

Construction of terminology subsets: contributions to clinical nursing practice

CONSTRUÇÃO DE SUBCONJUNTOS TERMINOLÓGICOS: CONTRIBUIÇÕES À PRÁTICA CLÍNICA DO ENFERMEIRO

CONSTRUCCIÓN DE SUBCONJUNTOS DE TERMINOLOGÍA: CONTRIBUCIONES PARA LA PRÁCTICA CLÍNICA DEL ENFERMERO

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ABSTRACT

The International Classification for Nursing Practice (ICNP[®]) is a classification system that unifies the elements of nursing practice (diagnoses, interventions and outcomes), enabling elucidation of elements of a specific nursing language through the construction of terminology subsets. In this reflective essay, aspects relevant to the construction of ICNP[®] terminology subsets are highlighted, as well as their contributions to clinical nursing practice. The development of subsets as a tool that contributes to making nursing language universal, facilitates the communication process, as well as the scientific and technological advancement of the profession, is discussed. Therefore, its use by nurses worldwide is encouraged.

DESCRIPTORS

Nursing
Terminology
Vocabulary
Classification

RESUMO

A Classificação Internacional para a Prática de Enfermagem (CIPE[®]) é um sistema de classificação unificador dos elementos da prática de enfermagem (diagnósticos, resultados e intervenções), que possibilita elucidar elementos da linguagem própria da Enfermagem por meio da construção de subconjuntos terminológicos. Neste ensaio reflexivo, destacam-se aspectos relevantes para a construção de subconjuntos terminológicos CIPE[®], bem como suas contribuições para a prática clínica do enfermeiro. Discute-se a elaboração de subconjuntos como ferramenta que contribui para a universalização da linguagem da Enfermagem, facilita o processo comunicativo, bem como o avanço científico e tecnológico da profissão. Portanto, incentiva-se seu uso por enfermeiros de todo o mundo.

DESCRITORES

Enfermagem
Terminologia
Vocabulário
Classificação

RESUMEN

La Clasificación Internacional para la Práctica de Enfermería (CIPE[®]) es un sistema de clasificación unificador de los elementos de la práctica de enfermería (diagnósticos, resultados e intervenciones), lo que permite dilucidar los elementos del lenguaje propios de Enfermería a través de la construcción de subconjuntos de terminología. En este ensayo reflexivo, se destacan los aspectos relevantes para la construcción de un subconjunto de terminología CIPE[®], así como sus contribuciones para la práctica clínica del enfermero. Se discute el desarrollo de subconjuntos como una herramienta que contribuye para el lenguaje universal de la Enfermería, lo que facilita el proceso de comunicación, así como el avance científico y tecnológico de la profesión. Por lo tanto, su uso es incentivado por las enfermeras de todo el mundo.

DESCRIPTORES

Enfermería
Terminología
Vocabulario
Clasificación

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INTRODUCTION

Nursing has been concerned about its consolidation as a science and strengthening of its practice in different contexts of care. That demands a specific language which defines and describes its performance and professional actions. However, the lack of this vocabulary hinders the assimilation of terms needed to classify and name its practice, which leads to efforts of nurses worldwide in search of scientific development of the profession⁽¹⁾.

The effort for a specific nursing vocabulary or language led to the development of classification systems that have aroused the interest of nurses in the use of a specific professional language, through the adoption of terms attributed to the phenomena of their clinical practice, thereby resulting in unification and standardization of communication and information exchange among nurses, in order to strengthen the autonomy and recognition of social practice.

Nursing currently counts on several classification systems related to some of the elements of the nursing process, such as diagnoses, interventions and outcomes. The International Classification for Nursing Practice (ICNP®) is an important technological resource that brings together nursing diagnostic terms and concepts, outcomes and interventions in the same classification. This classification represents an important information tool to describe the elements of clinical nursing practice, to provide data that identifies its contribution to health care, to promote changes in clinical nursing practice through education, administration and research. Its use results in greater visibility and professional recognition, promoting more autonomy to the profession⁽²⁻⁴⁾. Therefore, it is an important resource for clinical nursing care, subsidizing nurses' actions in different contexts of professional practice.

