are inherent to the professional practice: diagnoses, actions, interventions and nursing results. Initially, six stages were proposed, but advances in studies reduced them to five⁽⁵⁾. It should be highlighted that the nursing history (anamnesis and physical exam) triggers the other stages of the SNC (nursing diagnosis, assistance plan, prescription and nursing prognosis), which, in turn, trigger the nursing assistance to the individual.

It is known that through the anamnesis the health professional can identify problems, determine diagnoses, plan and implement care. In addition, this stage allows for the nurse to earn the confidence of the patients and their family, which allows for the recognizing and evaluation of biopsychosocial and spiritual aspects of the individuals, favoring a type of care which is personalized, holistic, humanized, and science-based⁽⁶⁾.

As a consequence, the physical exam allows for the nurse to evaluate the patient through the identifying of signals and symptoms, seeking abnormalities that could suggest problems in the health-illness process and were not mentioned before. Such a procedure is paramount to the identification of the individual's actual health situation, and to lead into the other stages that make up the SNC⁽⁵⁻⁶⁾.

The Nursing History (NH) is the first part of the nursing process, and is essential for the subsequent phases. It is a simplifying mechanism, capable of identifying real or possible health problems, organize records, and therefore, improve the quality of the nursing assistance. It also makes it possible to plan the assistance and the control of costs and audits, contributing directly to the quality of care. Thus, the physical exam conducted by the nurse aims to survey the specific needs of each individual, and requires scientifically-based techniques, manuals and instruments⁽⁷⁾.

Focusing on the pediatric intensive care environment, a Research Practice entitled "Validação de Histórico de Enfermagem: um instrumento de coleta de dados para a UTI Pediátrica do HUM" (Proc. No 8077/2014) from the Nursing Department of the Universidade Estadual de Maringá (UEM), in the state of Paraná, Brazil, elaborated a NH capable of collecting essential information to aid in the planning of specific assistance, targeted at each child. Considering, therefore, that the SNC guides, subsidizes and justifies nursing care, providing it with visibility and professional recognition, and mainly evaluates and provides an improvement in the quality of care, the objective of this study was to validate the Nursing History of a pediatric intensive care unit, regarding appearance and content.

The theoretical model of Wanda Horta⁽⁸⁾ considers all basic human needs presented by Maslow and proposed by Mohana (psychobiological, social and spiritual needs), and it is the referential adopted in the teaching hospital to subsidize the nursing process. The familiarity of the nursing team with it was also considered, and this theoretical framework, as a result, was the basis of the NH elaboration for the pediatric ICU, which also included the classification of nursing diagnoses proposed by the North American Nursing Diagnosis Association - NANDA⁽⁹⁾, whose Standards of Human Response established were the bases for the creation of the items and topics of the instrument mentioned.

The expected results of the NH, and of its application in the day-to-day practice of the unit for which it was designed, are the possibility to offer personalized care, and an improvement in the quality of the assistance for children who are under intensive care, and their families.

■ METHODOLOGY

This is a methodological research aimed at evaluating the content and appearance of a data collection instrument called Nursing History (anamnesis and physical exam). Methodological studies are defined as the investigation of methods used to obtain, organize and analyze

data, including the elaboration, validation and evaluation of research techniques and instruments⁽¹⁰⁾.

The instrument considered here, specific for the pediatric intensive care unit of a teaching hospital, was created in a Research Project developed by professors and students of the nursing department of the UEM, together with nurses from the unit. The NH was build with information obtained from the review of literature pertinent to pediatric ICU and to the SNC, not to mention empirical elements pointed out by nurses (members of the research team) who offer care in those units.

The theoretical framework which subsidized the surveying and selection of items to build a Nursing History (NH) was the Theory of Basic Human Needs created by Wanda Horta⁽⁸⁾. The NANDA⁽⁹⁾ was the base for distributing the items in topics, titled Human Response Patterns, and aiming at the identification of possible nursing diagnoses and interventions (care plan). The instrument was structured in the form of a check-list, composed of topics. Each topic integrated items which are relevant to the respective Human Response Pattern (HRP)⁽⁹⁾.

