REVISTA ONLINE DE PESOUISA

CUIDADO É FUNDAMENTAL

UNIVERSIDADE FEDERAL DO ESTADO DO RIO DE JANEIRO - ESCOLA DE ENFERMACEM ALFREDO PINTO

RESEARCH

DOI: 10.9789/2175-5361.rpcfo.v12.7998

SYSTEMATIZATION OF CARE AND NURSING PROCESS: KNOWLEDGE OF NURSING STUDENTS

Sistematização da assistência e processo de enfermagem: conhecimento de estudantes de enfermagem

Sistematización de la asistencia y proceso de enfermería: conocimiento de estudiantes de enfermería

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How to cite this article:

Caveião C, Oliveira AS, Schnitzler RS, Waldrigues MC, Silva JOM. Systematization of care and nursing process: knowledge of nursing students. 2020 jan/dez; 12:1093-1098. DOI: http://dx.doi.org/0.9789/2175-5361. rpcfo.v12.7998.

ABSTRACT

Objective: The study's main purpose has been to analyze the comprehension of nursing undergraduates concerning both nursing care systematization and nursing process. **Methods:** It is a cross-sectional, descriptive and exploratory study with a quantitative approach that was performed with 109 nursing undergraduates, using a structured instrument and being assessed by specialists. Data were analyzed using simple descriptive statistics. **Results:** The findings have shown that 61.5% of the participants had difficulties with the stages of the nursing process, 78.8% did not have knowledge regarding the nursing care systematization before attending the discipline; among the difficulties to elaborate the nursing process, 70,6% mentioned work overload, lack of professionals and large number of patients. **Conclusion:** During the Nursing Graduation Course, the contents must be taught addressing the nursing process aiming to facilitate the correlation between theory and nurse daily practice, leading the students to ponder upon their professional performances, therefore, driving them toward constant information pursue for providing better care quality.

Descriptors: Nursing, nursing process, nursing undergraduates, knowledge, teaching.

RESUMO

Objetivo: analisar o conhecimento de estudantes de enfermagem sobre a sistematização da assistência de enfermagem e processo de enfermagem. Métodos: estudo transversal, descritivo, exploratório, com abordagem quantitativa, realizada com 109 estudantes

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DOI: 10.9789/2175-5361.rpcfo.v12.7998 | Caveião C, Oliveira AS, Schnitzler RS et al. | Systematization of care and nursing process: knowledge...









de enfermagem, por meio de um instrumento estruturado e avaliado por especialistas. Os dados foram analisados utilizando a estatística descritiva simples. Resultados: 61,5% dos participantes possuem dificuldades com as etapas do processo de enfermagem, 78,8% não possuíam conhecimento sobre a sistematização da assistência de enfermagem antes de cursar a disciplina, dentre as dificuldades para elaborar o processo de enfermagem 70,6% citam sobrecarga de trabalho, falta de profissionais e número elevado de pacientes. Conclusão: durante a graduação os conteúdos devem ser ministrados relacionados ao processo de enfermagem de forma a propiciar a conexão da teoria à prática diária do enfermeiro, levando o estudante à reflexão acerca de sua atuação profissional, instigando-o na busca constante pela melhora na qualidade da assistência

Descritores: Enfermagem; Processo de enfermagem; Estudantes de enfermagem; Conhecimento; Ensino.

RESUMÉN

Objetivo: analizar el conocimiento de estudiantes de enfermería sobre la sistematización de la asistencia de enfermería y proceso de enfermería. Métodos: estudio transversal, descriptivo, exploratorio, con abordaje cuantitativo, realizado con 109 estudiantes de enfermería, por medio de un instrumento estructurado y evaluado por especialistas. Los datos fueron analizados utilizando la estadística descriptiva. Resultados: 61,5% de los participantes tienen dificultades con las etapas del proceso de enfermería, el 78,8% no poseía conocimiento sobre la sistematización de la asistencia de enfermería antes de cursar la disciplina, entre las dificultades para elaborar el proceso de enfermería 70,6 % citan sobrecarga de trabajo, falta de profesionales y elevado número de pacientes. Conclusión: durante la graduación los contenidos deben ser ministrados relacionados al proceso de enfermería de forma a propiciar la conexión de la teoría a la práctica diaria del enfermero, llevando al estudiante a la reflexión acerca de su actuación profesional, instigando en la búsqueda constante por la mejora en la calidad de la asistencia.

Descriptores: Enfemería; Proceso de enfermería; Estudiantes de enfermería; Conocimiento; Enseñanza.