Clinical care is understood as the set of practices, interventions and systematized actions, directing care, developed by the nursing staff and directed to the human being, both to an individual or a community, based on quantitative and/or qualitative evidence, with philosophical, ethical, aesthetic, technical and political bases, considering the manifestations or responses of people to their living process in the health-disease continuum. It does so by using scientific and theoretical knowledge through technologies in order to maintain or improve the health condition of the person cared for, promoting comfort, well-being and quality of life⁽⁵⁾.

The International Classification for Nursing Practice is in a technology that allows the organization of clinical care and the scientific, technological and innovative professional advancement by enabling the development of terminology subsets targeted to specific areas of clinical practice. These

subsets consist of affirmative clusters of nursing diagnoses, outcomes and interventions that favor the adoption of a unified accessible language to nurses in all countries, as recommended by the International Council of Nurses (ICN)⁽⁶⁾.

In order to enhance the use of ICNP®, the ICN has encouraged the participation of nurses worldwide in the development of terminology subsets as an alternative to unify nursing language, as well as to identify, explain and evaluate the elements that describe their practice.

This study aimed to make a theoretical reflection about aspects relevant to the construction of ICNP® terminology subsets, and to discuss its contributions to clinical nursing practice.

CONSTRUCTION OF ICNP® TERMINOLOGY SUBSETS

In 2010, a process model to construct ICNP® subsets was published with six stages distributed in the three main components of the life cycle of this terminology, namely: *Research & Development* (identification of clients and health priorities and collection of terms and concepts relevant to the priority); *Maintenance & Operations* (mapping of concepts identified into the ICNP® terminology and modeling of new concepts) and *Dissemination & Education* (finalization and dissemination of the catalogue)⁽⁶⁾. The process of construction of ICNP® terminology subsets is described in the following paragraphs.

Research & Development

This component involves identification of clients and health priorities. The client corresponds to individuals, families and communities who receive nursing care. Health priorities for ICNP® terminology subsets fit into at least one of three areas: *health conditions* (e.g. mental health, HIV/AIDS, tuberculosis, chronic diseases, depression, flu, etc.); *health specialties or care settings* (e.g. midwifery, community nursing, family nursing, cancer care, geriatric nursing, trauma and orthopedic nursing, palliative care, etc.) and *nursing phenomena* (e.g. pain, fatigue, self-care, urinary incontinence, treatment compliance, etc.)⁽⁷⁾.

Moreover, a collection of terms and concepts relevant to the health priority should be performed. The extraction process of terms can be done from medical records, official documents, research instruments, or any other sources that enable the obtainment of terms relevant to the clinical nursing practice. The process of concept extraction, understood here as nursing diagnoses, outcomes and interventions, should be done within the ICNP®, preferably in its latest version.

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These steps require more careful attention and effective care by those who perform them, the adoption of a guideline being necessary to enable the standardization of the strategies used in the extraction of terms and concepts by all professionals involved in this process, in order to prevent loss of relevant data⁽¹⁾. It requires accuracy and professional experience, consisting of one of the main phases of the construction of terminology subset, through which the data needed to perform the subsequent steps are obtained.

Once this step is finished, the extracted terms should be transcribed in terminology records, documents that support the collection, registry and subsequent analysis of terms used in clinical nursing practice and relevant to the priority chosen to structure the terminology subset. After exclusion of repetitions, the terms identified should be submitted to graphic correction, standardization and content validation. Likewise, the concepts should be transcribed and then analyzed to prove their use and relevance in clinical practice aimed at the priority of the terminology subset.

Maintenance & Operations

This aspect involves cross mapping of terms and concepts extracted from the ICNP[®] terminology, and modeling of new concepts.

Cross mapping is a method used to compare terms of different classification systems in order to determine their semantic equivalence. It can be used in the analysis of data of the nursing process, in different areas of clinical practice, enabling the analysis of terms not included in standardized nursing languages in order to compare them with those in classification systems and thus identify the similarity of these terms, enabling its adaptation to a standardized language⁽⁸⁻⁹⁾.

