EMPIRICAL INDICATORS FOR STRUCTURING AN INSTRUMENT OF DATA COLLECTION FOR PATIENTS WITH DISABILITIES BY STROKE

INDICADORES EMPÍRICOS PARA A ESTRUTURAÇÃO DE UM INSTRUMENTO DE COLETA DE DADOS PARA PACIENTES COM INCAPACIDADES POR ACIDENTE VASCULAR CEREBRAL

INDICADORES EMPÍRICOS PARA ESTRUCTURAR UN INSTRUMENTO DE RECOLECCIÓN DE DATOS PARA PACIENTES CON DISCAPACIDAD POR ACCIDENTE CEREBROVASCULAR

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ABSTRACT

Objective: to list the empirical indicators found in the literature from basic human needs and to identify the frequency of empirical indicators in patients affected by stroke. Methodology: methodological study with quantitative and qualitative approach attended 36 patients treated at a referral center in João Pessoa/Paraíba/Brazil. The study was approved by the Ethics in Research, CAAE nº 0005.0.133.000-12. Results: 231 empirical indicators were identified, distributed in the basic human needs described by Horta. Subsequently, we determined the frequency of these indicators in patients in the sample, resulting in 115 indicators identified. Conclusion: from the identification of these indicators was possible to construct an instrument for data collection and it is hoped that this will contribute to the improvement of care and implementation of the systematization of nursing service.

Descriptors: Nursing; Stroke; Nursing Process; Rehabilitation.

RESUMO

Objetivo: listar os indicadores empíricos encontrados na literatura a partir das necessidades humanas básicas e identificar a frequência dos indicadores empíricos em pacientes acometidos por acidente vascular cerebral. Metodologia: estudo metodológico com abordagem quanti-qualitativa do qual participaram 36 pacientes, atendidos em um serviço de referência, em João Pessoa/PB/Brasil. A pesquisa foi aprovado pelo Comitê de Ética em Pesquisa, CAAE nº 0005.0.133.000-12. Resultados: foi identificar 231 indicadores empíricos, distribuídos nas necessidades humanas básicas descritas por Horta. Posteriormente foi realizada a verificação da frequência desses indicadores nos pacientes da amostra, resultando em 115 indicadores identificados. Conclusão: a partir da identificação destes indicadores foi possível construir um instrumento de coleta de dados e espera-se que este venha contribuir para a melhoria da assistência e implementação da sistematização da assistência de enfermagem no serviço. Descritores: Enfermagem; Acidente Vascular Cerebral; Processos de Enfermagem; Reabilitação.

RESUMEN

Objetivo: listar los indicadores empíricos en la literatura de las necesidades humanas básicas y identificar la frecuencia de los indicadores empíricos en los pacientes afectados por un derrame cerebral. Metodología: estudio metodológico con enfoque cuantitativo y cualitativo asistió a 36 pacientes atendidos en un centro de referencia en João Pessoa/Paráiba/Brasil. El estudio fue aprobado por el Comité de Ética en Investigación, CAAE nº 0005.0.133.000-12. Resultados: se identificaron 231 indicadores empíricos, distribuidos en las necesidades humanas básicas descritas por Horta. Posteriormente, se determinó la frecuencia de estos indicadores en los pacientes en la muestra, lo que resulta en 115 indicadores identificados. Conclusión: de la identificación de estos indicadores fue posible construir un instrumento de recolección de datos y se espera que esto contribuya a la mejora de la atención y la implementación de la sistematización del servicio de enfermería. Descriptores: Enfermería; Accidente Cerebrovascular; Proceso de Enfermería; Reabilitación.

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INTRODUCTION

Nursing had roots as a practice based on empiricism and with the passage of time began to worry in basing their practice on scientific knowledge, with the goal of providing qualified care that meets the needs of the individual, family and community. Through this perspective the application of a systematic methodology for the care shown by the Nursing Process (EP) as a challenge to the qualification of such assistance, thereby contributing to the evolution of nursing as a science and profession.

This methodology was introduced in Brazil by Dr. Wanda de Aguiar Horta, in the mid-1970s, in view of the practical application of their newly developed conceptual model. This model, called the Theory of Basic Human Needs (BHN) was based on the Theory of Human Motivation Maslow and Levels of Psychic Life of John Mohana.1

Commonly described as the essence of nursing practice, the EP indicates the adoption of a method for a specific professional work involving a chain of actions and dynamic inter-related to its implementation, this methodology is based on a system of moral values and beliefs and technical and scientific knowledge of the area.2

In addition to being defined as a systematic approach to PE is also regarded as a humane method of care, because their actions are planned, taking into account the interests, ideals and desires of the client as well as the family and the community, health care.3 We can add your personalization, because the needs are identified for each client, family and community, which facilitates the planning of actions for the affected needs, targeting specifically careful thought / planned.3-4

