

A PROPOSED EVALUATION OF POSTGRADUATE NURSING ACCORDING TO THOMAS KUHN

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ABSTRACT

Objective: to present Thomas Kuhn's theory and its applicability for epistemological evaluation of the Nursing Graduate Program.

Method: reflective analysis with a guiding question: How can Thomas Kuhn's theory contribute to an epistemological evaluation of the Graduate Nursing Program?

Results: the Nursing Science in its historical process of realization has been facing numerous challenges that impose themselves to scientific knowledge: having an accurate and robust philosophical basis that justifies and legitimizes the knowledge of the area to support its assertions; dwell on the object of his science; have clear the field of discipline and its relationship with the related sciences, establishing interdisciplinary dialogue. To base scientific production on objects proper to nursing, to seek appropriate methods to approach them without disregarding the knowledge of nurses' experiences and accomplishments may be the guiding thread that enables Nursing Science to be linked to the pragmatics of the profession and Cheers. This has been the challenge for the nursing scientific community. The elements of Kuhnian theory are presented: pre-science, normal science, crisis and revolution; points out a hypothesis to be tested by the researchers of the program. If the hypothesis is true, Nursing Science approaches the paradigmatic level and will manifest itself in pragmatics through the scientific nursing discipline. If rejected, there will be a new classification for the area.

Conclusion: the *corpus doctrinae* of the profession requires qualitative self-assessment of an epistemological nature. Thomas Kuhn's thinking can support this assessment.

DESCRIPTORS: Nursing. Knowledge. Philosophy. Search. Science.

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POR UMA PROPOSTA DE AVALIAÇÃO DA PÓS-GRADUAÇÃO EM ENFERMAGEM A PARTIR DE THOMAS KUHN

RESUMO

Objetivo: apresentar a teoria de Thomas Kuhn e a sua aplicabilidade para a avaliação epistemológica do Programa de Pós-Graduação em Enfermagem.

Método: análise reflexiva tendo a questão norteadora: como a teoria de Thomas Kuhn pode contribuir para a avaliação epistemológica do Programa de Pós-Graduação em Enfermagem?

Resultados: a Ciência da Enfermagem em seu processo histórico de realização vem se deparando com inúmeros desafios que se impõem ao conhecimento científico, dentre eles: ter base filosófica precisa e robusta que justifique e legitime o conhecimento da área para dar apoio às suas assertivas; deter-se no objeto de sua ciência; ter claro o campo da disciplina e sua relação com as ciências afins, estabelecendo o diálogo interdisciplinar. Assentar a produção científica em objetos próprios à enfermagem, buscar métodos apropriados para abordá-los sem que se desprezem o conhecimento das experiências e realizações das enfermeiras pode ser o fio condutor que possibilite a Ciência da Enfermagem a ligar-se à pragmática da profissão e da saúde. Esse tem sido o desafio para a comunidade científica da Enfermagem.

Conclusão: o *corpus doctrinae* da profissão exige a autoavaliação qualitativa de natureza epistemológica. O pensamento de Thomas Kuhn pode subsidiar essa avaliação.

DESCRITORES: Enfermagem. Conhecimento. Filosofia. Pesquisa. Ciência.

PARA UNA PROPUESTA DE EVALUACIÓN DE POSTGRADO EN ENFERMERÍA DE THOMAS KUHN

RESUMEN

Objetivo: presentar la teoría de Thomas Kuhn y su aplicabilidad para la evaluación epistemológica del Programa de Postgrado en Enfermería.

Método: análisis reflexivo con la pregunta guía: ¿Cómo puede contribuir la teoría de Thomas Kuhn a la evaluación epistemológica del Programa de Postgrado en Enfermería?

