Convergent care research and its qualification as scientific research

Pesquisa convergente assistencial e sua qualificação como investigação científica

Investigación convergente asistencial y su calificación como investigación científica

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ABSTRACT
Objectives: to highlight the main attributes of Convergent Care Research that ratify it as a method of scientific research. **Methods:** it is a theoretical-reflective study on Convergent Care Research's theoretical-methodological assumptions. **Development:** Convergent Care Research is compatible with the Social Constructionism paradigm. Convergent Care Research projects have two approaches: practical and conceptual. The Convergent Care Research process corpus contains five phases: conception; instrumentation; scrutiny; analysis and theorizing. **Final Considerations:** Convergent Care Research rigor encompasses the relationship between research and care practice, and this corresponds to the convergence of these two dimensions. Due to its theoretical foundation and criteria of methodological rigor, Convergent Care Research is aligned with scientific research methods.
Descriptors: Research; Methods; Health Services Research; Professional Practice; Nursing Research.

RESUMO
Objetivos: destacar os principais atributos da Pesquisa Convergente Assistencial que a ratificam como um método de pesquisa científica. **Métodos:** estudo teórico-reflexivo sobre pressupostos teórico-metodológicos da Pesquisa Convergente Assistencial. **Desenvolvimento:** a Pesquisa Convergente Assistencial se compatibiliza com o paradigma do Construcionismo Social. Projetos de Pesquisa Convergente Assistencial supõem dois enfoques: prático e conceptual. O *corpus* do processo em Pesquisa Convergente Assistencial contém cinco fases: concepção, instrumentação, perscrutação, análise e teorização. **Considerações Finais:** o rigor em Pesquisa Convergente Assistencial compreende as relações entre pesquisa e prática assistencial, e isso corresponde à convergência dessas duas dimensões. Por sua fundamentação teórica e critérios de rigor metodológico que comporta, a Pesquisa Convergente Assistencial se coloca em alinhamento com métodos de pesquisa científica.
Descritores: Pesquisa; Métodos; Pesquisa de Serviços de Saúde; Prática Profissional; Pesquisa em Enfermagem

RESUMEN
Objetivos: destacar los principales atributos de la Investigación Convergente Asistencial que la ratifican como método de investigación científica. **Métodos:** estudio teórico-reflexivo sobre supuestos teórico-metodológicos del Investigación Convergente Asistencial **Desarrollo:** el Investigación Convergente Asistencial es compatible con el paradigma del Construccionismo Social. Los proyectos de Investigación Convergente Asistencial asumen dos enfoques: práctico y conceptual. El corpus del proceso Investigación Convergente Asistencial consta de cinco fases: concepción, instrumentación, investigación, análisis y teorización. **Consideraciones Finales:** el rigor de la Investigación Convergente Asistencial comprende la relación entre la investigación y la práctica asistencial, y esto corresponde a la convergencia de estas dos dimensiones. Por su fundamento teórico y criterios de rigor metodológico, el Investigación Convergente Asistencial se alinea con los métodos de investigación científica.
Descriptores: Investigación; Métodos; Investigación en Servicios de Salud; Practica Profesional; Investigación en Enfermería.

INTRODUCTION

Over approximately two centuries, nursing has intensified efforts in the physical, intellectual, moral and political dimensions, in order to follow the technical and scientific evolution in general and, mainly, in the scope of human health. Among these efforts, education in the nursing area stands out, which has moved from the performance of routine technical activities to the development of scientific research, the results of which have aroused new incentives to think about explaining the epistemic bases of its care practice.

Education at the *stricto sensu* (master's and doctorate) graduate level in nursing triggered an evolutionary movement in Brazilian nursing that had a great impact on the production of theoretical and research studies. Currently, although nursing has achieved a considerable status, when compared to other health professions, the literature still shows incessant concern among nursing professionals regarding the quality of their care practice, mainly regarding the distancing of this practice from the concepts created in the academy[1]. Such distance is seen as a great "wasteland" in nursing[2-3].