Validating an instrument regarding its appearance and content means to identify if the items which compose it evaluate that which the instrument aims to analyze. The result is decided through professional agreement (a panel of evaluators) regarding the items that compose an instrument. The validation of the content is related to the connection between the sample and the field of knowledge that needs to be examined, that is, it measures the knowledge regarding a specific subject. This validation, thus, is a judgment conducted to analyze and evaluate if the items inserted in the instrument correspond to the scope of the subject⁽¹¹⁾ being evaluated. In this specific case, the instrument should raise as much information as possible regarding the children under intensive care, to plan and implement their nursing care. The appearance validation analyzes the presentation and organization of the items, as well as the form and layout of the instrument⁽¹⁰⁻¹¹⁾.

For the theoretical analysis of the instrument, the nine professionals chosen (two physicians and seven nurses) for the group of evaluators were specialized in intensive pediatric care. They also were familiar with instrument validation processes, or experience and had domain over the Systematization of Nursing Care. The panel of evaluators assessed each item and its respective topic (Human Response Pattern) in the instrument, to obtain a consistent and legitimate validation. All participants confirmed their participation and signed the Free and Informed Consent Form, following the ethical precepts established through

Resolution 466/2012. The study was approved by the Committee of Research Ethics (CAAE 58903216.6.0000.0104).

The instrument was distributed with a guide, aimed at directing the evaluators regarding the analysis they were undertaking, and included the following questions: *a) are the items/questions of the NH relevant and sufficient to identify the Basic Human Needs (BHN) affected?; b) are the terms/expressions used appropriate?; c) are they understandable?; d) are they clear and objective?; e) are items/expressions repeated in the distinct necessities?; f) do you suggest the inclusion or exclusion of items/expressions and/or questions?; g) do you consider the presentation and the structure of the instrument adequate?; h) is it easy to ready and simple to complete?; i) considerations and suggestions regarding the content of the NH.*

The evaluators considered these issues to analyze and complete the form, and deliver it with the instrument to be evaluated. This form was constituted by the criteria to the evaluation of the topics and respective items, as well as the composition of the instrument. The topics were evaluated by the evaluators as *adequate, inadequate or partly adequate*, according to each criterion. In the end of this form there was an empty space for suggestions, recommendations and commentaries from the evaluators.

The forms for the evaluations were distributed to the specialists between June and November 2014, and they had 45 days to analyze the instruments and return the forms. It should be noticed that three of the judges required more time for the procedure, and the researchers granted 15 extra days. As a defining criteria, a level of agreement of at least 75% (6) of the judges was required for the maintenance, reformulation, inclusion or exclusion of an item, expression and/or questions⁽¹¹⁾.

■ RESULTS

The panel of evaluators was constituted by two pediatricians who act in intensive care and seven nurses, two of whom are professors of pediatric nursing and five of whom work in the pediatric ICU. All of them have more than one year of professional higher education experience and know the SNC. To identify the judges, a system of letters in alphabetic order was used, represented by the letters: A, B, C, D, E, F, G, H and I. The forms were completed by the evaluators, data was then extracted through a quantitative method.

Table 1 includes the compiled responses on which the evaluators agreed on, considering the evaluation criteria of the instrument topics and the group of items from each Human Response Pattern. It is worth highlighting that the topics which present the lowest indexes were *Activity/ex-*

Table 1 – Distribution of the level of agreement among the evaluators (n=9) regarding items respective to the Human Response Patterns (topics) that make up the instrument. Maringá-PR, 2014