Resultados: la Ciencia de Enfermería en su proceso histórico de realización se ha enfrentado a numerosos desafíos que se imponen al conocimiento científico, entre ellos: tener una base filosófica precisa y sólida que justifique y legitime el conocimiento del área para apoyar sus afirmaciones; detenerse en el objeto de su ciencia; tener claro el campo de disciplina y su relación con las ciencias relacionadas, estableciendo un diálogo interdisciplinario. Basar la producción científica en objetos propios de la enfermería, buscar métodos apropiados para abordarlos sin ignorar el conocimiento de las experiencias y logros de las enfermeras puede ser el hilo conductor que permita que la ciencia de enfermería se vincule con la pragmática de la profesión y salud Este ha sido el desafío para la comunidad científica de enfermería. Se presentan elementos de la teoría de KUHNIANA: la ciencia, la ciencia normal, la crisis y la revolución apuntan a una hipótesis para ser probada por investigadores del programa. Si la hipótesis es cierta, la ciencia de enfermería se aproxima al nivel paradigmático y se manifestará en pragmática a través de la disciplina científica de enfermería. Si se rechaza, habrá una nueva clasificación para el área.

Conclusión: la *corpus doctrinae* de la profesión requiere una autoevaluación cualitativa de naturaleza epistemológica. El pensamiento de Thomas Kuhn puede apoyar esta evaluación.

DESCRITORES: Enfermería. Conocimiento. Filosofía. Búsqueda. Ciencia.

INTRODUCTION

Nursing Science is a developing science, with a promising historical development process. However, representatives of the area highlight the need to critique this ongoing process from the following aspects, namely: philosophical basis, research object, disciplinary field and interdisciplinarity. Regarding the philosophical basis: it is proposed that this should precisely and robustly establish the ability to justify and legitimize the knowledge produced to support its assertions; research object of its science: every science has an object that is unique to him and must conform with; disciplinary field: in this regard, it is argued that researchers should have a clear field of discipline and its relationship to related sciences; Interdisciplinarity: Given the complexity that underlies human action, it is not reasonable for Nursing Science to develop in isolationist ways. Interdisciplinary dialogue is useful because it enables the production of scientific knowledge for the understanding of the human being in the various cycles of life, i.e., from conception to death, before nursing care, allowing to situate their practices in the social, political and philosophical context which determines human existence in the community. The incorporation of interdisciplinarity by the area also enables the construction of knowledge resulting from the integration of knowledge from all related health areas.¹⁻²

It is known that the proper research object of a science is instrumental to the specificity of the constructed scientific knowledge, since it defines the field and establishes its boundary as a discipline. Therefore, it is up to the Nursing Science to establish it in order to guarantee the specificity of the scientific knowledge produced. This object must emerge from practice, because the essence of the profession is rooted in the nursing actions. Thus, the scientific production of nursing needs to reflect nurses' experiences and accomplishments; it may be the guiding thread that enables Nursing Science to be linked to the profession and health pragmatics.¹⁻²

Nursing Science is performed when researchers unite around epistemic principles and values founding a scientific community. It is through this that they mediate the growth and development of knowledge of the area. It is true that in the world of culture - and science - there is no neutral environment, in other words, devoid of economic, political, ideological interest and power struggle. Therefore, it is possible that the interest of pharmaceutical and hospital equipment industry and the experimental science model that underlies the practice of health careers may be acting on the scientific community, imposing its agenda to the detriment of the study that fosters research on care practices. This situation is challenging for the scientific nursing community, as it is unreasonable to disconsider the possibility of this influence on the growth and development of its science.³

In the Brazilian context it is feasible to identify five generational periods for the construction of Nursing Science. The first generation was the pioneer period which emerged in the 1950s when many of these researchers took specialization courses abroad and developed the first scientific products in the area. The second generation emerged in the 1960s and 1970s, which was self-taught and a legacy for the education of nurses on the national scene the commitment to provide, through a public competition, the title of doctor and professor for the area, enabling the formation of human resources for the opening of postgraduate courses. The third generation was the academic one, which appeared in the 1970s and 1980s which gave rise to the *stricto sensu* postgraduate studies.

