

# CUIDADO É FUNDAMENTAL

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## TEACHING-LEARNING OF THE NURSING PROCESS: PERCEPTION OF GRADUATE STUDENTS

*Ensino-aprendizagem do processo de enfermagem: percepção de discentes da graduação**Enseñanza-aprendizaje del proceso de enfermería: percepción de estudiantes de posgrado*Yasmim Ribeiro Fracaroli<sup>1</sup> Bárbara Matioli Lapa Dias<sup>2</sup> Geovana Tosatti Petraccone<sup>3</sup> Lucélia Terra Chini<sup>4</sup> Alice Silva Costa<sup>5</sup> Isabelle Cristinne Pinto Costa<sup>6</sup> 

### ABSTRACT

**Objective:** describe the conceptions of undergraduate about the nursing process. **Method:** this is a qualitative, exploratory, descriptive, and cross-sectional study. The data collected, stored during the questionnaire technique, were analyzed through Bardin's content analysis. **Results:** in the categorization process, the following categories were identified: limitations in the approach to the teaching-learning process of the Nursing Process in disciplines and clinical practices: fragmentation and lack of continuity; Evaluation of teaching methodologies of the Process: challenges and gaps; Use of Standardized Language; Approach and application of nursing theories in practical context. **Final considerations:** this study reveals limitations in the teaching of the Nursing Process for undergraduate students, highlighting a fragmented approach, lack of interdisciplinary integration, and challenges in teaching methodologies. These findings guide improvements in education for a more comprehensive and effective nursing training.

**DESCRIPTORS:** Nursing process; Learning; Students nursing;

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## RESUMO

**Objetivo:** descrever as concepções dos discentes de graduação sobre o processo de enfermagem. **Método:** trata-se de um estudo de abordagem qualitativa, exploratória, descritiva e transversal. Os dados coletados, armazenados durante a técnica do questionário, foram analisados à luz da análise de conteúdo de Bardin. **Resultados:** no processo de categorização, foram identificadas as seguintes categorias: limitações na abordagem do processo de ensino-aprendizagem do Processo de Enfermagem nas disciplinas e práticas clínicas: fragmentação e falta de continuidade; avaliação das metodologias de ensino do Processo: desafios e lacunas; uso de Linguagem Padronizada; aproximação e aplicação das Teorias de Enfermagem no contexto prático. **Considerações finais:** este estudo revela limitações no ensino do Processo de Enfermagem para discentes de graduação, evidenciando uma abordagem fragmentada, falta de integração interdisciplinar e desafios nas metodologias de ensino. Tais descobertas direcionam melhorias no ensino para formação mais abrangente e eficaz em Enfermagem.

**DESCRIPTORS:** Processo de enfermagem; Aprendizagem; Estudantes de enfermagem;

## RESUMEN

**Objetivos:** describir las concepciones de estudiantes sobre el proceso de enfermería. **Método:** se trata de un estudio cualitativo, exploratorio, descriptivo y transversal. Los datos recopilados, almacenados durante la técnica del cuestionario, fueron analizados a la luz del análisis de contenido de Bardin. **Resultados:** en el proceso de categorización, se identificaron las siguientes categorías: limitaciones en el enfoque del proceso de enseñanza-aprendizaje del Proceso de Enfermería en las disciplinas y prácticas clínicas: fragmentación y falta de continuidad; Evaluación de las metodologías de enseñanza del Proceso: desafíos y lagunas; Uso de lenguaje estandarizado; Aproximación y aplicación de teorías de enfermería en el contexto práctico. **Consideraciones finales:** este estudio revela limitaciones en la enseñanza del Proceso de Enfermería para estudiantes de pregrado, evidenciando un enfoque fragmentado, falta de integración interdisciplinaria y desafíos en las metodologías de enseñanza. Estos hallazgos orientan mejoras en la educación para una formación en enfermería más integral y efectiva.

