The teaching of the nursing process.

THE TEACHING OF THE NURSING PROCESS
O ENSINO DO PROCESSO DE ENFERMAGEM
LA ENSEÑANZA DEL PROCESO DE ENFERMERÍA

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ABSTRACT
Objective: to analyze the scientific production of nurses on the teaching of the Nursing Process. Method: this is an integrative review of studies published between 2002 and 2012, in the LILACS database and SciELO virtual library. The search was carried out in March of 2017, using controlled descriptors contemplated in the DeCS. Results: seven original articles, characterized as periodical, year of publication, methodological design, area of action and titration of the authors and regional origin of the productions. The results raise the need to discuss and reflect on the ways of teaching and learning the Nursing Process among teachers, students, coordinators of nursing courses and health services. Conclusion: in view of the complexity of the Nursing Process, its teaching must take place transversally, involving innovative strategies and promoting continuous teaching qualification aimed at training critical professionals, reflective and committed to the principles of the Unified Health System. Descriptors: Nursing; Nursing Education; Higher Education; Nursing Process; Review.

RESUMO
Objetivo: analisar a produção científica de enfermeiras sobre o ensino do Processo de Enfermagem. Método: trata-se de revisão integrativa de estudos publicados entre 2002 e 2012, na base de dados LILACS e biblioteca virtual SciELO. Realizou-se a busca em março de 2017, utilizando-se descritores controlados contemplados no DeCS. Resultados: siete artículos originales, caracterizados sobre el periódico, año de publicación, delineamiento metodológico, área de atuação e titulação das autoras e procedência regional das produções. Suscita-se a necessidade de discutir e refletir sobre os modos de ensinar e aprender o Processo de Enfermagem entre docentes, discentes, coordenadores de cursos de enfermagem e serviços de saúde. Conclusão: considera-se que diante da complexidade do Processo de Enfermagem, o seu ensino deve ocorrer transversalmente, envolver estratégias inovadoras e promover qualificação docente contínua visando à formação de profissionais críticos, reflexivos e comprometidos com os princípios do Sistema Único de Saúde. Descritores: Enfermagem; Educação em Enfermagem; Educação Superior; Processo de Enfermagem; Revisão.

RESUMEN
Objetivo: analizar la producción científica de enfermeras sobre la enseñanza del Proceso de Enfermería. Método: se realizó una revisión integradora de estudios publicados entre 2002 y 2012, en la base de datos LILACS y biblioteca virtual SciELO. Se realizó la búsqueda en marzo de 2017, utilizando descritores controlados contemplados en el DeCS. Resultados: siete artículos originales, caracterizados sobre el periódico, año de publicación, delineamiento metodológico, área de actuación y titulación de las autoras y procedencia regional de las producciones. Los resultados muestran la necesidad de discutir y reflexionar sobre los modos de enseñar y aprender el Proceso de Enfermería entre docentes, discentes, coordinadores de cursos de enfermería y servicios de salud. Conclusión: frente a la complejidad del Proceso de Enfermería, su enseñanza debe ocurrir transversalmente, envolver estrategias innovadoras y promover calificación docente continua visando a formación de profesionales críticos, reflexivos y comprometidos con los principios del Sistema Único de Salud. Descriptores: Enfermería; Educación en Enfermería; Superior Educación; Proceso de Enfermería; Revisión.

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**INTRODUCTION**

The scientific, technological, economic and social development of the last decades is a great challenge for the health and education area, originating the need to deepen the knowledge about the contemporary pedagogical tendencies in the formative process of nursing.

In this process, Nursing Higher Education Institutions understand the responsibility of investing efforts in the formation of critical and reflective professionals capable of learning to learn, work in teams and provide humanized services. This understanding makes it imperative to search for models and theoretical references of the body of specific knowledge of the profession, to guide clinical practice, teaching and research, materializing such knowledge with scientific.

In the middle of the 20th century, American nurses created theoretical models that aimed to portray, describe and explain concepts, predict phenomena and determine the domain of the area, indicating the need to make it systematic, based on the Nursing Process (NP) of each one of these models.

In Brazil, the teaching of the Nursing Process (TNP) was introduced through the Basic Human Needs Theory (BHNT), which enabled the introduction of care practices based on the scientific knowledge of nursing.

