INTERNATIONAL JOURNAL OF
INTEGRATIVE AND
MODERN MEDICINE

The Disciplinary Autonomy of Nursing Science in A Context of Transdisciplinarity

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Abstract: A critical review of the literature establishes that Nursing Care is at the same time a technique, a science, an art and a profession. But very little literature addresses the question of the scientific autonomy of Nursing, particularly in a transdisciplinary context. Rooted in the field of epistemology, this article proposes to structure the disciplinary autonomy of nursing science in a transdisciplinary context. It specifies criteria of the scientificity of a discipline, analyses the concept of disciplinary autonomy, and the link between autonomy, professional identity and disciplinary skills in Nursing. Nurse disciplinary autonomy is then conceptualised in a complex, transdisciplinary, and self-eco-structured perspective.

Keywords: Scientificity, Disciplinary autonomy, Nursing Science, Transdisciplinarity.

Introduction

Researches on the typology of nursing knowledge as reported by Milhomme, Gagnon and Lechasseur (2014) indicates a plurality of this knowledge: empirical, ethical, personal and aesthetic knowledge (Carper, 1978); socio-political knowledge (White, 1995); emancipatory knowledge (Chinn & Kramer, 2008); scientific, moral, intra-personal, interpersonal, combinatorial, constructive, perceptual, experiential, practical and contextual knowledge (Lechasseur, 2009). The wealth of nursing knowledge makes it possible to consider Nursing Care (NC) as a set of knowledge, skills and techniques relating to the design and implementation of nursing care procedures aimed to meet the health needs of individuals/families or communities (AMIEC Research, 2005). It is therefore not a simple question of exclusively routine, automatized manual tasks. But this definition underlines the idea of research as a tool for the production of knowledge. The NC are therefore made up of knowledge, skills, and ways of proceeding that are specific to nurses. They call for competences, technical skills, expertise, intuition, clinical judgment, giving rise to interventions requiring a highly developed faculty of judgment that require reference to proven scientific principles and adequate and autonomous decision-making. Collière (2001) distinguishes:

- the “cure” or “curing”, meaning the curative or restorative care, which calls upon the skills of collaborative care with the other members of the multidisciplinary team;
- the “care” or “caring” which is not “taking care” (Hesbeen, 2002) but corresponds to the activity of helping a person to grow and actualize her or himself, a process, a way of entering into a relationship with the other that promotes his or her development (Mayroff, 1971). Caring is a set of so-called carative factors that form the basis of the care approach and promote either the development or maintenance of health or a peaceful death (Watson, 1998). It brings together the care implemented and evaluated independently by the nurse.

The World Health Organisation (WHO, 2002) maintains that the mission of Nursing in society is to help individuals, families and groups to identify and achieve their full physical, mental and social potential and to achieve it in the context of the environment in which they live and work, all while adhering to a strict code of ethics. This requires nurses to learn and perform functions related to the maintenance and promotion of health as well as the prevention of disease. WHO sustains that Nursing encompasses the planning and implementation of curative and rehabilitation care, and covers all aspects of life (health, illness, disability and death). Thus, in its definition of Nursing, the WHO recognizes the autonomy of the nursing profession. To the extent that planning is about selecting information and making assumptions about the future with the aim of defining the activities necessary to achieve the objectives set. According to WHO (2002), nurses stimulate the active participation of the individual, family and friends, social group and community, in an appropriate way in all aspects of health care, and thus promote the independence and self-determination of populations. The WHO specifies that nurses work as partners with members of other professions involved in the delivery of health services. To this extent, there is no question of an inferiority or superiority of one profession over another. This partnership brings together people with common objectives and requires concerted action and horizontal relationships. Moreover, Decree 2001-145 of 3 July 2001 specifies the various health bodies (including the nursing profession) without indicating that one professional body would be the standard-bearer of the others. It is in a collaborative perspective that these different professional bodies work for the good of the care recipient.

