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INTEGRATIVE REVIEW OF LITERATURE

Estratégias de ensino-aprendizagem do processo de enfermagem na graduação e pós-graduação de enfermagem

Strategies for teaching learning process in nursing graduate and Postgraduate nursing

Estrategias de enseñanza-aprendizaje del proceso de enfermería en lo grado y postgrado en enfermería

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ABSTRACT

Objective: to present strategies for teaching and learning of the nursing process used in graduate and postgraduate levels. **Method:** an integrative review of literature, using the databases CINAHL, LILACS and MEDLINE. The search for the articles was carried through the controlled descriptors: Nursing Process; Education, Nursing; Teaching; Education, Nursing, Diploma Programs; Education, Graduate; using the Boolean operator AND. The sample consisted of eight articles. **Results:** several strategies of teaching and learning of the nursing process are identified, namely: electronic tools, written case studies, and lecture and theoretical-practical lessons for graduate education. However, there is a lack of studies regarding the teaching of nursing process in post-graduate level. **Conclusion:** the use of innovative and active methodologies facilitates the learning process, while the restricted approach for theory is a complicating factor. **Descriptors:** nursing process, education in nursing, teaching.

RESUMO

Objetivo: apresentar as estratégias de ensino-aprendizagem do processo de enfermagem utilizadas nos cursos de graduação e pós-graduação. **Método:** revisão integrativa da literatura, utilizando as bases de dados CINAHL, LILACS e MEDLINE. A busca dos artigos foi realizada através dos descritores controlados: Nursing Process; Education, Nursing; Teaching; Education, Nursing, Diploma Programs; Education, Graduate; utilizando o operador booleano AND. A amostra constituiu-se de 8 artigos. **Resultados:** várias estratégias de ensino-aprendizagem do processo de enfermagem são apontadas, a saber: ferramentas eletrônicas, estudos de caso escritos, aula expositiva e aulas teórico-prática para o ensino de graduação. Entretanto, destaca-se a ausência de estudos referentes ao ensino do processo de enfermagem em nível de pós-graduação. **Conclusão:** a utilização de metodologias inovadoras e ativas facilita o processo de aprendizagem, enquanto a abordagem restrita à teoria é fator dificultador. **Descritores:** processos de enfermagem, educação em enfermagem, ensino.

RESUMEN

Objetivo: presentar las estrategias para la enseñanza y el aprendizaje del proceso de enfermería utilizadas en los niveles de pregrado y postgrado. **Método:** revisión integradora de la literatura, utilizando las bases de datos CINAHL, LILACS y MEDLINE. La búsqueda de artículos se realizó a través de los descriptores controlados: Nursing Process; Education, Nursing; Teaching; Education, Nursing, Diploma Programs; Education, Graduate; mediante el operador booleano AND. La muestra constaba de 8 artículos. **Resultados:** varias estrategias para la enseñanza y el aprendizaje del proceso de enfermería se identifican, es decir: instrumentos electrónicos, estudio de casos por escrito, conferencia y lecciones teórico-prácticas para pregrado. Sin embargo, hay una falta de estudios sobre la enseñanza del proceso de enfermería en el nivel de postgrado. **Conclusión:** el uso de metodologías innovadoras y activas facilita el proceso de aprendizaje, mientras que el enfoque restricto en la teoría es un factor dificultador. **Descriptor:** procesos de enfermería, educación en enfermería, enseñanza.

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INTRODUCTION

The Nursing Process is considered a method of organizing care and care of the profession.¹ Briefly, your organization comprises the steps of data collection, nursing diagnosis, planning, implementation and rating.² Through the nursing process can be guaranteed the continuity of care by nursing staff guided the scientific aspects of the profession, which ensures special care, humanized, individualized and targeted to each type of client.³

Incorporating the practice of this method of work has been presented as an alternative to reconnect the nurse of their clientele. What makes the systematization NP essential to be able to promote autonomy, independence and specificity to the profession⁴; besides enabling compliance with ethical and legal requirements.¹

The application process requires knowledge, which evolve the concepts and theories of nursing, biological sciences, physical, behavioral and human that support decision making in trials, interpersonal relationships and nursing.¹

The execution of the steps of the NP involves critical thinking, interpretation, and teamwork. In relation to teaching, theoretical and philosophical discussions and practices NP begin in the undergraduate nursing.⁴ In graduate courses, the NP requires penetrations so that knowledge can be extended to other spaces and steeped profession.

