



## NURSING STUDENTS' PERCEPTION ABOUT THE SYSTEMATIZATION OF PERIOPERATIVE NURSING CARE

### PERCEPÇÃO DOS GRADUANDOS DE ENFERMAGEM SOBRE A SISTEMATIZAÇÃO DA ASSISTÊNCIA DE ENFERMAGEM PERIOPERATÓRIA

### PERCEPCIÓN DE LOS ESTUDIANTES DE ENFERMERÍA EN LA SISTEMATIZACIÓN DE LA ASISTENCIA DE LA ENFERMERÍA PERIOPERATORIA

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#### ABSTRACT

**Objective:** to identify the Nursing students' perception about the Systematization of the Perioperative Nursing Care. **Method:** descriptive-exploratory study, conducted with 20 Nursing students from an University of the inner São Paulo that were approved in the discipline *Care Process in Perioperative Nursing*. The data was collected by using a questionnaire divided into two parts: characterization of the population and identifying the perception. For the descriptive statistical analysis and the analysis of the content of the responses, the software *Microsoft Excel*®. **Results:** the Systematization directs the perioperative care, must be applied in all its stages, and enhances the scientific work of the nurse. The students' perception reveals a gap between theory and practice, and the need for improving the knowledge, in order to enable the correct use and the graduation of qualified professionals. **Conclusion:** the Systematization is an essential tool for the nurse; however, there are clear evidences of the difficulties of implementing it in professional practice. **Descriptors:** Perception; Nursing Students; Graduation in Nursing; Nursing Processes; Perioperative Nursing.

#### RESUMO

**Objetivo:** identificar a percepção dos graduandos em Enfermagem sobre a Sistematização da Assistência de Enfermagem Perioperatória. **Método:** estudo descritivo-exploratório, com 20 graduandos do curso de Enfermagem de uma Universidade do interior paulista que cursaram a disciplina de Processo do Cuidar em Enfermagem Perioperatória. A coleta de dados foi realizada por meio de um questionário composto por duas partes: caracterização da população a identificação da percepção. Utilizou-se a planilha do programa *Microsoft Excel*® para a análise estatística descritiva e análise de conteúdo das justificativas. **Resultados:** a Sistematização direciona o cuidado perioperatório; deve ser aplicada em todas as suas etapas; evidencia o trabalho científico do enfermeiro; a percepção dos graduandos revela lacuna entre teoria e prática e a necessidade de aprofundar os conhecimentos, para possibilitar a aplicação adequada e a formação de futuros profissionais capacitados. **Conclusão:** a Sistematização é ferramenta essencial para o enfermeiro, porém há evidências claras da dificuldade da implementação desta na prática profissional. **Descritores:** Percepção; Estudantes de Enfermagem; Educação em Enfermagem; Processos de Enfermagem; Enfermagem Perioperatória.

#### RESUMEN

**Objetivo:** identificar la percepción de los estudiantes de enfermería en la Sistematización de la Asistencia de la Enfermería Perioperatoria. **Método:** estudio descriptivo-exploratorio, realizado con 20 estudiantes universitarios del curso de enfermería de la Universidad de Sao Paulo, aprobado en la disciplina Proceso de Atención de la Enfermería Perioperatoria. La recolección de datos fue realizado a través de un cuestionario que consta de dos partes: la caracterización de la población y la identificación de la percepción. Se utilizó el programa *Microsoft Excel*® para el análisis estadística descriptiva y análisis de contenido de las justificaciones. **Resultados:** la Sistematización regula el cuidado perioperatorio, debe ser aplicado en todas sus etapas y destaca el trabajo científico de las enfermeras. La percepción de los estudiantes revela una brecha entre la teoría y la práctica y la necesidad de profundizar en el conocimiento para permitir la implementación y la formación de profesionales cualificados. **Conclusión:** la sistematización es una herramienta esencial para la enfermera; sin embargo, existe una clara evidencia de la dificultad de su implementación en la práctica profesional. **Descriptores:** Percepción; Estudiantes de Enfermería; Educación en Enfermería; Proceso de Enfermería; Enfermería Perioperatoria.

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## INTRODUCTION

Nursing directs its care from the identification, assessment and intervention on the needs of the individuals, family, group and community. Historically, this work went through different types of knowledge, being molded by the professionals who began to develop theories and concepts that, besides guiding the practice, allowed the formation of the professional identity, which resulted in the characterization of nursing as a profession.<sup>1-4</sup> Thereby, with the science development, the construction of the knowledge in different and specific areas became important, mainly the perioperative nursing when considering this study.