Eyinga (2011) proposes six dimensions of Nursing:

- a preventive dimension: the one that helps to avoid diseases and their complications;
- a diagnostic-therapeutic and rehabilitative dimension: that which relates to the period of the illness and the post-illness;
- a palliative dimension: the one that provides maximum availability and comfort to a person at the end of life;
- an educational and formative dimension: that which corresponds to communication and other promotional interventions and the supervision of novices;
- a managerial dimension: that which relates to the organisation, supervision of intra-disciplinary teams and coordination of the interdisciplinary team;
- a research dimension: one that advances the discipline as a science.

If the literature recognizes Nursing as a multidimensional practice, a science, an art, a profession in its own right, socially accepted, how is its disciplinary autonomy structured in a context of transdisciplinarity? The discussion of this question requires to first recall criteria of the scientificity of a discipline. It will then be important to debate what disciplinary autonomy is, before establishing the link between autonomy, professional identity and disciplinary skills in Nursing. The article will conclude by positioning disciplinary autonomy in Nursing as a complex conceptualization deep-seated in transdisciplinarity.

1. Criteria of the Scientificity of a Discipline

Eyinga (2023), based on Morin (1994) and Létourneau (2008), considers disciplinarity as synonymous with science. He recalls that at the beginning the word discipline was understood as a small whip used to self-flagellate. It is therefore a way of whipping up those who venture into the realm of ideas of which the specialist considers himself the owner. Conceivable as tools for grasping knowledge, the discipline contains the idea of power and fecundity (research). It is in this sense that according to Morin (1994) a discipline has its own boundaries, language and concepts that separates it from other disciplines and from problems that overlap disciplines. Lamontagne (2001) and Gingras (1991) add the institutionalization of training and research at the university level and the creation of researchers' associations and field-specific journals to the list of constituent elements of a scientific discipline.

The Online Dictionary of Philosophy explains that, etymologically, the term "science" derives from the Latin word *scientia*, which itself derives from the Latin verb *scire*, which means "to know". Science therefore refers to a body of knowledge relating to certain categories of facts, objects or phenomena obeying laws and verified by methods. This is why the general characteristics of science are: rationality (rationally based knowledge); universality (objective, universally valid knowledge) and systematization (organized body of knowledge). Scientific knowledge is therefore assumed to have been proven or demonstrated, and to be produced by the use of appropriate methods. Consequently, science is conceived as systematized knowledge, organized into a coherent whole, according to a determined order and method. In this sense, scientific disciplines abound today. Carnap (2004) classifies them into four main categories: natural sciences (biology, botany, genetics, neuroscience, zoology, etc.); experimental sciences and earth sciences (chemistry, physics, climatology, geography, mineralogy, etc.); social sciences or humanities (anthropology, archaeology, sociology, history, psychology, etc.); pure sciences (mathematics, logic, geometry, etc.). Unlike the first three categories, the pure sciences have no immediate and concrete applications and are based on deduction. The central concern of any scientific discipline is to seek the answer to the "why?" and the "how?" of phenomena.

However, it is necessary to distinguish science from: technique (application of the results of science), philosophy (argumentation devoid of experimental method), metaphysics (situated beyond or below science) and religion (it admits standards of truth distinct from science). But, the science/technique disjunction is less obsessive today. For the birth of "techno-science" consecrates the interweaving of "theory" (science) and practice "application" (technique). Nursing is an example of techno-science.

With regard to the criteria of scientificity, Albert (2013) presents two different perspectives: the essentialist perspective, which is essentially epistemological in nature, and the constructivist perspective developed in the sociology of science. He specifies that essentialists distinguish science from non-science by specifying, on the one hand, the elements that would be characteristic of scientific activity, and on the other hand, non-scientific intellectual practices. An intellectual practice is scientific when it respects criteria legitimately recognized by the research community. These criteria are first and foremost a matter of methodology. The foundation of science would therefore consist in the proper use of the right method. Thus, for Popper (1978), a discipline can only claim the status of a scientific discipline if it produces falsifiable statements, testable more than once, capable of being subjected to the test of experimentation. This ensures that the results are not the product of chance or that of uncontrolled variables. In contrast to the epistemological perspective, the sociology of science sees the question of defining the criteria of scientificity as a struggle for power between and within scientific fields. Thus, for Bourdieu (2001), researchers symbolically fight among themselves with "weapons" that are distinctive of the scientific field: rationality, logic, argumentation, non-contradiction, refutation, etc. The logic, or the culture of the scientific field, ensures that those who are members of the same field develop a set of dispositions that lead them to engage in the struggle for scientific authority with the only weapons approved in the field. Disciplinary autonomy thus devotes the scientific authority of a discipline. However, the disciplinary autonomy is to be thought of in the context of transdisciplinarity, envisaged by Nicolescu (1994) as a process of integration and overcoming of disciplines in order to promote an understanding of the complexity of phenomena.