Although a large amount of research has been developed in nursing, care practice has not yet managed to advance in order to apply these practices, the same growing pace of conceptual studies, as has been indicated by science. Moreover, nursing researchers have been using diversified research methodological approaches and have also built new approaches that meet the specificities of research in the field.

Among the innovative paths of theoretical construction in Brazil, Care Research, Sensitive Creative Method, Convergent Care Research (PCA - *Pesquisa Convergente Assistencial*) stand out. The creation of new methods needs to be justified by the need to establish new ways of appropriating the object of study, not served by other existing methods. It is in this perspective that PCA was developed and has been advancing in terms of its application, theoretical framework and consistency as a method[2,4].

OBJECTIVES

To highlight the main attributes of Convergent Care Research that ratify it as a method of scientific research.

DEVELOPMENT

PCA was created to contribute to the process of approximation between theoretical conceptions and care practice, aiming to be a reference tool in research to carry out innovations in the daily care practice of nursing. PCA supports the following values: human being; health; scientific investigation; job; education; responsibility; veracity; reliability; nursing care, in the sense of assisting people in their health needs and promoting the convergence of nursing theory and practice.

PCA is a type of research with an eclectic epistemological anchorage, which is justified, necessarily, by its design intertwined with care practice. It is compatible with the Social Constructionism paradigm, precisely because it is designed to go beyond the biological model, originating from a sociological theory. Its knowledge proposes to reconstruct and understand reality from shared, collective actions.

It is understood that PCA presupposes the existence of multiple and dynamic realities, adverse to immutable laws. Also, in this aspect, Social Constructionism is in defense of a subjective epistemology, i.e., knowledge is a social construction, just as the construction of knowledge in PCA is recognized. Therefore, a researcher and other participants involved in PCA build knowledge based on their social interaction[2].

Thus, the ontological pillar of Social Constructionism supports the PCA's practical approach, which proposes changes and/or innovations in a given context of care practice. This action requires a broad democratic relationship between researchers and members of the context to be investigated and modified.

Every PCA project has two types of focus: practical focus and conceptual focus. Practical focus is embodied in the attribute of a researcher's immersion in care practice, in order to maintain, throughout the research process, a close relationship with this practice, producing research data that sustain the intended changes. A researcher will be able to solve or minimize the problems, benefiting changes and/or introducing innovations in the context of practice in which an investigation occurs. In this onslaught, a researcher conducts care practice actions and research actions within a social dialogical process in the production of changes that have been expressed, as necessary, by a researcher and an assistance work team, or even by the health service users. Therefore, a project that does not intend to remove obstacles to benefit assistance or introduce innovations in the context of research practice cannot be classified as PCA, as this practical approach is part of the supporting pillars of PCA.

Conceptual approach is aimed at producing knowledge through the abstraction of findings obtained during the process of seeking changes in care practice to: a) give sustainability to change and, or even, the introduction of innovations in care practice; b) have the construction of theoretical models and/or new instruments, analogous to the care or research practice. PCA's conceptual focus allows the expansion of what was previously proposed for the transformation of practice and/or the production of innovations. The reflections made in PCA development allow initial concepts to expand to new constructions, with new themes that emerge in promoting innovations.

The interaction of these two approaches - practical and conceptual - indicates the main difference between PCA and many other research methods. In PCA, the results of an investigation must present a change and/or innovation that has occurred, or even be already in the process of being applied in care practice in which PCA was developed. PCA research necessarily includes care practice actions, research practice actions and theoretical constructions, carried out *simultaneously*.

Although these two different types of activities (research and assistance) occur at the same time, each requires that their own identities be maintained. "Perhaps this is the biggest challenge to be faced in PCA, since the process is unusual and complex, at the junction of investigating while practicing assistance and, more particularly, that of practicing assistance, while research is being carried out. (...) In this regard, PCA also approaches the complexity paradigm, which conceives the articulation, the identity

and the difference of all aspects of the phenomena. Therefore, complexity deals with 'articulations shattered by cuts between disciplines, between cognitive categories and between types of knowledge'[2]. The conjunction of dialogue, immersion, simultaneity and expandability constitutes the framework that establishes the typified frontier between PCA and other research methods.

