NURSING AND SCIENCE: A REFLECTION ABOUT ITS CONSOLIDATION**ENFERMAGEM E CIÊNCIA: UMA REFLEXÃO SOBRE A SUA CONSOLIDAÇÃO****ENFERMERÍA Y CIENCIA: UNA REFLEXIÓN SOBRE SU CONSOLIDACIÓN**

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ABSTRACT

Objective: to reflect on the science of Nursing and the nurse scientist, taking into account the challenges of scientific production, to reach degree equivalent to or close to that of reliable knowledge. **Method:** it is a descriptive study, type reflexive analysis, constructed through the search in SciELO, LILACS and BDENF, with the descriptors nursing and science, using the Boolean operator AND, with temporal delimitation from 2012 to 2017. **Results:** this reflection highlights the need to strengthen the guiding principles of the scientific practice for the strengthening of nursing science. It is essential to use tools available in the promotion of sociopolitical actions that point to the quality of life of society in the internationalization through the dissemination of publications in relevant periodicals. **Conclusion:** this reflection contributes to the propagation of knowledge produced in the reality of health services, in the community and in nursing training centers, leading to significant changes that are not restricted to the academic universe. **Descriptors:** Nursing; Science; Knowledge; Philosophy in Nursing; Nursing Research; Education in Nursing.

RESUMO

Objetivo: refletir sobre a ciência da Enfermagem e o enfermeiro cientista, levando em consideração os desafios da produção científica, para atingir grau equivalente ou próximo ao do conhecimento confiável. **Método:** trata-se de estudo descritivo, tipo análise reflexiva, construído por meio da busca na SciELO, LILACS e BDENF, com os descritores enfermagem e ciência, utilizando-se o operador *booleano AND*, e com delimitação temporal de 2012 a 2017. **Resultados:** destaca-se, por esta reflexão, a necessidade do fortalecimento dos princípios norteadores da prática científica para o fortalecimento da ciência de Enfermagem. Torna-se imprescindível a utilização de ferramentas disponíveis na promoção de ações sociopolíticas que apontem para a qualidade de vida da sociedade na internacionalização por meio da divulgação das publicações em periódicos relevantes. **Conclusão:** contribui-se, por esta reflexão, para a propagação do conhecimento produzido na realidade dos serviços de saúde, na comunidade e nos centros de formação de Enfermagem, acarretando mudanças significativas que não se restringem ao universo acadêmico. **Descritores:** Enfermagem; Ciência; Conhecimento; Filosofia em Enfermagem; Pesquisa em Enfermagem; Educação em Enfermagem.

RESUMEN

Objetivo: reflexionar sobre la ciencia de la enfermería y el enfermero científico, teniendo en cuenta los desafíos de la producción científica, para alcanzar un grado equivalente o próximo al del conocimiento confiable. **Método:** se trata de un estudio descriptivo, tipo análisis reflexivo, construido por medio de la búsqueda en SciELO, LILACS y BDENF, con los descriptors enfermería y ciencia, utilizando el operador booleano AND, y con delimitación temporal de 2012 a 2017. **Resultados:** se destaca, por esta reflexión, la necesidad del fortalecimiento de los principios orientadores de la práctica científica para el fortalecimiento de la ciencia de Enfermería. Se hace imprescindible la utilización de herramientas disponibles en la promoción de acciones sociopolíticas que apunten a la calidad de vida de la sociedad en la internacionalización a través de la divulgación de las publicaciones en periódicos relevantes. **Conclusión:** se contribuye, por esta reflexión, a la propagación del conocimiento producido en la realidad de los servicios de salud, en la comunidad y en los centros de formación de Enfermería, acarreando cambios significativos que no se restringen al universo académico. **Descritores:** Nursing; Science; Knowledge; Philosophy, Nursing; Nursing Research; Education, Nursing.

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INTRODUCTION

Nursing knowledge influences the philosophical foundation and clinical practice. Science, then, is a function of human life and must be in line with the survival of mankind.

