ABSTRACT

Objective: to identify published studies in Brazil, using as content validation methodology of diagnoses, interventions and outcomes of nursing in interface with the classifications NANDA-I, NIC and NOC. Method: integrative review of literature, with the question << As are described the content validation studies of diagnoses, interventions and nursing outcomes in Brazil and what it’s interface with the classifications NANDA-I, NIC and NOC? >> in Data Bases Latin American literature and Caribbean Health Sciences (LILACS), Medical Literature Analysis and Retrieval System Online (MEDLINE) and Scientific Electronic Library Online (SCIELO). Results: most work has interface with a classification of nursing diagnoses. Conclusion: the classifications of diagnoses, interventions and nursing outcomes enhance the communication and qualifying the nursing process. It was noted that the content validation is an important tool in the refinement of classifications of nursing. Descriptors: Validation Studies; Nursing; Nursing Process.

RESUMO

Objetivo: identificar estudos publicados no Brasil, que utilizam como metodologia a validação de conteúdo de diagnósticos, intervenções e resultados de enfermagem em interface com as Classificações NANDA-I, NIC e NOC. Método: revisão integrativa da literatura, com a questão << Como são descritos os estudos de validação de conteúdo de diagnósticos, intervenções e resultados de enfermagem no Brasil e qual sua interface com as classificações NANDA-I, NIC e NOC? >> nas Bases de dados Literatura Latino-Americana e do Caribe em Ciências de Saúde (LILACS), Medical Literature Analysis and Retrieval System Online (MEDLINE) e Scientific Eletronic Library Online (SCIELO). Resultados: a maioria dos trabalhos possui interface com uma classificação de diagnósticos de enfermagem. Conclusão: as classificações de diagnósticos, intervenções e resultados de enfermagem favorecem a comunicação e qualificam o processo de enfermagem. Constatou-se que a validação de conteúdo se constitui em ferramenta importante no refinamento das classificações de enfermagem. Descritores: Estudos de Validação; Enfermagem; Processos de Enfermagem.
INTRODUCTION

Throughout the history of nursing is possible to identify the search for building a working method based on a body of knowledge that allows the commonality of their language in order to make visible their domains as discipline.\(^3\) Similarly, the demand for qualification of nursing actions, since the survey data of a patient until the evaluation of the results produced by the care dispensed to him. The development of this knowledge presents a historic character, which is illustrated primarily by the evolution of nursing process (NP) and its stages.

Notice that since the late 20th century and early 21st century there have been changes in the form of nursing, communication as well as in the care in clinical practice. It is in this scenario that the nurse starts the study and development of standardized languages for health problems, the treatments provided and the expected results, in order to facilitate communication and to qualify the performance of its role in health care, giving it greater visibility.\(^1\)

The NP appears as a systematic recognized since 1950\(^2\) and the development of taxonomies emerged as a necessity for nursing from 1970. It is known that the use of these classifications in clinical practice of Brazilian nursing is still incipient, and nursing records, when realized, often do not adopt a uniform language system.\(^3\)

The classification of nursing diagnoses (ND) of NANDA International (NANDA-I), nursing interventions of Nursing Interventions Classification (NIC) and the results of nursing of Nursing Outcomes Classification (NOC) is based on studies and research, and clinical practice. The terms that these classifications standardized for diagnoses, interventions and outcomes of nursing remain in refinement through the actions of nurses that, among other activities, develop studies with the goal of enhancing the implementation and theorizing about the taxonomies.

The NANDA-I is a classification used in various Brazilian institutions, both in assistance in research and teaching.\(^4\,5\) She is organized into 13 domains and 47 classes and features 217 Diagnostics. Each one of these diagnoses is structured by four main components: diagnostic statement, definition, defining characteristics, related factors or risk factors.\(^6\)

The NIC is a classification of nursing interventions and has its studies originated in the year 1987, the University of Iowa, in the United States. He currently is organized into seven domains with 30 classes, 542 speakers and more than 12 thousand activities.\(^7\) Each intervention has a title, a definition and a list of activities that can be performed by the team of nursing care to the patient, family or community.\(^7\)