In Brazil, the EP has its legal framework based on the Law No. 7.498/86 which provides for Professional Practice of Nursing, where prescription of nursing and nursing consultation activities are considered private nurse.5

Added to this fact the Federal Board of Nursing (COFEN), enacted Resolution 272/2002 provides that the obligation on the SAE in all health services regardless of the level of attention which develops nursing activities.6 Not quite the same body adopted resolution 358/2009 which resolves the PE should be performed in all environments in which it occurs nursing care, regardless of this being public or private and to be performed in institutions providing outpatient health services, households, schools, community associations, among others, will be termed as nursing consultation.7

Thus, we believe that one of the steps to meet those decisions is through the development of an instrument that guide PE, so this instrument need to have your targeted content for the clientele to be served or specific, since a single instrument for all specialties and age groups would not be considering the specificities inherent to these issues.

The development of an instrument encourages the documentation of nursing interventions and actions performed so that it can be analyzed through a clinical trial. It is noteworthy that the notes of these actions or interventions give visibility to the profession and to promote communication between professionals. In addition to promoting the implementation of the steps of the nursing process in the everyday practice of nurses.8

Considering that the EP consists of interrelated steps, which are: research, also called data collection or history of nursing, nursing diagnosis, planning, implementation and evaluation.9-10-11 Where the first of these steps, called the data collection, it is essential for the development of others. It is necessary to have a tool for identifying needs of the customers for which you want to watch.4

Analyzing this context, considering the objectives and characteristics of the PE and the goal of providing quality and individualized care to patients affected by cerebrovascular accident (CVA) in their rehabilitation process. Understanding that the consequences imposed by stroke impose the need for various measures planned and developed with the goal of providing the greatest possible completeness patient, this study has its justification.

With the prospect of meeting the real needs of patients affected by the episode of stroke and contribute to the implementation of the Nursing Care System, aiming at building a tool for data collection aimed to assist patients with physical disabilities due to stroke in your rehabilitation process and thus qualify for assistance, we study aimed to list the empirical indicators found in the literature from basic human needs and to identify the frequency of the same in patients with physical disabilities due to stroke.

METHOD

This article was drawn from the dissertation << Construction instruments query nursing applied to patients with physical disabilities due to stroke >>.
disabilities from stroke >> presented to the Program Associate Postgraduate Nursing, University of Pernambuco / UPE - State University Paraiba / UEPB. Campina Grande, Brazil, in 2012.

This is a study of a methodological approach with quantitative and qualitative. This type of design allows the investigation of methods for collecting and organizing data, from the development, validation and assessment instruments. The goal is to produce an instrument that is reliable, accurate and usable so it can be used by other researchers, and to evaluate its success in achieving the objective.12

Study developed the Coordination of Assistance to People with Physical Disabilities (CODAFI) located at the Foundation Center for Integrated Support for the Impaired (FUNAD) in the city of João Pessoa - PB. Said Foundation's basic assignment enabled, rehabilitate, professionalize and entering the labor market, people with disabilities, and to develop prevention programs and training of human resources as well as, manage the actions of special education throughout the state.

To conduct the study, we performed two steps: 1) identification of empirical indicators, conducted through literature, and 2) structuring of the instrument from the verification of empirical indicators in patients treated at the physical rehabilitation of FUNAD.

The research design of this study was assessed by the Ethics Committee of the State University of Paraíba (UEPB) in compliance with the ethical aspects envisaged in Resolution No. 196/96 of the Ministry of Health that supports the ethical aspects of research in humans and Resolution COFEN No. 311/2007, which recasts the code of ethics of nursing, receiving assent to its execution, under the Protocol CEP-UEPB: 0005.0.133.000-12.

RESULTS

The first step was to identify empirical indicators Basic Human Needs in Patients with physical disabilities imposed by stroke episode in their rehabilitation process. Emphasized that the empirical indicators are considered as the experimental criteria used in the observation or measurement of the concepts of a theory.13-14

Therefore, this step was developed through a literature review of studies published in journals indexed in the databases LILACS (Latin American and Caribbean Health Sciences) and MEDLINE (International Literature in Health Sciences and Biomedical) and virtual library SciELO (Scientific Electronic Library Online) and Portal periodic CAPES (Coordination of Improvement of Higher Education Personnel), along with books that addressed this issue.

From this review it was possible to identify 231 empirical indicators of basic human needs of patients with physical disabilities imposed by stroke episode, but it was still necessary to list each of these indicators in the corresponding basic human needs. To this there was also a literature on the theory used in the study, with the objective of seeking to define each of the basic human needs, considering that not all were defined by theoretical, so it was necessary to resort to other authors who had set Previously these needs.