Initially, the nursing in operating rooms was specifically for the maintenance of the environment, to keep it safe, comfortable and clear.<sup>5</sup> The evolution of the Nursing course, in this case, was directed to instrumental aspects, helping the physicians and organizing and providing materials, setting the care to the patient undergoing a surgery.<sup>6</sup>

The development of health care regarding the operating room, the surgical and instrumental techniques, as well as innovations in other specialties, demanded the health staff, specially nurses, to improve the scientific qualification.<sup>6</sup> Thus, nursing, concerning the global health, structure its assistance in order to build a knowledge focused on acting, evaluating the work and reorganizing the care, the Systematization of the Nursing Care (SNC).

The SNA reassembles the care and unifies the work of the nursing staff, once it is based on the process of communication between professionals and on the patients' reality and needs, organizing the professional work related to the method, apparatus and personnel so that it is possible to operationalize the Nursing Process (NP).<sup>7</sup>

The Resolution N° 358/20098 of the Nursing Federal Council (COFEN) states about the SNA in Brazilian health institutions, considering it as a private activity of the nurse compound by scientific methods and strategies for the identification of health conditions/disease, supporting nursing care actions that may contribute to the promotion, prevention, recovery and rehabilitation of the individual and his/her family, being the nurse also responsible for implementing, planning, organizing, executing and evaluating the NP.<sup>8</sup>

This practice involves the patient care in the operating room environment and the hospitalization unit. In this work process, the nurses are responsible for both the

perioperative nursing care as the accomplishment of management activities. However, certain health services has divisions of tasks among the nurses of the operating room staff, in which some become responsible for administrative and bureaucratic activities, and others, for the patient care.<sup>3</sup>

Regarding the direct care, nursing improves and consolidates its own types of knowledge in various areas from NP - a methodological, systematic and humane instrument used to guide the professional nursing care. It is considered systematic for it has five stages (history of nursing, nursing diagnosis, planning, implementation and evaluation), and humanized for it is individualized and subjective.<sup>9-10</sup> The conceptual marks and nursing theories are tools that support the operationalization of the NP, being the first publication about NP in Brazil from 1979, by Wanda Horta, with the book "The Nursing Process".<sup>1,11</sup>

Therefore, the NP is characterized by flexibility and dynamism, organizing and directing the clinical practice of nursing and the nurse's work in investigating the patient's data, identifying care needs, recommending interventions and evaluating the results. Thus, it is a method to operationalize the nurses' work for enlarging nursing actions, related to the systematization of care.<sup>4,11</sup>

Most Brazilian hospitals failed to implement the NP methodology, with all its stages. The success or failure of implementing nursing care depends on the nurse and each institution.<sup>3-4</sup> A study showed that there is an initial resistance among health professionals about the SNC, which favors the apprenticeship of nursing care, encouraging both students as service users and their families.<sup>2</sup> Another study stated that the main difficulties faced by nurses for not working the NP are the lack of time and poor knowledge related to the NP and nursing classifications.<sup>5</sup>

In perioperative nursing, according to the Brazilian Society of Nurses in Surgical Center, Anesthetic Recovery and Material and Sterilization Center (SOBECC), that formulates the guides for the practice, promotion and dissemination of perioperative nursing, the Systematization of Perioperative Nursing (SPN) is identified as a proper organization tool, with the following phases: preoperative nursing visit, planning perioperative care, the implementing the care, evaluation with post-operative nursing visit and redesign of care.<sup>12</sup>

SNP was created in 1985 with the objective of promoting the complete, individualized, documented, evaluated and ongoing care to

the surgical patient and his/her family.<sup>7</sup> Therefore, it can be described as an appliance of the NP on the care to the patient, based on the complete, individualized, documented and evaluated care.<sup>13</sup> This care's objectives are: immediate assessment and preoperative preparation, perioperative nursing intervention and postoperative evaluation, integration of inter-institutional, interdisciplinary and multidisciplinary actions, favorable conditions for teaching perioperative nursing for graduation, post-graduation, continuing and permanent education and for encouraging, planning and developing of researches in the area of care and education of perioperative nursing.<sup>10</sup>

The SPNC intends to support the client and his/her family in understanding and preparing for the proposed anesthetic-surgical treatment; to decrease the most the risks of using the materials and equipment needed for the development of these procedures, as well as the environmental ones, such as the surgical center and the post-anesthetic recovery room.<sup>10</sup>

In nursing education, it is assumed that students and professors envisage the graduation of qualified professionals committed to the ethics and the satisfaction of the assisted community. The education should be focused on a reflective teaching, with a challenging and stimulating objective, in order to help students to build skills and competencies that strengthen the professional commitment, specifically, in this study, the perioperative nursing.<sup>14</sup>

