



THE TEACHING OF NURSING PROCESS STEPS: AN INTEGRATIVE REVIEW

O ENSINO DAS ETAPAS DO PROCESSO DE ENFERMAGEM: REVISÃO INTEGRATIVA

LA ENSEÑANZA DE LAS FASES DEL PROCESO DE ENFERMERÍA: REVISIÓN INTEGRADORA

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ABSTRACT

Objective: To analyze the national literature about the teaching the steps of the Nursing Process. **Method:** an integrative review, with the issue << *What is the existing national scientific production about the teaching of steps of the Nursing Process?* >> in databases LILACS and MEDLINE. To collect data it was used an instrument containing the information: title, journal, year, objectives, study type, place of publication, stage of the Nursing Process and results. The sample consisted of 19 articles in Portuguese and English, organized into figures and discussed according to the literature. **Results:** 12 articles addressed the investigation stage, four, the nursing diagnosis, two, all stages and one, the stage of nursing interventions. **Conclusion:** The number of Brazilian publications is still scarce and most are directed to teaching the investigative stage. Thus, there is need for more studies to support educational practices those will reflect on the quality of nursing care. **Descriptors:** Nursing Processes; Teaching; Learning.

RESUMO

Objetivo: analisar a literatura nacional sobre o ensino das etapas do Processo de Enfermagem. **Método:** revisão integrativa, com a questão << *Qual a produção científica nacional existente sobre o ensino das etapas do Processo de Enfermagem?* >> nas bases LILACS e MEDLINE. Para a coleta de dados foi utilizado um instrumento contendo as informações: título, periódico, ano, objetivos, tipo de estudo, local de publicação, etapa do PE e resultados. A amostra foi composta de 19 artigos em Português e Inglês, organizados em figuras e discutidos conforme a literatura. **Resultados:** 12 artigos abordaram a etapa de investigação; quatro, o diagnóstico de enfermagem; dois, todas as etapas e um a etapa de intervenções de enfermagem. **Conclusão:** o número de publicações brasileiras ainda é escasso e a maioria está direcionada ao ensino da etapa de investigação. Assim, há necessidade de mais estudos para subsidiar a prática educativa, que refletirá na qualidade da assistência de enfermagem. **Descritores:** Processos de Enfermagem; Ensino; Aprendizagem.

RESUMEN

Objetivo: analizar la literatura nacional acerca de la enseñanza de los pasos del Proceso de Enfermería. **Método:** revisión integradora, con la cuestión << *¿Cuál es la producción científica nacional existente acerca de la enseñanza de las etapas del Proceso de Enfermería?* >> en las bases LILACS y MEDLINE. Para recoger los datos se utilizó un instrumento que contiene la información: título, periódico, año, objetivos, tipo de estudio, lugar de publicación, la etapa del Proceso de Enfermería y los resultados. La muestra estuvo compuesta por 19 artículos en portugués e inglés, organizados en figuras y discutidos de acuerdo con la literatura. **Resultados:** 12 artículos abordaran la etapa de investigación; cuatro, el diagnóstico de enfermería; dos, todas las etapas y uno, el estado de las intervenciones de enfermería. **Conclusión:** el número de publicaciones brasileñas es aún escaso y la mayoría está dirigida a la enseñanza de la etapa de investigación. Por lo tanto, existe la necesidad de más estudios para apoyar las prácticas educativas, que reflejarán la calidad de los cuidados de enfermería. **Descriptores:** Procesos de Enfermería; La Enseñanza; El Aprendizaje.

