REVISTA CHILENA DE ENFERMERÍA RchE FACULTAD DE MEDICINA UNIVERSIDAD DE CHILE

ORIGINAL ARTICLE

Assessment of the nursing process formulation among second-year students at a state university

Evaluación de la formulación del proceso de enfermería en estudiantes de segundo año de una institución universitaria estatal

Avaliação de formulação do processo de enfermagem em estudantes do segundo ano de uma instituição universitária estadual

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ABSTRACT

Introduction: The Nursing Process is a foundational tool for the practice of the nursing profession, requiring cognitive, technical, and communication skills for its adequate implementation. Consequently, teaching and learning the Nursing Process entail certain complexities. **Objectives:** To describe the performance of second-year nursing students within an institution located in the province of Buenos Aires, Argentina, in the execution of the Nursing Process. **Methodology:** Descriptive, cross-sectional documentary study, with a quantitative emphasis. A total of 160 works were analyzed based on variables that describe the assessment, the diagnoses, and the care plans designed within the Nursing Process. Data analysis was carried out using simple descriptive statistics. **Results:** The study revealed that students encounter greater challenges in the stage of formulating actual and potential diagnoses, with percentages of 63.75% and 56.25%, respectively. Furthermore, difficulties were observed in identifying risk factors (63.75%) and prioritizing needs (55.63%). Additionally, the care activities lacked a coherent sequence that was aligned with the needs presented in the clinical case (57.50%). **Conclusions:** The difficulties identified through this study need to be resolved. To this end, a pedagogical intervention is proposed, centered on active learning, collaborative work, and

constructive feedback. The implementation of theoretical-practical workshops featuring clinical case studies and peer evaluation is recommended. Furthermore, this proposed intervention could potentially be extended to other populations.

Keywords: Students, Nursing; Nursing Process; Education, Nursing; Teaching; Learning.

RESUMEN

Introducción: El Proceso de Enfermería es una herramienta fundamental para el ejercicio de la profesión y su correcta aplicación requiere de habilidades cognitivas, técnicas y comunicativas, por lo que su enseñanza y aprendizaje presenta cierta complejidad. **Objetivos:** describir el desempeño en la realización de trabajos sobre el PE en estudiantes de segundo año de la carrera de enfermería de una institución de la provincia de Buenos Aires, Argentina. **Metodología:** Estudio documental descriptivo, transversal, con enfoque cuantitativo. Se analizaron 160 trabajos, según variables que describen la valoración realizada, el diagnóstico construido y los cuidados formulados en el diseño de procesos de enfermería. El análisis de datos se realizó mediante estadística descriptiva simple. **Resultados:** Se identificó que los estudiantes presentan mayor dificultad en las etapas de formulación de Diagnósticos reales y potenciales, 63,75% y 56,25% respectivamente y en la de identificación de factores de riesgo 63,75%. A su vez se visualizan falencias al momento de priorizar necesidades alteradas 55,63% y se planifican actividades de cuidados que no presentan una secuencia lógica de acuerdo con las necesidades que se plasman en el caso clínico 57,50%. **Conclusiones:** Se presentan dificultades que deben ser resueltas, por lo que se propone una intervención pedagógica basada en el aprendizaje activo, el trabajo colaborativo y la retroalimentación formativa. Se sugiere realizar talleres teórico-prácticos con casos clínicos y evaluación entre pares. Esta propuesta podría extenderse a otras poblaciones.

Palabras claves: Estudiantes de Enfermería; Proceso de Enfermería; Educación en Enfermería; Enseñanza; Aprendizaje.

