Classification of Nursing Diagnoses and Interventions: NANDA and NIC

Classificações de diagnóstico e intervenção de enfermagem: NANDA-NIC

Clasificaciones de diagnóstico e intervención de enfermería: NANDA-NIC

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INTRODUCTION

The idea of bringing up the Nursing Classifications theme to this event came from the basic assumptions of the Nursing science state of art manifested in such classifications construction, and the need to have them in a globalized world, where people's health has been treated by multi-professional teams, in environments ranging from the most sophisticated, with the highest technology, to those where care is provided directly in a family's house or in the communities, many times, poor communities, which are part of the Brazilian reality, and need the Sistema Único de Saúde (SUS – Healthcare System).

No matter where care is provided, analyzing its efficacy, effectiveness and efficiency will facilitate the local, national, and international decision making processes, concerning the population's health and their quality of life.

Nursing, through its professionals, provides care based on a methodological reference denominated nursing process, which is supported by the scientific model.

Such tool-method assists nurses systematizing their actions through steps that are slowly operationalized, most of the times, along with the step, which gives it a flexible character.

Organizing and systematizing actions is something inherent to the human beings so that goals/outcomes may be reached.

Such method, if lacking of theoretical references, does not enable the verification of phenomena observed by the nurses during their daily practice (diagnosis), and of results (outcomes) of their actions (interventions).

The Nursing science evolution happened, initially, with the development of countless theoretical models and theories, transposed to the diagnosis, interventions, and outcomes classifications[1].

DIAGNOSIS AND NURSING INTERVENTION CLASSIFICATIONS

The Nursing Process (NP) first generation is defined by the clinical reasoning that will take place to try and identify problems that must be solved based on theoretical references that will allow its identification and support the nursing actions in order to solve them.

The NP second generation is linked to the Diagnosis Classification usage, where clinical reasoning takes place through diagnosis hypothesis formulations that will be confirmed or refused in case the goals/objective stated are reached or not. The Intervention Classification usage may be or may be not adopted in this generation.

In the NP third generation, the three classifications will necessarily be used: Diagnosis, Outcomes, and Interventions. The clinical reasoning is based on the assessment of an initial result, derived from the outcome indicators established for

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the diagnosis supposedly identified and its progress, or absence of progress, is judged after the interventions take place.

Therefore, knowing the classifications, using, researching and spreading them is a must in the globalized world, where scientific evidence dictate conducts to healthcare professionals.

Diagnosis, Intervention, and Outcome Classifications have been built in different countries since the seventies, and have been changed and improved through research.

The first north American conference for the nursing diagnosis discussion took place in 1973, at *St. Louis University*[2]. The conferences continued to occur, when in 1980 the diagnosis terms were generated, refined, and classified. Due to this process, in 1982, the *North American Nursing Diagnosis Association* (NANDA) was created[3]. NANDA, until 2000, used to classify the nursing diagnosis according to Taxonomy I, which was structured by nine categories, as of the conceptual model of the Human Response Standards (to exchange, to communicate, to relate, to value, to choose, to move, to perceive, to know, to feel)[4-5].

After the biennial conference, in April 1994, the Taxonomy Committee had a meeting to add the recently submitted diagnoses to the structure and, consequently, felt it was necessary to create a new taxonomy structure[4-5].

After several studies and attempts to separate them into classes, the Taxonomy Committee presented, in 1998, four different theoretical structures: structure 1, based on the natural style; structure 2, which used Jenny's ideas; structure 3, which employed the nursing outcome classifications; and structure 4, which used Gordon's Functional Standards. However, none of them completely met the demand, although Gordon's was considered the one which best adapted to the needs. With his permission, the Taxonomy Committee modified the structure in order to create structure number 5[4-5].

As of this structure, new modifications were made, either adding domains or renaming them. Finally, in the year 2000, Taxonomy II was defined, with 13 domains, 106 classes, and 155 diagnoses. Since then, NANDA's Taxonomy II has been improved to include new diagnoses[4-5].

In NANDA's last edition[4], the nursing diagnosis and the support material approved by the Committee were submitted to the associates' voting on NANDA's website, after which the approval was granted by the associates and the nursing diagnoses were added to NANDA-*International*'s Taxonomy II. This edition is comprised of 13 domains, 47 classes, and 201 diagnoses[4], as shown by illustration 1.

Such terminology is included in the *Unified Medical Language System* (UMLS) and recognized by NANDA. It was registered in *Health Level Seven* (HL7), modified to comply with ISO norms and included in the *Systematized Nomenclature of Human and Veterinary Medicine* (SNOMED-CT), besides being available in 12 languages[6].

In Brazil, NANDA was presented to Brazilian nurses through a publication in Portuguese, released in 1990 by nurses from Universidade Federal da Paraíba, leaded by Doctor Marga Coler and launched at the 1º Simpósio Nacional de Diagnósticos de Enfermagem[7] (1st National Nursing Diagnosis Symposium). NANDA's, *Nursing Interventions Classification* (NIC), and *Nursing Outcomes Classification* (NOC) official versions were presented to the Brazilian nurses in Portuguese publications, respectively in 2000, 2002, 2003, 2006, and 2008. The last edition (2009-2011) will be soon translated into Portuguese.