**PALABRAS CLAVE:** Proceso de Enfermería. Aprendizaje. Estudiantes de Enfermería.

## INTRODUCTION

The Nursing Process (NP) can be understood as the main methodological model for the systematic performance of professional practice, or a technological tool used to promote care. It organizes and gives visibility to the actions of professionals by promoting humanized care that qualifies nursing assistance.<sup>1</sup>

The implementation of the NP emerges as a fundamental pillar for the quality of care provided to patients, as well as for valuing the nursing profession. The NP is structured in sequential and interrelated stages, namely: data collection, diagnosis, planning, implementation and evaluation.<sup>2-3</sup> It stands out for being guided by research and scientific evidence. NP aids critical thinking and the recording of information as a comprehensive and systematized approach, which helps to ensure that no important aspect of care is neglected.<sup>4-5</sup>

However, it is believed that the difficulties in operationalizing NP are correlated with insufficient knowledge from the training process, which generates insecurity and resistance to the implementation of the method on the part of nursing professionals.<sup>6</sup> In this context, a thorough and reflective analysis of the curricular configuration and syllabus adopted in undergraduate nursing courses is necessary, which should be reviewed regularly with the incorporation of the latest practices and scientific evidence, in order to ensure that nurses develop the necessary clinical skills in the use of NP.<sup>7</sup>

The lack of adequate theoretical and practical preparation for the implementation of NP reveals deficiencies in the nursing education curriculum. When these gaps are not properly addressed during academic training, it can have direct implications for nurses' practice, such as discontinuity in the provision of care, inaccurate judgments about results, among others. Lack of knowledge has a significant impact, not only on the care aspect, but also on the financial, legal and administrative dimensions of health care.<sup>8-9</sup>

In order to ensure that these professionals are prepared for the effective implementation of NP in their clinical practice, it is necessary to understand the importance attributed by students to NP in order to elucidate the facilities and difficulties they face in theoretical and practical teaching during their undergraduate studies, in order to provide support for the development of strategies that stimulate skills and competencies and for better assimilation of NP.<sup>10</sup>

In view of the above, and based on the idea that teaching NP contributes to strengthening and increasing nursing's visibility and autonomy, as well as building nursing students' care competencies, this study aimed to describe undergraduate students' conceptions of NP.

## METHOD

This is a qualitative, exploratory, descriptive and cross-sectional study conducted in accordance with the Consolidated

Criteria for Reporting Qualitative Research (COREQ) guidelines. Data collection took place from January to February 2023, involving undergraduate nursing students from an educational institution in the south of Minas Gerais. The eligibility criteria included students aged 18 or over, regularly enrolled in any period of the institution's nursing course. Students absent on the day designated for data collection were excluded.

The sample of 39 students was recruited through invitations distributed in the institution's WhatsApp groups. Before the data was collected, the students were given information about the study, including the objectives, through the Informed Consent Form (ICF). Anonymity was preserved by replacing the participants' names with letters "D", which were randomly numbered after the questionnaire was completed. Participants had the option of refusing to answer certain questions or withdrawing their participation without prejudice.

Data was collected using a questionnaire on Google Forms. The questionnaire included closed questions to characterize the sociodemographic profile of the participants, covering variables such as gender, age and period. The second part of the questionnaire explored issues related to the teaching and learning of the Nursing Process (NP) at the participants' educational institution. These questions included inquiries about the application of the NP in practice scenarios, the use of standardized language systems, the evaluation of the teaching methodologies employed by teachers, as well as identifying facilities and difficulties in teaching and learning the NP. The questionnaire also addressed the participants' familiarity with nursing theories, how they applied these theories in practical subjects, and highlighted facilities and difficulties in the teaching-learning process related to nursing theories.