RESUMO

Introdução: O Processo de Enfermagem é uma ferramenta fundamental para o exercício da profissão e a sua correta aplicação exige competências cognitivas, técnicas e de comunicação, pelo que o seu ensino e aprendizagem apresenta uma certa complexidade. **Objetivos:** Descrever o desempenho na realização de trabalhos sobre EF em estudantes do segundo ano de enfermagem de uma instituição da província de Buenos Aires, Argentina. **Metodologia**: Estudo documental descritivo, transversal, com abordagem quantitativa. Foram analisados 160 trabalhos, segundo variáveis que descrevem a avaliação realizada, o diagnóstico construído e os cuidados formulados no desenho dos processos de enfermagem. A análise dos dados foi realizada por meio de estatística descritiva simples. **Resultados**: Identificou-se que os estudantes apresentam maior dificuldade nas etapas de formulação de diagnósticos reais e potenciais, 63,75% e 56,25% respetivamente, e na identificação de fatores de risco, 63,75%. Ao mesmo tempo, observam-se deficiências na priorização de necessidades alteradas 55,63% e são planejadas atividades assistenciais que não apresentam uma sequência lógica de acordo com as necessidades refletidas no caso clínico 57,50%. **Conclusões**: Existem dificuldades que devem ser resolvidas, pelo que se propõe uma intervenção pedagógica baseada na aprendizagem ativa, no trabalho colaborativo e no feedback formativo. Sugere-se a realização de oficinas teórico-práticas com casos clínicos e avaliação por pares. Esta proposta poderia ser estendida a outras populações.

Palavras-chave: Estudantes de Enfermagem; Processo de Enfermagem; Educação em Enfermagem; Ensino; Aprendizagem.

INTRODUCTION

The Nursing Process (NP) is a methodological tool through which care plans are personalized and systematized for patients and their families. It involves logical reasoning, which enables professionals to apply critical clinical analysis before planning the bespoke care required to meet the needs of the care recipient. Additionally, it provides relevant information to promote health, prevent illness, and strengthen self-care skills.[1,2]

This process is part of the teaching-learning framework included in the curriculum of nursing training institutions; its inclusion is also mandated by the minimum content standards for the Professional Area in Resolution 2721/15 of the Accreditation Standards for Nursing Programs in Argentina.[3] Since it is considered a part of the disciplinary development that directly links theory and practice, it is necessary to foster an environment that encourages the application of the NP as a dynamic tool involving critical thinking, where scientific evidence is put to practice.[4,5]

Within the history of Nursing it can be observed that, through the development of different theoretical approaches, the stages of the NP aim to encapsulate critical reasoning for the planning, implementation, and evaluation of quality care with a theoretical foundation. The literature shows that when the NP was first implemented, it focused on data collection, care planning, and implementing care. In 1974, care evaluation was included to determine whether the established objectives were achieved.[6,7]

The ongoing analysis of this methodology led to the incorporation of an additional stage known as Nursing Diagnosis, which enhanced various stages and consolidated quality care based on theoretical and scientific foundations.[7] In summary, the NP has evolved into a systematic and organized method aimed at managing personalized care provided by nursing professionals, as care planning is essential for delivering efficient and effective care and ensuring quality in nursing practice.[8]

Numerous studies show that students and nurses experience difficulties in implementing the NP.[9,10] This learning process poses significant challenges not only for students, but for faculty as well, as they have the task of employing methodological and pedagogical strategies that enhance the training process aimed at providing increasingly complex and individualized care. Alfaro-LeFevre suggests that these difficulties can arise at any stage of the NP, as it is a sequential process where the success of the initial stage influences the subsequent stages.[9]

The NP is directly linked to care quality, as its methodology allows for bespoke care based on the needs of the person, family, and/or community.[10,11] To analyze potential difficulties at different stages of the NP, certain criteria can be applied. These criteria encompass a set of standards or specific conditions used to evaluate the process. The smooth resolution of these criteria indicates that the NP is the most appropriate method for meeting the needs of the patient.[12,13]

In the initial stage, Assessment, the accurate identification of data revealing actual and/or potential disturbances in the patient's basic needs relates to the proper formulation of scientifically grounded nursing diagnoses. This is followed by corresponding interventions in subsequent stages.[14,15] The difficulties found in identifying disturbances in basic needs or in analyzing potential disturbances reveal a limitation in recognizing relevant signs and symptoms. In turn, this indicates a deficit in the relationship between data, signs, symptoms, and diagnoses.[14,16]