The teaching of NP (Nursing Process) at graduation was assigned as a facilitating factor for the implementation of the same in healthcare practice. However, this learning did not minimize the difficulties expressed in everyday life. Nursing diagnosis was considered the most difficult step, due mainly to the limited knowledge about the diagnostic taxonomy theoretical.⁵

The existence of divergence between theory taught in the classroom and what is implemented in practice fields stage may hinder the perception of the student as to the applicability and feasibility of this methodology in the daily care process.⁴ "It is, however, emphasize the contribution of the academy before the fragmentation between knowing and doing, which corroborates the weakness in construction concomitant skills knowledge, skill and attitude in academic".^{6:87}

Thus, we see the influence of teaching actions in training professionals capable of implementing the NP and relevance of active methodologies that provide the link between theory, practice and meaningful learning. Faced with this problem, this study aims to present the teaching-learning process of nursing used in undergraduate and graduate programs.

METHOD

For the preparation of this integrative review were followed the steps outlined in the literature 7, namely the establishment of the issues and objectives of the integrative review, establishing the criteria for inclusion and exclusion of articles; definition of the information to be extracted from selected articles; analysis results, discussion and presentation of results, and, last, the presentation of the review.

The guiding questions for this integrative review constituted: that approach has guided the teaching framework of the nursing process in graduate and postgraduate? What teaching strategies of the nursing process can be identified in the publication?

The selection of articles was through databases *Cumulative Index to Nursing and Allied Health Literature (CINAHL)*, *Medical Literature Analysis and Retrieval System Online (MEDLINE)* and the Latin American and Caribbean Health Sciences (LILACS). Thus, we sought to expand the scope of the research, minimizing potential biases in this step of the process of the survey.

To survey articles in the databases, we use controlled descriptors: *Nursing Process; Education, Nursing; Teaching; Education, Nursing, Diploma Programs; Education, Graduate*. Performed the grouping of descriptors as follows: *Nursing Process AND Education, Nursing AND Teaching; Nursing Process AND Teaching; Nursing Process AND Education, Nursing; Nursing Process AND Education, Nursing, Diploma Programs; Nursing Process AND Education, Graduate*.

Inclusion criteria were: articles available in selected databases; articles available in Portuguese, English or Spanish; articles that address the teaching strategies of the nursing process in undergraduate and graduate programs. The exclusion criteria of studies were: Editorials, Letters to the editor, articles that do not address the issue relevant to achieving the objective of the review.

The search was conducted by online access, using the keywords in Portuguese and English, and the criteria for inclusion and exclusion. Initially the search descriptors, associated as established, CINAHL were found in 253 articles, 604 articles in MEDLINE, LILACS and 550 articles. After meeting the inclusion and exclusion criteria, the sample consisted of 08 articles.

For the synthesis and analysis of data, a tool was developed, which includes the following: identification of the article, methodological features of the study, objectives or research questions, findings and conclusions or implications.

The presentation and discussion of the results were made in a descriptive manner, allowing the reader to assess the applicability of the developed integrative review, in order to achieve the purpose of this method, ie, positively impact the quality of nursing practice, providing support to nurses in teaching and practice everyday.

RESULTS AND DISCUSSION

The eight articles were analyzed, and then present it will be an overview of the articles. In Tables 1 and 2 shows the synthesis of the articles included in this integrative review.

In identifying the source location for the articles, five were derived from the database CINAHL and three LILACS. The MEDLINE database was also used for research, however, found the articles that met the inclusion criteria were repeated to the already found in other databases.

Among the selected articles, four were written in Portuguese and four in English, with the publication period ranging between the years 1994-2010. All items referred to the teaching of PE in undergraduate nursing, however, the association of descriptors Nursing Process AND Education, Nursing, Diploma Programs e Nursing Process AND Education, Graduate found no publications in complete format. This fact reveals the need to produce studies that discuss the nursing process in graduate school in view, it is in this space that professionals are prepared for the job of teaching.

Title	Objectives/Tasks	Results
Teaching the nursing process in schools of nursing graduation the state of São Paulo ¹ .	To characterize the profile of teachers who teach in the trunk in the professional graduate schools of nursing in the State of São Paulo. Describe how the teaching of NP offered these schools ¹ .	The most appropriate way to deliver the content of the NP is the approach of theory and practice conducted by the same teacher. This allows continuity, coherence and interrelatedness of the theme introduced in theory and applied in practice. The teachers do not teach the theoretical content of the nursing process, it is recommended that the use as a methodology for teaching different disciplines trunk occupation ¹ .
Teaching the nursing process: planning and curricular insertion in ⁴ .	Analyze the planning of teaching methodological bases of PE arrays in this way, taking as reference the National Curriculum Guidelines proposed in Resolution 03/2001 ⁴ .	Teaching strategies are based on the teacher exposure methods and methods of preparation joint group. The references used are contemporary and not contemporary and evaluation method used is the summative evaluation ⁴ .
Evaluation of the Outcome-Present State test Model as a Way to teach clinical reasoning ⁸ .	Determine if the students of an undergraduate program in psychiatric nursing and mental health can learn to perform cognitive activities used with Web of clinical reasoning and the OPT model (an instrument for teaching clinical reasoning) ⁸ .	The OPT model is a strategy for teaching clinical decision-making using NANDA, NIC and NOC (NNN), language and their links. The tool is designed so that teachers can detect the level of rigor that a student uses to fill the template through the count of the number of observations in writing within each seção ⁸ .
Using a Modified Electronic Health Record to Develop Nursing Process Skills ⁹ .	Describe the experiences and behaviors of students at the beginning of the course of nursing with an electronic health record modified to develop a study of case ⁹ .	The Simulated E-Health includes small groups of students of nursing home, conducted by an instructor. Case studies are given in writing in order to enter patient data in electronic health record. The junction of technical skills of students and teachers, case studies with wealth of data to perform the EP, and a strong technological infrastructure has created a positive learning experience ⁹ .