In order to perform the cross mapping, the terms identified in the data sources selected should be included in a spreadsheet, with the aid of computer software, as well as the terms of the ICNP[®]. These two spreadsheets are crossed in order to identify the terms listed and not listed in this terminology – i.e., the terms that are already present in the ICNP[®] and those which are not, and to constitute a database of terms of clinical nursing practice for the priority previously selected, excluding terms belonging to other areas.

For the development of these steps and subset consolidation, the collaboration of expert nurses in the field of the ICNP[®] nursing terminology is important, in order to validate the allocation of terminology content according to the Seven-Axis Model⁽¹⁾. The definitions of the seven axes are: *focus* – area of attention that is relevant to nursing; *judgment* -: clinical opinion or determination related to the focus of nursing practice; *client* - subject to which a diagnosis refers and who is the recipient of an intervention; *action* – an intentional process applied to a client; *means* – a manner or method of accomplishing a nursing intervention; *location* - anatomical and spatial orientation of a diagnosis or intervention; *time* - point, period, instance, interval or duration of an occurrence⁽³⁾.

From the bank of validated and normalized terms, nursing diagnoses, outcomes and intervention statements should be developed based on the ICNP[®] Seven-Axis Model. As recommended by the ICN⁽³⁾, based on ISO 18.104:2003 of the International Organization for Standardization (International Organization for Standardization - ISO)⁽¹⁰⁾, in order to construct a nursing diagnosis and nursing outcome, the following guidelines should be used: a term of the *focus* and *judgment* axes must be included; include additional terms from the *focus* and *judgment* axes and the other axes as needed.

The expected result is the measure or condition of a diagnosis in a time interval after a nursing intervention⁽¹¹⁾.

For the construction of nursing intervention statements, a term from the *action* axis and a *target* term must be included, i.e. a term from any of the other axes, except the *judgment* axis. Additional terms from the other axes may be included as needed^(3,10).

The nursing diagnosis, outcome and intervention statements constructed add to the concepts identified in the ICNP[®]. Next, another cross mapping of these concepts with those contained in the ICNP[®] must be done in order to identify concepts listed and new concepts. The new concepts must be submitted to the modeling process. For such purpose, it is recommended to check whether they are consistent with the modeling guidelines for the ICNP[®] nursing diagnoses, outcomes and interventions, having as a parameter ISO 18104: Integration of a reference terminology model for Nursing, which has been adopted by the ICN as basis for the construction of the content of terminology subsets⁽⁶⁾.

Once this process is finished, the nursing diagnosis, outcome and intervention statements should be subjected to content validation by experts in order to confirm their relevance to the clinical nursing practice related to the priority selected to construct the ICNP[®] subset. Therefore, the relevance, evidenced priority, clinical applicability to the context and the people to whom care is aimed, familiarity of the professional with the use of the nursing process and the use of the terminology presented, among other relevant aspects, should be assessed in this phase.

Dissemination & Education

This component covers the last two phases of the process of construction of the ICNP[®] terminology subsets: the finalization and dissemination of the catalogue. The first step involves the structuring of the terminology subset, which must contain the significance for nursing, the theoretical model and the list of nursing diagnosis, outcome and intervention statements validated.

The ICN highlights that there is no specific theoretical or conceptual model for structuring nursing diagnoses, interventions and outcomes into the terminology subsets. The presentation of these statements, according to the ICNP[®], may vary for different catalogues, with the option

for the conceptual and theoretical models that will guide its organization being determined by the researcher who develops them⁽⁷⁾, depending on his/her practice and the context in which it should work.

After the process of preparation and organization of nursing diagnosis, outcome and intervention statements, the next step is the modeling of concepts using *Protégé* software, when an electronic file of each terminology subset is generated in order to reduce errors in the identification of concepts and in the respective codes (unique identifiers). This step is performed in collaboration with the ICN, resulting in a printed brochure for the subset, including general information, code set and examples of how to use it in clinical practice⁽⁶⁾. Then a wide dissemination of the subset is done globally in order to enable its validation, aiming to verify its applicability and the use of a unified language in different contexts of clinical nursing practice worldwide.