2. What is Disciplinary Autonomy?

Eyinga (2023) argues that the boundaries of a scientific discipline are built around the concepts and theories specific to the discipline under consideration. He formulates that disciplinary boundaries are also structured by the construction of a disciplinary language, the determination of a research object and the use of methods (and techniques) specific to the discipline. It is also relevant to specify that a philosophical ideology underlies the integration of the elements mentioned above, and animates the activities and debates within the discipline. This is an important criterion in the construction of disciplinary autonomy. The organization of disciplinary boundaries determines the specificity of the discipline concerned and distinguishes it from others. Thus any external invasion into the parcel of knowledge belonging to a particular scientific discipline is sanctioned by the spirit of discipline, a spirit of ownership. This disciplinary attitude is developed around the idea of autonomy and legitimacy

of disciplines. However, beyond the idea of specialization and the requirement of rigor and objectivity, the organisation of fields of knowledge into disciplines runs the risk of intellectual and scientific blindness resulting from being confined to a precise and sometimes very specialised object of research (Morin, 1994). This disciplinary blindness makes the members of this discipline forget that their object is situated in a more global context, and prevents them from distancing themselves from their own discipline.

Disciplinary autonomy would therefore not be conceivable in the philosophical sense of Kant, to whom autonomy is conceived as a theory of the will. To Kant, freedom of thought is opposed at first, to civil coercion. The freedom to speak or write may be suppressed by a higher power, but never the freedom to think. He considers freedom of thought in the sense that it is opposed to the constraint exerted on conscience. Thus reason submits to no other law than that which it gives to itself. Kant therefore conceives of autonomy as an exclusive relationship between the individual and himself. He considers it from a timeless point of view as "*this property which the will has of being its own law (independently of any property of the objects of the volition). The principle of autonomy is, therefore, to always choose in such a way that the maxims of our choice are understood at the same time as universal laws in the same act of volition"* (Kant, 2006, p. 46). Kant's conception of autonomy raises a fundamental question: Would we think better, by thinking in autarky, without others, who would share their thoughts and to whom we would communicate our own?

Disciplinary autonomy is not a political autonomy in which one local administration has many powers, but depends on another for certain competences. Nor is it a technological autonomy, which measures the autonomy of a device by its duration of use without the use of external energy sources. Rather, disciplinary autonomy is closer to the idea of collective autonomy, which requires the existence of a collective imaginary beforehand. This is what Castoriadis (1999) calls "*social imaginary meanings*" (p. 96). Social imaginary meanings are the ones which hold a group together, such as "*the taboo, the totem, God, the nation, the party, citizenship, virtue, or eternal life"*. In all societies, whatever their levels of autonomy and heteronomy, depending on the need for the integration of individuals into the collective, there is a need to internalize common values and prohibitions, in order to give meaning to institutions and mores (Ansart-Dourlen, 2005). This author specifies that the function of social imaginary meanings is to tame and control the radical imagination which, in psychic life, always tends to transgress common norms. In the same line, Castoriadis (1999) maintains that the notion of radical imagination makes it possible to grasp the threats of alienation, the difficulties of human beings in accessing the status of "subject", the site of "I" (Morin, 1990).

3. Autonomy, Professional Identity and Disciplinary Competences in Nursing Science

Zarifian (2001) argues that autonomy is an inevitable requirement for the expression of competence, because competence exists only if the actor has or gives himself a margin of initiative and decision-making, and does not limit himself to following prescriptions. It is therefore not in the interest of any organization to prescribe everything, it must also rely on the judgment of the workers to make the right decision (Perrenoud, 2000; Terssac, 1992). This proves that the link between autonomy and competence is fundamental insofar as, in order to be autonomous, one must first understand the so-called and unspoken rules in force, the relations and power games, the possible alliances, the flaws in social control, the price to pay to obtain more autonomy, whether in terms of efficiency, loyalty, reciprocity, flattery (Perrenoud, 2002). To this author, two types of competences are at stake in the exercise of autonomy:

- the competences you need to demonstrate so that others let you do as you please in a defined area;
- the strategic competences that must be used to practically broaden one's room for initiative or to have one's competences formally recognized, as well as the autonomy and initiatives that they allow.