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INTRODUCTION

The evolution of nursing as a science and profession portrays the search for models and theoretical frameworks that guide professional practice giving visibility to know and do the job. Thus, the development of the Nursing Process (NP), understood as a model for a methodical professional practice to organize the conditions necessary for the care, as well as recording the evolution of it. This points out to the concern of more qualified nursing payment, based on scientific principles.¹

The NP was designed in different ways and by different authors over the evolution of nursing history, however, shows the presence of common elements in these different ways to describe it.² It appears that the NP is described as being developed in five phases: research (history and physical examination) nursing diagnosis, planning, implementation and evaluation of nursing interventions (results).³ However, for the NP can be applied at all stages, in order to add organization and quality of care practice, it is necessary that the nurse who runs it has cognitive abilities to perform a collection of consistent data, which in basis diagnoses and interventions to achieve positive health outcomes for individuals, families and communities.⁴

It is noteworthy that these cognitive skills accompanied by habits of mind make up a set of elements necessary for the development of the NP steps, through critical thinking. For patient assessment and care situation that it needs, the nurse uses, for example, cognitive skills that include the ability to analyze, application patterns, insight, information search, logical reasoning, predicting and transforming knowledge. The habits of mind such as, confidence, contextual perspective, creativity, flexibility, curiosity, intellectual integrity, intuition, understanding, perseverance and reflection are applied across the clinical decision making and the establishment of nursing diagnosis is also often used.⁴

There is a growing concern in improving the learning of these skills and habits of mind students of undergraduate courses in nursing in order to permeate the entire academic career in the theoretical/philosophical and practical. Therefore provide for the construction and development of these elements necessary to carry out all stages of the NP, so criticism and humanized, is critical to the success of future performance professional.⁵

Some teaching strategies have been identified in the literature to facilitate learning in NP. We highlight the case studies, problem-based learning, the use of the virtual learning environment and conceptual maps.⁵ However, there are other elements that directly or indirectly influence the teaching of NP in schools graduate as the layout of the course curriculum, the vision of teachers and students, using a theoretical framework that allows ground the NP and the structure available in the institutions education and health involved in this process.⁶ Another important issue is that nursing education is permeated by the influence of a changing world, by changes in the population profile, the complexity of issues related to health and disease, knowledge constantly renewal, as well as the technological advances that will require these professionals the ability to meet the needs of the population in the current reality and, consequently, how apply the NP.⁶

It is understood that challenging is the responsibility of educational institutions and teachers against the teaching of NP as a method guided by critical thinking requires that the nurse, in addition to scientific knowledge, interpersonal skills, technical and intellectual resources to identify, interpret, intervene and evaluate the responses of individuals to care situations. However, it appears that the teaching of NP in Brazil is not yet covered in all institutions of higher education and, in some cases, their teaching/learning is incomplete and focused on only some of its steps.⁷ It is also noticed that there is a dissociation between theory and practice in teaching NP, where often the student is unable to implement what you have learned in the classroom to practice in the training field, because many health care institutions have not perform in all its stages.^{3,8}

It is important to deepen the knowledge about the teaching of NP is being developed in the institutions of higher education in nursing, emphasizing its different stages, so you knew the gaps and thus contributing and instigating reflection to improve practice educating nurses about this process.

OBJECTIVE

- To analyze the scientific production about teaching the steps of the nursing process.

METHOD

Integrative review, which seeks to group the results obtained in primary research on a

particular subject, in order to synthesize and analyze the data to develop a more comprehensive explanation of the phenomenon under study. The method is developed in five steps: problem formulation, data collection, data evaluation, analysis and interpretation of data, presentation of results.⁹

The formulation of the research problem and the purpose of the study were guided by the research question << ***What is the existing national scientific production about teaching the steps of the nursing process?*** >>

The data were collected in electronic databases: Latin American and Caribbean Health Sciences (LILACS) and *National Library of Medicine* (MEDLINE). The descriptors used were selected contemplate seeking the phenomenon under study: *Nursing Process, Education, Learning, Physical Planning, patient care, nursing diagnosis, nursing care and Outcome Assessment (Health Care)*.

Inclusion criteria were established: scientific articles written in Portuguese and English, resulting from primary research and theoretical studies that have as their country of origin Brazil, with online access to the full

text. There was no definition of the publication period. We excluded articles that did not contain responded to guiding question of the study.

