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REFLECTIVE ANALYSIS ARTICLE

SCIENTIFIC DIMENSION OF NURSING CARE AND ITS ARTICULATION WITH THE QUADRIPOlar METHODOLOGICAL SPACE

DIMENSÃO CIENTÍFICA DO CUIDADO DE ENFERMAGEM E SUA ARTICULAÇÃO COM O ESPAÇO METODOLÓGICO QUADRIPOlar

DIMESIÓN CIENTÍFICA DEL CUIDADO DE ENFERMERÍA Y SU ARTICULACIÓN CON EL ESPACIO METODOLÓGICO CUADRIPOlar

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ABSTRACT

Objective: to reflect on the scientific dimension of nursing care and its articulation with the methodological quadripoilar space of the scientific practice: epistemological, theoretical, morphological and technical. **Method:** theoretical reflection originated in the subject of the Postgraduate Program in Clinical Care in Nursing and Health, structured in four stages: a study of theoretical reference, analytical elaboration through literature search, the dialectical movement to emerge analytical praxis and formulation of written material. **Results:** in the epistemological pole, the influence of the Natural and Social Sciences is recognized. The theoretical stage is represented by Nursing theories, which understand the vicissitudes of care. The morphological is represented by the Constitution and application of a taxonomic system. In the technical field, the nursing process is recognized as an instrument to systematize nursing care. **Conclusion:** nursing maintains its scientific at the epistemological, theoretical, morphological and technical poles, producing its body to strengthen the profession. **Descriptors:** Nursing Care; Science; Knowledge.

RESUMO

Objetivo: refletir sobre a dimensão científica do cuidado de Enfermagem e sua articulação com o espaço metodológico quadripoilar da prática científica: epistemológico, teórico, morfológico e técnico. **Método:** reflexão teórica originada em disciplina do Programa de Pós-Graduação Cuidados Clínicos em Enfermagem e Saúde, estruturada em quatro etapas: estudo do referencial teórico; elaboração analítica mediante busca na literatura; movimento dialético para emergir a práxis analítica; e formulação de material escrito. **Resultados:** no polo epistemológico, reconhece-se a influência das Ciências Naturais e Sociais; o teórico é representado pelas teorias de Enfermagem, que compreendem as vicissitudes do cuidar; o morfológico é representado pela constituição e aplicação de um sistema taxonômico; no polo técnico, é reconhecido o processo de Enfermagem como instrumento para sistematizar a assistência de Enfermagem. **Conclusão:** a Enfermagem sustenta sua cientificidade nos polos epistemológico, teórico, morfológico e técnico, produzindo corpo próprio para fortalecimento da profissão. **Descritores:** Cuidados de Enfermagem; Ciência; Conhecimento.

RESUMEN

Objetivo: reflexionar sobre la dimensión científica del cuidado de Enfermería y su articulación con o espacio metodológico cuadripolar de la práctica científica: epistemológico, teórico, morfológico y técnico. **Método:** reflexión teórica originada en la materia del Programa de Post-Graduación Cuidados Clínicos en Enfermería y Salud, estructurada en cuatro etapas: estudio del referencial teórico, elaboración analítica mediante búsqueda en la literatura, movimiento dialéctico para surgir la práctica analítica y formulación de material escrito. **Resultados:** en el polo epistemológico, se reconoce la influencia de las Ciencias Naturales y Sociales; lo teórico es representado por las teorías de Enfermería, que comprenden las vicisitudes del cuidar; lo morfológico es representado por la constitución y aplicación de un sistema taxonómico; en el polo técnico es reconocido el proceso de Enfermería como instrumento para sistematizar la asistencia de Enfermería. **Conclusión:** la Enfermería sustenta su cientificidad en los polos epistemológico, teórico, morfológico y técnico, produciendo cuerpo propio para fortalecimiento de la profesión. **Descriptores:** Atención de Enfermería; Ciencia; Conocimiento.