INTRODUCTION

Nursing is a dynamic profession, and the nursing care systematization provides a continuous reflection on its actions. It is up to the nurse to provide individualized care, centered on the needs of the patient/family. The nurse must also be able to make decisions in different situations as a manager and leader of the nursing team. The nursing process aims to assist nurses in their practice, concerning patient care and nursing responsibility in administrative and leadership matters.¹

The nursing care systematization, enables the planning, execution, and evaluation of care, assisting in the implementation of norms and routines, scientifically supporting and substantiating nurses' actions. It consists of a scientific work method and strategy for the identification of health/illness situations, supporting nursing care actions with a view to contributing to the promotion, prevention, recovery and rehabilitation of the health of the individual, family and community.² So, through the nursing care systematization the nursing process is established.

The nursing process is applied in professional practice, reflecting the nurse's scientific knowledge, whether or not

it is based on a particular nursing theory. It translates into the organization of care provided to the patient, following pre-established steps, namely: nursing history, nursing diagnosis, nursing prescription, nursing implementation, and nursing assessment.³

The nursing care systematization proposes the organization of nursing actions through the scientific method, giving nurses autonomy and appropriation of scientific, ethical and legal knowledge of professional practice, collaborating for the social recognition of the profession.⁴

Systematizing nursing actions means putting into practice the Professional Exercise Law No. 7,498, which points out that nurses perform all nursing activities, including the following tasks: planning, organizing, coordinating and evaluating nursing care services.⁵

Through the Resolution No. 358/2009, the Federal Council of Nursing establishes the mandatory implementation of the nursing care systematization in all health institutions in Brazil, either public or private, in which professional nursing care occurs. It also defines that the five stages of the nursing process are interrelated, interdependent and recurring.⁶

This study is justified by the importance of evaluating the knowledge of nursing undergraduates on the nursing care systematization and the nursing process, as well as its application during the exercise of the profession, considering that when applying them, nurses organize their working process, impacting the individual's health-disease process. Therefore, it is necessary that the future nurse learns such knowledge during graduation. Bearing in mind the aforesaid, this study targets to analyze the comprehension of nursing undergraduates concerning both nursing care systematization and nursing process.

METHODS

It is a cross-sectional, descriptive and exploratory study with a quantitative approach that was performed over May 2017 at a higher education institution in *Curitiba* city, *Paraná* State, which offers the Nursing Graduation Course. The contents on the nursing process and nursing care systematization are taught from the third period of undergraduate nursing in this educational institution. The research was carried out from the fourth period where students had already had contact with this subject.

The inclusion criteria were: Nursing undergraduate who took the disciplines with the contents of the nursing process and systematized nursing care, enrolled in the second academic semester of 2017. And as exclusion criteria: students absent in the research period or who did not wish to participate in the study. A total of 142 students were invited to participate and 109 accepted to do so.

Data collection took place through a structured instrument established by the researchers, containing closed questions, which underwent the evaluation of two specialist nurses in the area, who were responsible for evaluating the content and language. Subsequently, a pilot test was performed with two volunteer students to

test the understanding of the instrument and dimension the response time. At a time previously arranged with the coordination of the course and teachers, the researchers went to the classrooms, invited the students and explained the objectives of the study.

After data collection, these were typed into a Microsoft Excel Office* 2010 spreadsheet, and analyzed using simple descriptive statistics, using the Statistical Package for Social Sciences software, the base for Windows version 20.0, and presented in tables. The sampling error of 4.6% was calculated.

The study respected the formal requirements addressed in national and international regulatory standards for research involving human beings. The project was approved by the Research Ethics Committee under protocol No. 2.196.835.

RESULTS

Considering the 109 participants, the predominance was female 95 (87.2%), 71 (65.1%) had no technical training and 61 (56.0%) and did not work in the field of either nursing or health, 61 (56.0%) have already attended to lectures on the nursing care systematization and/or the nursing process and 38 (34.9%) of courses involving the theme. When it comes to students' knowledge concerning the nursing process and the nursing care systematization, the measurement of answers is shown in Table 1.