The fourth generation began in 1990, consisting of research group leaders. Its main feature was the development of systematic and collective scientific production. Critics point out that during this period the problem of thematic dispersion arose, which caused the area to define the investigative field, fearing PPGENF's weakening due to the lack of continuity and consistency. The fifth or current generation is composed of researchers with significant contribution to scientific production and expertise as masters and doctors, with recognized leadership capacity based on academic meritocracy

with internationalization, notably through two ways: scientific production and the relationships with international universities and research institutions.⁴

All this historical movement, starting from the foundation of the scientific community of nursing, highlights the relevance of each generation and the link that unites the researchers. Thus, after 46 years of PPGENF in the national scene, its growth and development through the title of masters and doctors can be celebrated. This fact is relevant in the qualification of human resources for care, research and teaching. This assertion can be exemplified by the number of academic titles conferred by the *stricto sensu* graduate degree in the last four years. According to the Coordination for the Improvement of Higher Education Personnel - CAPES - there have been 76 PPGENFs, 3,446 academic masters, 631 professional masters and 1,309 doctors thus far, revealing the effort of the nursing scientific community to build their science.⁵⁻⁶

Nursing Science manifests itself from the dissertations, theses, articles, among others, developed by researchers in PPGENFs, moving the elaboration and (re) construction of their scientific knowledge. Thus, Nursing Science enables the emergence of theories, methods, technologies and innovations for the pragmatics of the area, whether in teaching, research, care or organization. In the national scenario this reality has been the driving force for the elaboration of policies that provide new achievements, strengthen and provide updates and generate impacts on the formation of human resources in the area, in the sphere of scientific knowledge production, and may produce new technologies for Nursing and Health. In addition, it is known that the area has undergraduate and postgraduate health care professionals, researchers and the support of science, however, their *raison d'être* as a health career is in practice, whether in assistance, organization, research and teaching. With this motto, it appears that it is in the reading assumed by the nurse that the experimentation and application of the knowledge produced by the Nursing Science takes place.^{1-3,5}

The international scientific community in the area, through the International Network for Doctoral Education in Nursing (INDEN), has expressed this concern; this fact was verified from the elaboration of criteria and norms for doctoral courses, indicating that these should be directed to the Nursing Science, highlighting two fundamental axes: (1) the contents should be focused on the theoretical and philosophical, methodological and ethical research; (2) investigations should respond to the phenomena of the profession and thus enable the eventual transformation of nursing practice. From this, it can be seen that INDEN's focus of interest is on a pragmatic attitude of Nursing Science research, making it, as a science-in-progress, undertake efforts in production of knowledge about their practice, especially those that meet the interest of unveiling the epistemological foundations of nursing care, thus clarifying the domain of career knowledge.⁵

Therefore, a tangible concern must be given to reaching the truth of the knowledge that epistemology deals with, putting the scientific *corpus* arising from the academic constructs of the PPGENF under criticism, a movement attributed by the researcher, since in the historical course of the construction of Nursing Science eventual deviations may occur, removing the researchers from the research area motto. It is noteworthy that this movement of epistemological criticism of the PPGENF is beneficial, because its focus is to judge the relevance of scientific production for the growth and development of nursing knowledge and its use in care practice, organization, research and teaching.⁷⁻⁸

Despite the institutional evaluation of PPGENF, the courses offered in Brazil are evaluated by CAPES every four years. The agency appoints a committee of experts in the field that assigns concepts ranging from 1 to 7 to the program. The concept above 5 is attributed to the academic excellence program that meets specific requirements in the areas of Solidarity, Nucleation, Leadership and Internationalization. The evaluation proposed by CAPES aims to establish the parameters that guide the PPGENF, allowing national effectiveness and internationalization. The area has been engaged in the criticism of its science through systematic evaluation, promoting the link between quantitative

and qualitative elements. However, a qualitative assessment from a theoretical-philosophical basis is yet to appear.²⁻⁶