Human Response Pattern (topics and items)	Analysis criteria	Evaluator Agreement Level				
		Form and Presentation %	Ease of reading and completing %	Clarity and ease of understanding %	Content relevance %	Adequate ordering %
Anamnesis		78	78	67	89	33
Mother's obstetric background		67	78	67	78	44
Patterns of health perception - health control		89	78	100	78	77
Role-relationship pattern		89	100	89	78	89
Activity/exercise-sleep/rest pattern		44	44	55	100	55
Genitourinary-reproductive pattern		44	44	67	78	55
Gastrointestinal/abdominal-nutritional pattern		44	44	55	89	55
Perceptive-cognitive pattern		78	78	78	100	89
Confrontation/stress tolerance pattern		78	78	89	100	67
Cardiovascular-bloodstream pattern		67	67	78	89	89
Thoracic and respiratory pattern - oxygenation		78	78	78	100	89
Functional/locomotion pattern - cutaneous-mucous integrity		66	66	77	89	100

Source: Research data, 2014.

ercise-sleep/rest Pattern, Genitourinary/reproductive pattern and Gastrointestinal/abdominal-nutritional pattern.

The evaluators' suggestions, recommendations, amendments and ideas for substitution, inclusion or exclusion of items, were analyzed and considered during the refinement process, taking into account the pertinent literature. Seeking the greatest possible improvement, the validation process continued through March and April 2015, and the restructured instrument was once again submitted to the analysis of the nine professionals that were part of the panel of evaluators in the previous assessment, this time achieving a satisfactory agreement level in all criteria mentioned in Table 2.

■ DISCUSSION

The evaluators had a low agreement level regarding the criterion "Adequate ordering", in the topics *Anamnesis* and *Mother's obstetric history* (33% and 44%, respectively). Six of them warned about the mixing of data from the mother and from the child, and suggested that the items were reorganized. Thus, those recommendations were followed, and the elements relocated. For instance, the items "Previously hospitalized in Neonatal ICU"; "Previously hospitalized"; and "Previous hospitalization motives" were moved to the topic *Anamnesis*, and the item "Religion" was moved to the topic *Mother's obstetric history*.

Table 2 – Distribution of the agreement level among the evaluators (n=9) regarding the items and their respective Human Response Patterns (topics) from the restructured instrument. Maringá-PR, 2015

Analysis criteria Human Response Pattern (topics and items)	Evaluator Agreement Level				
	Form and Presentation %	Ease of reading and completing %	Clarity and ease of understanding %	Content relevance %	Adequate ordering %
Anamnesis	86	100	85	93	83
Mother's obstetric background	92	99	89	95	87
Patterns of health perception - health control	91	88	100	88	94
Role-relationship pattern	92	100	98	95	100
Activity/exercise-sleep/rest pattern	78	79	84	100	89
Genitourinary-reproductive pattern	82	82	92	89	88
Gastrointestinal/ abdominal-nutritional pattern	81	80	93	93	91
Cognitive-perceptive pattern	86	89	93	100	97
Confrontation/stress tolerance pattern	93	91	87	100	91
Cardiovascular-bloodstream pattern	87	81	92	94	93
Thoracic and respiratory pattern - oxygenation	91	84	94	100	95
Functional/locomotion pattern - cutaneous-mucous integrity	90	89	91	89	100

Source: Research data, 2015.

The evaluator C, claiming that the information asked for was difficult to understand, suggested that the item "Vaccination records" was renamed "Vaccinal situation", and that an option was added, indicating complete or incomplete records. This suggestion was incorporated, since the Vaccinal Situation contributes for the achievement of Vaccinal Coverage, a term that represents a health index of the quality of care. Adequately completing one's vaccination records, as the National Immunization Program requires from all individuals since birth, aims at specifically preventing immunopreventable diseases, inducing mass immunity, and consequently, interrupting transmission⁽¹²⁾.

It is important to highlight that most topics with a low agreement level presented a lack of agreement in the topics Adequate Ordering (six topics varying from 33% to 67%), Ease of Reading and Completing (five, from 44% to 67%), Form and Presentation (six, from 44% to 67%). These criteria are directly linked to the appearance, and thus, one depends on the other to have a favorable evaluation.