The structure and dynamics of Nursing knowledge are outlined by scientific (general) knowledge and specific (special) clinical cases. It is inferred that, then, to do science is to create solutions to observed problems, using thought, that is, imagination, to simulate the real before things happen. From there, models, laws or theories are created, which are nothing more than simulations of what must happen.¹

Influence, through the science of Nursing, has been influenced throughout the trajectory of two predominant paradigms, which are classified as empiricist and interpretive. These paradigms represent, fundamentally, opposing visions of knowledge.² The concept of metaparadigma is portrayed, through many conceptual structures of Nursing, from the perspective of the different paradigms.³

Empiricism is based on the assumption of what is known and can be verified by judgment. Knowledge is developed in the empiricist paradigm by the observational perception of the natural world in order to verify and justify theories that describe, predict and establish. The interpretative is concerned with the values and beliefs of science, as well as with the sociological and historical contexts in which decisions about scientific research are constructed. By historical approaches, the ideas of philosophers.²

It is observed today the existence of multiple paradigms in the science of Nursing, indicating a strong and flourishing science, but still there are weaknesses in relation to its construction. It is believed that some of the manifestations of nursing science are diffuse, since they are related to the difficulty of interconnecting theory and practice. It is therefore necessary to seek a solid and healthy scientific community, encouraged by creativity, encouraging dialogue and exchange of ideas, providing diversity of knowledge, promoting productivity, and remaining open to questions, reflections and concerns, with symbiotic relation of Nursing know-how.⁴

It is known that Nursing possesses its own knowledge, as a profession and social practice. This is followed by the steps of professions anchored in scientific knowledge and, over time, a corpus of knowledge, defined within a methodological and conceptual rigor, is constructed, indicating

the need to think and qualify as science, even though this is an issue to be discussed.⁵

It is added that, even in the persistence of a debate about its scientificity, Nursing still presents challenges for its recognition, making it necessary that this category, from the assistance, passing through management, teaching and research, and society believe in which it is being produced.⁶ It is pointed out that the scientific and technological productions that refer to it have sought to characterize and legitimize it in the social scene of science by its contribution to the improvement of the quality of life of those who resort to their services.

OBJECTIVE

- To reflect on the science of nursing and the nurse scientist, taking into consideration the challenges of scientific production, to achieve degree equivalent to or close to that of reliable knowledge.

METHOD

This is a qualitative, descriptive study, type reflexive analysis, originated throughout the discipline of "Philosophy of Science Nursing and Health", of the Doctoral course of the Postgraduate Program in Clinical Care in Nursing and Health of the State University of Ceará - UECE, held in the first half of 2017, where it was necessary to prepare a reflective text on the subject in question.

The reflection was constructed through articles based on philosophical and theoretical nursing, through the electronic search in the databases Scientific Electronic Library Online (SciELO), Latin American and Caribbean Literature in Health Sciences (LILACS) and Base of Nursing Data (BDENF), using the descriptors Nursing and science, and Boolean operator AND, with temporal delimitation from 2012 to 2017.

RESULTS

A total of 61 publications were found in the bibliographical survey. The inclusion criteria were based on complete articles, available free of charge, in the Portuguese, English and Spanish languages and year of publication from 2012 to 2017. Articles of bibliographic review were excluded.

It is reported that, after the initial analysis, the articles captured were re-selected by reading the titles and abstracts, being chosen for the preparation of the study those that best contributed to the achievement of the previously established

objectives. From the reading and analysis of the selected studies, a total of nine articles.

After the selection of the studies, two themes for reflection were established: Nursing science and challenges, advances and perspectives for the consolidation of nursing science.

DISCUSSION

♦ The science of Nursing

Nursing was developed in antiquity according to common-sense knowledge, based on experience and observation. Nursing was seen to be seen, with the rise of dogmatism over society in the early centuries of the Middle Ages, as an exercise in penance for the purification and atonement of sins, lasting until the Renaissance as a religious art. In the 16th century, lay people were contracted to carry out nursing work in hospitals with low pay and precarious conditions.³

It is inferred that, from the 19th century, scientific knowledge began to replace empiricism in Nursing, through the figure of Florence Nighthale, arising the modern Nursing, which was revealed as a new way of caring, from a consubstantiated thought, organized and logical, expanding worldwide as practice and teaching, pointing to the beginning of its scientificization process and contributing to the construction of theories in the field of epistemological knowledge of Nursing, which contributed to its recognition as a science.²

In this context, nursing theories describe, explain, predict or prescribe the care, epistemological object, developing a strong influence on the research and providing scientific support for the actions of the nurse.²

It is currently contributing, through the academic environment, composed of spaces where masters and doctoral courses take place, for the development of the care provided by nurses, for allowing the deepening of scientific methods. It is understood that the quality of the scientific production of permanent and student or graduate teachers has, as a fundamental aspect, the publication of research results in indexed journals, with impact factor and reference for the World Nursing.⁷