Data was collected in a reserved room at the School of Nursing, equipped with computers to facilitate participants' access to the online questionnaire. The interviews were analyzed in three phases, using Bardin's content analysis.<sup>11</sup> In the first phase, the answers were transcribed and read, with the aim of grasping the main ideas. In the exploration phase, units of meaning were selected, reducing the text to significant words and expressions related to the objective of the study. The analysis was concluded by categorizing the units of meaning according to their degree of proximity, allowing for the expression of meanings, interpretations and elaborations.<sup>12</sup> The research followed the guidelines of Resolution 466/2012 of the National Health Council and was approved by the Ethics Committee of the educational institution (CAAE: 65905722.8.0000.5142).

## RESULTS

The study involved 39 participants, predominantly female (89.7%) and aged between 21 and 23 (64.2%). The majority were in their 7th year of undergraduate studies (23; 59%) and had started university studies between 2020 and 2021 (30; 76.9%). The analysis of the responses revealed empirical categories: Limitations in the approach to

the NP teaching-learning process in clinical disciplines and practices: fragmentation and lack of continuity; Evaluation of NP teaching methodologies: challenges and gaps; Use of LP in NP; Approximation and application of nursing theories in the practical context.

Limitations in the NP approach were highlighted, especially fragmentation and lack of continuity.

*NP takes place in greater depth in SAE, in other subjects the teachers just comment and discuss the need to use it. (D1)*

*It's based on clinical reasoning, which has been worked on a lot, but the application of the process ends up being somewhat imperceptible, not least because it was only mentioned in one subject again. (D7)*

*The NP subject was a great learning experience in the fourth term of my nursing degree, and now we have the knowledge to apply it, but not all teachers follow this line of reasoning. (D8)*

The analysis also revealed that, in many situations, the approach is restricted to the theoretical presentation and discussion of specific cases, without a broad connection with other disciplines or clinical practices.

*The process is approached with the help of nursing theories and clinical cases, which enable critical thinking, which is very important for applying the process. (D7)*

*Teachers apply clinical cases asking for nursing diagnoses and interventions. (D15)*

*Unfortunately, to date, I haven't found myself applying the Process in full, mainly due to lack of time and lack of continuous contact with patients. (D19)*

Students' perceptions of the methodologies used to teach NP varied. Some considered them effective, while others expressed difficulties, including the lack of continuity and the superficiality of some approaches.

*In general, I think it was very well covered, promoting interest and knowledge about the Nursing Process. (D9)*

*I think the methodologies used are very good, as they perfectly fit theory with practice. (D13)*

*In part, they use the active methodology to teach the NP, and this is very good for our learning and for establishing the stages of the Process. One of the obstacles is that we only see NP in one subject and then we come across fields of practice that don't use it in their routines. (D1)*

*I think the methodology is ineffective and very little is covered in the teaching process. There is no continuation of teaching on the subject and little application in practice. (D11)*

From the testimonies, we can conclude that the main advantages are understanding the importance of the NP for care, the use of a standardized method for organizing care, practical application in clinical cases and the possibility of autonomy and individualization of care:

*The NP makes it easier for nursing students to understand their area of work, showing the importance of having critical thinking to carry it out. It also shows that through it the professional has more autonomy in their work. (D9)*

*The NP helps to develop a strategy for patient care, as the stages contribute to individualizing care. (D12)*

Variation was observed in the request for and use of LP systems in nursing courses. Some teachers request the use of specific LP, such as NANDA-I, NIC and NOC, while in other subjects there is no clear standardization.

*The most commonly used are NANDA-I, NIC and NOC. (D2)*

*Some teachers request the use of NANDA-I for ED and there has been a case of using ICFSC for Diagnoses and Interventions. (D18)*

*We are usually asked to survey diagnoses using NANDA-I. We've also had contact with the CIPESC. (D17)*

*In most of the courses enrolled, the standardization most used and requested by teachers is NANDA and CIPE. (D22)*

*The NANDA-I, NIC and NOC languages are used the most, but there is no standardization; teachers are open to all taxonomies. (D9)*

*A teacher is never directly asked to use standardized language, it is implied that we know how to apply NANDA-I, NIC and NOC. (D7)*

With regard to nursing theories, participants mentioned facilities, such as understanding the importance of NP and the practical applicability of theories in clinical situations. However, difficulties were also reported, including the complexity of the theories and the lack of practical applicability during academic training.