This reflection is justified because Nursing Science, as a science-in-progress, needs to critically evaluate the epistemological bases that define it. For this epistemological evaluation of the PPGENF, it is necessary to assume a theoretical framework which is capable of supporting it. In the historical course of the philosophy of science, various conceptions have emerged, meaning the current theoretical field is vast and expresses different nuances. Each philosopher justifies and legitimizes a given concept of science, expresses a worldview and its epistemic reflections have difficulties and limitations. In this case, it is necessary for researchers who work in the PPGENF, in a democratic and consensual manner, to assume a certain theoretical perspective and, under their protection, proceed to epistemological criticism. As the area proposes its alignment with the parameter and indicator of physics or biology, so-called mature sciences, it is considered legitimate to use the theorists used by these areas to perform their self-criticism. In this essay, the theorist Thomas Kuhn was chosen.⁹⁻¹⁰

Taking this epistemologist as a reference, the following guiding question is formulated: how can Thomas Kuhn's theory contribute to the epistemological evaluation of the Postgraduate Nursing Program?

OBJECTIVE

To present Thomas Kuhn's theory from the work, 'The Structure of Scientific Revolutions' and its applicability to the epistemological evaluation of the Postgraduate Program in Nursing.

REFLECTION

A reflection study organized in two sections. In the first section, the basic elements of Thomas Kuhn's theory are presented, and in the second, the applicability of this theory to the epistemological evaluation of the PPGENF is highlighted. The epistemological position taken by the theorist is opposite to skepticism, dogmatism and fallibilism. His interest lies in the socio-historical analysis of the construction of science.⁷⁻¹⁰

The Structure of Scientific Revolutions and their Basis Elements

In 1962, Thomas Kuhn published 'The Structure of Scientific Revolutions'. He established concepts not previously contemplated, among them, that to do science is to assemble a "puzzle", and also brought the idea of thinking about the transience of paradigms. A science can go through different phases, summarized in: pre-science, normal, crisis and revolution. In the preconscious phase, there are several rival paradigms and there are no methodological rules or principles capable of guiding all members of the community and, therefore, concepts, theories and the phenomena themselves to be investigated, no longer have the consent of the community. In general, at this stage, the researcher needs to invest his time justifying concepts, methods, techniques and conducting experiments or solving problems. Such pulverization of actions ends up compromising scientific growth and development.⁸⁻¹⁰

In turn, the lack of consensus in a given area of knowledge produces, among other consequences, a lack for the emergence of a cohesive scientific community and weakens the researcher's sense of belonging to it. The disagreements of an epistemological nature shared among the researchers will materialize in three elements: (a) the choice of phenomena to be studied; (b) the methodological principles and theoretical foundations that should be employed; (c) the typification of the phenomena to be explained. In short, in the pre-scientific period the various paradigms are in dispute, generating a disorganized activity and without establishing the singular phenomenon of research in the area. It is a period marked by competition between schools on equal terms.¹⁰

Normal science arises when the dispute between paradigms is over and the research community adheres to only one paradigm for the research area. The theorist used the term 'paradigm' in a polysemic sense in his text, which has fueled several criticisms. Later, in elaborating the afterword of the work, he assumed the meaning of paradigm as that of a disciplinary matrix.¹⁰

In the normal science phase, the winning paradigm is established and the divergences between the practitioners of a research area are reduced, giving rise to a scientific community that now consists of a set of researchers who relate to each other and have common goals. In it, the investigated phenomena are interpreted equally, since scientists share the same worldview. Thus, the methods, instruments, principles, concepts and theories are defined, established and practiced by all. Presumably, the participating members of this nascent scientific community believe they have the knowledge of what the world is like. It should be noted that in normal science, it is inherent in the paradigm to leave problems to be solved, similar to a puzzle game. It is these problems that measure the scientist's resourcefulness in finding a solution, requiring the elaboration of simple and efficient solutions.^{8,10}