For a long time, nursing diagnoses were linked only to disturbed needs. This was until well-being diagnoses (WD) emerged from a holistic perspective that includes disease prevention and health promotion when the needs of the care recipient and their family are satisfied. Currently, there is a marked trend towards considering both the quality of care and quality of life. Therefore, it is necessary

that training enables students to include WDs in their evaluation routine, as this facilitates the optimization of self-care and the reinforcement of activities for health promotion.[16-22]

Evaluation of Nursing care is a fundamental stage of the NP, as it helps determine the effectiveness of the interventions and objective achievement. However, it is a complex domain that involves not only using methodology, instruments, and/or scales but also theoretical knowledge, clinical skills, and critical clinical thinking. These elements enable nursing students to analyze the results and identify the strengths and weaknesses in their practice, as well as opportunities for improvement and the need for modifications in response to unexpected outcomes.[23]

The evaluation of nursing care promotes a reflective and self-critical attitude, which contributes to the continuous improvement of the quality and safety of care provided to patients. It encompasses collecting, analyzing, and comparing data, while also involving constant feedback between healthcare personnel/students and care recipients, aiming for satisfaction.[24]

The role of instructors within the NP teaching-learning process in the second year of training should consider constant monitoring and feedback, as well as practical learning opportunities that facilitate the mentoring process. It also requires promoting theoretical skills that allow students to analyze and synthesize information and identify the areas that need to be addressed in care planning, considering a holistic approach.[4,5]

The NP, as a dynamic methodological teaching tool, links theory with practice aimed at professional development, which represents a challenge in nursing training. According to the literature, the main obstacles faced by first-cycle nursing students when learning this process are the lack of clarity in the theoretical framework and insufficient hours of practice to analyze real-life cases.[25-27]

In this context, the objective of this research is to describe the NP performance of second-year nursing students at an academic institution in the province of Buenos Aires, Argentina, who faced restrictions in their clinical practice due to the COVID-19 pandemic. The purpose is to design didactic strategies to improve the learning and application of the NP.

METHODOLOGY

This is a descriptive documentary study with a quantitative, cross-sectional approach. It was conducted from May to July of 2022, within the Nursing Program of a state academic institution in the province of Buenos Aires, Argentina.

Regarding the population and sample, 160 assignments, completed by second-year nursing students from the aforementioned state institution, were selected by convenience. These assignments required students to analyze a patient's problem situation and develop an NP accordingly. They were completed during the first semester of the second year of training.

Inclusion criteria comprised assignments submitted by second-year nursing students who were enrolled in the Nursing Care of Adults and Older Adults I course (*Cuidado de Enfermería del Adulto y Adulto Mayor I*) between May and July of 2022. Exclusion criteria included assignments submitted by students who did not meet the aforementioned inclusion criteria.

The variables of the study were: Disturbed needs, identification of risk factors, prioritization of disturbed needs, formulation of actual nursing diagnoses, formulation of potential/risk diagnoses, care planning, evaluation of planned care, and formulation of well-being diagnoses. These variables are qualitative and ordinal.

The variables were selected considering the teaching-learning process of the NP in the nursing program. This NP is addressed in the first-year course, "Fundamentals of Nursing Care I," linking

this process with the scientific method and problem-solving, its epistemological framework, and historical evolution. Subsequently, the five stages that comprise it are taught, and special focus is given to the first stage, Assessment, including activities that make up the Nursing Anamnesis.

The Assessment stage is complemented by prior course content on basic human needs and theories by Abraham Maslow, Virginia Henderson, and Marjorie Gordon. These needs are categorized into biological and psychosocial, with corresponding criteria for determining their level of disturbance and prioritization. Additionally, ways of organizing data, risk factors, and social determinants influencing well-being are introduced. Then, in the framework of the course "Fundamentals of Nursing Care II," the contents are revisited, and progress is made towards drafting actual and potential nursing diagnoses, with corresponding care planning. Participating in institutional and community internships further enhances care planning observation and application.