Such classifications should be carefully translated, for they reflect concepts that belong in the practice, demanding, therefore, a team who utilizes and researches such phenomena.

In Brazil, there are researchers' centers in different regions which divulge their findings at specific national (SINADEN-ABEn) and international events (NANDA International, NIC/NOC); Acendio, and other scientific events of the area.

The term "Nursing Diagnosis" is defined by NANDA as "a clinical judgment about individual, family, or community responses to actual or potential health problems/life processes. Nursing diagnoses provide the basis for selection of nursing interventions to achieve outcomes for which the nurse is accountable"[4].

NIC, on its turn, was built by researchers from University of Iowa, and launched in 1992. It is now on its fifth edition. The first edition presented 336 interventions and the fourth, 514, with more than 12000 actions/activities. Currently, it has seven domains, 30 classes, as shown by Illustration 2. Since the third edition, the specialty area essential interventions have been presented, totalizing 43 specialties. The time for such interventions execution, as well as the graduation levels for their secure administration are also described[8].

According to NIC, nursing interventions are "any treatment based upon clinical judgment and knowledge that a nurse performs to enhance patient/client outcomes[8].

The NIC interventions are related to NANDA's nursing diagnosis, to the Omaha system problems and to NOC's outcome classification results; to the protocols used to assess interns in special nursing care institutions; and to the Outcome and Assessment Information System (OASIS), currently mandatory for *Medicare* and *Medicaid* covered patients who received care in their domiciles[8].

The research for NIC's elaboration began in 1987 and went through several steps and research methods in order

to be built. The first construction step used the inductive method. Content analysis, focus groups' reviews, and specialty questionnaires were utilized.

In step II, the deductive method was used: similarity analysis, hierarchical grouping and multi-dimensional scaling. Validation studies were also performed. The field clinical tests evidenced the NANDA, NIC, and NOC connection necessity[8].
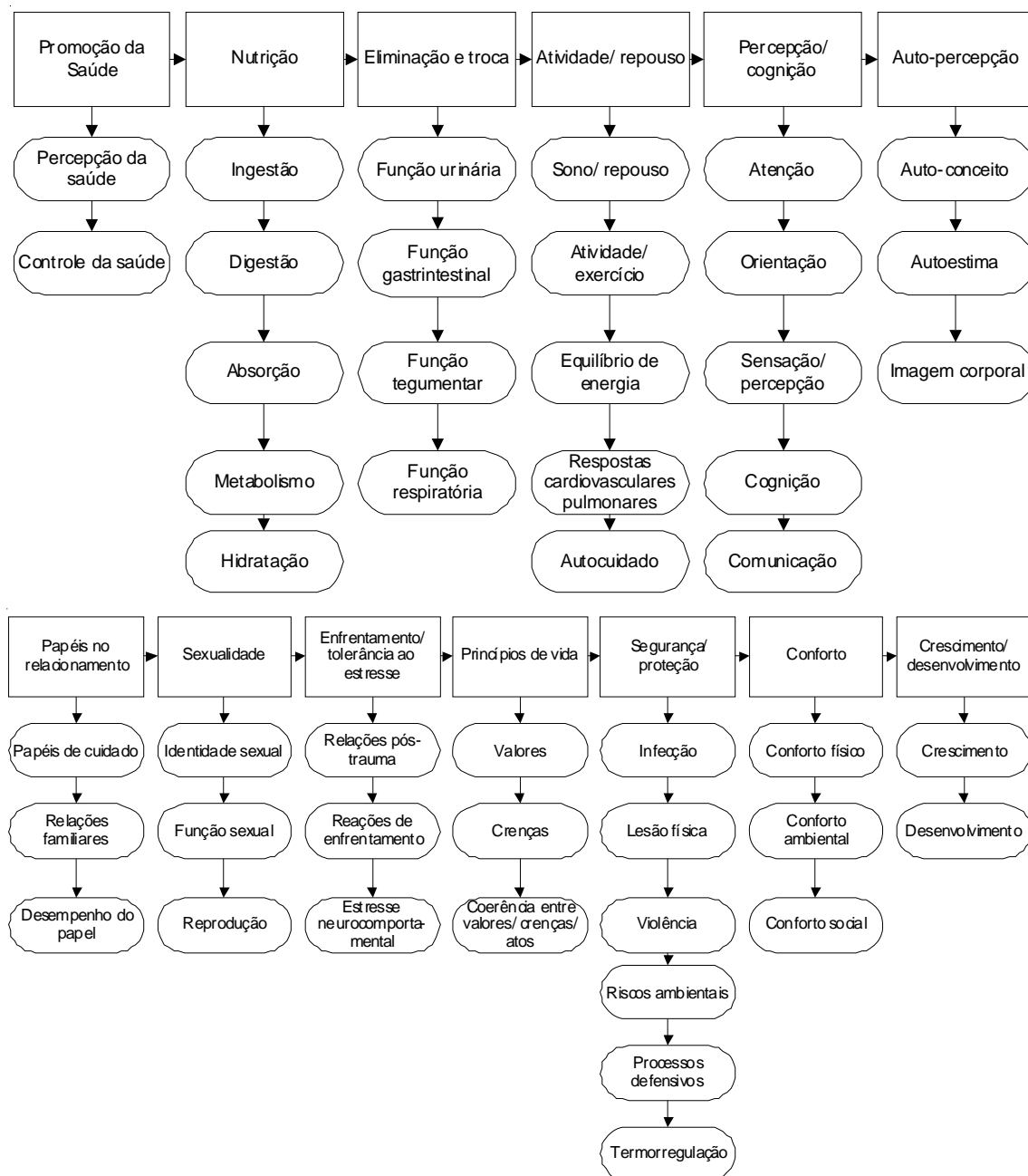