*The theories underpin the whole holistic view of care, from the anamnesis to the interventions and guidance. (D8)*

*As each theory has a focus of action, it contributes to developing patient-centered care that fits the profile of action. (D12)*

*Understanding each patient's self-care and their particular needs. (D15)*

*Theories help to facilitate how to follow a line of reasoning for carrying out NP, thus facilitating the interpretation and practice of more viable and visual actions for the process and teaching. (D8)*

*Lack of understanding of some theories. (D10)*

*I couldn't understand the difference between theories, because there are a lot of theories, and there is little application and approach to them in practice. (D11)*

*They can often be complex and extensive, requiring careful understanding before using them. (D13)*

## DISCUSSION

The qualitative approach adopted in this research made it possible to reveal insights into a topic that is frequently explored but often neglected in terms of transformations in its teaching process in educational institutions. This methodology offered a more in-depth and contextualized understanding, contributing to a more comprehensive view of the topic's impact on the educational landscape.

Category 1 of this study highlights the limitations during the teaching and learning of NP in clinical disciplines and practices: fragmentation and lack of continuity. Through this analysis, in the students' reports, it was observed that NP teaching occurs exclusively in specific disciplines, such as SAE, but is not approached in a consistent and continuous manner throughout the course.

Throughout their undergraduate studies, students are instructed in the application of NP and the use of other nursing classification systems, such as NANDA-I, NIC, NOC, CIPE and CIPESC, however, there are still limitations during the educational approach. The insertion of NP and its contextualization with other subjects in the course allows students to acquire a solid theoretical basis, with intellectual improvement and the acquisition of essential skills from the start of their training.<sup>14</sup>

Despite these efforts, the NP teaching-learning process continues to be a challenge, mainly due to the lack of practices that promote the effective development of this tool.<sup>15</sup> This traditional teaching model favors a fragmented understanding of knowledge, which represents a challenge for the practical application of knowledge. Such limitations have the potential to compromise students' ability to effectively and comprehensively incorporate NP into their clinical practice.<sup>16</sup>

Category 2 addressed the evaluation of NP teaching methodologies: challenges and gaps according to the opinion of the research participants. At this stage, it was reported how teachers convey the content of NP through various methodologies. It is worth noting that although students mention that teachers use various methodologies, they do not specify them.

A priori, it can be seen that imparting knowledge related to NP represents an intrinsic challenge to nursing education, often restricted to the theoretical domain. Therefore, for these changes to occur, it is necessary to adopt active and dynamic pedagogical approaches during teaching, with an emphasis on immersing students in practical contexts that reflect their future professional activities. This approach aims to promote the development of critical and reflective education and learning, encouraging students' active participation and enabling them to take a leading role in their own NP.<sup>17-18</sup>

In addition, the promotion of innovative teaching-learning methodologies becomes crucial, as it enables a more personalized approach. Given that each student has their own needs and learning styles, innovative educational strategies



can help meet this diversity and enhance the development of clinical reasoning in nursing. In addition, such approaches can encourage authenticity and the practical application of clinical reasoning to the conduct of NP, preparing students to face the complex challenges of professional practice. Therefore, the search for dynamic and personalized teaching methods is essential to promote the growth of CR among future nurses.<sup>19-20</sup>

Despite the obstacles encountered, some factors were identified that facilitate the integration of theory and practice in teaching. The reports revealed a wide range of methodological approaches, some of which were reported to be satisfactory and effective, especially those that provide articulation between theory, practice and the learning process. Therefore, the understanding of promoting effective practice, with critical reflection and research within nursing practice makes learning dynamic with a focus on the student's professional development.<sup>21</sup>

With regard to category 3, this portrays the reports of how students make use of Taxonomies and Standardized Languages in Nursing disciplines, emphasizing the use of NANDA-I and reinforcing the diversity in the request and use of other taxonomies, which establishes a certain inconsistency of records and difficulty in communication between health professionals.