In the second-year course "Nursing Care of Adults and Older Adults I", previous knowledge is drawn upon, aiming to connect the process to a clinical situation, with increasing complexity. This is achieved by analyzing classroom-based cases and real-life situations in practicum settings and allows students to progress toward the execution of planned care and its evaluation, mentored by faculty. Additionally, well-being diagnoses are incorporated, considering what the patient proposes and feels.

An assessment rubric was designed for data collection, which includes categories for each variable, each of them assigned with a number. The categories are: Excellent (4 points); Satisfactory (3 points); Fair (2 points); and Insufficient (1 point). The rubric is presented in Table 1.

The assessment rubric was based on the need to have an instrument that allows for systematic and objective evaluation of the NP in an academic context. The categorization of items according to the stages of the NP reflects careful attention to the different aspects of the process, resulting in a specific and detailed evaluation of students' skills in each critical phase. By including the study variables, the grid comprehensively addresses the competencies necessary for successful performance in the field of nursing care.

Table 1. Nursing Process Assessment Rubric.

Variables / Score	4 Excellent	3 Satisfactory	2 Fair	1 Insufficient	Score Obtained
	WITHOUT DIFFICULTIES		WITH DIFFICULTIES		
Identification of Disturbed Needs	Identifies all present disturbed needs. The student attempts to include additional information and is original.	Identifies most disturbed needs present in the problem situation.	Identifies only evident disturbed needs. Does not recognize less evident disturbed needs or needs that contain less information.	Identifies only some of the disturbed needs; does not recognize evident unsatisfied needs.	
Identification of risk factors	Identifies risk factors present according to the disturbed needs. Knowledge of the subject is excellent.	Identifies most risk factors present in the problem situation. Shows basic knowledge of the topic and the content is correct.	Identifies risk factors adequately but limitedly. Errors found in data and/or in identifying risks according to the present disturbed need(s).	Content includes unlikely risk factors and many errors in data.	
Prioritization of Disturbed Needs	Prioritizes all identified disturbed needs correctly, showing extensive knowledge of the subject.	Prioritizes most disturbed needs adequately. Demonstrates basic knowledge of the subject.	Prioritizes most disturbed needs incorrectly. Shows limited knowledge of the subject.	Shows limitations in recognizing the prioritization of disturbed needs, even evident ones.	
Formulation of Actual Nursing Diagnoses	Formulates actual nursing diagnoses correctly using the PES format or structure.	Formulates actual nursing diagnoses adequately. Shows some difficulty using the PES format.	Formulates actual nursing diagnoses with difficulty. Uses the PES format with limitations.	Shows noticeable difficulties in formulating actual nursing diagnoses.	
Formulation of Potential/Risk Diagnoses	Correctly formulates potential/risk diagnoses present in the situation, using the structure required in the course.	Formulates potential/risk diagnoses adequately. Shows basic knowledge of the topic.	Formulates potential/risk diagnoses with difficulty. Demonstrates limited knowledge of the topic.	Formulates potential/risk diagnoses with evident difficulty and inconsistencies.	
Care Planning	The student is able to plan correctly and completely the nursing care required for each formulated diagnosis.	Plans most of the nursing care required for each diagnosis correctly.	Plans some aspects of nursing care correctly or incompletely.	Shows noticeable difficulties in planning nursing care.	
Planned Care Evaluation	The student evaluates the care plan correctly and comprehensively according to the objectives to be achieved.	Carries out a correct, mostly comprehensive evaluation of the planned care. Shows knowledge of the topic.	Performs an incomplete or incorrect evaluation of the planned care. Shows basic knowledge of the topic.	Shows difficulties in evaluating planned care, with inconsistencies found in their assessment.	
Formulation of Wellbeing Diagnoses	The student correctly formulates the well-being diagnoses present in the problem situation.	Formulates and recognizes most well-being diagnoses present in the problem situation.	Shows limitations in recognizing and formulating well-being diagnoses.	Shows noticeable limitations in recognizing and formulating well-being diagnoses.	

Source: Created by the authors (2023).