Therefore, as mentioned, the changes and recommendations of the evaluators were readily accepted.

However, in the criteria regarding content, most topics showed a level of agreement between 77% and 100% (seven topics) in the criterion Clarity and Ease of Understanding. In the criterion Content Relevance, all topics also had a concordance level above the pre-established level of 75%.

In the analysis of the topic *Activity/exercise-sleep/rest pattern*, with the exception of the criterion Content Relevance, which obtained a 100% agreement level, all the others had a low level (between 44% and 55%). The evaluators F and H asked for a review of the writing and distribution of the items, suggesting reorganization. The evaluator I suggested that the information should be ordered so the items could be classified as belonging to primitive development reflexes.

The primitive reflexes represent many of the movements of the newborn, which tend to disappear in the first six months of life. That happens due to the development of the child and to the onset of the functioning of their cortical neurological structure. Among such reflexes, the follow-

ing can be highlighted: Moro, suction, swimming, walking/stepping, palmar grasp, and Babinski⁽¹³⁾.

The development is sensory-motor because learning happens due to the feeling of movement in every experience with the body and, therefore, in the motor development, there is a sequence of postures and acquisition of distinct and varied movements. Consequently, a new posture is seen as an improvement of other primitive postures that had been acquired and/or as an association of these. Psychomotor development is the development of intentional and spontaneous corporal movements. The first one is presented through walking, sleeping and eating, and the second for physical activities specific of each phase of childhood: running and jumping, going up and down, manipulating objects, rolling and playing⁽¹⁴⁾. As a result, corroborating the evaluators and the literature, the sub-items "sit alone, rolls, gets up with a support, eats alone, crawls, wanders, speak words, babbles, smiles, interacts with the environment, grasps with fingers, grasps with hands, supports the weight of the head, follows movements around", became part of the item "Development".

The agreement level on the two following topics, titled *Genitourinary - reproductive* and *Gastrointestinal/abdominal - nutritional*, was low in four criteria, as Table 1 indicates, therefore requiring many changes. However, the negative observations were focused in the criteria Form and Presentation (44% and 44%, respectively), Ease of Reading and Completing (44%; 44%) and Adequate Ordering (55%; 55% each), indicating, once again, that appearance related criteria are directly dependent one on the other for the achievement of a favorable result in the evaluation. Regarding Clarity and Ease of Understanding of the items, the agreement level (67%; 55%, respectively) was also inferior to the expected level. The notes of the evaluators, however, were directed mostly at the excess of data and at its positioning, a situation that prejudiced the finding of content and its coherence.

The decisions of the evaluators were therefore accepted, even though they were not agreed upon by more than 75% of them – which led to the removal of some items as to prioritize the changes more commonly indicated. The others were noted in the field reserved for observations that the instrument has (a suggestion from evaluator A). The notes on the excess of information in the instrument pointed out by evaluators C and D were also accepted, as well as the comparison of anamnesis and clinical diagnosis, mentioned by evaluator G. For example, genital changes have been removed from the form (cryptorchidism, phimosis, Hypospadias, among others) and when present, they will be noted in the field for observations.

The evaluators considered the topics *Cognitive/perceptive pattern* and *Thoracic and respiratory pattern - oxygenation*, and reached an agreement level above the established for all criteria, guaranteeing the adequacy and Content Relevance of the items in the respective topics for the composition of the NH.

In *Stress Confronting/Tolerance Patterns*, the criterion Adequate Ordering was the only one with low-level agreement (67%). Nonetheless, in the guide delivered for the evaluators to assess the instrument, 23% said that they "partly agreed" with the criterion, and none of them chose the option "inadequate". They, however, did not make notes or comments. The items were understood to satisfactorily contemplate the topic, and were kept as they were. In addition, according to the taxonomy established by the NANDA⁽⁹⁾, some of the characteristics that define the domain *Stress confronting/tolerance pattern* are: uncertainty, reports of incapability of confronting, inadequate problem resolution, diminished use of social support, among others, which are contemplated in the NH. Therefore, the items were not modified.