Table 1 - Distribution regarding the students' knowledge concerning the NP and the NCS. *Curitiba* city, *Paraná* State, Brazil, 2017

Understanding with regards to the NP and the NCS	Right answer n (%)	Wrong answer n (%)
Steps that are part of the NP	106 (97.2)	3 (2.8)
Defining the NP steps	42 (38.5)	67 (61.5)
Professional responsible for NP	106 (97.2)	3 (2.8)
Health care levels where nursing consultation is mandatory	101 (92.7)	8 (7.3)
The Resolution No. 317/2007 allows nurses to prescribe and order tests based on protocols	84 (77.1)	25 (22.9)
Sequence of NP steps	77 (70.6)	32 (29.4)
Moment when the NP must be developed	76 (69.7)	33 (30.3)
Resolution governing the NCS	84 (77.1)	25 (22.9)
Definition of the NCS	91 (83.5)	18 (16.5)
Definition of the NP	62 (56.9)	47 (43.1)

NP: Nursing Process. NCS: Nursing Care Systematization.

Table 2 shows the benefits of systematizing nursing care according to the students' viewpoint.

Table 2 - Benefits and importance of NCS during the nurse's working process. *Curitiba* city, *Paraná* State, Brazil, 2017

Variable	n (%)
Benefits	
Improves the quality of provided care	78 (71.6)
Unifies language (standardization)	23 (21.1)
Facilitates the working process	19 (17.4)
Values the professional	9 (8.3)
Importance	
Important	107 (98.2)
Useful only in some health institutions	2 (1.8)

NCS: Nursing Care Systematization.

Among the participants, 87 (79.8%) did not know the nursing care systematization before taking the course, 108 (99.1%) understand that nurses should use the nursing process as a working tool, and 45 (41.3%) answered that they did not have enough knowledge for its elaboration. The difficulties that nurses might encounter while developing the nursing process are shown in Table 3, according to the students' viewpoint.

Table 3 - The difficulties faced while developing the NP during the work process according to the nursing undergraduates' viewpoint. *Curitiba* city, *Paraná* State, Brazil, 2017.

Variable	n (%)		
Difficulties faced while developing the NP			
Work overload, lack of professionals and high number of patients	77 (70.6)		
Lack of professional training	55 (50.5)		
Inadequate working conditions	46 (42.2)		
Process discontinuity	40 (36.7)		
Too much bureaucracy	16 (14.7)		
Steps of the NP that you feel more are difficult to develop			
Nursing history	18 (16.5)		
Nursing diagnosis	37 (33.9)		
Nursing prescription	46 (42.2)		
Nursing implementation	47 (43.1)		
Nursing assessment	15 (13.8)		

NP: Nursing Process.

DISCUSSION

The female predominance of students is similar to the data presented by the Federal Nursing Council in the study of the Nursing Profile in the *Paraná* State.⁷ The number of women working in the nursing field is clear, perhaps because it is a profession that requires patience, instinct to take care and care that comes from nature and the creation of women.⁸

In the *Paraná* State, there are 80 thousand professionals enrolled in the Regional Nursing Council, 76.5% of whom are technicians and assistants and only 23.5% of nurses.⁷ The discrepancy between these categories is denoted, which may be related to the reduction in the search for graduation and, consequently, an increase in training at the technical level. Here, the minority of students work in the field of nursing or health, concluding that all knowledge and experience related to the profession are acquired during graduation, highlighting the responsibility of higher education institutions in the training of nurses.

It is essential for nurses to have full knowledge about the nursing care systematization and the nursing process, as they support the practice of this professional and give a scientific approach to the provided care. Nursing undergraduates showed interest when the higher education institution offers courses and lectures on the subject, nevertheless, they do not seek for these contents in an extracurricular way. Students who already have technical training and/or nursing assistants, demonstrate that they seek better qualifications in the area of expertise, seeking courses on the subject. Even working in nursing, all the learning about the nursing care systematization and the nursing process is new for them, as it is a private activity of the nurse. ^{10,11}

At the investigated institution, classes on the nursing care systematization and the nursing process take place in the third period of graduation. In another study carried out with students, 54.9% of the participants considered that the greatest difficulty is the articulation between theory and practice, and 33.3% pointed out methodological divergence among the teachers. They also underlined that they are only able to acquire greater knowledge on the theme from the third year of college, due to the reduced number of classes on the theme, making it difficult for them to understand the theme. It is important that such contents are taught at the beginning of the course and in a transversal way throughout the training, allowing the student to articulate theory with practice, because the experience leads to an improvement in the quality of their learning.

Another important factor is the participation of students in extracurricular courses and lectures on the subject, being fundamental to the construction of knowledge, so as not to be attached only to undergraduate learning. ¹³ It is understood that the nursing care systematization and the process of nursing are essential content in the curriculum, however, extracurricular training is shown to be complementary in the learning process.