This evaluation instrument was developed by the instructors and was agreed upon with the clinical internship tutors for first and second-year students, to unify evaluation criteria and facilitate feedback to the students. Various grids and rubrics previously used by the instructors were considered, showing a collaborative approach in its construction and reinforcing the intention to integrate the best evaluation practices. This would ensure that the final instrument is representative and includes the expectations of the entire faculty.

The assessment categories for each variable were drafted positively, as achievement expectations or competencies to be reached, following a four-level scale: excellent, good, fair, and insufficient. Each level includes a detailed description of the criteria required to obtain the corresponding rating, which allows the teachers to interpret and assess homogeneously.

A pilot test conducted in 2021 validated the applicability and relevance of the rubric in this specific context, allowing for necessary adjustments before its definitive implementation (Table 1). The consolidation of this rubric within the curriculum is based on the feedback and the experience of the instructors during the pilot test. The comments obtained from the process were: (1) It reflects the learning objectives and the contents of the NP taught in the course and clinical practice. (2) It allows for a comprehensive and systematic evaluation of the NP, covering all its stages and variables. (3) It enables objectivity and transparency in evaluation by establishing clear and agreed-upon criteria for assigning scores. (4) It promotes the development of professional competencies in students by guiding them toward set expectations of performance. (5) It contributes to the continuous improvement of the teaching-learning process by providing valuable information for identifying strengths and weaknesses.

The data analysis was carried out using a quantitative approach with simple statistics. Based on the evaluations of the variables derived from each rubric, a double-entry data matrix was created, where each variable was assigned an indicator: "With difficulty" when the assessment fell into the Fair or Insufficient categories (2 or 1 points, respectively) and "without difficulty" when the performance was assessed as Excellent or Satisfactory (4 or 3 points, respectively). Absolute frequency (n) and relative importance (%) were calculated for each indicator. The grades obtained for these projects, whether passed or failed, were not considered. The analysis focused only on the quality of the process, based on the variables studied.

Regarding ethical aspects, this research followed Law 15.462 regulating Human Research in the province of Buenos Aires, Argentina. The analysis of documentary material does not require approval by a Human Research Ethics Committee;[28] therefore, authorization was requested from the program coordination team only. No personal or identifying data were collected, such as names, surnames, identification numbers, enrollment numbers, email addresses, or any other information that could link the students to the analyzed documents, thus ensuring anonymity. Furthermore, the regulations established by Law 11.723, which governs the Legal Regime of Intellectual Property, were respected at the moment of citing material.[29]

RESULTS

From a total of 160 papers on the construction/elaboration of the NP, the highest proportion of difficulties was observed in the stages of Identifying risk factors (63.75%) and Formulating nursing diagnoses (actual) (63.75%). Conversely, the lowest difficulty was encountered in the Evaluation of planned care (56.25%) and in the Identification of disturbed needs (55%). Table 2 shows the data quantifying each of the proposed study variables.

Table 2: Assessment of variables in the construction of the NP

Variables/Analysis	With Difficulty		Without Difficulty	
	n	%	n	%
Identification of disturbed needs.	72	45.00%	88	55.00%
Identification of risk factors.	102	63.75%	58	36.25%
Prioritization of disturbed needs.	89	55.63%	71	44.37%
Formulation of nursing diagnoses (actual).	102	63.75%	58	36.25%
Formulation of potential risk diagnoses.	90	56.25%	70	43.75%
Care planning according to the prioritization performed.	92	57.50%	68	42.50%
Evaluation of planned care.	70	43.75%	90	56.25%
Formulation of well-being diagnoses.	88	55.00%	72	45.00%

Source: Created by the authors (2023).