Illustration 1 – NANDA's Taxonomy II Domains and Classes

NANDA *International* developed a common terminology NANDA-NIC-NOC (NNN), so as to relate diagnosis, interventions, and outcomes[2]. It was developed through the alliance among NNN, NANDA *International*, NIC and NOC.

It is worth highlighting that such classifications are also part of the terms which comprise the Classificação Internacional para a Prática de Enfermagem (CIPE – International Classification for the Nursing Practice). Such Classification was organized by the Conselho Internacional de Enfermeiras (CIE – International Council of Nurses) and defined as a nursing phenomena, actions, and outcomes classification. Its translations were done by researcher nurses which comprised a group named by the *International Council of Nurses* (ICN)[9-10].

Several studies that contribute to an evolution of such classifications, among them, the clinical content validation studies[11-12], validation of consensus, studies on the nursing diagnosis accuracy[11], concept analysis studies[13], cross mapping of terms[14-15], trans-cultural equivalence[16-17] and exploratory studies.

The researches performance and the classification use in a daily basis, besides enabling the nursing actions verification, bringing, therefore, visibility to the profession, will also grant the desired and necessary scientificity to the professions. Thus, its utilization when teaching, providing care, and researching continues to be a nurse's commitment, reflecting professional quality and responsibility.
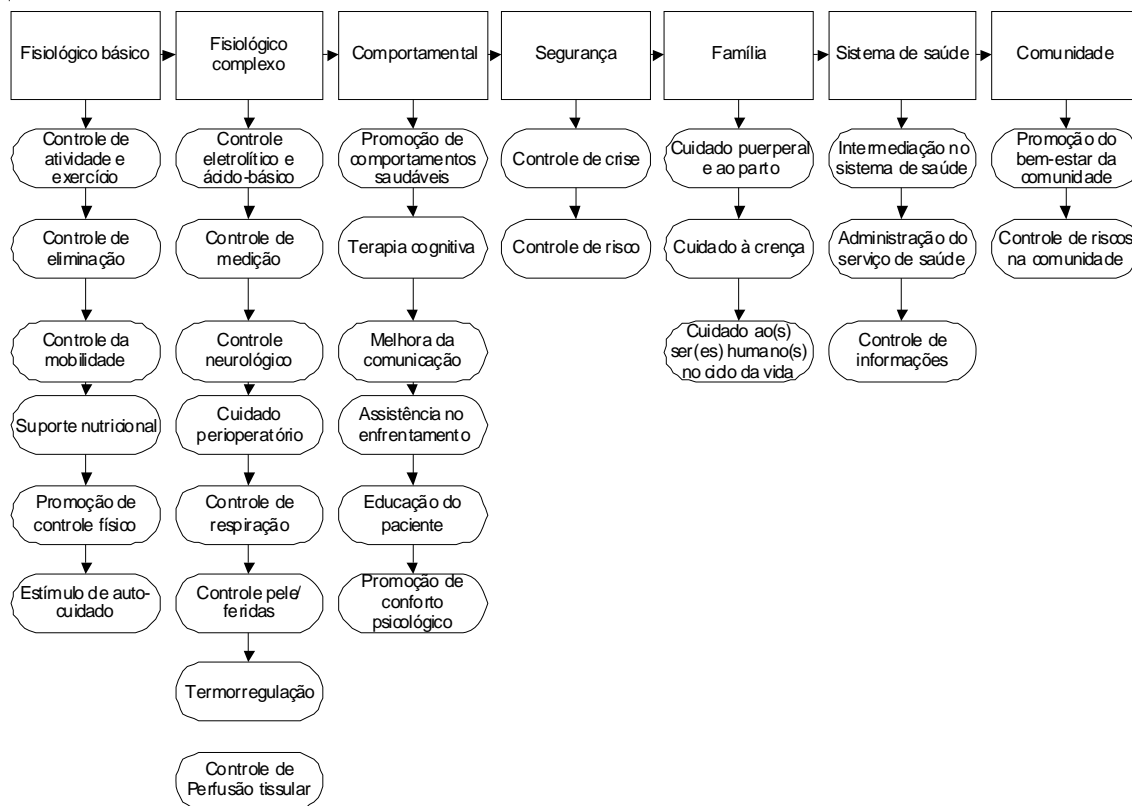

Illustration 2 – Nursing Interventions Taxonomy Domains and Classes

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