

## REFLECTIONS FOR A NURSING EPISTEMOLOGY

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**ABSTRACT:** Based on a literature review, we propose to reflect on the nature of nursing knowledge, resulting in a synthesis. Human responses unfold on a stage of unpredictability, with the complexity of human beings and contexts, requiring robust conceptual framework for their understanding. The dialogic, hologramatic and recursive organizational principles are a starting point for understanding the facilitating action of transition processes for welfare. The answers to welfare and health problems, beyond the simple transfer of knowledge, are structured by and for practical action in a swinging movement from practice to theory and back to practice. Nursing finds the epistemological field as a practical human science with public and private knowledge, a process of translation in which knowledge is produced and implemented in a hermeneutical spiral.

**DESCRIPTORS:** Nursing. Professional practice. Knowledge.

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## REFLEXÕES PARA UMA EPISTEMOLOGIA DA ENFERMAGEM

**RESUMO:** Partindo da análise da literatura, propomo-nos refletir sobre a natureza do conhecimento em enfermagem resultando numa síntese. As respostas humanas desenrolam-se num palco de imprevisibilidade, com a complexidade do ser humano e dos contextos, exigindo robustez conceptual para a sua compreensão. Os princípios dialógico, recursivo organizacional e hologramático, são um ponto de partida para a compreensão da ação facilitadora dos processos de transição para o bem-estar. As respostas aos problemas de saúde e bem-estar, mais do que a simples transferência de conhecimento, estruturam-se através e durante a ação prática, num movimento de vaivém da prática para a teoria e de novo para a prática. A enfermagem encontra o campo epistemológico como ciência humana prática com conhecimento público e privado, num processo de translação em que o conhecimento próprio é produzido e concretizado numa espiral hermenêutica.

**DESCRIPTORIOS:** Enfermagem. Prática de enfermagem. Conhecimento.

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## REFLEXIONES PARA UNA EPISTEMOLOGÍA DE ENFERMERÍA

**RESUMEN:** Con base en la revisión de la literatura nos proponemos a reflexionar sobre la naturaleza del conocimiento en enfermería dando como resultado una síntesis. Las respuestas humanas se desarrollan en un escenario de incertidumbre, requiriendo la complejidad de los seres humanos y los contextos, además de un marco conceptual sólido para su comprensión. Los principios dialógico, holográfico y recursivo organizacional, son un punto de partida para comprender la acción de facilitación de los procesos de transición de bienestar. Las respuestas a los problemas de la salud y el bienestar, más que por la simple transmisión de conocimientos se estructuran por y para la acción práctica en un movimiento alternativo de la práctica a la teoría y la vuelta a la práctica. La enfermería encuentra el campo epistemológico como una ciencia humana práctica con conocimiento público y privado, en un proceso de translación en que el conocimiento propio es producido y concretizado en una espiral hermenéutica.

**DESCRIPTORIOS:** Enfermería. Práctica profesional. Conocimiento.

## INTRODUCTION

Nurses care for humans through a human activity that transports, creates and recreates knowledge in action based on a practical-reflective rationality.<sup>1</sup> The empirical standard in connection with other knowledge standards in line with the complexity of reality takes place in this knowledge. Nurses, by facilitating transition processes, convert these into stages of life,<sup>2</sup> a self-eco-organizer phenomenon, and consequently producer of autonomy,<sup>3</sup> enabling humans to self-care. Nursing aims at providing not only health, but also welfare; as a practical human science,<sup>1,4</sup> it is structured in public and private knowledge,<sup>5</sup> interweaving the several knowledge standards in a hermeneutical spiral.<sup>6</sup> This operation occurs not in a linear logic, but in a translation<sup>7-8</sup> between theory and practice, systematization and clinics. In this understanding, complexity, hermeneutical spiral and translation are three topics with epistemic interest, as they may contribute to clarify the question: What is its starting point and how is the nursing specific knowledge developed, individualized and qualified?

The contribution to the clarification of this question is relevant to the disciplinary construction and to identify the nursing specific field as private scientific knowledge.

The present reflection is conducted on three topics: caring as a work scope of nurses is performed in a scenario of experiential complexity; understanding, interpreting and action on such reality creates its own knowledge; scientific evidences and reflective practice are qualifiers of care.