DISCUSSION

The Nursing Process (NP) is a highly valuable tool for professional growth, through which comprehensive care is provided. Additionally, it represents a complete pedagogical strategy for use in teaching practices and for analyzing the care provided by students during their clinical and community practicums. This method allows for the systematization of nursing work, enabling the organization of observations and interpretations arising from the nursing anamnesis. Moreover, it contributes to the promotion, prevention, treatment, and rehabilitation of health in individuals, families, and communities, synthesizing theoretical and practical knowledge.[30]

The role of the instructor is to guide students in learning the discipline. This role is formative as it facilitates the student's approach to the subject matter of the discipline, and normative because it establishes criteria to validate methods and techniques, define scientific interests, present problems, solve them, and at the same time determine the professional profile that is expected of graduates, in this case, of the nursing program. García Ladrón de Guevara, M. asserts that the development of critical thinking in the teaching-learning process is directed/oriented by teachers so that the student learns not only what to do but also how to do it. Consequently, it will then be the professional themselves who seek, analyze, discuss, and critique the information they receive to restructure their knowledge and choose the most accurate and pertinent approach in their professional practice.[31]

In the context of the problematization established by the research team, this study allowed determining in which stage of the NP development the greatest difficulty is found. This was observed in the “Identification of disturbed needs” and “risk factors” stages, which show the issues students experience in analyzing information that conveys a lack of well-being and possible complications in

the data provided. "Identification of risk factors" is linked to knowledge of different pathologies, their etiology, and the complications that may arise if adequate care planning and treatment are not provided. Furthermore, limitations in the adequate prioritization of disturbed needs are directly linked to the identification of risk factors, so difficulty in one impacts the other. Alfaro-LeFevre[9] indicates that if the assessment is incomplete, inaccurate, and misinterpreted, it is very likely that mistakes will be made in diagnosis, as problems are not identified as such.

Regarding the stages where difficulties are observed, Lopera Arango, A. considers it necessary to acquire these skills, as they are the basis for decision-making in nursing and inform all decisions made by these professionals. This also considers a process of relationship-interaction, careful observation, data analysis, the elaboration of diagnoses, and all subsequent actions taken for the proper care of the individual.[32]

Considering that the nursing diagnosis sets the basis for designing/developing an intervention plan, the lack of specificity in care planning should be framed as a deficit in the training or teaching-learning process. The fact that students did not have access to institutional practicums in the first year of the program (2021) may have negatively impacted their care planning skills, since they did not have the opportunity to observe such activity performed by a professional and applied to real situations, as a complement to the theory they were taught by lecturers. Cardozo, Díaz, and Méndez[25] agree with this assessment since their interviews with second and third-year nursing students reveal that practical experience is necessary to visualize the application of theory on this subject.

As for the incorrect or incomplete evaluation of planned care, it is important to remember that the stages of the NP represent a cyclical and continuous process. This means that the difficulties observed may impact the assessment of the patient or the detection of unresolved disturbances. Miranda Limachi et al. indicate that during the initial stage of practicums, students should learn to perform interpretations/interventions of nursing care, both their own and those carried out by professionals, and to recognize their competent execution, which becomes evident with the achievement of objectives and the satisfaction of the care recipient and family. The evaluation of planned care is more manifest in the observation of real situations, so a theoretical assignment could limit this aspect. The same authors mention that experiences lived by social actors (students and care recipients) related to significant aspects of care enable their ability to connect theoretical constructs and potentially expanding knowledge in nursing.[26]

If we observe the variable "Formulation of well-being diagnoses," the high percentage of papers that did not reach a satisfactory score can be interpreted either as a limited ability in formulation or identifying preserved/non-disturbed needs that are satisfied and recognized within usual patterns by the care recipient.

The results obtained in this study show that nursing students have difficulties in constructing/developing the Nursing Process (NP), especially in the stages of assessment, diagnosis, and planning. These difficulties could be attributed to several factors, among which the following stand out:

a) The lack of contact with clinical practices during the first year of the program, due to the COVID-19 pandemic, which may have affected the development of clinical competencies and critical thinking skills.

b) Insufficient theoretical knowledge of some pathologies, their causes, complications, and treatments, which hinders the identification of risk factors and disturbed needs in care recipients.

c) Limited application of the NANDA International, Inc. taxonomy[33] (Organization for the development of standardized nursing diagnostic terminology) for formulating nursing diagnoses, which hampers the proper use of the PES (Problem, Etiology, Signs and Symptoms) structure and the classification of diagnoses as actual, potential, or well-being.
d) Limited ability/competence to prioritize disturbed needs and establish goals and nursing interventions according to the formulated diagnoses, which could impact the quality and safety of care.