The competences of the first type differ according to the field and activity considered. The way in which they are attested also varies. In salaried work, a qualification, diplomas or demonstration of

practical expertise is required. In politics and in the liberal professions or in education, incompetence is punished by not renewing a mandate, by withdrawing love or trust, or by depriving people of the right to exercise an activity or a responsibility (Perrenoud, 2002).

Competences of the second type are less context-dependent. They are psycho-sociological, even if their exercise always assumes a form of expertise or familiarity with an activity and its organizational framework (Perrenoud, 2002). Perrenoud (1999, 2002) describes eight skills that enable a social actor to build and defend his or her autonomy, individually or in a group, in various social or organizational fields:

1. to assess, identify and to assert their resources, rights, limits and needs;
2. to train and lead projects, to develop strategies;
3. to analyse situations, relationships, force fields in a systemic way;
4. to build and lead organizations and systems of collective action of a democratic type;
5. to play with the rules, to use them, and develop them;
6. to cooperate, act in synergy, participate in a collective, and to share leadership;
7. to manage and overcome conflicts,
8. to build negotiated orders across cultural differences.

With regard to Nursing specifically, Benner (1982) structures nursing competences on a five-level scale: novice (1st year student), advanced beginner (new graduate), competent (1 to 2 years of practice), experienced (transition phase to expertise) and expert (practical wisdom). Perrenoud's and Berner's structures are in line with the standards proposed by the American Nurses Association (ANA, 2010) regarding the competencies expected of a nurse. They reflect the entire nursing process. They are:

Standard 1: The nurse collects comprehensive data on the health and/or situation of the individual/family or community.

Standard 2: The nurse analyses the data collected to determine diagnoses or problems.

Standard 3: The nurse identifies the expected outcomes as part of an individualized plan for the care recipient.

Standard 4: The nurse develops a plan that prescribes strategies and alternatives to achieve the expected results.

Standard 5: The nurse implements the plan previously developed.

Standard 5a: The nurse coordinates the delivery of care.

Standard 5b: The nurse uses strategies to promote health and a healthy environment.

Standard 5c: The Registered Nurse Specialist or Advanced Practice Nurse Graduate provides guidance to influence the plan developed, improve the abilities of others, and effect change.

Standard 5d: The Advanced Practice Nurse uses prescribing authority, procedures, referrals, treatments, and therapies in accordance with state laws and regulations.

Standard 6: The nurse assesses progress towards achieving outcomes.

The United States of America is not alone in setting standards for the nursing profession and practice. There are ten French standards of nursing practice, described as competencies expected of nurses (Decree of 31 July 2009). They are also grounded in the nursing process, as a nurse's critical thinking ability. These include:

1. to evaluate clinical situations and establish nursing diagnoses,
2. to design and conduct a nursing care project,

3. to guide the patient in the realization of his daily care,
4. to implement diagnostic and therapeutic actions,
5. to initiate and implement educational and preventive care actions,
6. to communicate and conduct relationships in a care context,
7. to analyse the quality of care and improve professional practices, search for and process professional and scientific data,
8. to organize and coordinate nursing interventions,
9. to inform and train staff and students,
10. to initiate and implement educational and preventive care,
11. to accompany a person in carrying out his or her daily care,
12. to communicate and lead a relationship in a care setting,
13. to inform, train professionals and trainees.

Additionally, Eyinga and Agborbechem (2018) report that, the South African Nursing Council has also set standards for nursing education and training programmes. Among these norms, critical, analytical, and reflective thinking occupies a central place. This means that critical thinking is a fundamental dimension of nursing. Thus, a competent nurse is one who demonstrates mastery of critical thinking, which allows her to carry out the nursing process successfully.