Thus, it began to teach this knowledge progressively in nursing undergraduate courses, occupying spaces in which experience and values arise and interact influenced by culture, context, and mental representations. These elements direct the participants of the teaching/learning process, that is, teachers and students, to a critical position before the established formal knowledge and the specific knowledge of the profession.

Once presented to nursing students, it is possible that such knowledge is associated with its previous cognitive structure until it becomes meaning, as an act of creation and recreation. In this process, the interactions that are articulated with past, present and possibly future knowledge are involved with the pedagogies and the reality of those involved.

NP is defined as a method of providing nursing care, organizer of nursing work, with a philosophical basis and instrument that provides order, systematization, and direction to the work of the professional of the area, besides structuring their decision-making.

The application of the NP is the materialization of a theoretical thought of the own knowledge of the nursing. It consists of distinct, interdependent and interrelated stages entitled: Nursing History - anamnesis and physical examination; Nursing Diagnosis - identification, answers or real and/or potential problems to the diseases; Plan of Action - establishment of priorities and results; Intervention - plan in action; Evolution - verification of results and review of priorities.

The NP is a means to comply with Resolution CNE/CES nº 03/2001 that establishes the National Curricular Guidelines (DCNs) for the Nursing Undergraduate course. Article 3 of these guidelines explicitly states that nurses must be qualified to intervene in health-disease situations, in the biopsychosocial dimensions, promoting actions aimed at the patient's integral health and in line with the principles of the Unified Health System (SUS).

This study is justified by the need to know the state of the art on the subject, as well as the teaching strategies that help in the training of the nursing professional. The aim is to encourage nurses, teachers and students to seek scientific evidence in teaching and care practices through reflections and discussions to uncover potentialities, fragilities and new ways of teaching and learning the NP during the training.

**OBJECTIVE**

- To analyze the scientific production of nurses on the teaching of the Nursing Process.

**METHOD**

This is an integrative review following the next steps: determination of the objective; formulation of guiding question; definition of sources of information; definition of the descriptors and inclusion and exclusion criteria; data collect; analysis, discussion and presentation of results.

A cross-sectional retrospective study, with the intention of investigating the theme in a predefined and analytical time, seeking to interpret the reasons and motivations implied by the ideas.

The study was guided by the following question: How is the teaching of the Nursing Process presented in the online scientific production produced by nurses, considering the approval of the National Curricular
Guidelines for Undergraduate Nursing Courses and Resolutions 272/2002 and 358/2009?

A bibliographic survey was carried out in the Virtual Health Library (VHL), the Latin American and Caribbean Literature in Health Sciences database (LILACS) and the Scientific Electronic Library Online (SciELO) virtual library, in March 2017 for the selection of the articles, using the following descriptors: nursing, nursing processes, and nursing education, interconnected by the Boolean AND.

The search included articles published between 2002 and 2012, a temporal cut that intended to investigate studies conducted since the publication of the DCNs, n. 03 of November 07, 2001, for the Undergraduate Courses in Nursing, in addition to Resolutions 272/200216 and 358/2009,17 both of the Federal Nursing Council (Cofen), which provide for the Systematization of Nursing Assistance (SAE) and the implementation of the Nursing Process in all health services in the country in which nursing care takes place.

The following inclusion criteria were defined: articles available in full, published by nurses between 2002 and 2012, in Portuguese, English or Spanish. As exclusion criteria, articles were established between the bases, reviews and those that did not answer the research question. To collect the relevant information in the studies included in the review, an Excel spreadsheet, prepared by the authors, was used to facilitate the organization and discussion of the results.

There were 1,468 (100%) publications identified, of which 1,437 were excluded after reading the titles, remaining 31, 12 in LILACS and 19 in SciELO. Five of them were subtracted per repetition. Of the remaining 26, 18 were eliminated because they addressed the teaching of other subjects and one was a review, resulting in seven (0.47%) articles of the initial corpus, analyzed quantitatively and qualitatively according to external and internal criticism.

In the external critique, statistical procedures were carried out for relative measures (%) of proportion, based on the indicators adopted, presented in Tables 1 to 4 below.

