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ORIGINAL ARTICLE

ANALYSIS OF THE APPLICATION OF NURSING PROCESS IN A GOVERNMENTAL HOSPITAL

ANÁLISE DA APLICAÇÃO DO PROCESSO DE ENFERMAGEM EM UM HOSPITAL GOVERNAMENTAL

ANÁLISIS DE LA APLICACIÓN DEL PROCESO DE ENFERMERÍA EN UN HOSPITAL DEL GOBIERNO

Milva Maria Figueiredo de Martino¹, Luiz Fernando Fogaça², Paula Cristina Pereira da Costa³, Vanessa Pellegrino Toledo⁴

ABSTRACT

Objective: analyzing the nursing process in a governmental hospital, identifying the stages used by nurses. **Method:** a descriptive and exploratory study with a quantitative approach. The data collection was carried out with 45 nurses, using a questionnaire that identified the three dimensions of the nursing process: phases' identification; verification of the difficulties encountered in the development of each phase; and measuring the time undertaken for its implementation. The data were analyzed by Wilcoxon Test and organized in tables. The research project was approved by the Research Ethics Committee, CAAE No 0727.0.146.000.08. **Results:** the NP (nursing process) phases implemented by the participants are: history (60%), diagnosis (80%), planning (66,6%), prescription (84,4%) and evolution (77,7%). **Conclusion:** The application of the nursing process is not performed systematically, what can compromise the quality and continuity of care. **Descriptors:** Nursing Process; Nursing Research; Nurses.

RESUMO

Objetivo: analisar o processo de enfermagem em um hospital governamental, identificando as fases utilizadas pelos enfermeiros. **Método:** estudo descritivo e exploratório, de abordagem quantitativa. A coleta de dados foi realizada com 45 enfermeiros, que por meio de questionário, identificaram as três dimensões do processo de enfermagem: identificação das fases; verificação das dificuldades encontradas no desenvolvimento de cada fase e mensuração do tempo empreendido para a sua aplicação. Os dados foram processados pelo Teste de Wilcoxon e organizados em tabelas. O projeto de pesquisa foi aprovado pelo Comitê de Ética em Pesquisa, CAAE nº 0727.0.146.000.08. **Resultados:** as fases do PE implementadas pelos participantes são: histórico (60%), diagnóstico (80%), planejamento (66,6%), prescrição (84,4%) e evolução (77,7%). **Conclusão:** a aplicação do processo de enfermagem não é realizada de forma sistemática, o que pode comprometer a qualidade e continuidade dos cuidados. **Descritores:** Processos de Enfermagem; Pesquisa em Enfermagem; Enfermeiros.

RESUMEN

Objetivo: analizar el proceso de enfermería en un hospital público identificando las etapas utilizadas por los enfermeros. **Metodología:** un estudio descriptivo y exploratorio con abordaje cuantitativo. La recolección de datos se llevó a cabo con 45 enfermeras, mediante un cuestionario que identifica las tres dimensiones del proceso de enfermería: identificación de fases; verificación de las dificultades encontradas en el desarrollo de cada fase; y la medición del tiempo adoptado para su implementación. Los datos se analizaron por el Test de Wilcoxon y organizados en tablas. El proyecto de investigación fue aprobado por el Comité de Ética de Investigación, CAAE No 0727.0.146.000.08. **Resultados:** las fases del PE (proceso de enfermería) implementadas por los participantes son: historia (60%), diagnóstico (80%), planificación (66,6%), prescripción (84,4%) y evolución (77,7%). **Conclusión:** La aplicación del proceso de enfermería no se realiza de manera sistemática, lo que puede comprometer la calidad y continuidad de la atención. **Descriptores:** Proceso de Enfermería; Investigación en Enfermería; Enfermeras.