Critical thinking therefore makes the difference, in an equal position in a healthcare facility, between nurses who defend and develop their professional autonomy and those who, on the contrary, fail to perceive and use the room for manoeuvre that is theirs. The development of professional autonomy is one of the pillars of nurses' competence and defines their professional identity by this same link. Professional autonomy, the ability to take charge of the total resolution of a problem in a specific area of expertise (Bréchot, 2007), is for nurses a sign of freedom from both a past of subordination and dependency (Blondeau & Lambert, 2001). But for Blondeau and Lambert, this autonomy does not mean independence in the sense of the absence of relationships, unlimited freedom, indocility or non-conformism. Rather, these authors situate this autonomy at the crossroads of relationships. In fact, Nursing Professional Identity, Nursing Disciplinary Competence, and Nursing Disciplinary Autonomy are one and the same complex reality. At the clinical and technical level, they proceed by searching for information, analysing and determining the problem, deducing interventions, implementing them and evaluating the outcomes obtained. This is critical thinking in Nursing. At the scientific level, they arise from the development of specific knowledge (disciplinary research); training (perpetuation of people with the same ideology); and the management and involvement of members of the profession in the design and implementation of health policies.

4. The Complexity of Disciplinary Autonomy in Nursing Science

Morin (1990) uses the term complexity to express "*embarrassment", "confusion"* in ideas, and the *"inability to define in a simple way, to name clearly, to put ideas in order"*. He thinks that "*what cannot be summed up in one key word, what cannot be reduced to a law, what cannot be reduced to a simple idea*" (p. 10) is complex. Complex thought, by incorporating as many simplifying modes of thought as possible, rejects "*the mutilating, reductive, one-dimensionalising, and ultimately blinding consequences of a simplification that takes itself as the reflection of what is real in reality"* (*Ibid.* : 11). *"It aspires to multidimensional knowledge*" (*Ibid.).* Thus, by defining autonomy as being situated in the site of the "I", Morin (1990) conceives of it as a complex relationship, at once complementary, competing and antagonistic between the organizational autonomy of any living system and its dependence on the environment. He calls it "*self-eco-organization"*. This appears to be a corollary of the idea of an open system (Bertalanffy, 1973). The opening of the system allows it to import energy and matters to ensure its maintenance of life (Morin, 1990). The system is self-organizing by the fact

that the matter imported from the environment, from the ecosystem, is transformed by the laws instituted by the system itself. Because the material comes from the ecosystem, Morin calls the import process "*eco-organization"*. Self-eco-organization is then the necessary and irreducible conjunction of the interactions of two levels of organization: the internal level (self-organization) and the external level (eco-organization). Each level brings out the other in a co-generic way. This is the double unity. In fact, self-organization, while unfamiliar to eco-organization, is part of it, which in turn is part of self-organization while also being foreign to eco-organization (*Ibid*.). Self-eco-organization is therefore a recursive concept. This is the systemic representation of the autonomy of the living system which is fundamentally dependent on the environment or autonomy-dependence. Consequently, "*There is no such thing as an autonomous organization in the strict sense*" (Morin, 1985, p. 67). The same is true for scientific disciplines. None of them is autonomous in the true sense of the word. The scientific disciplines are open to each other and complement each other in a relationship of mutual interdependence. They feed off each other. Located at the crossroads of the life sciences and the humanities, Nursing Science import tools, methods and techniques from the surrounding sciences, at the same time as offering them research objects that allow them to make better contributions to the development of scientific knowledge more broadly. Disciplinary autonomy in nursing science is self-eco-structured. The self-structuring of this autonomy effectively consists in the definition of open barriers built around:

1. its object: human experience of health and illness;
2. its fundamental concepts: care, person, health and environment;
3. its specific vocabulary: including, but not limited to, the taxonomy of nursing diagnosis, the taxonomy of nursing interventions and the taxonomy nursing of outcomes.
4. its own philosophies, models and theories;
5. its method: the care process or critical thinking in nursing.