RESULTS

Of the seven articles selected, three are in the SciELO database and four in LILACS. As for the year of publication and indexed database, four (57.14%) were found in LILACS, published between 2003 and 2012, and three (42.86%) in SciELO, published between 2002 and 2007. All the productions were the participation of teaching nurses of public HEIs, which demonstrates a concern of the academy regarding the production and dissemination of knowledge with scientificity.

As for the methodological design, the exploratory type predominated, with six (85.72%) productions. This fact can be attributed to the object and type of study most common in nursing; there was only one (14.28%) type of experience report.

In the external critique, statistical procedures were carried out for relative measures (%) of proportion, based on the indicators adopted, presented in Tables 1 to 4 below.
In the internal criticism, the contents were carefully read, considering the ideas contained, as well as the authors’ own interpretation. The findings were grouped into three groups and five categories identified from A to E, according to Figure 1.
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Table 4 shows a fair distribution in the Southeast, South and Midwest regions, with two (28.57%) publications, the exception for the Northeast region with one (14.28%) and the absence of production in the North.

Studies highlight the growth of the supply of qualified professionals in nursing in recent years. Such growth is due to the expansion of postgraduate programs in the area and should give the profession greater visibility in the country’s higher education system. However, this expansion occurs unevenly, since the South and Southeast regions have a greater number of undergraduate and postgraduate programs.24-25

This situation ratifies historically established differences that will certainly affect more productions and publications in the regions already highlighted, while in the Northeast and North regions progress has been slow.26 From this perspective, there is a need for investments and research throughout the country, making the reality and complexity of the TNP in a comprehensive way.

The internal analysis of the selected studies points to TNP guided by interdisciplinary and transversal thinking through contemporary pedagogies that contemplate the emerging paradigm of education.2,11,26

The category A addresses the teaching and learning process of the NP from the beginning of the course and maintained throughout the groups, not only to expand the knowledge but for the future entrance in the academy.

The participation of non-teaching nurses in research groups and in the production of knowledge about TNP expresses an understanding of the importance of research in the field of nursing and the need to carry out scientific studies beyond the academy. However, analyzing that the application of the NP occurs mostly in the field of care practice, it is possible to perceive that there are gaps in the scientific production on the teaching of this method in Brazil, including by nurses who work in care.

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graduation in the professional curricular components. It suggests that the teacher should adopt appropriate methodologies, such as problem-solving and open dialogue, aiming at the student's role and knowledge exchange to train active, committed critical and reflexive professionals.\(^{2,11,20-27}\) This appropriation enhances teaching, as it breaks with traditional models and allows the incorporation of innovative knowledge and practices.\(^{28}\)

In the category, the TNP is also emphasized in its entirety, since it constitutes a method with steps to be applied in an interconnected and interdependent way, so the care offered is integral and grounded. It also mentions that students should receive objective influences from the theoretical and scientific content of the NP and of the subjective protagonists of the TNP and, as a result, when they enter the labor market, they can act by applying the NP as recommended in Resolution 358/2009 of Cofen,\(^ {2,11,17,26}\)

The featured theme is complex and influenced by diverse beliefs and values. The nurses found difficulties in applying the NP in practice and associated it with insufficient knowledge since the academy and limitations on working conditions. On the other hand, they revealed insecurity and resistance to the implementation of the method.\(^ {26}\)

It is recommended that HEI promote continuous pedagogical qualification and carry out the policy of permanent education in services to ensure TNP in a transversal way.\(^ {29}\) Nurses from different representative bodies need to reflect on the theoretical and philosophical aspects of the teaching and application.\(^ {1}\)

Category B attributes value to SAE and the NP, articulating knowledge and doing as inseparable elements. It evidences the NP as a guiding instrument, which enables the care with scientific foundation and the involvement of teachers in the conduction of the teaching/learning process in a critical and reflexive way to neutralize technical and automated tendencies. Some of this valuation accentuates personal subjective aspects of teaching and care nurses related to the will to teach and apply the NP, materializing the knowledge and the doing, besides emphasizing the integration of teaching and assistance as relevant factors to support and success in their teaching.\(^ {30}\)