The selection of productions comprised two stages: 1st from reading the title and summary of the article; 2nd from reading the article in its entirety. Initially, the search showed 9350 articles in MEDLINE and LILACS in 1655. However, after reviewing the same (1st and 2nd time), we selected 19 items that comprised the sample of this study, according to the inclusion criteria. Four of whom are from MEDLINE, LILACS, and four of 11 that were available at both bases.

There were respected ethical aspects, retaining the authenticity of the ideas presented, ensuring the authorship of articles, with all referenced sources consulted.

RESULTS

There were analyzed 19 publications in LILACS and MEDLINE on the subject of teaching the steps of Parliament. The year of publication, article title, the NP step approached, the journal and the database that was found in the text are shown in Figure 1.

Year	Title	Step of the NP	Periodic	Basis
2011	Virtual objects for supporting the teaching-learning process of physical examination in nursing ¹⁰	Research (Physical examination)	Acta Paul Enferm	LILACS MEDLINE
2011	Nursing diagnosis: educational strategy based on problem-based learning ¹¹	Nursing diagnosis	Rev Latino-Am Enfermagem	LILACS
2011	Nursing students' difficulties in learning the nursing diagnosis, the perspective of Metacognition ¹²	Nursing diagnosis	Esc Anna Nery	LILACS
2009	The teaching of physical examination in their technical and subjective dimensions ¹³	Research (Physical examination)	Texto Contexto Enferm	LILACS
2008	Interactive multimedia in Nursing: a technology for teaching-learning in semiology ¹⁴	Research (Physical examination)	Rev Gaúcha Enferm	LILACS
2008	Assessing the learning of nursing physical examination in the context of Pediatric semiology ¹⁵	Research (Physical examination)	Acta Paul Enferm	LILACS
2008	Evaluation of the influence of technological resources in the teaching-learning process in the discipline of semiotics and semiology of nursing ¹⁶	Research (Physical examination)	Arq. Ciênc. Saúde Unipar	LILACS
2006	Nursing physical examination of the newborn at term: software self-teaching ¹⁷	Research (Physical examination)	Rev Latino-Am Enfermagem	LILACS/ MEDLINE
2005	Study with self-teaching modules as a teaching strategy in the discipline of nursing neonatological ¹⁸	Research (Physical examination)	Acta Paul Enferm	LILACS
2004	Teaching of physical examination in a nursing school ¹⁹	Research (Physical examination)	Arq Ciênc Saúde	LILACS
2003	Experiencing an emancipatory proposal in teaching for nursing semiology ²⁰	Research (Physical examination)	Rev Latino-Am Enfermagem	LILACS
2002	Nursing care to the bearer of changes in skin integrity: an account of teaching-learning experience ²¹	Interventions	Rev Esc Enferm USP	LILACS
2002	Teaching of nursing process in schools of nursing degree in the State of São Paulo in Brazil ²	All	Rev Latino-Am Enfermagem	MEDLINE
2000	The teaching of pulmonary physical examination by the method of questioning ²²	Research (Physical examination)	Rev Latino-Am Enfermagem	LILACS
2000	Nursing process: factors that make it difficult and that facilitate the teaching ²³	All	Rev Esc Enferm USP	MEDLINE
1998	The teaching of physical examination in nursing undergraduate schools of the municipality of São Paulo ²⁴	Research (Physical examination)	Rev Latino-Am Enfermagem	LILACS/ MEDLINE
1997	Students' opinion about the teaching of nursing diagnoses according to the taxonomy of NANDA ²⁵	Nursing diagnosis	Rev Esc Enferm USP	MEDLINE
1996	The process of diagnosing and its teaching ²⁶	Nursing diagnosis	Rev Escola Enferm USP	LILACS
1993	Teaching of patient assessment: proposed outline of the content by the nursing diagnosis ²⁷	Research (Anamnesis and Physical examination)	Rev Latino-Am Enfermagem	LILACS/ MEDLINE

Figure 1. Distribution of selected studies in LILACS and MEDLINE databases developed on the theme teaching of NP, according to year, title, PE step, newspaper and database in which the same is available.