In this scenario, the quality of scientific knowledge produced by Brazilian nurses, comparable to the standards of world excellence, the internationalization of scientific productions and the improvement of the editorial quality of the periodicals of the area, as well as favoring the conquest of

political spaces, participation in institutional decision-making processes and of national and international publishing associations.⁸

It follows the scientific nurse ascending on strengthened and secure bases for their support as a profession grounded in science and technology, and with the recognized impact on social development, effecting the improvement of health care. Their visibility and their international insertion are growing, in the same way, expressively, in the conquest of spaces for experiences and collaborative projects of greater relevance for their qualification in advanced level.⁹

It is recalled that Nursing is a science under construction, based on theoretical conceptions, basic principles, specific working methods and knowledge of a legally recognized scientific practice that has been concerned with the epistemological reach of the results of its investigations.¹⁰

It is then confided that the science of nursing relates to the necessary and sufficient conditions for the promotion, maintenance, and restoration of health in human beings. The health and disease experiences of individuals, families and communities in different contexts over time are approached; interventions and results; health and disease mechanisms; systems and quality of care and health and economy policies related to Nursing care.¹¹

It is a consensus, even in the persistence of a debate on Nursing scientificity, the importance of critical nurses' thinking in all spheres - from the practice of care, to the theoretical deepening of research.

Challenges, advances and perspectives for the consolidation of nursing science

Throughout its history, Nursing has undergone important transformations until reaching its scientific recognition. It is suggested, by the reflection on the paradigmatic transformations in Nursing, the extension of its field of vision of action to qualify the production of knowledge and the way of caring in health.

It becomes essential, so that Nursing can be strengthened as science, profession and social practice, that the nurse uses tools such as research, university extension, public-private partnership, among others, promoting sociopolitical actions of care that point to a higher quality of life of society. It is noticed that this type of proposal is already visible and can be verified in the association between the assistance and the research, that guarantees changes and / or innovations in the clinical care of the nurse.³

The need for respectability, comprehensiveness and acceptance of the scientific community is currently being felt by nurses, since it is understood that it is not enough to just research, it is also necessary to produce quality knowledge and share it, in order to leverage Effective Nursing.¹²⁻³

There is another challenge that emerges in the consolidation of the dissemination of the science of Nursing care internationally: currently, scientific production, within the scope of Brazilian Nursing, is predominantly academic, with significant changes in teaching, research and extension, aimed at interdisciplinarity and the transformation of the health care model.

It is evaluated that internationalization does not imply only knowing other realities, but also being part of the global community and recognizing, as well as the sharing of scientific knowledge in which respect and solidarity seem to be fundamental values that allow the generation of good questions and the acquisition of funding for research and the effective and quality development of health and nursing care.¹²

It is perceived that in Nursing, now more than ever, their scientists must be prepared to lead and participate in complex issues that affect health, and addressing these issues requires that the next generation of Nursing scientists education be qualitatively different from past in content, methods and research training.¹¹

It is required, when thinking about the profession and the production of knowledge, the political-professional articulation and the construction of a collective project that considers intervention in the health sector and professional valorization. It is necessary that nursing professionals have critical capacity and assume the leading role in the health sector and in society, showing a profession that defends the universal right to health and safe and quality care, 10 in addition to strengthening their educational actions for the training of professionals able to act reflexively and critically, considering the emphasis and valorization of the technical activities that still persist in the scenarios of performance.¹⁴

It is alerted that it is up to the professionals and researchers of the Nursing to analyze, permanently, their suitability and propose changes. It is necessary, in this process, to evaluate the reality of the profession considering the economic-social macro-scenario, which defines the institutional and legal-legal constraints in which its work is carried out.

CONCLUSION

Established Nursing is imbricated and regulated by socially constituted paradigms in the field of health sciences. As important, it establishes a position on the theoretical questions that argue its praxis, which constitute an important part of the identification of a profession, a science and a social role.

It is concluded that, in order for Nursing to be strengthened as a science, it is essential to use the available tools to promote sociopolitical actions, which aim at a higher quality of life in society, in internationalization through mass dissemination and through scientific publications, which, therefore, contributes to the knowledge produced reaching the reality of health services, community and training centers, leading to significant changes that are not only restricted to the academic universe.

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