In this sense, these attributes of PCA affect care practice. In this moment of conjunction, the core of the process is inscribed in its most refined plan of cognitive construction. In this conjunction, reading the relationships between the same practice and its adherence (or not) to theoretical-conceptual investments will require an intense intellectual effort of analysis by a researcher, in search of discerning new concepts that emerge in the rhythm's intersections, sometimes contradictory, sometimes synergistic, that reside in the strength of the tension of the encounter of theoretical and practical forces.

Following this chain of ideas, PCA is configured as an approach whose apex is in consolidation in the acts of convergence of care practice and research actions in the continuous of its progress. Therefore, it differs when compared to most research methods. This specificity of PCA does not translate weaknesses, on the contrary, it shows forces that support the channelization of research results in practice and that, during the PCA process, provide opportunities for the finding of innovative conceptual constructions. PCA has the strength to transform practice according to the corresponding theoretical conceptions and, if necessary, to redefine the very theoretical conceptions. PCA has the potential to produce knowledge, absorb it and incorporate it into a given care space. Thus, PCA constitutes the connection between the knowledge it produces and the context of care practice investigated[5].

As PCA differs from most research approaches and its high point is addressed to care practice, the first impression is that PCA does not materialize as research, considering the parameters of conventional research. The exemption or neutrality expected from researchers and traditionally accepted, even in health research, is contradicted. Assistance practice in PCA is no longer seen only as a space for the development of research. It is also seen as a space for research-practical relations, especially when a researcher has to fulfill, simultaneously, his or her role of assisting as a professional of assistance, which is fulfilling the immersion phase in the researched care practice in the method.

Due to these PCA's specificities, some questions have arisen such as: in what types of PCA assistance can be materialized? With what kind of participants? What are the appropriate settings for a PCA?

The answers to some of these questions refer to questions from initial studies related to the structure and functioning of PCA, launched in the health/nursing literature for the first time in 1999. Since then, several other publications have followed. A study on the productions carried out with PCA showed that, from 2000 to 2008, PCA method was used in 119 productions[6], showing its acceptance among professionals, predominantly nursing professionals.

On the other hand, there are questions in non-formal environments regarding the identity of PCA, specifically around the doubt regarding its configuration as an investigative scientific method. This question corresponds to a justification, such as the one that is exposed below.

After all, what characterizes a research study? Scientific research is a set of systematized activities aimed at the discovery of new knowledge in the scientific domain. Scientific research consists of a rigorous process of capturing answers to certain questions exposed by a researcher about a certain phenomenon that is still unknown. The process of any scientific research needs to show, in small detail, the entire trajectory traveled from the beginning to the end of the study, in order to ensure reliability of results[7].

This strategy includes decisions regarding: a) formulation of questions, which a researcher proposes to answer at the end of the study; b) choice of context and research participants; (c) definition of techniques, methods and instruments for capturing information, and for the processing of such information; c) production of information; d) production of reliability of answers to the questions proposed at the beginning of a research; e) description of theoretical and methodological support; f) production of results anchored to the chosen reference[7].

PCA meets these precepts of the scientific research process, proposing the phases that follow[2]:

Conception - in a PCA project, in this phase is elaborated what, metaphorically, translates as the "brain" of a research, in such a way that it differs from the other research design. The research theme of a PCA should emerge from a researcher's daily professional practice, and the questions swill: what bothers most in the care practice environment? What could be modified to improve it? What innovations would be needed? What knowledge will it be necessary to build during this process in order to support the intended changes in this care practice?

In order to delimit a research problem of a PCA, other persons involved in care practice, or even assistance, should be consulted, as well as negotiating the proposal with those who will be involved in the investigation in some way. Each and every nursing care practice assumes a collective identity; therefore, in PCA, the process needs to be from the beginning and, throughout the process, treated collectively.