From the definition of basic human needs was possible to group each of the empirical indicators on their needs. At the end of this survey, we built a tool containing settings for each basic human need that by Horta and other authors, and empirical indicators found for every need. It is noteworthy that the indicators that appear in more than a need was counted only once.

The instrument built in this phase was composed of 231 empirical indicators, of which 158 correspond to physiological needs, distributed as follows: Oxygenation (15) Hydration and Electrolyte regulation (9), Food (14) Elimination (18), and Sleep home (8) Physical activity (23) Sexuality (12) Body Care (5), Physical Integrity (10), Regulatory Neurological (7), Regulation Vascular (12), Hormonal Regulation (4), Temperature Regulation (4), Perception of Sense Organs (10), Physical Security and Environment (7). Psychosocial Needs in the 68 indicators were
Empirical indicators for structuring an instrument...

distributed: Emotional Safety (4) Love and Acceptance (15), Freedom and Participation (3) Communication (7) Creativity (2), Health Education / Learning (11), Gregarious (4) Recreation and Leisure (5) Self-realization (3), Self-esteem, Self-confidence and self-respect (10) Attention (4). And in psychospiritual needs were 05 indicators: Religious / Spiritual.

In an attempt to obtain an instrument with some minor formatting indicators were grouped. So as indicators: eupnea; apnea; bradypnea, dyspnea and tachypnea, orthopnea, Cheyne-Stokes received the following configuration: rhythm and respiratory rate (eupnea; apnea; bradypnea,

dyspnea and tachypnea, orthopnea and Cheyne-Stokes) and the researcher pointed to the instrument the presence of the indicator and a griffin marked the manifestation observed.

Possession of the instrument and after approval by the Research Ethics Committee of the researchers have started the second phase of the study, the verification of empirical indicators in patients treated at the physical rehabilitation of FUNAD. This phase aimed to determine the frequency of appearance of empirical indicators identified through the literature, in patients affected by stroke treated at the physical rehabilitation.

Verification of Empirical indicators in patients in rehabilitation after STROKE

Organized by NHB

Indicators more frequently

Figure 2. Steps in the second phase. João Pessoa, 2012.

The instrument built in the previous phase of the study was applied to 36 patients attending the service, this sample represented 80% of the care of patients with sequelae due to stroke occurred in the months from May to July 2012. It is noteworthy that this sample was composed from the accessibility and acceptance of the research participants, thus devoid of any statistical rigor.

To make it possible to screen patients to compose the sample the researcher searched for the professionals who were in the service, these stood out physical therapists, as they were in the service in greater numbers, so that they should point patients who were in the process Rehabilitation for sequelae resulting from stroke and it was done each turn with the different service professionals, who have come to refer patients after rehabilitation sessions for which they were presented to the research, its purpose and objectives.

According to the criteria, the research began with the request of the patient's authorization by signing the term of consent. It is noteworthy that prior to the signing of this term all participants were instructed in accordance with procedures that meet the requirements of Resolution 196/96 of the National Health Council, which has about the rules regarding research involving human subjects. Just as they were guaranteed of anonymity and their right to withdraw, at any time of the survey, with no charge for their treatment.

After authorization, were conducted the interview and physical examination, patients in the sample, in order to identify the evidence that the needs were affected or not. In some cases, such evidence is presented by means of signs and symptoms, and others, the demonstration guess through the verbalization of the patient, which indicated the need was or was not affected. Shortly after this step, the indicators identified as indicated in the instrument for evaluation of the results.

At the end of this phase, the data collected were analyzed in order to identify the frequency of appearance of empirical indicators in patients in the sample and thereby subsidize the construction of an instrument of data collection focused on the real needs of patients in rehabilitation after episode stroke. For this, the data were treated by the method of descriptive statistics with the help of Microsoft Office Excel 2007.

For composition instrument to collect data were considered indicators of emergence often equal or greater than 33%. After analyzing the data obtained, a total of 83 indicators, distributed in 51 of physiological needs, 31 Psychosocial Needs and only 1 of psychospiritual needs, which are presented in Figure 3.
Considering the relevance of empirical indicators identified in the literature it was decided to consider some indicators often below 33%. This decision was made because of some of them, even if present in low frequency in the study were identified as very important in the literature, including articles to discuss them separately, as is the case of indicators that represent risk factors for stroke and related to changes in lung capacity.

As were added indicators bedridden and wheelchair which although not described in the literature is presented in some patients of the service, these indicators were considered observing the impact on patient’s life and impairment in activities of daily life. Beyond what was observed during the physical examination bedridden patients presented themselves in the same proportion as pressure ulcers and wheelchair users reported at examination some complaints related to areas of compression due to the use of the wheelchair.