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INTRODUCTION

What is science? Several definitions and understandings can be tailored to clarify such a concept. Nevertheless, the concept of science is summarized by scientific knowledge. Science can be “a system that serves to gather and order knowledge about a certain scope of things according to a certain perspective.”^{1:52} Some epistemological points are recognized to explain the origin of knowledge. Rationalism and empiricism are fundamental theses in the discussion of this genesis.²

Modern Nursing emerged in the nineteenth century, driven by the need for improvements in care. These should be anchored in scientific principles, expressing, in effect, the urgency of a professional practice based on foundations to replace the intuitive actions carried out. In the twentieth century, more precisely in the 1950s, there was solidification in the search for scientific foundations with support in the Natural and Social Sciences to support Nursing techniques for care.³

Care has always taken place in human history, not being the privilege of Nursing. It is intrinsic to any living being to show concern for another being. Nursing care is recognized as broad and complex, possessing various dimensions - cultural, educational, aesthetic, ethical and scientific, among others.⁴⁻⁷ Therefore, there is the need to be considered as care as object, central focus or essence of Nursing through scientific studies, so that this phenomenon can be better understood, exploring its meaning.⁸

Brazilian Nursing expresses achievements to its development, strengthening the profession in Brazil and contributed to a positive impact on the health of the population. To this end, Nursing scientists demonstrate advances in several areas, as well as in teaching and research, consolidating Nursing as a Science and a profession.⁹

Considering nursing as the science of care and the construct of a recent history of scientific strengthening, it aims to:

- Reflect on the scientific dimension of Nursing care and its articulation with the four-way methodological space of scientific practice: epistemological, theoretical, morphological and technical.

METHOD

This is a theoretical reflection originated from the production in the subject “Critical Analysis of Clinical Care in Nursing and Health,” of the Graduate Program in Clinical

Care in Nursing and Health of the State University of Ceará/UECE.

The theoretical-methodological trajectory was structured in four stages. The first one was the study of the Dynamics of Research in Social Sciences that proposes the structuring of Science in four poles - epistemological, theoretical, morphological and technical - which guided the analysis of the scientific dimension of Nursing care.¹⁰

The epistemological pole is understood as the driving force of the scientific constituent. There were gnosiological questions that contribute to the scientific knowledge of Nursing discussed. In the theoretical pole, it was pondered the hypothetical-theoretical-conceptual elaboration of Nursing. The morphological pole guided the structural discussion of the scientific object of Nursing, materializing in the taxonomic structures proposed by Nursing in an articulation of concepts and variables portrayed by the previous poles. The technical pole is the moment of abstraction and analysis of the information, seized and confronted with the theory that originated them.¹⁰

The second stage of the analytic elaboration occurred through the search in the literature of Nursing production on elements that constitute the four poles guiding the study. The survey was carried out in the Virtual Health Library/VHL, with support in the descriptors “nursing” and “science,” from which articles available in full, published in the last five years with content to support the discussion initially proposed were selected. Literary works were also selected from contemporary authors dealing with Science and/or Philosophy and/or Nursing. It is worth noting that there was no intention of the integrative or systematic search of the literature, but only theoretical reinforcement for the proposed reflections.

The third moment occurred by immersion in the theoretical-methodological reference of the study and selected literature, constituting a dialectical movement to emerge the analytical praxis constituent of this essay. The fourth phase was consolidated with written material and a seminar presentation of this subject, with the purpose of (re) thinking the material produced by the optics of teachers and students.

RESULTS

The four poles that underpinned the reflection of the scientific dimension of Nursing care (Figure 01) are articulated and are interposed as a guarantee of scientific.¹¹ Although the reflection is initially performed

in a piecemeal fashion (one pole at a time), it will be given for didactic reasons, but, in advancing the discussion of propositions, tacks will be approached in oneness and interdependence.

Recognizing care as the focus of nursing triggers the questioning about the coexistence

between scientific and art in the profession. Such questions were propelling the recognition of the multidimensionality of human care and the complexity of this practice as science (knowledge production) and art (experience and skills development).