Regarding the type of study we identified one (5,2%) and the other study teórico²⁷ arising from research, 10 (52,6%) and eight qualitative^{2,12-5,18,20-2,24} 24 (42%) quantitative.^{10-1,16-7,19,23-5}

The Latin American Journal of Nursing was the journal with the highest number of publications (7), followed by the Journal of the School of Nursing with four publications by Acta Paulista Nursing with three and only one publication in each of the other cited journals (School Anna Nery, Text & Context Nursing, Journal of Nursing Gaucha, Archives of Health Sciences Unipar, Archives of Health Sciences). The years 2008 and 2011 presented the largest number of publications, three in each.

It was identified that 12 articles (63,15%) addressed the investigation stage,^{10,13-20,22,24,27} with 11 (57,8%) on issues relating to physical examination and only one (5,2%) also considered the anamnesis. In the sequel, we found four (21%) publications that addressed the teaching of nursing diagnosis.^{11-2,25-6} Two (10,5%) articles contemplated teaching all stages of PE^{2,23} and (5,2%) addressed the nursing interventions.²¹ There were no publications focusing on the steps of planning and evaluation of results.

The objectives of each study were also synthesized, and their main findings and contributions (Figure 2).

NP step addressed	Objectives	Main findings/contributions
Research (physical exam/anamnesis)	Describe the process of construction of virtual learning objects of the physical examination in nursing	The use of integrated computing technologies should support the teaching of physical examination, optimizing the theoretical and practical activities and maximizing the learning outcomes.
	Describe the concepts of nursing scholars on the practice of physical examination and discuss your teaching in clinical nursing care perspective	During the teaching-learning process of physical examination, are viable joints between semiological techniques, the subjectivity and the clinic, being necessary the aesthetic sensibility, ethics and humanization.
	Analyze the use of interactive multimedia for teaching practical theorist of semiology in nursing.	The interactive multimedia education and streamlines enables the interaction of sounds and images, optimizing the performance of students in physical examination and customer care.
	Check how the nursing student performs a physical examination of the child. Analyze phases of motivation and performance, according to the benchmark of Gagné.	The students were motivated, interacting with the child. Obtaining anthropometric data and inspection (except of the middle ear) were easier learning. Auscultation is the hardest learning method, followed by palpation and percussion.
	Evaluate the influence of technological resources online (TelEduc) in learning about the general physical examination, nursing students	Academics who had access to the tool showed better results compared to those who did not use.
	Develop and evaluate self-teaching modules of physical examination of the newborn at term (NBT) as a teaching strategy.	The modules have received good or excellent concepts by the experts. Educational software can contribute to technological advancement of neonatal nursing.
	Describe the application of self-teaching modules of physical examination of how teaching strategy, NBT and verify the performance on learning.	Self-teaching modules can contribute to learning and skills development in the carrying out of physical examination of NBT.
	Identify which are the variables involved in the teaching of physical examination.	The physical examination is applied in subjects without specific programming. Suggest as improvements: specific discipline, teacher training and increased workload. There is a need on the part of teachers to enhance their knowledge and skills.
	Analyze the teaching of semiology in five universities of Ceará.	Presence of teachers with experience in teaching and research. These indicate that the high number of students impairs the teaching. The students reported difficulties in the preparation of and the initial contact with client hospitalized, causing insecurity and rejection of the practice of the discipline.
	Implement and analyze pulmonary physical education through the methodology of Problematization (ARC Method)	The major difficulties of the students were: percussion and palpation. The application of pedagogy of questioning in teaching physical examination is feasible.
	Detect the situation of the teaching of physical examination by identifying the factors that hinder the recommendations of teachers for their improvement.	There is not a specific discipline to teach physical examination. Teachers are not prepared for this teaching. It is recommended to improve the knowledge and skills of teachers, create specific discipline and adequate workload.
	Discuss controversial aspects of the teaching of initial assessment of the patient and offer a proposal that guide this content.	It is suggested to reformulate the traditional content of data collection, using the of and their defining characteristics as a reference to delimitation of the content of data collection
	Evaluate the effectiveness of a teaching strategy about based on problem-based learning.	Showed improvement in the ability to group data from students of the experimental group, positive influence of the strategy implemented.