Given this rationale, indicators that were often less than 33% were analyzed and those assessed as relevant, considering the quality of care to people with physical disabilities were included in the instrument. Thus aggregates 32 indicators were considered relevant to the instrument of the third stage of the research, 27 of these belong to physiological needs Psychosocial Needs and 5, which are presented in Figure 4.
Of the 231 empirical indicators found in the first stage of the research, remained 115 indicators of which 78 belong to physiological needs, 36 Psychosocial Needs and Psychospiritual Needs 1.

**DISCUSSION**

The construction of an instrument that guides the collection of nursing data, focused on customer needs, favors the clinical judgment of the nurse about the findings highlighted in the first phase of the nursing process. Given that it supports the other phases of this process, thereby demonstrating its importance for clinical practice of nurses.

When thinking of a data collection instrument, consider the understanding that this instrument should be structured so as to identify the signs and symptoms that may be characterized as problems for both nursing and the nurse is able to analyze the data collected in order to combine their expertise and promote quality care.

In general, when building an instrument should take into consideration, that this should be not only meaningful for nurses, but also for the patient, in addition to enabling their practical use through the possibility of establishing the diagnosis, and results nursing interventions, thereby providing a professional nursing care to promote recovery and or improving the quality of life of the patient.

For the construction of an instrument of data collection is needed to identify the empirical indicators, it is through the signs and symptoms of the patients that nurses can plan and implement the assistance and thus confer individualization and quality.

During the search of empirical indicators, it was observed that in most cases the studies brought to the concern with the issues facing the physical mobility of the patient, the respiratory system problems and dysphagia, which had as its main focus the risks for respiratory problems in the case aspiration. While checking these indicators, the study confirmed that 100% of the indicators related to physical mobility were present in the patients in the sample, however often ≥ 33% this percentage was 87%.

With regard to indicators related to the respiratory system, which had a frequency ≥ 33% were reacted the rate and respiratory rate. This fact is explained because depending on the type and location of brain damage left by the episode of stroke; breathing patterns may be affected, leading to a potential change in respiratory rhythm generation central leading change in respiratory rhythm and pattern.

In terms of the indicator dysphagia, this is performed with frequency ≥ 33% and most patients with this indicator were changed at the beginning of the rehabilitation process, which begins immediately after discharge.

It is noteworthy that in relation to the total verification of empirical indicators, we obtained confirmation of the presence of the majority of patients in the sample, which represented 84% of the indicators, confirming the data found in the literature. With regard to the indicators that had frequency ≥ 33%, these accounted for 50% of the indicators found in the literature.

It was also observed that most of the publications dealing with the rehabilitation of patients after stroke episode are mostly authors physiotherapists and nursing little publishes in the area of rehabilitation, so little in rehabilitation of patients after stroke. This fact caught the attention and showed the need for more research if they were facing...
nursing in this area of activity thus underscoring the importance of this study.

It is worth mentioning the importance of the participation of nurses in research and assistance to people with disabilities in the rehabilitation process is to provide it with improvements in health care to those individuals who require multidisciplinary and multi-professional team to meet your needs. Because in general the person with disability needs assistance geared to their current needs depending on their degree of dependency and nursing participated in this process for highlighting the importance this systematization of nursing care to assist this population segment.\(^\text{16}\)

\section*{CONCLUSION}

Considering that the patients in the rehabilitation process and have many particularities regarding the patient who experiences this process due to an episode of stroke should take into account not only rehabilitate, but the need to rediscover and adapt to a new reality imposed due to the fact that this disease leaves the non-fatal sequelae that may compete with the loss of autonomy and the need for special care.

From the perspective of meeting the needs of these individuals, the construction of an instrument to collect specific data contributes to the quality of care provided to patients, besides facilitating the implementation of the other phases of the nursing process which enables the documentation of actions nursing thus giving to the visibility and recognition of profession.

This article aimed to the development of the first phase of building a data collection instrument for patients in rehabilitation after stroke, was used for both the Theory of Basic Human Needs, Horta. Empirical indicators to identify and define each basic human need revisions were made in the literature. After these searches, we determined the frequency of these indicators in patients with physical disabilities after stroke episode in surgical rehabilitation process, obtaining 115 empirical indicators that composed the first version of the instrument for data collection to meet these patients.

By identifying these indicators will be possible to construct an instrument for data collection and it is hoped that this will contribute to the implementation of the systematization of nursing care service study, standardizing data collection. We also consider the need for this instrument is validated by nurses who work in the area of rehabilitation and which is subsequently applied in practice for testing and possible adjustments and thereby provide a service that dignifies the professional, the profession and the patient.

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\section*{REFERENCES}


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