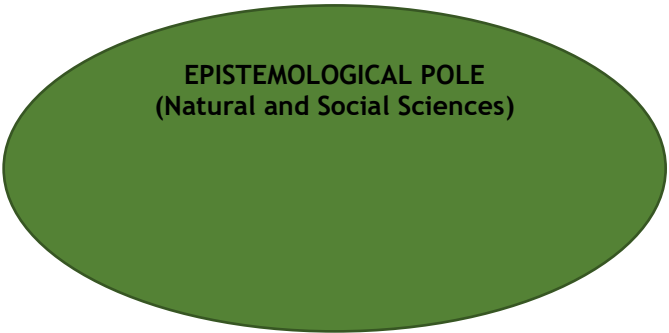
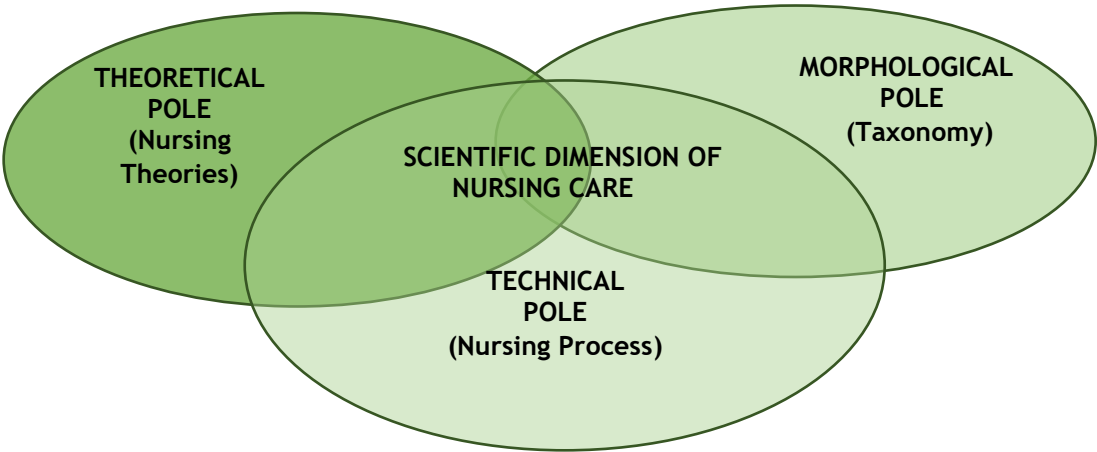


Figure 1. Four-way proposal of the structure of Science in the analysis of the scientific dimension of Nursing care. Fortaleza (CE), Brazil, 2014.



The contexts identified in human care that promulgate epistemological conjunctures for the scientific complexity that is required by the practice of caring must be considered. One of the constituent parts of this care is the biological/physiological cut. This demands epistemological support in a model derived from the Cartesian revolution, in which the body, compared to a machine, can denote problems of functioning (illness) in its parts (organs and systems), dichotomizing the body and mind.¹³ Positivism predominates and disregards other knowledge as necessary.

Thus, subjects of the Natural Sciences become fundamental for the body of Nursing (Anatomy, Physiology, Morphological and Pathological Sciences). It is also considered that one of the reasons for the first foundation of Nursing to have occurred in the Natural Sciences is the result of the important number of US nurses who have completed a Ph.D. in Biological Sciences.¹⁴

Other issues are also recognized by Nursing. Holism is thought in the development

of this profession, and it is promoted like the philosophy of a being in the unit. It expresses the interlocution of Art and Science, interconnecting body, mind, and spirit, although this understanding is still one of the challenges of Nursing.¹⁵

Even when challenged, holism does not commune with positivist scrutiny and reflects the crisis of the previously dominant scientific paradigm, recreating relational, subjective, cultural, and environmental spaces that direct Nursing care.¹⁶

Such redirects can be perceived through the phenomenological foundations of authors such as Martin Heidegger and Alfred Schutz, as an epistemological contribution of care and research in Nursing. The phenomenological proposition of these and other scholars has approached and influenced many Nursing theorists.¹⁷