Identifying and comprehending the way the students perceive this qualification and commitment is necessary for the development and strengthening of the Nursing. A study conducted in 1998<sup>13</sup> intended to describe the comprehension of a group of just-graduate nurses from the Nursing School of USP about the discipline *Administration in Nursing* of the respective school. The reports stated about the perception of the mentioned discipline in professional practice, understanding the administrative and main function of the nurse's work. They identified the importance, the size and depth of this discipline, in addition to the preparation and safety. The issues discussed during the classes, regarding relationship and the development of the working team, had different responses, as the classes were considered, at the same time, sufficient and insufficient. Thereby, comprehending the perception of the graduates about administration in nursing allowed understanding the teaching of the discipline *Administration in Nursing*.

Considering the mentioned scenario, the following question arises: what is the perception of nursing students in relation to the SPNC? To answer it, the following objectives were established:

- To identify the perception of the Nursing students about the Systematization of the Perioperative Nursing Care;
- To characterize the population regarding gender, marital status, origin city, technical education, work or internship in the perioperative area;
- To identify the perception of the students about the theoretical and practical content of the discipline *Perioperative Nursing*;
- To identify the perception of the students about the stages and viability of implementing the Systematization of the Perioperative Nursing Care.

## METHOD

Descriptive-exploratory study, with a population compound by Nursing students from the Nursing College of the State University of Campinas (UNICAMP) that, in 2013, attended the classes of the discipline *Care Process in Perioperative Nursing*.

The discipline has a total of 120 hours, being 45 hours of theoretical content, and 75 hours of practical content, performed at the centers of material and sterilization, surgical center and post-anesthetic recovery unit. The activities were accomplished at the Clinics' Hospital of UNICAMP.

In August and September, the literature review about Nursing Process (NP) and Systematization of the Perioperative Nursing Care (SPNC) was conducted in the Latin-American and Caribbean Literature (LILACS), Electronic Library of Brazilian Scientific Journals (SCIELO), International Literature (MEDLINE) and Virtual Library in Health (VLH) databases.

The instrument for data collecting consisted of two parts: the first one is related to the characterization of the students, including the variables: gender, age, marital status, origin city, technical education, job or internship in the perioperative area; the second one, specific to identify the perception of the students about the theoretical and practical content of the perioperative nursing discipline, the phases and the feasibility of implementing the SPNC.

The second part contains the answers to the questions using a Likert scale, a non-comparative five-point scale ranging from "strongly agree", with value one, to "strongly



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disagree", with value five, which can be used to evaluate products/services where the respondent fulfill a single item according to his/her satisfaction level.<sup>15</sup> Furthermore, the individuals justified their answers in a suitable space and, lastly, wrote about the experience in the practice fields of the discipline using the SPNC.

For the collecting, the researchers submitted the project to the Graduation in Nursing Committee, which approved the implementation of the study at the Nursing School of UNICAMP. The coordinator of the discipline was also informed about the study. Once these points were informed and accepted, a meeting with the graduate students to explain the research's objectives was scheduled, and an email to invite them was sent. The questionnaire and the Term of Free Consent and Informed (TFCI), with two copies, were delivered to all of the students joining the study, and so a period of seven days was established to return the questionnaire and the TFCI.

Due to the return period of the questionnaires coincide with the end of the academic activities of the semester, the students found difficult to return them. In an attempt to solve the problem, the return date was extended, but, still, four questionnaires did not return.

The software *Microsoft Excel*® was used for the descriptive statistical analysis and for the analysis of the content of the students' responses. The research was delivered to the Research Ethics Committee of the Medical Science College of the State University of Campinas (UNICAMP), in October 2013, and was approved in November 2013, under the opinion number 435.572.

## RESULTS

The sample consisted of 20 nursing students: 95% (n = 19) were women and 5% (n = 1), men; age from 20 to 26 years, with an average of 22 years with a standard deviation of 1.6 years. Regarding the origin, 90% (n = 18) were from the state of São Paulo, 5% (n = 1) from Minas Gerais and 5% (n = 1) from Rio de Janeiro; 45% (n = 9) live in the metropolitan region of Campinas, 10% (n = 2) in the metropolitan region of São Paulo and 45% (n = 9) in other cities. Concerning the technical education, 35% (n = 7) said they had graduated the technical course in nursing and all of them developed practical activities in the perioperative area, and 14.2% (n = 1) had already worked in that area.