¹Nurse, Professor, Nursing College, State University of Campinas - UNICAMP. Campinas (SP), Brazil. Email: marfi@fcm.unicamp.br;

²Nurse, Master Teacher in Nursing, University Center Hermínio Ometto / UNIARARAS. Araras (SP), Brazil. Email: luizfogaca@uniararas.br;

³Nurse, Master's Student, Postgraduate in Nursing, Nursing College, University of Campinas / UNICAMP. Campinas (SP), Brazil. Email: paulinhapcosta@hotmail.com; ⁴Nurse, Professor, Nursing College, State University of Campinas / UNICAMP. Campinas (SP), Brazil. Email: vtoledo@fcm.unicamp.br

INTRODUCTION

In everyday practice of nurses, in the diverse spheres of activity, it is developed a working method, known as the nursing process (NP) in order to systematize nursing care.¹ It can be defined as the practical application of care model and nursing theory in patient care. This process is a methodology that helps identifying, understanding, describing, explaining and / or predicting the response of customers to the problems of health or life processes, and determining which aspects of these responses require professional intervention.²

Florence Nightingale, pioneer of modern nursing, a profession grounded in idealized reflections and questions to build a framework of scientific knowledge different from those of medicine, establishing the nursing knowledge should be directed to the person, the conditions in which he lived and how the environment might act positively or not on people's health.³

In seeking to meet the needs of nurses in finding better strategies for intervention in the health context, some theoretical models and theories have been developed, aiming to providing systematic knowledge.⁴ The first essays on nursing theories are given in the 50s, in United States, aiming to describe, explain, predict and control phenomena from their own framework of nursing.⁵⁻⁶ In Brazil, this movement began with the work of Wanda de Aguiar Horta, entitled: "The Nursing Process", published in 1979.¹ This work presented a conceptual model of nursing, the central phenomenon is the vital process, and from which emerge principles to guide the practice.¹ Its impact is observed up to the present day, both in attendance, as well as education and research.⁶

Horta sought to initiate the development of a theory, the Theory of Basic Human Needs by which tries to show nursing as an applied science, moving from the empirical phase to the science phase, developing her theories, systematizing her knowledge by researching and becoming day to day, as an independent science. The author relies on the Theory of human motivation of Maslow (physiological needs, safety, love, esteem and self-actualization), based on the basic human needs, namely: psychobiological; psychosocial; psychospiritual, divided into categories and subcategories.¹

To Horta, the nursing process is the dynamics of systematized and interrelated actions aimed at assisting the human being. It is characterized by the inter-relationship and

dynamism of its phases or steps, consisting of: historical and nursing diagnosis, planning, implementation and evaluation of patient care, thus allowing the identification of problems for which nurses can assist.^{1,6}

In Brazil, the Federal Council of Nursing (COFEN), recommends the use of the NP, which includes the patient's history, physical examination, diagnosis, intervention and evaluation of nursing, since it is a scientific method that aims to identify the manifestations of health and disease, directing the activities of nurses and contributing to the promotion, prevention, recovery and rehabilitation of the individual, family and community.⁷

The NP is required for the recovery of nurses and their role in society; however, the professional must understand his duties to his importance and applicability to become more effective. Despite being known, the NP is not used effectively by all nurses. Before the work performance of nurses, this is seen in the contingency perform many administrative, bureaucratic and educational activities beyond the practices for direct patient care. An excess task contributes to increase the distance between nurse and patient. Direct attention should be the motivation that drives the implementation of nursing care planned.⁸

Nurses use the nursing process as a trajectory for improving care practice, focusing on a methodical, individualized and quality care, and not by the imposition of a resolution or to raise funds from the Ministry of Health; however, its use is not unanimous.^{6,9}

Studies show the difficulty in using the NP, related to its own structure factors (complexity and lack of uniformity in their phases); deficiency of more effective teaching about the techniques of physical examination, the phases of the nursing process and theories that underlie such as difficulties in the practical application of the nursing process, in addition to uniformity in the way these contents are taught; the lack of human and material resources and the lack of consistency between discourse and professional nursing practice, perhaps explained by his ignorance of the correct completion of the NP.^{6,10} Although there are some difficulties in implementing the NP, the same when performed, allows reflection on nursing practice and qualification of care.⁶

OBJECTIVE

- Analyzing the nursing process in a governmental hospital, identifying the stages used by nurses.

METHOD

An exploratory and descriptive study with a quantitative approach, performed at the Hospital of the State University of Campinas - HC (UNICAMP), from May 2009 to July 2010.

The purpose of this study is analyzing the NP through three dimensions: identification of stages of NP used by nurses; verification of the difficulties encountered in the development of each phase; and measuring the time undertaken for its implementation.