The challenge of the researcher is to solve the 'puzzles' and, for the theorist, this situation is an important part of the motivation of the scientist for the research work, since it demands his ability to create, because his spirit is awakened, encouraging the emergence of new methods, techniques and elaboration of concepts in order to solve the problem. The researcher assumes tacit commitments to the paradigm for its conservation and maintenance, which implies that he does not have as his motto the search for the elaboration of new concepts or phenomena. Despite the awakening of the scientific spirit, this does not cause the researcher the imperative to seek them.¹⁰

It is observed in the course of the history of normal science that part of the observed phenomena is shown repeatedly and consistently, causing the expected result, from adherence to the paradigm, to be inadequate, preventing the 'puzzle' from being solved. This phenomenon is described by the theorist as an anomaly. Its positive effect is that it is potentially capable of generating new discoveries within the paradigm, which can strengthen it by allowing the discovery of new pieces for the puzzle solution. This fact strengthens the scientific community regarding the paradigm. However, as time goes on, anomalies can gain contradictory epistemological force, leading the paradigm into crisis. This is fertile soil for a scientific revolution to flourish.⁹⁻¹⁰

The crisis in one area of research erupts as researchers begin to suspect the dominant paradigm's ability to solve the many problems that are accumulating within normal science. This feeling is growing within the scientific community and will allow the emergence of new alternatives from the assumption of a new paradigm. The distrust will grow until it becomes widespread, causing the researcher to no longer visualize his ability to predict, solve, elucidate, explain the observed phenomenon in the paradigm. For the theorist, the substitution of one paradigm for another involves cognitive factors, objectives, psychological elements, change in worldview and extra cognitive factors, such as the insecurity of the researcher regarding the current paradigm. It is the sum of all these elements that gradually move researchers away from the dominant paradigm.^{5,9-10}

Through the crisis, the researcher will be tested on his resilience capacity aiming at the search for an accommodation between the anomaly and the paradigm. By sensing his failure, the researcher becomes a critic of his own activity and now begins the process of convincing new dissatisfied people to end the paradigm abandonment. From a psychological point of view, there is a sense from the researchers that the paradigm is malfunctioning and is a prerequisite for the scientific revolution. In general, the abandonment of a paradigm is affected when the researcher comes across another paradigm capable of bringing back the lost hope in solving the puzzle to this intricate process of conversion, the theorist calls revolution. For the epistemologist, the scientific revolution is an episode

of noncumulative development, characterized by the replacement of the previous paradigm with the new one. However, in the scientific community it will be possible to contemplate researchers who, even in the face of discomfort caused by non-accommodation, never abandon the previous paradigm.⁹⁻¹⁰

The applicability of Thomas Kuhn's theory to the qualitative assessment of the PPGENF

To illustrate the applicability of the Kuhnian theory, this hypothesis is arbitrarily formulated in this paper, taking it as an Archimedean point, namely: Nursing Science is in the normal science phase, has a disciplinary matrix and has research object. Its test will be given by the researchers through the comparison between the hypothesis and empirical observation data (dissertations and theses), position accepted in Popper, obtaining a confirmation (true) and rejection (false). If true, Nursing Science approaches the paradigmatic level and will manifest itself in pragmatics through the Nursing scientific discipline. If rejected, there will be a new classification for the area, among the alternatives, namely: pre-science phase, crisis or revolution. This will bring significant epistemic implications. However, this development is beyond the scope of this reflection. Now, it is necessary to explain the Kuhnian implications of the hypothesis for the scientific discipline Nursing, the disciplinary matrix and research object.^{1,2,8,10}

The Nursing scientific discipline must account for the diversity of the scientific field of the area and have the division and specialization of work in its core. It is culturally and historically defined by phenomena and knowledge of professional practice. The Nursing scientific discipline will possess relative stability of the research object and techniques, which enables the production of knowledge within the perspective assumed by the scientific community. It may become exhausted and no longer answer the questions arising from professional pragmatics and, thus, start the process of destructuring.^{3,8,10-15}

Regarding the disciplinary matrix, it is known that it is constituted by theoretical and methodological assumptions with the purpose of establishing procedural norms from the observance of laws and principles that guide the researchers; It has a scientific agenda that indicates the problems to be studied by the research community and provides standardized solutions for a given science.¹⁰⁻²⁰