When asked about the contribution of the theoretical content of perioperative nursing in

acting as a nurse, 60% (n = 12) of the students report using the content taught in the course in the practice of nursing, fully agreeing, scoring one in Likert scale. Among the respondents, 50% (n = 10) scored two according to Likert scale, agreeing that the theoretical content of nursing contribute or will contribute in the use of SPNC and 25% (n = 5) strongly agreed, punctuating one, although reporting a weak theoretical content about SPNC.

The practical activities in the center of material and sterilization, operating room and post-anesthetic recovery unit contributed or will contribute to the work as a nurse for 70% (n = 14) of the population interviewed. The development of practical activities using SPNC improved the knowledge of the perioperative period for 65% (n = 13) of the respondents, while 60% (n = 12) reported the need for expanding workload.

Among the students, 45% (n = 9) agree, scoring two in the Likert scale, that the Systematization of Perioperative Nursing Care (SPNC) is a nurse working tool that qualifies the care provided to the client and his/her family. The experience with SPNC partially met the expectations according to 40% (n = 8) of the sample, scoring three in Likert scale.

Most of the students, 70% (n = 14), fully agrees - one in Likert scale - that the preoperative visit is an effective tool for nurses in planning the care provided to the surgical client, and 60% (n = 12) fully agrees - one in Likert scale - that the information collected in the preoperative visit provides subsidies that allow them to positively change the implementation of nursing care during surgery and post-anesthetic recovery.

Among all graduate students, 40% (n = 8) agreed, scoring two in the Likert scale, and other 40% (n = 8) fully agreed, scoring one, that the postoperative visit is an effective tool for nurses to evaluate the quality of care provided to the surgical client, since it evaluates the provided assistance.

Most of the sample, 50% (n = 10), agrees, scoring two in the Likert scale, and 35% (n = 7) fully agree, scoring one in the scale, that the SPNC collaborates as a possible reformulation of the care, believing it to be important if correctly done.

Among the respondents, 40% (n = 8) believe it is possible to implement the SPNC in any service to attend the surgical patient, provided there is sufficient human resources, nursing staff commitment, material resources and planning of the institution.

Nine graduate students answered the question open about the experience in practical fields of activity, 15% (n = 3) responded that the SPNC is little used, and were not able to see its implementation; 5% (n = 1) reported that the experience was useful in practical fields of activity, whereas 5% (n = 1) reported that they would like to look for the patient in all operative periods, to have access to the books of the institution and to know how the SPNC was implemented by the nursing staff of the institution. The importance of SPNC in post-anesthetic recovery, where it is mostly viewed, was present for 10% (n = 2) of the students. Finally, 5% (n = 1) reported that the practical activity was essential to consolidate their theoretical knowledge.

## DISCUSSION

During the academic life, the theoretical and scientific content about the Systematization of Nursing Care and Nursing Process is presented, discussed and applied for and with the students. This construction in nursing provides the development of practice in the perioperative period. Thereby, the nurse who has the opportunity to practice the SPNC during the academic life can apply this scientific method in the future of the professional life.<sup>16</sup> It is essential that graduate students receive adequate training, highlighting the importance of systematization.<sup>3</sup>

Nursing's objective is to look into the aspects of the impact of the disease on individuals and their families, having its focus of action on the human being. The SNC intends to promote basic human needs affected by the health-disease process and is constituted as a methodological tool that enables the development of the nursing profession as a science, linking the areas of assistance, teaching and research.<sup>2</sup>

The nurse's NP in the operating room includes the care, management, teaching and research. The Association Perioperative Registered Nurses (APRN) and the Brazilian Society of Nurses in the Surgical Center, Anesthetic Recovery and Material and Sterilization Center (BSNSC) seek the unification of perioperative practice, in order to establish standards for excellence.<sup>12,16</sup> In this study, the students pointed out the importance of the practical activities of the discipline "Care Process in Perioperative Nursing" both in the Surgical Center as in the Sterilization Center, improving the knowledge with the use of SPNC and highlighting the need to increase the workload.

The NP is a tool that enables the improvement of the professional status of nursing, due to the application of scientific knowledge, and is the implementation of systematic and interrelated actions, providing a management of the nursing assistance.<sup>17-18</sup> Therefore, the nurse is essential to develop and apply the SPNC, which constitutes the proper tool for organization, and includes the phases of preoperative nursing visit, planning perioperative care, the implementation of assistance, evaluation and post-operative nursing visit and reformulation of the care.<sup>19</sup>

The construction of the knowledge responsible for professional practice begins in the college, being focused on the efficient training of future nurses, contributing significantly to justify this study. In this study, the students agreed (45%, n = 9) that the SPNC is a working tool that qualifies the care provided to the client and the family. In contrast, their experience with the SPNC in practice fields partially met expectations.