There were 45 nurses working in inpatient units who participated in the survey. For the following selection criteria were adopted: being a nurse and being on duty at the time of data collection.

The data collection was initiated after approval by the Research Ethics Committee of the Faculty of Medical Sciences - UNICAMP, under the Protocol N° 919/2008 and CAEE N° 0727.0.146.000.08. To the participants was requested to sign an Informed Consent Form (ICF).

It was used as an instrument of data collection, a questionnaire that was answered by nurses during working hours on unit admissions. The instrument contained in part one data such as: age, gender, time since graduation, working time, courses already undertaken after graduation, work unit, function and now they attended any course on the nursing process. In part two, the questions dealt with the application of the NP steps used in practice, difficulties encountered in each phase, time estimation undertaken for preparation of NP, points facilitators and barriers encountered in its implementation.

The data were processed electronically for conducting the statistical method (Wilcoxon Test), presented as absolute numbers, proportions and rates and organized in tables.

The study took place shortly after the signing of the Terms of Free and Informed Consent and approval of the research project by the FCM Committee of Ethics in Research, by CAEE N° 0727.0.146.000.08, getting favorable opinion for publication under Protocol N° 919/2008.

RESULTS

Regarding the part one of the questionnaire, it was found that 36 (80%) participants were female and 14 (20%) male, with an average age between 20 and 54 years old.

With respect to training time, it was observed that 25 (55,6%) had 1 to 10 years of graduation, 19 (42,2%) from 11 to 20 years, and 1 (2,2%) of nurses did not report the time of graduation. For the period of service in the nursing field, it was observed that 17 (37,8%) of nurses worked 11-20 years in the profession, 15 (33,3%) for about 1-10 years and 13 (28 9%) did not report.

Regarding the courses about the NP, 22 (48,9%) of nurses said they have already done, 21 (46,7%) said they did not attend courses on the theme and 2 (4,4%) did not answer to this question.

It is observed that all nurses participating in the study used a partial or full phases of NP form. Table 1 deals with the phases of the NP that nurses have used in several areas of the hospital setting.

Table 1. Phases of the nursing process carried out by Nurses. Campinas, São Paulo, 2013.

NP deployed phases	n°	%
Nursing history	27	60%
Nursing diagnosis	36	80%
Nursing planning	30	66,6%
Prescription of Nursing	38	84,4%
Evolution of nursing	35	77,7%

The data in table 2 show the phases of the nursing process in which the nurse gets hard.

Table 2. Phases that the nurse had greater difficulty in Nursing Process. Campinas, SP, 2013.

Phases of NP	n°	%
Nursing history	11	22%
Nursing diagnosis	17	34%
Nursing planning	08	16%
Prescription of Nursing	05	10%
Evolution of nursing	04	8%
Total	45	100%

In the table 3 is shown the estimated time taken for the completion of nursing history.

Table 3. Estimated time taken for the completion of nursing history. Campinas, SP, 2013.

Time	n°	%
30-60 minutes	32	71,1%
60-90 minutes	08	17,8%
90-150 minutes	02	4,4%
Without identification	03	6,7%
Total	45	100%

Table 4 shows the estimated time by diagnosis, planning, prescription and nursing nurses in accomplishing the stages of nursing developments.

Table 4. The estimated time to the preparation of phases of the Nursing Process. Campinas, São Paulo (SP), 2013.

Time	Diagnosis		Planning		Prescription		Evolution	
	n°	%	n°	%	n°	%	n°	%
10-30 minutes	26	57,8%	23	51,1%	36	80%	34	75,6%
31-60 minutes	16	35,5%	13	28,9%	08	17,8%	10	22,2%
61-90 minutes	03	6,7%	02	4,4%	01	2,2%	01	2,2%
Without identification	0	0%	07	15,6%	0	0	0	0
Total	45	100%	45	100%	45	100%	45	100%

According to the reports of the subjects it was considered the facilitator points to the implementation of the NP in the hospital. There were studied: allows the general knowledge of the patient, facilitates nursing care, allows the implementation of clinical reasoning, facilitates the shift change, and assists in organization of tasks and team coordination. And the barriers faced in adhering to NP were: lack of time which allows its implementation, lack of education project and permanent lack of theoretical and practical knowledge.