## LIFE AS SELF-ECO-ORGANIZATION: A COMPLEX PHENOMENON PRODUCER OF AUTONOMY

Nursing theorists and theory recognize that "health situations requiring nursing care are almost always complex, and so is care to people (...)",<sup>9:13</sup> and the nursing action "is developed in a complex, uncertain and value-saturated reality",<sup>10:534</sup> in a multicultural context. Ethnic and religious differences, beliefs and attitudes are as diversified as the histories of life in interaction in the relationship established between users, nurses, informal caregivers and other interlocutor agents, evidencing that "many of the care situations in the everyday of nurses are of medium and high complexity".<sup>9:13</sup> The concept of complexity is here understood in the perspective of Morin, that is, "at first sight the extreme quantity of interactions and

interferences between a high number of units is a quantitative phenomenon,"<sup>3:51-52</sup> however, "it also includes uncertainties, indeterminations, random phenomena (...) always in contact with chance",<sup>3:52</sup> but "it is not limited to uncertainty; it is the uncertainty within richly organized systems".<sup>3:52</sup>

Nursing care, for its own nature essentially based on interpersonal relationships, for the environments where they occur with significant diversity and for the circumstances in which the multiple interactions of uncertainty, variability, unforeseen and unpredictability are developed, become distant from simplicity and is presented as something complex. There is an awareness that complexity is inherent in the care process, as nursing is defined as "a human science concerned about life experiences of human beings and their meanings, health and disease and their meaning in their lives, as well as the experience of death".<sup>11:89</sup> Still, "the idea of complexity is much more widespread in the current vocabulary than in the scientific vocabulary".<sup>3:49</sup> The question of knowing whether there are scientific mechanisms to approach the complex then emerges. Some consider that complex situations are those "developed by influence of multiple factors and that have no linear response. They are multiple input and output systems (...)".<sup>9:13</sup> Nursing care "represents such a complexity that all mathematical and analytical approach and every intention of formalization assume a representational hypersimplification that greatly complicates understanding such entities (...)".<sup>12:535</sup> The simplifying thought disintegrates and the complex thought integrates as much as possible, aiming at multidimensional knowledge knowing that full knowledge is not possible and incorporating a principle of incompleteness.<sup>3</sup>

Keeping dualism within a unit, considering the products and effects as both causes and producers of what produced them, and surpassing the reductionism that only sees parts and the holism that only sees the whole finds expression in dialogic, recursive and hologramatic principles.<sup>3</sup> Dialogic, where the whole and the part are indivisible, where opposites do not oppose to each other and are an integral part to understand the most diverse clinical situations. Recursive, fleeing the reductive and simplistic explanation of causal linearity. Hologramatic in the process of recognition of complex clinical situations through small signs and intuitions. In the light of Morin, we accept holism and reductionism as two hermeneutic inabilities only surmountable, in another paradigm,

by the idea of complex thought, punctuated by the "(...)principle of *unitas multiplex*, which escapes from the abstract unit of high (holism) and low (reductionism)".<sup>3:22</sup> It is also the understanding that "(...)life is not a substance, but an extraordinarily complex self-eco-organization phenomenon that produces autonomy".<sup>3:21</sup> It considers human beings as open, ecological, balanced systems with self-care ability, as they are self-care-organizer living beings. Self in the sense of having registered in their program the autonomy and existential strategy based on self-care ability. It identifies nurses with responsibility of facilitating, restoring and maximizing such ability. Eco, for being an open system in interaction with other systems of which it depends to their independence. This leads to the required ecological understanding to care. Organized, for having an internal and external logic and openly interacting in a systematic manner.

### ACCESS TO NURSING KNOWLEDGE, SPIRAL MOVEMENT

Nursing action generates knowledge at the same time it uses own and borrowed knowledges. "Nursing knowledge is epistemologically characterized as a practical knowledge that, by its own nature, is personal and tacit (...). This reflective practical knowledge exists in the professional action in a personal and implicit manner, being developed in a complex reality."<sup>10:533</sup> "On the one hand, there is no control of the complexity of thought, reflection; on the other hand, no control of simple things that would involve action. Action is the concrete and sometimes vital realm of complexity".<sup>3:118</sup> Knowledge in practice is concrete, reflection of real life, saturated of values and it is formed in a constant process of understanding-transformation-understanding.<sup>13</sup> This knowledge results from objective confrontation with the reality posed to nurses and drives to decision making that guides the action - care. Encounter between caregivers and users, people with beliefs and values. Values understood as a "set of principles or rules that for embodying an ideal of moral maturity or perfection should be pursued by human beings"<sup>14:3659</sup> and that in a multicultural scenario, also incorporates "each one of the precepts or principles capable of guiding human action in the assumption of an unavoidable plurality of ethical standards".<sup>14:3659</sup>