Other two topics also showed an agreement level below 75%: *Cardiovascular-bloodstream patterns* and *Functional/locomotion pattern - cutaneous-mucous integrity*. Both received an unsatisfactory assessment in the criteria Form and Presentation (67%; 66%, respectively) and Ease of Reading and Completing (67%; 66% each). In the *Cardiovascular - bloodstream pattern*, the evaluators did not suggest any adjustments in the criteria with low agreement scores. The evaluator F, however, warned about the need for a content review. Even considering that this criterion reached a positive agreement level (89%), as well as one of Clarity and Ease of Understanding (78%), the recommendation was accepted, and the topic was reviewed and rearranged, a process conducted according to the literature.

To evaluate the functioning of the cardiovascular system, a series of data from the general physical exam need to be considered, in addition to the heart examination itself. When examining one's pulse it is important to note the number of beats per minute, as well as characteristics such as intensity (full or thready), rhythm (regular or irregular) and type. Therefore, the instrument was changed to maintain, as attributes for the evaluation of the pulse, the items "full or thready, regular or irregular, normal rhythm, bradycardic or tachycardic". To evaluate the jugular vein distention, the "cross" scale is used (+, +2, +3, +4) which, however subjective, is still the most common method⁽¹⁵⁾. Thus, the scale was added to the form, and is the same method used to evaluate the edema.

In the *Functional/locomotion pattern - cutaneous-mucous integrity*, the evaluator F suggested adjustments tar-

geted at the appearance, and the evaluator H suggested the withdrawal of some items, and the maintenance of only the most important. Therefore, some items were excluded, and others reordered within the same topic. The item "observation" (present after "temperature") was removed, as the form has a space for observations at the end. In the characteristics that compose "elementary lesions", the terms were listed in alphabetic order to make their completion easier and faster. The item "other", which complemented the characteristics of "scalp", "neck", "face" and "Superior and inferior limbs", was also suppressed, as these data can be noted in the space for observations; the characteristic "not flawless" was added to the evaluation of skin, mucous membranes and scalp. Finally, the characteristics contained in the form are compatible to the defining characteristics mentioned by NANDA⁽⁹⁾ and, as they corroborate the literature, they were maintained.

The evaluator I asked for the inclusion of the characteristic "mobility" for neck evaluation, which was readily accepted, since literature indicates that some diseases can reduce the amplitude of mobility, such as congenital anomalies, osteoarthritis, rheumatoid arthritis, torticollis, meningitis, and paraspinal muscle spasms. The evaluation of neck mobility is a part of the motor exam of the intrinsic muscles of the cervical spine, which indicates the presence of any muscle hypotonia and determines the integrity of the nervous system supply⁽¹⁶⁾. In short, the refinement of items was carried out, and the suggestions and recommendations of the evaluators were contemplated (rearrangement, alteration, substitution, inclusion, exclusion), resulting in the final setup of the NH for the Pediatric ICU of the Teaching Hospital analyzed.

Considering that the SNC is used by nurses who are committed to improving the quality of the care offered to the patient, the survey of the necessary information about the patient in the most adequate and complete way possible is paramount, as it leads to the execution of further SNCstages. It should be highlighted that the data obtained converges to the identification of the nursing diagnosis, which in turn directs the nursing interventions. Consequently, the success of all SNCstages and the quality of the nursing assistance depends on a successful data collection⁽⁹⁾.

However, a recent integrative review conducted about the SNCrevealed that many nurses find it difficult to elaborate nursing diagnoses, whether for lack of information or because they do not evaluate all data collected. Moreover, some nurses cannot adequate their plan of care to the specific needs of each patient. The authors advert that, for an adequate and efficient SNCimplantation, the scientific

knowledge of the nursing professionals must be enough to develop all stages⁽¹⁷⁾.