CONTRIBUTIONS OF THE ICNP® SUBSETS FOR CLINICAL NURSING PRACTICE

The construction of the ICNP® terminology subsets fills a need to subsidize health information systems, by enabling the development of nursing diagnosis, outcome and intervention statements suitable to specific areas of professional practice. These subsets allow nurses to more easily integrate the ICNP® in different contexts of their daily practice, being an easily accessible reference for these professionals in their areas. However, the subsets do not replace clinical reasoning and decision-making of the nurse, mandatory elements for the provision of individualized care after patient assessment⁽⁷⁾. Its applicability, as well as its structure based on care systematization, depends on the involvement of the professional in nursing practice, supporting the resolution of people's and/or community's problems⁽²⁾.

The ICN⁽³⁾ encourages the joint participation of nurses, organizations and centers for education and research in the nursing area in the development and testing for validation of the ICNP® subsets, as well as its dissemination worldwide.

The participation of the ICNP® Research and Development Centers in the process of proposal submission, assessment criteria, scope of work and responsibilities in the consolidation of this classification system and its dissemination worldwide is noteworthy.

The ICN and partners developed and disseminated five ICNP® terminology subsets for different health priorities: treatment compliance⁽¹²⁾, palliative care for dignified death⁽¹³⁾, indicators of nursing outcomes⁽¹⁴⁾, community nursing⁽¹⁵⁾, and, treatment of pediatric pain⁽¹⁶⁾. The development of these subsets has contributed greatly to the universalization of a standardized language to be used by nurses worldwide as a technological resource to strengthen and expand the purposes of the profession regarding the attention given to the human being in the health-disease process, considering the human life cycle.

In Brazil, the ICNP® Research and Development Center at the Nursing Postgraduate Program, Federal University of Paraíba, approved by the ICN in 2007, develops the use of ICNP® in the professional practice regarding nursing education, research and care, contributing to the construction, continuous development and consolidation of a reference terminology⁽¹⁷⁾.

Since its creation, four proposals of ICNP® subsets have been constructed: for patients with congestive heart failure⁽¹⁸⁾, for cancer pain⁽¹⁹⁾, for hypertension in primary care⁽²⁰⁾, and for elderly in the city of João Pessoa⁽²¹⁾. These proposals are in the process of clinical validation for subsequent submission for approval by the ICN.

Currently, this Center is developing two ICNP® terminology subsets: one for hospitalized diabetic patients and another for patients after prostatectomy. Furthermore, it collaborates with other institutions in several Brazilian states where proposals of ICNP® terminology subsets have also been developed related to different contexts of clinical nursing practice, namely: indigenous health nursing, rehabilitation care, neonatology, obstetrics and systematization of nursing practice in primary care⁽²²⁾.

The worldwide dissemination of these subsets allows the adoption of a standardized and specific language to diagnose, intervene and evaluate the outcome of care provided to individuals, families and communities within clinical nursing practice. The use of the ICNP® subsets allows the universalization of the nursing professionals' language in order to identify, explain and assess the elements that describe clinical practice, enabling the improvement of nursing actions through more reflective, effective and efficient care; facilitating the communication and relational process among nurses and other members of the multidisciplinary health care team and providing the profession with greater recognition and visibility in the different contexts of the everyday practice.

CONCLUSION

The development of the ICNP® terminology subsets is a technological strategy relevant to the systematization of nursing care, since it takes into account the main elements of its practice (nursing diagnoses, outcomes and interventions), through the use of a unified vocabulary, suitable to a worldwide language, considering cultural, social and local influences, and professional peculiarities in the use of technical terms. Given the concern in disseminating such care possibilities, the construction of knowledge about the the ICNP® terminology subsets is leveraged, highlighting the most relevant aspects for structuring and use in clinical nursing practice.

In this perspective, it is relevant that nurses worldwide take hold of these subsets within care, education and research, as recommended by the ICN, as a possibility of scientific and technological advancement, providing the profession with greater visibility in the different contexts of their clinical practice, highlighting their autonomy and social commitment to the human being.

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