Nursing taxonomies play a crucial role in nursing research and practice. These terminologies establish an LP that improves team communication, planning and the provision of care. By adopting taxonomies, nurses are able to organize and structure nursing care, which allows for greater visibility and impact on patient care, since it uses evidence-based practice to have better results in their conduct.<sup>22</sup>

The integration of NP plays a fundamental role in the nursing curriculum, since students learn to use these classification systems early on in their training, preparing them to assess and identify patient needs in a systematic way. Furthermore, taxonomies allow care to be better recorded and documented, as well as reducing the likelihood of errors and omissions in the provision of care, contributing to patient safety.<sup>23</sup>

Category 4 reflects the importance of theories in NP, highlighting students' experiences of using and understanding these theories in clinical practice and the difficulties encountered in this process. The students' statements revealed that other nursing theories they used a lot were Florence Nightingale, Wanda de Aguiar Horta and Marjory Gordon.

Nursing theories provide foundations for nursing practice, helping nurses to organize nursing care and enabling them to offer higher quality care on a daily basis.<sup>24</sup> In addition, they provided principles and guidelines to guide students in making clinical decisions and drawing up care plans. Therefore, they serve as a basis for the creation of various instruments for data collection, which are used as facilitating tools in nursing disciplines. Therefore, theories become important guides for

NP practice, helping not only in data collection, but also in the diagnosis, planning, implementation and evaluation of care.<sup>25</sup>

Despite the valuable information provided, this study has limitations to consider. Firstly, data collection was based on students' statements and may reflect a subjective and individualized perspective, which limits the generalization of the results to a broader context. In addition, the study focused on a specific institution, which may limit the generalizability of the findings to different academic environments in nursing.

It is also essential to note that the conclusions of this study reflect a specific moment in time and may be influenced by changes in educational policies or clinical practices over time. Considering these limitations, it is necessary to interpret the results with caution and encourage future research that addresses these issues in a more comprehensive manner, incorporating diverse perspectives and educational contexts, seeking the continuous evolution and improvement of nursing education programs.

Even so, this study offers highly relevant contributions to clinical practice, highlighting specific areas for improvement in NP teaching. The results found not only address the gaps identified in the teaching of NP, but also contribute to the teaching of NP, as they offer clear guidelines for improving the training of nursing professionals. Therefore, this approach aims to significantly improve the quality of training and, consequently, the standard of care offered by future nursing professionals.

## FINAL CONSIDERATIONS

This study provided substantial insights into undergraduate students' conceptions of NP. In view of the results, it was observed that the limitations in the NP approach in the disciplines and clinical practices are notable, since they reveal a punctual and fragmented approach. In addition, the strong orientation towards the application of clinical cases was identified, often limited to the theoretical presentation and discussion of specific cases, without a more comprehensive integration with other disciplines or practice contexts.

Students' perceptions of the methodologies used by lecturers to teach NP revealed significant difficulties and gaps. The lack of continuity in the application of NP in different disciplines, the superficiality of some approaches and the lack of clarity in instructions were mentioned as obstacles. Furthermore, resistance or a superficial approach on the part of some teachers was identified as an additional challenge.

As for the LP systems, the heterogeneity in the use of these languages highlights the need for a more consistent and standardized approach to teaching NP.

Finally, the last category revealed that while the practical applicability of theories in various clinical situations was recognized as a significant facility, the complexity of theories and the lack of practical applicability during academic training emerged as challenges to be overcome.

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