Also, a study warns about the precariousness of the records regarding the growth and development of children in the Children's Health Primary Care Handbook, which can only be followed if the health professionals noted every information thoroughly⁽¹⁸⁾. This study emphasizes the importance of the adequate surveying and reporting of the children's data, further reinforcing the need to obtain from the child in intensive care as much data as possible, as this information is often useful or even essential for the planning of assistance activities.

Another study points out that experiencing the process of elaboration and validation of an SNC instrument raise awareness regarding the importance of data collection. It also points out that the verification and communication of data in a thorough and organized way can generate a data bank about "the needs, health problems, experiences, health practices, goals, values and lifestyle of the client"⁽¹⁹⁾.

Thus, focusing on the greatest possible improvement of the instrument, the restructured version was once again submitted to the evaluation of the panel, and reached satisfactory levels of agreement in all criteria (Table 2). In the criteria Form and Presentation, the agreement levels varied from 78% to 93%; in Ease of Reading and Completing, from 79% to 100%; in Adequate Ordering from 83% to 100%; in Clarity and Ease of Understanding, from 84% to 100%; and lastly, in Content Relevance, the levels varied from 88% to 100% in all topics. These results guaranteed the appearance and content validation of the NH, demonstrating that the process of refining the instrument contemplated the characteristics of the unit, and that the instrument can be considered fit for implantation in the service for which it was created.

■ CONCLUSIONS

The preoccupation to improve the SNCthat was being used in a pediatric intensive care unit in a Teaching Hospital, starting from the Nursing Process implemented in the institution, in order to contemplate the health needs of the patients, considering the specificities and the characteristics of the care offered in the unit, triggered the elaboration of this NH for the service. It is believed that validated SNCinstruments made available in health services contribute to the decision making process, as they allow for the collection of data and evidence the health needs of the population, guiding the care for which they are targeted.

It was also noted that, as evidences are raised that the instrument adequately surveys the particularities of each individual, it allows for a more accurate description of their health needs, and therefore, it gains even more validity. It should be highlighted that the aspects found through this NH can contribute for the identification of the Nursing Diagnosis, and as a consequence, aid in the planning of the assistance and in the offering of a high-quality care for children in the Pediatric ICU.

The objective of this study was reached, considering that the elaborated instrument was validated regarding its appearance and content, and it is considered fit for implantation. The fact that it was not yet tested in children under intensive care constitutes a limitation of the study, as its application may highlight other adjustments that need to be made in the NH. However, this is the next step in his study, and it is already being outlined. Currently, the instrument is directed for implantation in the unit and incorporation in the patient charts, which will offer the data need for the subsequent study.

Therefore, this is a dynamic process, that confronts the characteristics of the patients and of the care they are offered in the context of where it is used. It is suggested, considering that the validated NH is not definitive and may be altered, that it should be constantly evaluated and adapted, for it to be the best possible.

This study can be replicated in other Pediatric ICUs, though it should be adapted according to the characteristics of each service. Finally, the development of the SNC requires the creation of a NH for each service, according to the reality of the institution in which it is inserted and the peculiarities of each health care unit.