Instrumentation - this phase includes decisions about: research's physical space; participants' characteristics; data production instruments and techniques and methods of convergence of care practice actions with research actions. PCA can be conducted in any setting where health care of the population is responsible. The inclusion of participants depends on each project, but usually includes one or more of the following categories: health professionals; health managers; family members or companions of people receiving health actions. The suggested instruments for PCA research belong to three groups[2]: "1. Self-reports (unstructured and structured); 2. Observation (structured, almost structured, and unstructured); 3. Biophysiological measures." Among the self-reports, the most appropriate collection techniques in PCA are interviews (open or even structured), conversational interviews and group discussions. The conversation interview is not characterized as a pre-elaborated instrument, this occurs during the care practice, inanely, as part of a dialogue that takes place between professionals and people who are under their care and according to the needs of the moment. The data produced in the interviews are considered as part of the information for care

practice and research, and are guided by the theoretical model that guides the process of care and research.

Perscrut – this phase occupies a position that requires expertise of a researcher because he or she is committed not only to the discovery of new phenomena (data production) but, above all, because he or she needs to conduct, demonstrate and justify the convergence of research actions and assistance actions in constructing changes that are taking place in care practice. To this end, it is necessary to investigate rigorously and use senses to capture the phenomenon's changes under observation. Peering into PCA means penetrating the core of the phenomenon and considering the context to be transformed. This requires a researcher to return to a phenomenon, in order to review it in what can still be revealed under various angles. In this phase, a researcher needs to apply skills to obtain information in greater depth, which requires persistence and sufficient time to acquire familiarity with the research situation, communication skills, in order to instill and perceive information not only said, but also communicated by other behaviors, or even more so, by expressions of emotional sensitivity. Peering activities are carried out in *simultaneity* with researchers' care practice activities, when aiming at the desired changes in the context of practice.

Analysis - this step includes three subprocesses: gathering, synthesis, and theorization. In PCA, gathering consists of obtaining essential information from the records resulting from the annotations made in the scan phase. This information needs to be organized in order to allow an immersion in information, which is often varied and extensive, requiring careful reading in order to extract groups of similar information that can result in numerous groups, or categorizations. This grouping of information is sequenced from an encoding que consists of marking excerpts of transcripts with symbols/ideas in order to give visibility to the groups of cohesive information in the transcripts. These cohesive groups, when highlighted in the text, serve for a researcher identify similar phrases, which are grouped into categories[7].

The information categorization technique allows visualization of the whole in its similarities and groupings by cohesion, visually foreshadowing in which area there is insufficient information and/or greater concentration. In this way, a researcher will be able to deepen the scrutiny and/or expand data production from new approaches with research/care practice participants to reach some of the saturations (by verticality, by horizontality, but always by expanding data).

Synthesis consists of bringing together different concrete or abstract elements and merging them into a coherent whole. The synthesis of information obtained in a scientific research project consists of describing the essence of this information. The synthesis of a research gives empowerment to a researcher in the negotiation of results and/or the agility to present coherence of information obtained. In PCA, synthesis will serve as a strong argument for the continuity of changes initiated in the context of practice.

Theorization in qualitative research develops from data gathering and synthesis[8]. Advanced qualitative research requires saturation of the data contained in the categories. Thus, PCA researchers will be able to move beyond changes in care practice, even offering an articulated theoretical structure towards a theory, i.e.,

"discovering the significance of the signifier and the significance of the insignificant"[9]. Theorizing, therefore, is a process that involves constructions, deconstructions and reconstructions of theoretical-conceptual formulations to build a scheme that allows describing and explaining phenomena of everyday life[2].

In order to reaffirm that PCA is characterized as a research method, a comparison follows between PCA and Demo's classification of scientific research[7]: 1-Theoretical: oriented towards the (re)construction of theories, frames of reference, explanatory conditions of reality, controversies and pertinent discussions; 2- Methodological: focused on the re (construction) of scientific instruments and paradigms (models), with a strategic role that is the self-criticizing questioner; 3- Empirical research (through experiences): needs proper handling of research methods and techniques; 4- Practical research: designed to intervene directly in reality, to theorize practices, to produce concrete alternatives, to commit to solutions. It is directly immersed in the concrete reality, the face of intervention.