The disciplinary matrix also contains axiological elements, i.e., it has epistemic values of accuracy, consistency, range, fecundity and simplicity. In order to clarify any doubts, it is necessary to point out the Kuhnian significance of these values, as they are non-cognitive elements and influence the decision of the scientist. Thus, accuracy is understood as the verification of the result obtained from the criticism of the method employed; Through its intermediate, the researcher seeks to revisit the result, criticizing it in the light of the method employed, whether quantitative, qualitative or mixed; seeking to remove their incongruities; Consistency: Through this value, scientific knowledge, when subjected to epistemological criticism, evidences the ability to resist contrary arguments, proving to be robust and logically ordered. Its purpose is to elaborate knowledge with depth and more adequate explanations; range: using this value, the study proves to be able to produce results that are employed by the scientific community. Its motto is to allow innovation and the transformation of existing knowledge; Fertility is the evaluative quality present in the study in proposing new questions to be investigated by the scientific community.

Thus, it allows the awakening of new content-related research activities, thereby preventing copying and fostering creativity. Therefore, the scientific spirit must explore all imaginable potentialities and elaborate ways for the construction of scientific knowledge; simplicity: this value highlights a realistic view of the research phenomenon, unveiling controversial aspects of the paradigm with rigor and clarity, making it understandable. These values are amalgamated in science and have been verified by the theorist. For him, normal science is built on those values that give it meaning, giving it robustness and coherence. It is possible to contemplate them in the course of the history of physics.

It is worth mentioning, however, that it will be up to the researchers to identify and establish the epistemic values that they deem appropriate in order to compose their disciplinary matrix, extracting them from the dissertations and theses of PPGENF.^{2,3,10-20}

In the present essay, the epistemological approach of the so-called mature sciences was proposed and, therefore, it is considered, by way of illustration, to consider the application of their epistemic values by the scientific nursing discipline. Therefore, PPGENF researchers, when scrutinizing nursing dissertations and theses, should contemplate the epistemic values of accuracy, consistency, scope, simplicity and fecundity. It is true that these axiological characteristics cooperate in the process of specialization of the scientific knowledge produced, a condition which in the Kuhnian view indicates the scientific progress of a given science. Epistemic values will not function as mathematical norms, but as guiding elements that will guarantee the objectivity and rationality of science, even if applied by researchers in a subjective way. Therefore, PPGENF researchers should assume them in potential, in order to become, so that they can safeguard the objectivity and rationality of scientific knowledge of the area.^{2,3,9-15}

Another aspect to explain is the Kuhnian concept of research object. The theorist states that the definition of a science's research object significantly limits the empirical and theoretical facts to be researched by the scientific community. It establishes agreement between the fundamental questions to be investigated, reveals the accepted paradigm and promotes progress in solving problems in the area. For the philosopher, the progress of science is a specific difference between science and other forms of knowledge. Thus, it is possible to state that scientific knowledge, arising from the study of the research object of the scientific nursing discipline, should be closely related to the idea of knowledge specialization.^{3,10,14,15-20}

Regarding the research object of the scientific nursing discipline, it is known that it is an element of conceptual controversy among many researchers in the scientific community. However, it will be imperative that, in Kuhnian terms, this object is inherent in the area and accurate. It is noteworthy that one does not ignore the theoretical position assumed by some peers in the nursing scientific community in emerging philosophical perspectives, which does not necessarily imply that there are multiple research objects in the scientific nursing discipline, but diversity of theoretical-methodological approach, in order to value the metaparadigm of nursing, promoting the link between objectivity and subjectivity for the production of scientific knowledge. Therefore, dialogue between the philosopher in question and other epistemologists is possible. It is ratified that the research object is the link that guarantees the unity of the paradigm and highlights the specificity of the knowledge founded by the scientific community, which implies that the academic constructs of the program will be linked to it.^{1,6,7,10-11,15-20}