Table 1 - Summary of articles reviewed 1st part.

It was found that seven of studies have clear objectives allowing an easy understanding to the reader. Only one publication featured a question aimed at the study. Evidence of purpose is fundamental to the understanding of the study and it is pertinent to present what you want to achieve in research.¹⁰

All studies evaluated were developed in universities, these four are Brazilian, three American and one Italian. It was found also that the four Brazilian universities, two were federal and two state, international institutions have not specified the nature of the institution.

Regarding the type of journal in which the articles were published in the review included five were published in nursing journals and national general American, two newspapers in nursing education (American), one in the international journal of nursing terminologies and classifications.

Regarding the research design, four articles presented qualitative approach, two studies developed with quantitative methods, an article of reflection and a literature review.

The qualitative approach is concerned with the level of reality that cannot be quantified, it seeks to understand the universe of meanings, motives, applications, beliefs, values and attitudes, which corresponds to the deeper space of relationships, processes and phenomena which cannot be synthesized in variable operationalizations.¹¹ With this approach, the researchers seek to develop nursing teaching methodologies that enhance the context in which students are placed.

Already the research are based on a quantitative measure, and seek to answer the research questions and / or test the hypothesis by the researcher through a systematic analysis of the data, the objective variables and the use of statistical techniques.¹²

By analyzing the teaching strategies of the nursing process, it was realized that in an article was not explicit.¹³ In another article we question the feasibility of using the PE through written case study and suggest its use as classroom activities.¹⁴ It also works with the Outcome-Present State Test (OPT). The OPT model is designed to help students develop clinical reasoning skills of the nursing process.⁸ Are worked using an electronic instrument study of the nursing process (Data-Rich Case Studies-a valuable Seeing, Hearing, and Doing it hybrid "SEED" for learning).⁹

Title	Objective/Tasks	Results
A1 the interface between teaching of nursing process and its application in practice assistencial ¹³ .	Reflection on PE teaching in the undergraduate program in nursing, as technology and tool for assistance ¹³ .	The NP is seen as a reference to the practice of nursing; as care technology. The difficulty for its teaching and operationalization of the EP is present within academic and healthcare plan, although it is a lightweight technology-essential for the care of hard nursing ¹³ .
The written nursing process: is it still useful to nursing education? ¹⁴ .	The NP has been the main writing tool that nursing educators use to teach students to identify the patient's problems and plan for their resolution, but is still useful? ¹⁴ .	Nursing School spend too much time in the writing of the NP, placing greater emphasis on writing a good process than in truly understanding the problems of patients, evaluation of health ¹⁴ .
A 10-Year Retrospective Study of Teaching Nursing Diagnosis to Baccalaureate Students ¹⁵ .	Evaluate the impact of the teaching process for nursing students at different levels of the Bachelor education, using the North American Nursing Diagnosis Association International (NANDA) ¹⁵ .	The constant comparison between nursing care plans completed by students at different stages of their school course demonstrates the learning process and the level of competence achieved. It is concluded that there are no standard curriculum in PE, taxonomies are used differently, and the tasks assigned to students during their clinical experience and the amount and type of required nursing care plans vary for the baccalaureate in different universities ¹⁵ .
Nursing process: factors that hinder those who facilitate learning ¹⁶ .	Describe the experiences and behaviors of nursing students commencing the use of the electronic health record to develop a plan of care for patients in the case study ¹⁶ .	Main factors considered that hinder teaching: the practical field adopts the method; lack of knowledge of the teacher; the student's inexperience in other disciplines. Factors that facilitate: the belief of the teacher in the method; the student realize the result; prior knowledge of other disciplines ¹⁶ .

Table 2 - Summary of analyzed articles continued.