DISCUSSION

As regards the analysis of PE in a government hospital in São Paulo State, it was reaffirmed that females (80.0%) is still a predominant feature in the nursing profession.¹²

The EP is an exclusive activity of the nurse and should be performed in all health institutions.¹³⁻⁴ Is the main model for development of a systematic practice of nursing, allowing nurses to apply in practice the theory that underlies their actions. In addition, the EP favors and qualifies careful as organizes the necessary conditions for implementation and proper record.¹⁴⁻¹⁶

The organization of the NP phases is interrelated and interdependent, allowing the identification of individual needs and appropriate intervention.¹⁴

In this study, it was observed that the participants perform the phases of the NP independently, because they are not prepared in its entirety, with the history of nursing and nursing planning between phases that are less used by nurses, with 60% and 66,6%, respectively.

The history of nursing is the first step in the process is to collect information about the health status of the patient, their family and

community, in order to identify the needs and problems of user.¹⁴ Is considered that this phase requires greater knowledge of the reality of patients, greatly contributing to a possible implementation of nursing actions, more efficient solutions to the problems identified.¹⁷ If this step is not performed, as reported by some participants of this study, the following process steps can be negatively affected.

Planning is the process of nursing care plan for nurses elaborates upon the problems encountered in the diagnostic phase. The fact that its realization by nurses may be related to the difficulty that nurses have on nursing diagnosis, since this study showed that the participants expressing difficulties in developing phases: diagnosis (34%) and history of nursing (22%).

In another study conducted in a private hospital in Brazil, the authors also mention that the phases of the NP are not integrated, there is a lack of consistency in the actions related to the health of patients, say that the lack of preparation of nurses allied the lack of a holistic view hinders the perception and registration of care.¹⁸

With respect to time undertaken for completion of NP, according to the literature, the estimate for review and documentation time is significantly higher at admission than during hospitalization.¹⁹

The data found by research to corroborate the above statement, since they show that the average time spent for the evaluation and documentation on admission is less than to that worn during hospitalization, ranging from 6.7 min to 23.8 min and 6.2 minutes and 19.7 minutes, respectively. For some authors, this time is reduced when a computerized approach for applied.²⁰

The time to perform the steps undertaken NP ranged mostly between 30-60 minutes to

the historic (71,1%), 10-30 minutes for diagnosis (57,85%), planning (51,1%) for prescribing nurses (80%) and (75,6%) for evolution. This time used for filling and recording stages, was regarded as another bureaucratic tasks of nurses and difficult to assist units with lack of human resources. It is interesting to know the time because many nurses report a lack of time as an unfavorable factor for the deployment of NP.¹⁵

The difficulties reported by nurses in this study (lack of time to enable the achievement of the nursing process, the absence of permanent education project and a lack of theoretical and practical knowledge) go against the literature.^{14-15,21,22} Although there has if there was an interest on the part of nurses to obtain information about the NP, and even (48,9%) reported that they attended courses on the topic, the NP was not performed systematically, since not all stages are being applied in the hospital.

CONCLUSION

This study allowed an examination of the EP in a government hospital in São Paulo State, it was found that NP is important for the nursing practice, however, its application is not conducted systematically, which can compromise the quality and continuity of the care.

The analysis showed that it can be difficult for nurses to developing and recording the phases of the NP, due in part to the time required for the provision of care and documentation of their work. It was evident that barriers to adherence to NP in this study are also common to other studies, which leads us to ask whether the way the NP has been applied by nurses is grounded in the theoretical framework. Therefore, this study highlights the need for ongoing evaluation of how the NP runs in the context of health services.

It is suggested that some aspects should be considered for the improvement of the NP: continuity of empowerment groups of nurses on the implementation of the NP units with unconventional spaces for lectures, but to provide information exchange and bring the peculiarities of each unit, through the presentation of clinical case studies, and the development of studies demonstrating the frequency of nursing diagnoses for each unit and also highlights the possibility of conducting audits to demonstrate the applicability of NP in the hospital.

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Corresponding Address

Vanessa Pellegrino Toledo
Universidade Estadual de Campinas
Faculdade de Enfermagem
Avenida Lauro Correia da Silva, 3805 / casa 87
Bairro Jardim do Lago
CEP: 13481-631 – Limeira(SP), Brasil