With regard to specific vocabulary, Pascal and Valentin (2016) propose a taxonomy of nursing diagnoses comprising 13 domains, 47 classes and 235 diagnostic concepts. It is structured as follows:

Domain I, Health Promotion

- Class 1, Knowledge of Health Status: 2 diagnostic concepts
- Class 2, Health Management: 10 diagnostic concepts

Domain II, Nutrition

- Class 1, Ingestion: 11 diagnostic concepts
- Class 2, Digestion: no diagnostic concept at this time
- Class 3, Absorption: no diagnostic concept at this time
- Class 4, metabolism: 4 diagnostic concepts
- Class 5, Hydration: 6 diagnostic concepts

Domain III, Elimination/Exchange

- Class 1, Urinary function: 9 diagnostic concepts
- Class 2, Gastrointestinal function: 9 diagnostic concepts
- Class 3, Integumentary function: no diagnostic concept at this time
- Class 4, Respiratory function: 1 diagnostic concept

Domain IV, Activity and Rest

- Class 1, Sleep/Rest: 4 diagnostic concepts

- Class 2, Activity/Exercise: 8 diagnostic concepts
- Class 3, Energy balance: 2 diagnostic concepts
- Class 4, Cardiovascular/Respiratory Responses: 14 diagnostic concepts
- Class 5, Personal Care: 7 diagnostic concepts

Domain V, Perception/Cognition

- Class 1, Attention: 1 diagnostic concept
- Class 2, Orientation: no diagnostic concept at this time
- Class 3, Sensation/Perception: no diagnostic concept at this time
- Class 4, Cognition: 8 diagnostic concepts
- Class 5, Communication: 2 diagnostic concepts

Domain VI, Self-Perception

- Class 1, Self-concept: 6 diagnostic concepts
- Class 2, Self-Image: 4 diagnostic concepts
- Class 3, Body Image: 1 diagnostic concepts

Domain VII, Relationships and Roles

- Class 1, Role of the caregiver: 5 diagnostic concepts
- Class 2, Family Relationships: 4 diagnostic concepts
- Class 3, Performance in the role: 6 diagnostic concepts

Domain VIII, Sexuality

- Class 1, Gender Identity: No diagnostic concept at this time
- Class 2, Sexual function: 2 diagnostic concepts
- Class 3, Reproduction: 4 diagnostic concepts

Domain IX, Adaptation/Stress Tolerance

- Class 1, Post-traumatic reactions: 5 diagnostic concepts
- Class 2, Coping strategies: 26 diagnostic concepts
- Class 3, Neuro-behavioural Reactions to Stress: 6 diagnostic concepts

Domain X, Principles of Life

- Class 1, values: no diagnostic concept at this time
- Class 2, beliefs: 1 diagnostic concept
- Class 3, congruence between values/beliefs/actions: 11 diagnostic concepts

Domain XI, Security/Protection

- Class 1, Infection: 1 diagnostic concept
- Class 2, Injuries: 26 diagnostic concepts
- Class 3, Abuse: 5 diagnostic concepts
- Class 4, Environmental Hazards: 3 diagnostic concepts
- Class 5, Defensive Process: 4 diagnostic concepts
- Class 6, Thermoregulation: 6 diagnostic concepts

Domain XII, Well-being

- Class 1, Physical Well-being: 7 diagnostic concepts
- Class 2, Environmental Well-being: 2 diagnostic concepts
- Class 3, Well-being in society: 4 diagnostic concepts

Domain XIII, Growth/Development

- Class 1, Growth: 1 diagnostic concept
- Class 2, Development: 1 diagnostic concept

Pascal and Valentin (2016) report that the taxonomy of nursing interventions includes 06 domains, 30 classes and 635 interventions. The Domain and classes of nursing interventions are organised as follows:

Basic Care Domain: 6 classes;

- Class A, Activity and Exercise Management: 10 interventions,
- Class B, Disposal Management: 24 interventions,
- Class C, Immobility Management: 10 interventions,
- Class D, Nutrition Assistance: 18 interventions,
- Class E, Promotion of physical comfort: 17 interventions
- Class F, Facilitation of Self-Care: 26 interventions

Complex Technical Care Domain: 8 classes;

- Class G, Hydro-electrolyte and acid-base management: 26 interventions
- Class H, Medication Management: 32 interventions
- Class I, Neurological Function: 13 interventions
- Class J, Perioperative Care: 15 interventions
- Class K, Respiratory Function: 22 interventions
- Class L, Skin and Wound Management: 19 interventions
- Class M, Thermoregulation : 7 interventions
- Class N, Tissue perfusion: 48 interventions