In this understanding, nursing is a practical human science, since it is based on "communicative action and requires the direct participation

in some kind of praxis".<sup>1:83</sup> While human sciences study life, value experiences and seek to understand life in its matrix of standards of values and meanings,<sup>15:41</sup> practical human sciences are different due to the fact that its research is mainly clinical and action-oriented.<sup>15-16</sup> Knowledge in nursing is not limited to knowledge resulting from investigation, it is developed in care action and nursing clinics, covered with personal, cultural, ethical, relational, procedural, aesthetic, intuitive and tacit aspects. "The integration of all knowledge standards is essential to professional nursing practice where no standard should be used in an isolated way",<sup>17:117</sup> existing many contact points between them, making them interrelated and interdependent.<sup>18</sup> Thus, nurses are expected to see the nursing practice from a broader perspective that assigns value to other ways of knowledge beyond the empirical.<sup>19</sup> In this sense, "collectively, the several knowledge standards constitute the ontological and epistemological foundations of nursing discipline".<sup>17:117</sup>

Knowledge in nursing consists of public and private knowledges.<sup>5</sup> Public knowledge where it is originated from scientific evidences resulting from investigation and its systematization. From the appropriation and development of own and borrowed methodologies. However, this public knowledge results not only from scientific work but also from the knowledge created, accumulated and improved in practice and that is published and documented. Private knowledge where it may be assumed as an art (technique, intuition and sensitivity),<sup>20</sup> as resulting from the set of knowledges individually interpreted, built and put into action, being unique and differentiated from nurse to nurse. However, part of this private knowledge is common or becomes common to the different individuals and the discipline; to this extent, this common part consists of public knowledge.<sup>5:21</sup> The "swinging movement from practice (problem) to theory and back to practice is what Bishop and Scudder (1995), inspired by Gadamer, call 'hermeneutical spiral'".<sup>1:73</sup> "According to Gadamer, understanding (*verstehen*), before interpreting (*Auslegung*) and applying (*Verwendung*) are axial concepts of hermeneutics."<sup>22:323</sup> It is in this hermeneutical spiral that the solutions to nursing problems are developed, with empirical knowledge resource but in a specific context and in the light of personal experience and sagacity, way of being, giving and doing. Knowledge in nursing arises from this perspective of understanding and interpreting the

clinical situation and from the implementation of solutions found. It is processed in a return to a new understanding that does not coincide with the initial understanding for being enriched by the praxis in a spiral rather than circular movement. Thus, nursing knowledge is more than a linear structured knowledge in a cause-effect positivist rational logic, a knowledge benefited from a practical-reflective rationality in which knowledge results from the object-individual interaction always in a specific context.

## TRANSLATION: QUALIFICATION OF CARE

We follow the definition of translational investigation as the process of converting scientific findings into benefits to health.<sup>7</sup> Emphasizing the nursing perspective, we would add welfare to health. The nature of scientific knowledge in nursing may have different origins, but it is particularly in the clinical action that it occurs and is structured, as it is benefited not only from a technical rationality of applied sciences, but also from a practical-reflective rationality, inherent to practical human sciences. Nursing is part of these sciences due to the very nature of the studied phenomena, understanding what contributes and how to allow a facilitation of the transition processes aiming at welfare.<sup>2</sup> Also, due to the knowledge standards that it creates, needs and uses in action, that is: empirical, aesthetic, ethical, personal, clinical, conceptual, experimental, interpersonal, intuitive, contextual, procedural, relational, cultural and tacit.