Investigate learning in hospital area, graduating students of the undergraduate program in	Students' difficulties: theoretical structure related to the practical application of diagnosing, the knowledge and the use of diagnostic classifications. The Metacognition
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	Metacognitive perspective	can be effective in the control of the learning difficulties of students.
Nursing diagnosis (ND)	To raise students' opinion about the teaching of the ND	Views: introduce the teaching in the 3rd semester, when begin basic nursing procedures; the study of of your modifications brought concept of nursing care. Most students reported learning difficulty level between 25% and 75%.
	Check the adequacy of the preparation of analysis and synthesis process and its relationship with the establishment of the ND.	Students' difficulties: in the area of establishing relationships and data collation, lack of knowledge of pathophysiology, lack of foresight in identifying relevant data. It is suggested to stimulate the development of thought process inherent in analysis and synthesis since the beginning of the program.
Nursing interventions	Describe a teaching-learning experience of nursing care to the adult and elderly skin integrity change carrier and the performances expected of students through integrated curriculum and problematizing methodology.	Work with an integrated curriculum and problematizing methodology represents a breakthrough in teaching learning process and, above all, a challenge. Difficulties: the training of teachers, according to the traditional model, which stimulates the creativity, with few possibilities of transformation of reality.
All steps	Describe how is offered NP education in schools of Nursing in the State of São Paulo in Brazil.	Steps included in the teaching of PE: a history of nursing (83,7%); Prescription of nursing (76,9%); Evolution of nursing (76,2%); (64,0%); Assistance plan (51%); Prognosis of nursing (18,4%).
	Identify how is offered the teaching of nursing process in schools of Nursing in the State of São Paulo in Brazil.	The factors that hinder the teaching of PE were numerically larger than those that facilitate. Most quoted difficulty: not practical field adopts the method. Most quoted facility: teacher's belief in the method. Despite the difficulties, the teaching of PE, has been offered by professors of public and private schools in the State of São Paulo.

Figure 2. Main findings and contributions of articles analyzed according to the stage of PE studied and established objectives.

It was found that among the articles that addressed the stage of research, five (26,3%) contemplated the development and use of information technology resources to optimize the teaching and learning of physical examination.^{10,14,16-8} The remaining studies of this step covered aspects related to assessment of learning, conceptions of academic difficulties related to teaching and use of the method of questioning to their teaching.^{13,15,19,20,22,24,27}

With regard to articles that addressed diagnostic methods of the physical examination, it was found that auscultation, palpation and percussion were the most difficult learning by students and inspection, as well as obtaining anthropometric data of the easier learning.^{15,22} The suggestions of teachers to improve the teaching and learning of physical examination were the creation of a specific discipline, teacher training and increased workload.^{19,24}

Three (15,7%) investigations have evaluated the diagnostic stage of learning among students from different methodologies: problem-based learning, metacognition and the process of analysis and synthesis.^{11-2,26} (5,2%) study investigated the student's opinion about the teaching of nursing diagnoses according to the taxonomy of NANDA-International.²⁵

The stage nursing intervention was contemplated in one (5,2%) study which showed the expected performance of students and the sequence of activities built for the education of nursing care to adult and elderly with change in skin integrity.²¹

It is noteworthy that the problem methodology was addressed in three (15,7%) studies as a teaching strategy in steps of physical exam, nursing diagnosis and nursing intervention.^{11,21-2}

In investigations that addressed all stages of NP, met the description of how your teaching is offered as well as the facilities (belief in the teaching method) and difficulties (practical field does not adopt the method) encountered by teachers.^{2,23} The difficulty most cited studies was the fact that the field of practical activities not adopt the NP and the facility was cited as the belief of teachers in NP. Another study presented data on more steps contemplated in teaching NP in schools of nursing graduation the state of São Paulo, pointing out that in the first place is the teaching of the history of nursing (research), prescription nursing and evolution followed the teaching of diagnosis, prognosis and plan care nursing.² The steps of planning and outcome assessment were not included in the studies analyzed.