Most respondents fully agree (70%, n = 14) that preoperative visit is an effective tool for nurses in care planning for surgical patients, and other 60% (n = 12) fully agree that the information collected in the preoperative visit provides data that allow changing positively the implementation of nursing care during surgery and post-anesthetic recovery.

The preoperative visit is very importance in the nurse's action in SPNC, since it enables controlling the evolution of the patient and early detection of possible errors in nursing care. It also enables reducing the anxiety of the patient and family, for any surgical procedure creates anxiety for the fear of the procedure or anesthesia, and it is up to the nurse to identify weaknesses and interfere, setting as an orientation process about the perioperative period, from the preparation of the patient, proposed procedure, postoperative period, legitimizing the continuity of nursing care in intra- and postoperatively periods. Studies show as difficulties in implementing the SPNC, the function overloading, insufficient number of professionals, time spent, structural and cultural paradigms, inadequate tools, lack of scientific knowledge, not-assumption of the role of leader and educator by the nurse, focusing the care on medical diagnosis and lack of autonomy of the nursing.<sup>6, 16, 20,21</sup>

In this context, it is necessary to plan and define the role of nurses regarding the action plan focused on the patient in the perioperative period, so that the assistance is good and safe, based on scientific theories and enabling the development and

consolidation of a specific knowledge of nursing, the SPNC.

Postoperative visit is an effective tool for nurses to evaluate the quality of care to surgical client, since it evaluates the care provided for most respondents, as 40% (n = 8) agree and another 40% (n = 8) fully agree with that statement. Postoperative visit is a moment in which the nurse is able to monitor the patient's progress and is considered essential to the exercise of the profession.<sup>20</sup> It provides a broader view of the patient, and even of his/her family, and obviously provide valuable information regarding the work of the nurse in the preoperative period, such as the effectiveness of the guidance and information provided during this period.

Most respondents agree (50%, n = 10) and fully agrees (35%, n = 7) that SPNC contributes to a possible reformulation of the assistance, believing it is important if correctly done. However, one of the challenges found by nurses to ensure this improvement is the fact that perioperative nursing care is done, mostly, without proper registration, which complicates the continuity of systematization.<sup>16</sup> A method to evaluate the organization, individualized care and management of the assistance is to build indicators that address the SPNC<sup>6</sup>, which may contribute to improve this situation.

The literature reports that there is a great difficulty in performing the SPNC, and when it is made, it is only applied in parts, though most nurses know its importance. Studies report that, in addition to the difficulties found by some graduate students of this study when performing the practical activities, such as insufficient number of professionals, both nurses as team members, lack of appropriate instruments and overhead functions (characterizing the lack of institution planning), are other difficulties are reported, such as lack of scientific knowledge, focusing the care on medical diagnosis, lack of autonomy of nursing and decrease of the role of leader and educator, by the nurse.<sup>16,18</sup> In this study, 40% (n = 8) believe that the implementation of the SPNC in any customer service to surgical patients is possible, provided there is sufficient human resources, nursing staff commitment, material resources and planning of the institution, according to the literature.

The practice of SPNC proved to be an essential tool for determining the theoretical content taught in class. Although this was considered insufficient by some students, implementing the systematization can be observed, appearing as the improvement of

the patient's care in perioperative situation, even if not fully performed by the professionals during practical activities.

## CONCLUSION

The SPNC is an essential tool for professional nursing practice, and, with this systematization, it is possible to put into practice the planning and promotion of an appropriate care to patients and their families, based on scientific evidence; however, even aware of this importance, there are clear evidences of the difficulty of implementing the SPNC in professional practice, due to factors such as work overload, lack of human resources, inadequate tools, lack of scientific knowledge, lack of nursing autonomy, among others.

Graduate students consider that the SPNC directs the perioperative care and should be applied in all its stages. Furthermore, the action plans for its implementation should be directed in accordance with the reality of institutions; it also comes as a way of showing the scientific work performed by nurses, as well as safe and quality care.

The students' perception reveals a gap between theory and practice and a need to improve the knowledge of these two aspects, in order to enable the proper implementation and training of qualified professionals, as they believe that the SPNC is important not only in practical level, as a way to plan and improve care, but also in theoretical level as an essential scientific basis of nursing education. Performing correctly all its stages provides subsidy that allows a better care to the patient and family, making it possible to evaluate and improve the quality of services provided during the perioperative period. There is also the need of scientific literature about the theme, being extremely important for the nurses to conduct researches, as scientific studies about SPNC are very scarce.

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