It posits the reality, not of a knowledge one made constituent of Nursing Science, but the epistemological union of the Natural and Social Sciences as a possibility to develop

complex practice of Nursing care geared to the needs of the person, thinking about the different resonances of the care as a way of being in human existence (love, tenderness, cordiality...).¹⁸ The interface of care based on the subjective human dimension and all the social complexity involved in care is sought, not just actions of vigilance of the ill bodies.¹⁹

The development of a body of knowledge, hypothetical and conceptual elaborations is urgent to sediment a professional discipline among the clashes and alignments of epistemological propositions in Care Science. The scientific dimension of Nursing care lacks the production and delivery of basic constituent concepts of its theories. In the theoretical assumptions of Nursing, several concepts coexist with phenomena that are perceptible human responses: stress, self-care, adaptation, stimuli, needs, empathy, environment, among others. Other concepts are recognized as meta paradigm that influence one another and confer a role to the profession: Nursing, man or individual, health, and environment.²⁰

Thus, the theoretical pole of Nursing is clearly represented by Nursing theories, which have the vicissitudes of the practice of caring and basic characteristics: to establish connections between concepts for different views of a given phenomenon; Be logical and denote ordered and sequential reasoning; Be simple and generalizable; Be basis for testable hypotheses; Collaborate and increase the body of nursing knowledge; Be compatible with other confirmed theories and principles, leaving, however, questions to be investigated; Be used as a guide to practice.²⁰

Nursing theories constitute a dynamic foundation that strengthens the practice and structure of Nursing research, as well as projects concepts reflective of the vision of care phenomena, and that scientifically support Nursing practice.²¹

The morphological pole enunciates structural rules of articulation of the propositions produced at the epistemological and theoretical poles, enabling its applicability and order of the elements of the Nursing practice. One of the morphological challenges in the scientific constitution of Nursing care is the application of a universal taxonomic system that allows the application of a systematized and uniform care among professionals.

As the morphological pole of the scientific constitution of Nursing, the taxonomies express the structure of its object, constituting its form and compelling, an architectonic configuration.¹⁰

The search for the proper language of Nursing results in the proposition of terms and structures for the systematization of Nursing care such as the International Classification of Practice in Nursing (CIPE®), the classification of NANDA Nursing Diagnoses, classification of NOC results and interventions of NIC, being only some structures of the language of the profession. The uniformity of language, besides standardizing the communication, allows to collect and analyze homogeneous information, as well as to promote the practical and scientific development of Nursing.²²⁻³

The commitment of the Brazilian Nursing to assume the use of a taxonomy occurs rhizomatic ally in the diverse realities of the act of caring, from the care in the primary, secondary and tertiary care directed to the different publics.^{24,25}

The Technical pole refers to procedures for collecting the information. It is the moment of observation of the facts and information with theoretical support to interpret and understand the facts, with the reflexive vigilance of epistemology and the structured enunciation of the formulation of its objective to consolidate an organized and scientific care.¹⁰

The technique that this pole refers is not related directly to the action, but to the specific organization that precedes it, being constituted above all as a procedure of thinking-doing. This organization materializes in the Nursing process.

The Nursing process is an instrument to systematize Nursing care, promote singular care and evidence the activities carried out by Nursing, being organized in five interrelated stages: Nursing data collection, Nursing diagnoses, Nursing Planning, Implementation and Nursing evaluation.²⁶ The Nursing process should be subsidized by a theoretical support that directs its praxis as well as taxonomically structured.²⁷

CONCLUSION

The analytical reading from the perspective of the quadripolar methodological space of the scientific dimension of Nursing care enables us to see the structure of this dimension through the dissociation of its components and recognition of the complementarity of these poles in the nursing scientific. It is observed that Nursing maintains its scientific at the epistemological, theoretical, morphological and technical poles, producing its body to strengthen the profession.

The reflexive exercise of one of the dimensions that compose nursing care enhances the academic praxis about the scientific constitution of the profession, expressing a structured matrix of Nursing Science.

It is important to recognize the complexity of the dimension under study to accept the impossibility of exhausting the discussion at that moment. Then, it is pointed out the importance of articulating this reflection with other postulates, in a constant restlessness about the growth of Nursing made science.

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