DISCUSSION

Studies on the teaching of NP steps are included in the period between 1993 and 2011, and only the stages of research, diagnosis and interventions were included, showing a small number of publications on this topic. This reinforces the need to develop more research about the teaching of NP and its dissemination in the academic and scientific way to boost this knowledge among students and nurses.

The first study found was the year 1993, which addresses the investigation stage (history and physical examination) from a proposal to use the ED as reference frame for collecting patient data.²⁷ In the 90s there were two more publications²⁵⁻⁶ regarding diagnostic step, based on the taxonomy of NANDA-I. It is known that the use of ratings for studies in nursing practice began from the 1980s, and the taxonomy of NANDA-I was one of the first to be studied and translated into Portuguese of Brazil.

This advance knowledge of classification systems, partly favored the qualification of studies and the teaching of NP, which now has the nursing diagnosis as more of its stages.

It is noticed that the increase of scientific literature on the teaching of the stages of NP occurred in Brazil since 2000, corroborating the findings of other studies that have analyzed the production of knowledge about NP and showed increase in the development of dissertations and doctoral theses and publications of articles about this topic at this time.^{3,7} This increase in scientific production may also be related to the resolution of the Federal Nursing 2002 establishes than in the NP as a mandatory activity to be developed by nurses in health²⁸ institutions encouraging educational institutions to contribute to the preparation of students graduation for the development of NP in professional practice.

About the lack of studies on teaching evaluation stage results, it is clear that although there is a concern of nurses with the same, seeing how their interventions change the state of the patients, the use of a classification system to describe such results is recent in the Brazilian reality and its use is still directed to research means of its application in clinical practice. Thus, it appears that nurses are still searching for the best way to operationalize this stage of NP, explaining the absence of investigations into their teaching.²⁹

Regarding the distribution of articles in the databases, we found a predominance of publications in LILACS, encompassing the scientific literature of Latin America and the Caribbean, which could be related to the fact that the Brazilian nurses do not publish the findings of their research in English and in international journals.

The higher prevalence of qualitative studies found in this review was also evident in research that examined the production of knowledge about NP from theses and dissertations national, reinforcing the fact that this approach has been widely used in the nursing scientific production. This is possibly

because of the issues discussed on the NP are more related to subjective aspects and little measurable quantitatively.⁷

Turning the discussion to the fact that the prevalence of the analyzed studies were directed mostly to the teaching of investigative stage, it is noted that noted a major concern of the authors of physical examination, however, no such attention to the patient's medical history, which should also be part of the first phase of NP (Research). This step needs to collect enough data to provide a basis for the development and interrelationships of the remaining steps of the NP.¹³

It is inferred that besides the importance of the stage of research for the development of NP, the numerical superiority of studies directed to it is due to be held in most health institutions, unlike other steps that are less covered in practice.⁸

Also in relation to the physical examination, analysis of production points to the development and use of educational technologies as a resource for teaching and learning this step.^{10,14,16-7} Educational technology involves a set of scientific knowledge that enable systematic planning, implementation, control and monitoring of the educational process. The teacher plays the role of facilitator of the learning process and student participant where creativity and sensitivity of both parties are used in the pursuit of personal and professional growth.³⁰

In this context, Research indicates that the use of these technologies in nursing education, especially of virtual learning objects, have intensified in recent years, especially in centers of teaching and research.¹⁰ These features facilitate the learning process, because the join theory and practice allow students to develop and use cognitive skills and habits of mind , stimulating critical thinking .