In research performed with teachers about teaching the nursing process, it shows that nursing undergraduates who use it during graduation, are learning to act like professionals in their practice. They are getting used to the tool and thus, becoming competent in its use, because this will be the basis for the development of their nursing care. ¹²

The nursing care systematization is responsible for organizing and facilitating the working process, while the nursing process will direct the best care for the

client during care, ¹⁴ and these concepts are replaced and/or forgotten when the knowledge of other students is analyzed during the participation in studies addressing the theme of nursing care systematization and nursing process.

The nursing process when performed in outpatient health services, homes, schools, and community associations, is called nursing consultation, which is provided for at all levels of health care, whether in a public or private institution, ¹⁵ giving greater autonomy and recognition to the nurse.

It is the nurse's responsibility to prescribe medication, provided it is supported by Public Health Programs and routines that have been approved by public or private health institutions. ¹⁶ It is important to make nursing undergraduates aware of the in-depth knowledge of the laws that govern nursing, providing guidance on the right to prescription, in addition to other activities that are the responsibility of nurses, aiming at the permanent search for scientific knowledge so that they can act with professionalism, integrated into the interprofessional team, and legally supported, during the exercise of the profession.

In a survey carried out with nurses, 51.0% knew the sequence of the steps in the nursing process, ¹⁷ that this must be done on the patient's admission and whenever necessary, ² and that provides support for the preparation of nursing diagnoses, directing the goals to be achieved, supporting the nursing interventions, culminating in the evaluation of the achieved results. ^{2,3,18}

It is noteworthy in this study that students had difficulty conceptualizing the nursing care systematization, which corroborates with another research made with nursing assistants, where 69.0% were unaware of the concept, not knowing the difference between systematization of care nursing and nursing process.¹⁴

The nursing process, an instrument to assist nursing care¹⁷ and fundamental for the communication of health team professionals,² is commonly confused with the nursing care systematization, which consists of the nurse's work method, promoting professional autonomy.¹⁴ Possible answers are the following: deficit in teaching-learning during graduation, the student's and/or professional's own understanding, and the erroneous application during performance, denoting divergence between theory and daily practice.¹⁷

Understanding these concepts during training is extremely important, as it will serve as a foundation for the knowledge acquired in this period, providing subsidies for quality professional practice. Individualized care and the formation of a nurse/patient/family bond occurs from the conscious and qualified application of the stages of the nursing process.²

It should be noted that students are not prepared to use the nursing process, since only daily practice as a professional will make them suitable for using this tool. Still, the little knowledge about the theme is due to the lack of applied classes, divergences between theoretical and practical, little understanding to use the nursing process individually.^{7,18,19}

Herein, students have reported more difficulty in performing the prescription and implementation steps, in contrast to another study, where the difficulties were in the nursing diagnosis and prescription stages, due to the gap in clinical interpretation and the theoretical basis for planning care.³ Nursing care is the moment when nurses' technical-scientific knowledge is applied, then requiring quality training during graduation.

It is important to underline that the teaching of the nursing care systematization must be performed by a professor with expertise in its application. The professor's knowledge will directly reflect on their pedagogical practice, leading students through the teaching and learning process.³

CONCLUSIONS

The understanding concerning both nursing process and nursing care systematization during graduation is of paramount importance for the construction of the nursing undergraduate's future professional identity. It is necessary that during graduation the contents related to the topic under study are approached, integrating theory into the practice of professional nurses, enabling them, as a student, to be able to apply this knowledge, collaborating for the development of specific skills that will contribute to a professional performance effective and quality.

It was possible to perceive with this study that students have a satisfactory level of knowledge about which steps make up the nursing process and the sequence to be followed, the professional responsible for applying these, the levels of health care in which they should be implemented, and the legislation governing the prescription of medicines by the nurse professional. Nonetheless, they have difficulties to conceptually differentiate the nursing care systematization and the nursing process, and in the development of the prescription and implementation steps, which make up the nursing process. The students stated that the nursing care systematization contributes to improving the quality of care provided and considers it as an important tool for the nurse's working process.

This investigation does not allow generalizations because it is limited to the local reality of a higher education institution. Yet, it allows other research to be performed, in order to identify the gaps that exist during the teaching and learning process related to the subject. Furthermore, it is highlighted that continuing education is the consolidated path to guarantee the application of the nursing care systematization and the nursing process in health services.

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Received in: 06/08/2018 Required revisions: 18/12/2018 Approved in: 15/02/2019 Publicado em: 24/08/2020

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Disclosure: The authors claim to have no conflict of interest.