■ REFERENCES

1. Nascimento KC, Backes DS, Koerich MS, Erdmann AL. Sistematização da assistência de enfermagem: vislumbrando um cuidado interativo, complementar e multiprofissional. *Rev Esc Enferm USP*. 2008 dez;42(4):643-8.
2. Souza KV, Assis LTM, Chianca TCM, Ribeiro CL, Gomes AC, Lima RJ. Roteiro de coleta de dados de enfermagem em alojamento conjunto: contribuições da articulação ensino-serviço. *Esc Anna Nery*. 2012 abr/jun;16(2):234-9.
3. Truppel TC, Meier MJ, Calixto RC, Peruzzo SA, Crozeta K. Sistematização da assistência de enfermagem em unidade de terapia intensiva. *Rev Bras Enferm*. 2009 mar/abr;62(2):221-7.
4. Ramalho Neto JM, Fontes WD, Nóbrega MML. Instrumento de coleta de dados de enfermagem em unidade de terapia intensiva geral. *Rev Bras Enferm*. 2013 jul/ago;66(4):535-42.
5. Bordinhão RC, Almeida MA. Instrumento de coleta de dados para pacientes críticos fundamentado no Modelo das Necessidades Humanas Básicas de Horta. *Rev Gaúcha Enferm*. 2012 jun;33(2):125-31.
6. Santos N, Veiga P, Andrade R. Importância da anamnese e do exame físico para o cuidado do enfermeiro. *Rev Bras Enferm*. 2011 abr;64(2):355-8.
7. Silva CMC, Sabóia VM, Teixeira ER. O ensino do exame físico em suas dimensões técnicas e subjetivas. *Texto Contexto Enferm*. 2009 jul/set;18(3):458-65.
8. Horta WA. *Processo de enfermagem*. São Paulo: EPU; 1979.
9. *Diagnósticos de enfermagem NANDA: definições e classificações 2015-2017*. 10. ed. Porto Alegre: Artmed; 2015.
10. Polit DF, Beck CT. *Fundamentos de pesquisa em enfermagem: avaliação de evidências para a prática de enfermagem*. 7. ed. Porto Alegre: Artmed; 2011.
11. Pasquali L. Princípios de elaboração de escalas psicológicas. *Rev Psiquiatr Clín*. 1998;25(5):206-13.
12. Carneiro SMMV, Lessa SS, Guimarães JAL, Loepert MM, Silva DB. Cobertura vacinal real do esquema básico para o primeiro ano de vida numa Unidade de Saúde da Família. *Rev Bras Med Fam Comunidade*. 2012 abr/jun;7(23):100-7.
13. Urzêda RN, Oliveira TG, Campos AM, Formiga CKMR. Reflexos, reações e tônus muscular de bebês pré-termo em um programa de intervenção precoce. *Rev Neurocienc*. 2009 nov;17(4):319-25.
14. Ministério da Educação (BR). Secretaria de Educação Especial. Educação infantil: saberes e práticas da inclusão: dificuldades de comunicação e sinalização: deficiência física. Brasília: MEC/SEE; 2006 [cited 2015 Jun 12]. Available from: <http://portal.mec.gov.br/seesp/arquivos/pdf/deficienciafisica.pdf>.
15. Barros ALBL (organizadora). *Anamnese e exame físico: avaliação diagnóstica de enfermagem no adulto*. 3. ed. Porto Alegre: Artmed; 2015.
16. Fernandes, JHM. *Semiologia ortopédica pericial: testes físicos especiais*. Módulo 10 [Internet] 2. versão do hipertexto. Porto Alegre: UFRGS; 2012 [cited 2015 Jun 10]. Available from: <http://www.ufrgs.br/semiologiaortopedica/Modulo 10.pdf>.
17. Neco KKS, Costa RA, Feijão AR. Sistematização da assistência de enfermagem em instituições de saúde do Brasil: revisão integrativa. *Rev Enferm UFPE*. 2015 jan;9(1):193-200.
18. Abud SM, Gaíva MAM. Records of growth and development data in the child health handbook. *Rev GaúchaEnferm*. 2015 jun;36(2):97-105. doi: <http://dx.doi.org/10.1590/1983-1447.2015.02.48427>.
19. Viana VO, Pires OS. Validação de instrumento de sistematização da assistência de enfermagem. *Rev Enferm Atenção Saúde*. 2014 dez;3(2):64-75.

■ Corresponding author:

Jussara Simone LenziPupulim
E-mail: jslpupulim@uem.br

Received: 09.21.2016
Approved: 05.08.2017