The study that constitutes this category also emphasized the use of the standardized terminology North American Nursing Diagnosis Association (Nanda). This was pointed out as a facilitating tool for the exchange of information of nurses in the fields of clinical practice, a support during the nursing consultation, as well as an incentive to the reflexive critical thinking of the students in the academy.\(^ {31}\)

Category C proposes SAE during the teaching of the curricular components. Thus, it suggests the use of innovative pedagogical strategies, such as dramatization and demonstration in supervised practice. Significant adherence to the emergent education paradigm is observed, which is based on the DCNs for the undergraduate course in Nursing.\(^ {12,32}\)

In this category, the applicability of BHNT, a model that promotes the nurse's scientific practice was evident. The study analyzed shows the teaching/learning of the theoretical and practical contents taught by the same teacher, defending the continuity, coherence, and interrelation between theory and practice to consolidate the meaning of NP in the academy.\(^ {12,33}\)

It also shows that private hospitals have a higher percentage of SAE implementation when compared to public hospitals. This may be related to the organizational structure, limited knowledge about NP, lack of printed documents, protocols, human resources and time, inadequate infrastructure and incomplete nursing records.\(^ {34}\)

Category D emphasizes the TNP through virtual, innovative teaching strategy and with positive impacts. However, in the pedagogical project of the nursing course in which the research was carried out, it is expected that such a strategy should not exceed 15% of the total workload of the curricular component for in-class courses.\(^ {35}\)

Given the positive receptivity of the students and the fast evolution of the technical information and communication devices, it is necessary to train teachers to use these resources, expanding the forms of teaching/learning of the NP.\(^ {36}\) Thus, it is necessary to improve the TNP, especially in the graduation through pedagogies that facilitate the cognitive and affective development of the students, so in the graduation they begin to recognize as future professionals with possibilities of scientific and autonomous practices.\(^ {35}\)

Thus, improving the TNP presupposes innovating and directing the students to be protagonists of the history. Therefore, they should develop cognitive and affective skills to investigate and analyze with interest contents such as the NP in its foundational aspects, that is, philosophical, technical-

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scientific, identity and professional autonomy.  

The category E exposes the experience of teachers in the application of the nursing care methodology as a theoretical-methodological teaching model for the care of patients submitted to pulse therapy. In this experience, teachers used the Nanda I Taxonomy and developed tools for recording the stages of the NP, a strategy that helped students develop actions in the fields of practice.

In view of these findings, it is inferred that the TNP assists the academy in recognizing the nature of the nurse’s work, while in practice the implementation of the NP delimits the field of professional action, produces satisfaction, recognition, visibility and specific identity profession.

CONCLUSION

This review included seven original, predominantly exploratory studies, distributed equally in the South, Southeast and Midwest regions of the country, published by public HEI professors, with a degree between the doctorate degree and the absence of publications by nurses who work in care.

The knowledge produced in three groups that addressed TNP in its entirety by virtual and as a method was gathered. As potential factors for the TNP, the publications were introduced in the introduction from the base of the training and in the course of the process, through innovative interdisciplinary practices, active methodologies and the continuous teaching qualification for the exercise of this teaching, aiming to train critical professionals, reflective and differentiated to act in the public health services.

In the analyzed productions, the authors emphasized the NP as an essential instrument for quality care. They also mentioned the internal and external difficulties of the nursing team to the implementation of the SAE in the health services and, consequently, to comply with Resolution 358/2009 of Cofen. Also, they emphasized the importance in the adoption of philosophical, theoretical-methodological models such as BHNT, associated to the Nanda taxonomy, both essential for the scientific practice of the nurse.

It is concluded that TNP is essential during the clinical training of the nurse; teaching strategies must accompany the theoretical, scientific and technological advances of the body of knowledge of the profession; the updating of teachers must occur continuously, and students should be encouraged to be protagonists of their own stories.

The results show reflections and alert teachers, students, coordinators of nursing courses and services on ways to teach and learn the NP to strengthen it through integrative networks, to update knowledge and development of research that validates its applicability, to transform reality into spaces in which such a theoretical model is not yet in place.

The study did not intend to exhaust the subject. Therefore, it is considered necessary more investigations, mainly, in those places that the scientific production on the subject is still incipient or absent.

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