The idea of translation does not lose its sense if seen in this rationality; it acquires a different amplitude, translates the removal of the notion of linear transposition (investigation-application) of applied sciences, of cause-effect simplified reasoning. The image of translation is close to the idea of "...(re)creative cycle of nursing care: nurse/practice/user/practice/nurse/practice..."<sup>23:335</sup> In this sense, nursing knowledge in action is created and recreated "in great complexity and ambiguity social situations that may not be solved by the mere application of scientific knowledge, since the world of care is too fluid and reflective to allow such systematization"<sup>24:5</sup> Whereas life is the world of care, this is "the unity of theory and praxis, that is the possibility and task of each one"<sup>25:40</sup> The questions of Gadamer are found to be of great interest: "Will a correct distinction of theory and praxis be made when these are considered only from their opposition?"<sup>25:30</sup> and also; "After all,

will theory be a praxis as previously questioned by Aristotle, or will praxis be, if truly human, also and ever theory?"<sup>25:40</sup>

In the concrete and in nursing it is affirmed that "theory, research and practice are connected, and most of the scholars acknowledge that they cannot be separated",<sup>15:81</sup> and that "nursing research, theory and practice form a cycle, and entering this cycle may occur at any point. Research precedes theory as well as it is driven by it. Both theory and research drives practice, and conversely, research and theory are derived from practical situations"<sup>15:81</sup>

An evidence-based practice is an objective of today. In complex environments of health care, there is much to be learned about how such interventions are implemented and how the evidence is translated into practice.<sup>8</sup> Evidence-based practice is within the very nature of knowledge in nursing; it is desirable and qualifies interventions in the form of public knowledge around the empirical standard, facilitating the development of private knowledge – from initiated to expert,<sup>21</sup> in an intrinsically interconnected process. It is important to note that "there is a way to use biomedical knowledge to improve the care practice without transforming it into a technology. It is the hermeneutical spiral"<sup>1:85</sup> Even because to nurses, the "evidence is not focused exclusively on interventions and clinical therapies; (...), it is associated with all aspects of health, health care and experiences of patients. Consequently, many types of evidences from several areas have to be considered"<sup>26:xiii</sup> It is also important to note that "replacing a practice by a technique not only breaks up the professional action field and depersonalize the practice but also converts the nurse into an applicator of techniques developed by others under the assumption that these are techniques selected by experts",<sup>1:86</sup> adding that "the difference between a technician and a practitioner lies in the fact that whereas a technician uses techniques that are evaluated by their efficiency, a practitioner makes decisions that are evaluated by their contributions to the welfare of people"<sup>1:86</sup> Also, when the action is reduced to technical rationality, transforming practical problems into technical problems, the ethics is reduced to the ethics of effectiveness.<sup>27</sup> An evidence-based practice qualifies the care, particularly those out of the empirical knowledge standard. As exposed, it is considered that the knowledge generated in nursing results from a practical-reflective rationality, from care,

where public and private knowledge interact,<sup>5</sup> in a multidimensionality of ethical, aesthetic, personal and naturally empirical order.

The nurses, by incorporating in their care the best evidences, giving them a personal and appropriate touch *in loco* to the concrete situation, ethically evaluating and deliberating about the best strategy of action, create their own disciplinary knowledge, qualify interventions with their users, walk forward and become experts.

## CONCLUSION

Complex thought is helpful to understand human phenomena, experiences and health and disease experiences, allowing access to understanding of life and living bodies as systems open to the world and part of that world. Humans as self-eco-organizer, are able to self-govern and self-determinate in a disciplinary language with ability to self-care. Nursing, as a practical human science, creates and structures knowledge by action, with origin in several knowledge standards from private and public sources, conjugated in hermeneutical spiral. This is concretized through a translation movement, qualifying the care. An evidence-based practice, in a specific context, with personal reflection, intuition and experience leads to a higher efficiency and effectiveness. The translation movement allows putting into action what is scientifically systematized and brings to systematization the empirical material of the action context, making it possible to suit and conjugate the knowledge standards that provide genuine and self-defining character to nursing.

In short, nurses, by caring, benefit from the understanding of complex situations, such as preservation, welfare and health promotion and recovery situations. The care action uses and creates knowledge in action in a practical-reflective rationality that is not linear nor circular, but spiral, since from the previous knowledge an understanding that leads to an interpretation and new understanding/action with the return to a new understanding is developed, however in a different level from the initial, thus creating nursing specific knowledge in the solutions found to the presented problems. Therefore, nursing is not only a science (in the most positivist meaning of science) nor only art (in understanding the development of individual abilities used with beneficial purposes). It results from a spiral translation movement whose point of return is never the starting point, putting together

public knowledge (systematized in scientific evidences) and private knowledge (development of individual clinical abilities) and originating a nursing-specific knowledge that is different from other disciplinary knowledges.

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