These findings align with other studies that have assessed the level of competency of nursing students in performing and applying the NP.[27] Miranda Limachi et al., highlight the importance of reinforcing the teaching process/methodology of the NP, both in theoretical and practical contexts, to promote the development of cognitive, technical, and attitudinal skills of future nursing professionals. The authors recommend strengthening the teaching of the NP in both theoretical and practical aspects to enhance students' cognitive, technical, and attitudinal skills. Additionally, it is suggested to conduct further studies that delve into the causes and consequences of these difficulties, as well as specific strategies to overcome them.[26]

Continuous improvement in NP training is essential to ensure competency and excellence in the future practice of nursing students, thus contributing to the overall improvement of nursing care. This training extends into the professional realm, as Millán Arteaga states that the knowledge acquired by nursing professionals during their academic training is not sufficient to face the challenges inherent to their profession. Furthermore, they emphasize the need for ongoing professional development to achieve continuous improvement in their professional practice.[34]

A pedagogical strategy that promotes active learning, collaborative work, and formative feedback is required to train competent and reflective professionals. These elements facilitate the construction of meaningful knowledge, the development of skills and attitudes, and the continuous improvement of professional practice, as stated by Rengifo Arias et al. in their integrative review.[35] Along the same lines, Gavilán Cabrera emphasizes the importance of using teaching strategies oriented towards reflection and analysis for clinical practice as the basis of meaningful learning. Therefore, it is recommended to design and implement a pedagogical strategy that incorporates these elements throughout the different years of training, aiming for future nurses to develop logical-critical and reflective thinking around their professional practice.[36]

Theoretical-practical workshops are proposed as a strategy, where students are able to analyze real or simulated clinical cases, identify potential problems and disturbed basic needs, formulate diagnoses and care plans, carry out interventions, and evaluate outcomes. In this strategy, the role of the faculty will be to guide students in their learning process by providing constructive and timely feedback on strengths and areas for improvement. Within this framework, self-assessment and peer evaluation are proposed to promote self-regulated learning and the development of social and communication skills. Urra Medina, Sandoval Barrientos, and Irribarren Navarro have suggested that simulated scenarios are an effective strategy for clinical training.[37] This proposal could apply to other student populations facing similar difficulties.

Regarding limitations and biases, the institution provides training for a closed cohort, so there is no possibility of comparing multiple courses over time. The limitations found in this study include the lack of previous research related to the topic within the institution, which hinders the comparison and contextualization of the data. These limitations should be considered when interpreting and generalizing the results. Concerning biases, due to the interaction with closed cohorts, there is no possibility of temporal comparison, leading to the evaluation of a captive population. This could be addressed with a longitudinal study.

CONCLUSIONS

The difficulties exhibited by second-year nursing students in the construction/elaboration of the NP, especially in the assessment, diagnosis, and planning stages, can be addressed through pedagogical interventions that promote critical thinking. The aim is to address the areas that present deficiencies and limitations. Additionally, it is necessary to monitor these skills to evaluate progress in assessment criteria, nursing diagnosis formulation, and care planning, ensuring the quality and safety of care provided to patients.

One of the factors that could explain these difficulties is the lack of contact with the clinical field during the first year of the program (2021) due to the sanitary restrictions resulting from the COVID-19 pandemic. Additionally, insufficient theoretical knowledge of pathologies and their complications, limited application of the NANDA taxonomy for nursing diagnosis formulation, and difficulty in prioritizing disturbed needs and establishing nursing goals and interventions according to formulated diagnoses have been identified. Moreover, deficient evaluation of planned care was observed.

In conclusion, nursing training should consider contingency plans in response to potential limitations and restrictions on clinical practice, as we cannot rule out other future epidemiological events.

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MAM: Conceptualization, Formal Analysis, Methodology, Writing – Original Draft Preparation, Writing – Review & Editing.
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