Relational Care Domain: 6 classes;

- Class O, Behavioural Therapy: 27 interventions
- Class P, Cognitive Therapy: 10 interventions
- Class Q, Communication Improvement: 12 interventions
- Class R, Adaptation Strategies: 38 interventions
- Class S, Patient Education: 40 interventions
- Class T, Promotion of Psychological Well-Being: 10 interventions

Security Care Domain: 2 classes;

- Class U, Crisis Management: 14 interventions
- Class V, Risk Management: 46 interventions

Family Care Domain: 3 classes;

- Class W, Maternity-Related Care: 38 interventions
- Class X, Life-Cycle Care: 12 interventions
- Class Z, Care related to the birth of children: 38 Interventions

Health System Domain: 5 classes.

- Class Y, Health Systems Mediation: 14 interventions
- Class Y-a, Health System Management: 22 interventions
- Class Y-b, Information Management: 17 interventions
- Class Y-c, Community Health Promotion: 8 interventions
- Class Y-d, Community Risk Prevention: 10 Interventions

While each intervention has a definition and a list of activities, the 490 care outcomes are structured into 7 domains and 32 classes (Pascal & Valentin, 2016). They are:

Domain I, Functional Health:

- Class A, Energy Maintenance: 8 outcomes
- Class B, Growth and Development: 24 outcomes
- Class C, Mobility: 22 outcomes
- Class D, Personal Care: 13 outcomes

Domain II, Physiological Health:

- Class E, Cardiopulmonary: 23 outcomes
- Class F, Elimination: 5 outcomes
- Class G, Fluids and electrolytes: 21 outcomes
- Class H, Immune response: 7 outcomes
- Class I, Metabolic Regulation: 5 outcomes
- Class J, Neurocognitive: 21 outcomes
- Class K, Nutrition and Digestion: 20 outcomes
- Class AA, Therapeutic response: 6 outcomes
- Class L, Tissue integrity: 8 outcomes
- Class Y, Sensory function: 6 outcomes

Domain III, Psychosocial Health:

- Class M, Psychological well-being: 17 outcomes
- Class N, Psychosocial Adjustment: 10 outcomes
- Class O, Self-Control: 10 outcomes
- Class P, Social interaction: 5 outcomes

Domain IV, Health knowledge and behaviour

- Class Q, Health behaviour: 31 outcomes
- Class R, Health beliefs: 6 outcomes
- Class FF, Health Management: 16 outcomes

- Class S, Health Knowledge: 64 outcomes
- Class T, Risk Control and Safety: 34 outcomes

Domain V, Perceived Health:

- Class U Health and Quality of Life: 13 outcomes
- Class V, symptom states: 18 outcomes
- Class EE, Care Satisfaction: 17 outcomes

Domain VI, Family Health:

- Class W, Caregiver Performance: 8 outcomes
- Class Z, health status of a family member: 15 outcomes
- Class X, Family Well-being: 10 outcomes
- Class DD, Parenting: 10 outcomes

Domain VII, Community Health:

- Class BB, Community Well-Being: 6 outcomes
- Class CC, Community Health Protection: 10 outcomes