For example, in the articles analyzed in this research, the use of interactive multimedia as a resource in teaching semiology for nursing students, has been shown as a means of easy handling and a facilitator between theory and practice, increasing the understanding of lessons theoretical.¹⁴ With this, students can be encouraged to develop cognitive skills such as the ability to analyze, search for information, logical reasoning, combined with habits of mind such as, confidence, creativity, flexibility, curiosity, intuition.⁴

Thus, it is identified that these technological resources, especially

information technology, have been used to improve student performance, theory and practice closer and streamline and optimize the process of teaching and learning. If on one hand the technological resources have proven alternatives facilitating the teaching of NP, analyzed some articles highlighted the difficulties faced by teachers in teaching physical examination, suggesting the creation of a specific discipline for this, besides the improvement of knowledge and skills of teachers about this content.^{19,24} Creating a discipline of NP, does not seem to be the best alternative, since it should not be a part of the content, but rather permeate all disciplines of nursing, in which all teachers recognize as a method that organizes and classifies the patient care.

It was also found that in relation to the assessment of learning physical examination there were some techniques that were more easily learned by students as obtaining anthropometric data and inspection, and were more difficult to auscultation, palpation and percussion.^{22,27} In this regard, it is noted that for the physical examination is needed is a set of scientific knowledge in various areas such as anatomy, physiology, pathology, symptomatology, among others, which are essential to detect changes, signs and symptoms as well as the risk factors they are exposed patients assessed by nurses. This careful evaluation result an accurate diagnosis, proper planning of interventions in order to remedy or minimize the health impaired.²²

Besides the use of technologies in education as a strategy for teaching the physical examination also demonstrated the use of problem methodology to enhance learning this step as well as the stage of nursing diagnosis and nursing intervention. This methodology values "learning to learn", leading the student to seek solutions through the learning of cognitive skills and competencies necessary to identify the best approach to solve the problems presented in the form of clinical.¹¹

Studies have shown that this approach had a positive influence on the learning process of physical examination, nursing diagnosis and intervention, improving the ability of data grouping and decision making, allowing the interaction of knowledge and active participation of students and contribute for the assessment of learning, where students and teachers can identify difficulties and skills presented.^{11,21-2}

Regarding the steps that were not included in the analyzed publications, namely, planning

and evaluation of the results, it is argued that the use of this last step was just more consistent from the mid 90's. Today exist these classification systems, the best known of the Nursing Outcomes Classification (NOC), which began in 1991 and aims to evaluate the interventions through the use of nursing outcomes.²⁹

Therefore, it is inferred that the still small number of publications on this step of the NP, is related to the fact that the measurement of results was only seen as an important step in the NP recently and that the NOC is still being used in most institutions research-driven, to be applied in future clinical practice.²⁹

Corroborating these findings, research on the teaching of nursing in undergraduate nursing schools in the state of São Paulo found that the six phases questioned in the study cited were the least care plan and prognosis nursing. The phases were most cited nursing history, prescription and nursing evolution. In this study, the authors note that the three stages mentioned make up the "simplified procedure" used in various health services as a way to systematize nursing care.²

The analysis of scientific productions performed in this study indicates that for teaching NP to be effective you need a set of factors such as the use of various teaching resources and the existence of health institutions that employ systematically the NP in all its stages and that may be the practical field for undergraduates. It is also noticed a need for teachers to use NP as a guideline for teaching and guiding nursing care to patients. Thus, we still have many challenges to overcome and many strategies to be developed and used in teaching NP.

CONCLUSION

The present review showed a small number of publications on the teaching of NP stages of the Brazilian reality in the period 1993-2011, reflecting a gap in knowledge production on this topic, especially with regard to the stages of planning and evaluation of results. The scientific production on the teaching of the stages of NP is more directed at the investigation stage (physical examination), followed by nursing diagnosis and intervention.

However, different strategies have been used in order to qualify the teaching and learning of NP steps, highlighting the educational computer technologies in teaching physical examination and problem-based learning also used in the stages of diagnosis and nursing intervention. These

methods have positive results on student performance and approach between theory and practice.

It was concluded that the teaching of NP is important issue for the discipline of nursing and there is the need to deepen their knowledge and teaching mode of its steps, in particular planning and results. The purpose of this is to provide grants to improve educational practice and thus enable a nursing care of the highest quality, with this method comprehensively in health institutions.

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