The conceptual and practical approaches of PCA, presented earlier in this text, may include the four types of research cited by Demo[9]. The conceptual focus of PCA corresponds to the first and second types of Demo research, the theoretical and the methodological. This conceptual approach supports the expansiveness attribute, which empowers PCA to go beyond knowledge regarding the reconstruction of care practice contexts and to advance towards the discovery of new knowledge that leads to the construction of theoretical concepts and reference frames that can lead the construction of methodological models.

The classification of empirical and practical research[9] corresponds to the focus of practice in PCA. This approach is supported by two of its important attributes, that of immersion, represented by the concrete researcher involvement in research actions, in the midst of care practice actions and in the same physical and temporal space of the study context; and the attribute of simultaneity, which implies the intention to arrive at the construction of knowledge, in reciprocity, through the convergence of research actions and actions of care practice, singularly typifying the PCA process.

PCA is a research method whose convergence is made for healthcare practice. A researcher practices assistance while producing research data, in order to obtain data that corresponds to reality, making it possible to build innovations in this practice, in a democratic, collective and reliable manner.

Rigor is a concept closely associated with the production of scientific knowledge; therefore, it integrates the process of any work of this nature. The rigor of an investigation is reflected in its fidelity to the principles of the study design[9].

In PCA, this rigor becomes indispensably understood in its two sides, that of research and that of care practice, i.e., a researcher is also a professional who is developing the health care of others. The commitment is even more complex, as there is an overlap of activities, time and space, but there is a separation between objects: research and practice.

The rigor in PCA in relation to its *Purpose* is based on its main elements of support, involving the concepts/constructs regarding PCA operationalization, expressed in: precise indication of a process of changes and or innovations that are intended to be

introduced or started in practice assistance during PCA; detailed description of a researcher's experience regarding his or her care practice; indication of what information obtained during PCA supported changes and/or innovations.

The rigor regarding *Dialogue*, *Convergence*, and *Simultaneity* concepts in PCA are shown in: PCA project transparent and democratic negotiation with research participants; sharing of information between researchers and participants and/or assistance managers, if applicable, during the PCA process; confirmation by participants of descriptions of information obtained; respect for the unity of research and assistance, without detracting from the unity of each one; explicit demonstration between practice and research actions and points of convergence between the two instances.

The rigor regarding the concept of *Immersibility* involves: researcher insertion as active in care practice in the information collection phase, in order to have a basis for making changes and/or introducing innovations with solid bases in information obtained from experience in practice assistance; indication of what information gave rise to the meeting of research actions and care practice actions.

In *Expansiveness*, rigor is manifested in the detailed indication of emerging themes not programmed in the initial outline and now under development, but which emerge in the PCA process and are of interest to carry out conceptual reformulations.

PCA operationalization rigor considers each of its four phases: conception, instrumentation, scrutiny, and analysis. Thus, its use in health research as a scientific method is one of the ways to bring research closer to care practice and to favor professionals in this practice to seek innovations to qualify care.

FINAL CONSIDERATIONS

The reflections on the main attributes of PCA ratify it as a method of scientific research. They allow us to state that PCA in its singular design focuses on the relationship between research and care practice, which corresponds to the convergence and intentionality of its construction. The consistency of the theoretical foundation that PCA has been showing and the criteria of methodological rigor presented has placed it in alignment with the research methods that fulfill the purpose of guaranteeing the quality in the construction of scientific knowledge.

The immersion of a researcher in care practice is, in PCA, one of the strong points of reinforcement to the character of practical research in its constructionist pillar, aimed at collective work. PCA settings respond to criteria of collective construction from the negotiation of the object to the confirmation of the benefit added to the corresponding assistance practice. PCA continuity points emerge from its process and revert to new PCA modules coordinated similarly to a thematic sequence of unique interest in a given research setting.

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