It is viewed as a strategy that during the first year of study, students have a block of 24 hours of theory on the nursing process based on the North American Nursing Association International (NANDA-I) and Bifocal Model Carpenito, to thereafter construct their care plans.¹⁵ One study uses critical analysis of the factors that hinder and facilitate the teaching, so that teachers can from the knowledge of these factors make the planning and implementation of their discipline.¹⁶

Teaching strategies are based on the teacher exposure methods and methods of preparing the joint teacher's group.⁴ Being considered in another study, the most appropriate way to deliver the content of the nursing process is the approach of theory and practice conducted by the same teacher.¹ This allows continuity, coherence and interrelation of theme, introduced in theory and applied in practice.

The lectures are the methodology considered the most used for the theoretical approach of the NP.¹ However, the inclusion of real situations and dynamics is a strong motivator for learning; where the experiences are to exert a strong role in decision making, given that the knowledge obtained in the opportunities to apply theory in real situations emphasizes the ability of critical thinking.⁵

Based on the results, the authors described several strategies for teaching NP and its applicability; they suggest some difficulties regarding operationalization of teaching and application of NP in the academic and healthcare.

Two articles describe important learning outcomes of the PE through the use of digital tools, such as OPT, electronic record, pointing to them as a positive learning experience.^{8,9} There seems to be agreement that the theoretical and practical application of the NP by the same teacher, the belief in the teaching method, the students' perception

of the outcome of NP in practice and prior knowledge of other disciplines favor the applicability of the method.

The agreement between the authors covers the use of various teaching resources, using lectures, clinical case discussions and computational resources. Health institutions that receive students are referred to as factor implication for teaching NP as the NP systematically employ these institutions contribute to successful learning, and improve the organization and quality of care in the service.¹³

It is noticed that the teaching-learning of NP are varied. It is noteworthy that active methods, such as electronic tools and we consider the knowledge of teachers and students are teaching proposals that more appear. However, still persists in some situations the use of the traditional method based on the transfer of content.

In nursing degree, learning can be facilitated by using several other strategies aimed at training, so the student has the opportunity to develop skills, and controlled or simulated situations, practice them through nursing procedures.¹⁷

The use of active methodologies reinforces the development of strategies for teaching and learning with participatory approach liberating, creative, reflective, and constructive questioning the content, these approaches have the potential to awaken in students the need and ability to instrument their knowledge, skills and attitudes to meet the demands of the population according to the prospects of advancing the profession.⁶

For this it is necessary to consider that the process of nursing education requires basic demands of professional practice, including the teaching of nursing from the disciplines of basic component. The disciplines of the professional component should enhance the learning of NP started in basic and deepen the theoretical and practical framework.^{4,6}

The development of clinical reasoning skills during interaction with practice denotes disagreement among authors about the graduation period to start the teaching of PE. The inclusion of disciplines on the nursing process in the basic components of the courses can lead to a significant learning bit by hindering the development of skills to learn, do and be fundamental to the care process; since the inclusion of this subject in the professional component, can provide a theoretical articulation practice of nursing process and thus the development of these skills and significant learning.⁴

Corroborating these differences, the authors state that to avoid wasting time in the construction of case studies written during the stages should be initiated case studies in the class room so that students become able to judge the situation of clinically patients and the problems to be addressed in care in practice.¹⁴ Other authors disagree with this thought in assessing the student's ability to use clinically reason and conclude that they need to start with a knowledge of the client to apply the model was developed.⁸

For the authors, the appreciation of the process of professional education in higher education demands the articulation of strategies and teaching methods that improve the training of professionals differentiated, with potential beyond the cognitive capacities.⁴ These skills underlie the construction of knowledge from the reality, and prior knowledge to form attitudes that meet the complex demands of the workplace.

In this perspective it is recommended the use of technology as a learning tool for nursing educators.⁹ Information technology becomes the vehicle for the interpretation of various perspectives, as well as to build the appropriate contextual knowledge.

CONCLUSION

In search of evidence of the most used strategies in relation to the teaching of PE in undergraduate and graduate programs, it is understood that the decision-making on the most appropriate choice should be based on careful evaluation. It was also observed that the situation described in some studies, makes it clear that the teaching of NP is taught mostly moments contemplating theoretical and practical, in addition to using electronic tools. Only in some situations, still remains essentially theoretical approach.

For evaluation of the strategy to be employed is necessary that the professional being supported scientifically, and to implement effective interventions that meet the real needs of the everyday practice of nursing.

Assessing the initial proposal of this review, there are gaps in scientific production on the teaching of NP in post-graduate nursing. Thus, reflects on preparing teachers for teaching NP since graduate school requires the preparation and development of knowledge for teaching practice.

Compared to the results indicated in the articles included in this study, it is understood to be necessary to intensify efforts to develop research designs that emphasize strategies to facilitate the education of the nursing process, and the use of descriptors in controlled studies, which would allow the best location productions and establishing evidence for nursing practice.

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