For the illustration of the epistemological evaluation of the PPGENF, from the Kuhnian perspective, it is necessary to point out - albeit preliminarily and under the benefit of the doubt - the research object for the scientific nursing discipline, trying to demonstrate how singular it should be from the area. Thus, it is considered legitimate to start from the Modern Nursing advocated by Florence Nightingale. Its aim was to lay new foundations for nursing care to be provided to the various population groups in England and around the world. In the Nightingalean perspective, it is up to the nurse to provide, in relation to nursing care, the conditions for nature to act on people without neglecting the effect of the environment on their care and health promotion. Taking this starting point, the scientific nursing discipline was gaining shape and, in the course of the twentieth century, systematized the scientific, technical and art knowledge of the profession, in addition to elaborating its theories. Thus, nursing care was gradually established as the essence and object of nursing pragmatics. There is still no consensus on what care or the care process is, as the various theories point to different

perspectives. However, the debate has contributed to the nursing care being recognized by peers as its epistemological object.^{3-4,7,14-20}

Care materializes through the nurse's actions and through care pragmatics with therapeutic purposes, promotion and maintenance of the biological and physiological ordering of the body. However, it does not end with it, since it is in its nature to admit that the human has social and spiritual particularity and is inserted in the community, so the care dimension goes beyond the biological, allowing to offer comfort and well-being. In the nurse-patient, family and community interaction, various actions performed may not constitute care, and will depend on the sentimental perception of the recipient, i.e., for those who participate in it as an expression of a sympathetic attitude. Thus, for this reflection, nursing care, based on science and art, is identified, manifested by the solidary attitude towards the patient, family and the community, as a research object for the scientific nursing discipline Nursing.^{1-5,7-11-13,20}

With these considerations in mind, for the application of the hypothesis, the researchers will have to assume a political role. It must be noted that the hypothesis will serve as a guide for the analysis of academic constructs and other actions to be undertaken by researchers to evaluate the program. The initial movement will be with the formulation of the concept of Nursing Science, using democratic and consensual actions, in order to justify and legitimize the research practice that underlies the scientific discipline; later, they will have to define the strategy for the analysis of dissertations and theses, and establish the chronological period.

It is suggested that we start from the last CAPES evaluative quadrennium in order to obtain the current state of Nursing Science. Only after this should they go back to earlier periods and carry out the full evaluation of the program. Then, they will seek to identify the disciplinary matrix and the research object of this science, starting from the scrutiny of dissertations and theses; These elements are characteristic of normal science. It is synonymous with specialized research, a condition for scientific progress. Once the identification of the disciplinary matrix and the research object has been identified, it can be stated that the scientific nursing discipline approaches the paradigmatic level.^{1,3,6,10}

CONCLUSION

It can be said that the researchers who work in the Postgraduate Program in Nursing have a meeting marked with qualitative self-assessment of epistemological nature, starting from the scrutiny of dissertations and theses.

The perspective of Thomas Kuhn is presented and a hypothesis is formulated, namely: Nursing Science is in the normal science phase, has a disciplinary matrix and has research object. Its test will be given by the researchers through the comparison between the hypothesis and the empirical observation data, obtaining the result of confirmation (true) and rejection (false). If the hypothesis is true, Nursing Science approaches the paradigmatic level and will manifest itself in pragmatics through the scientific nursing discipline. If rejected, there will be a new classification for the area, among the alternatives, namely: pre-science phase, crisis or revolution.

It is a fact that knowledge of the profession requires this dialogical encounter, because what is in question is the solidity of the scientific basis on which the area is based. It is unquestionable for the success and legitimacy of a profession that its learning must be based on foundations that hold robustness and consistency so that its modus operandi in health care is relevant and safe. For this reason, the epistemological criticism of the academic constructs is imperative, because it will be through them that the scientific knowledge of the area can be ratified or rectified, thus allowing the development of the corpus doctrine of the profession.

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NOTES

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CONFLICT OF INTEREST

Please be informed that there is no conflict of interest.

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