However, Hoffmans-Gosset (2000) thinks that "*it is only the dead who are autonomous because they no longer depend on anything and nothing can happen to them*" (p. 34). This author conceives of autonomy in relation to socialization. She maintains that autonomy is all about adjustments and supportive social constructions. To be autonomous is therefore, to be built of relationships and open to relationships. She specifies that autonomy is built by taking foundation, birth or root, on everything that around the being weaves the social network. In the relationship of autonomy, it is therefore more a question of becoming aware of the existence of others and of recognizing their value, their place. It is all about taking presence and being present. It is not denying others, or living without others. It is therefore appropriate to specify with her that to be autonomous is to be freer, it is liberation, the "freedom to" and not freedom. Nursing science being found at the crossroads of many other disciplines, can therefore not picture their disciplinary autonomy other than in the sense of Hoffmans-Gosset. Nursing Science is aware of the existence of other disciplines and recognize their values, feed on them, and is open to them. It is in this sense that the disciplinary autonomy of nursing science is structured around the relationships of reciprocal openness to the life sciences (Biochemistry, Biology, Biostatistics, Bioinformatics, Biotechnology, Pharmacology, Chemistry, Anatomy, Physiology, Medicine, Parasitology, Microbiology, etc.) and to the social and human sciences (Philosophy, History, Sociology, Anthropology, Psychology, Geography, Demography, Ergonomics, Economics, Education, Law, Communication, etc.). Because nursing science has moved from the paradigm of categorization to that of integration and today to that of transformation. The paradigm of categorization believes that phenomena are divisible into categories, classes or defined groups, considered as isolable elements or simplifiable manifestations. To Morin (1990), it is a mutilating, reductionist, disjunctive and blinding paradigm. The paradigm of integration is an extension and surpassing of that of categorization. It recognizes the elements and manifestations of a phenomenon but considers the context in which the phenomenon is situated. In this context, the nurses applied themselves to generating knowledge specific to their discipline. Under the paradigm of integration, nursing research has abundantly borrowed theoretical frameworks from other disciplines such as education, anthropology, psychology, epidemiology, etc. However, given the advent of doctoral programmes in nursing science in universities, research is increasingly inspired by a conceptual or theoretical basis specific to the discipline of nursing (Cohen et al., 2002; Gortner, 2000; Polit & Beck, 2008). According to the paradigm of transformation, a phenomenon is seen as a structured and structural global unit, in reciprocal and simultaneous interaction with another, often larger, structured entity. There is a notion of circularity. This paradigm therefore constitutes an opening of nursing science to the world. This is the

transdisciplinary stance that currently prevails today in sciences in general. Von Bartalanffy's theory of systems has strongly influenced this worldview. Each scientific discipline interacts with the others in such a way that it has become impossible to think linear, to isolate one discipline. There is no longer a starting point or a point of arrival. There is perpetual exchanges between scientific disciplines. Within the framework of this paradigm, nursing knowledge significantly influences nursing practices and the practices of other professions. This paradigm is becoming more and more prevalent at the moment.

Scientific and intellectual stance, transdisciplinarity allows the understanding of the complexity of the modern world. Nicolescu (1996) considers transdisciplinarity as a process of integration and transcendence of disciplines in order to promote an understanding of the complexity of phenomena. Navigating and crossing disciplines, transdisciplinarity does not concern itself with disciplinary boundaries. With it, disciplines become free to explore their complexities. This allows for new insights in the perpetual attempt to grasp the holisticity of phenomena by taking into account all the facets of their complexities. However, it is important to point out that the transdisciplinary posture requires a very in-depth knowledge of one's own discipline.

Conclusion

From the theoretical observation that the literature recognizes Nursing Care as a multidimensional practice, a science, an art, and a profession in its own right, socially accepted, this article aimed to propose an organisation of the disciplinary autonomy of nursing science. This structure is based on the transdisciplinary posture currently prevalent in the world of science. The article has succeeded in doing so by recalling the criteria of scientificity of a discipline. These include having a conceptual language specific to the discipline concerned, the institutionalization of training and research at the university level, the existence of associations of researchers and journals specific to the disciplinary field, rationality, universality and systematization. But contrary to these epistemological orientations, the sociology of science sees the question of defining criteria of scientificity as a struggle for power between and within scientific fields. The debate on the question of disciplinary autonomy has made it possible to remember that it is related to the idea of collective autonomy which requires the prior existence of a collective imagination. What Castoriadis (1999) calls "social imaginary meanings" (p. 96) whose role is to hold a group together, for the purposes of the integration of individuals into the collective. In this sense, autonomy is an unavoidable condition for the manifestation of competence, insofar as the expression of competence is associated with a margin of initiative and decision, and is not limited to following prescriptions. The link between autonomy and competence is therefore fundamental, and the central nursing competence is critical thinking understood as the mastery of the nursing process. But this autonomy-competence does not mean the absence of relationships, of unlimited freedom, it is located at the crossroads of reciprocal interdisciplinary relationships that is self-eco-structured. This reflects the complexity of disciplinary autonomy in nursing, which is more inscribed in transdisciplinarity.

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