The NOC is a classification that can be considered complementary to taxonomies of NANDA-I and NIC. It presents the results of nursing that are concepts that can be measured to a continuum, meaning that reflect a real condition of the patient. The NOC presents a structure in seven areas, 31 classes and a list made up of 385 results with definitions, a list of indicators and measurement scales that can be used in the evaluation of patients, families and communities.\(^8\)

These classification systems are in the process of refinement and so the terms described by they require validation of the existence of the same in practice.\(^9\) The use of objective parameters in the validation provides increased reliability when based on diagnoses, interventions and outcomes from clinical practice.\(^10\,11\) Some studies about ratings NANDA, NIC and NOC-I use the content validation methodology,\(^10\,2\) that along with the clinical validation studies, are important methods of research to contribute to the development and construction of specific knowledge of nursing, convergent to the subject of ranks.

Validate a nursing diagnosis (ND) means making it true, prove their authenticity by identifying signs and symptoms to a particular clinical situation. The cases of the most common validation study aim to perform validation of content of the defining characteristics of certain diagnostic categories, but this methodology can also be performed in order to validate the interventions and results of nursing.\(^11\)

So, considering the use of content validation studies, in the context of the evolution of the nursing process, is born the idea of executing an integrative review enabling the knowledge of how to behave these days, these studies in relation to the NANDA-I classification, NIC and NOC in Brazil, with the purpose of contributing to the improvement of search terms entered in this theme well as the qualification of classification systems and, consequently, the assistance provided.

OBJECTIVE

- To identify published studies in Brazil, using as content validation methodology of diagnoses, interventions and outcomes of...
nursing in interface with the classifications NANDA-I, NIC and NOC.

**METHOD**

It is an integrative review, which represents a broad review of research methodology in order to better understand the phenomenon in question. This methodology used the Cooper assumptions in order to achieve the goal.

The study had as its guiding the following question: How are described the content validation studies of diagnoses, interventions and outcomes of nursing in Brazil and what’s interface with the classifications NANDA-I, NIC and NOC?

For selection of the articles used the Latin American literature and Caribbean Health Sciences (LILACS), Medical Literature Analysis and Retrieval System Online (MEDLINE) and Scientific Electronic Library Online (SCIELO). Search in these databases was conducted with nursing and descriptor keyword content validation. The inclusion criteria were articles published between 2005 to 2010, from Brazil. Deleted articles without summary or full text available online.

We identified a total of 41 articles in LILACS and, after reading the same seven articles were selected for the study. In the SCIELO were found 43 articles, however, it was found that six articles were already covered in the search at LILACS. MEDLINE database were found 90 articles, of which five were selected articles. Of these, four were part of the study, because one of them was already included in the search conducted in the LILACS. So, 10 articles composed the sample selected for analysis.

For the analysis stage of the data was elaborated an instrument filled by researchers which contained the following information: title of the article, authors, journal, year, purpose and classification (NANDA-I, NIC and NOC), which allowed better understanding of the findings.

The ethical aspects have been respected with regard to the authorship of articles standards analyzed. All studies were referenced as advocate specific legislation concerning maintenance and warranty Brazilian copyright scientific productions.

**RESULTS**

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The largest number of articles found on the subject took place in the year 2008 with four publications, followed by the year of 2010 in which there were three publications. In the year 2009 there were two publications and in 2007 only one article on the subject was published.

The objectives of the ten studies analyzed can be synthesized by the content validation of different diagnoses, interventions and outcomes of nursing (NANDA-I, NIC and NOC), for the purpose of providing refinement and applicability in nursing care. As for the methodology, most of them used the content Validation model proposed by Fehring and the technique developed in Delphi, several scenarios of nursing clinical practice (Figure 2).

<table>
<thead>
<tr>
<th>Study classification</th>
<th>Element studied (diagnosis/intervention)/Nursing results</th>
<th>Methodology used</th>
</tr>
</thead>
<tbody>
<tr>
<td>NANDA-16</td>
<td>ND - Protection ineffective from ocular surroundings</td>
<td>Proposed content validation by Fehring.</td>
</tr>
<tr>
<td>2) NANDA-16</td>
<td>ND - Deficient Knowledge</td>
<td>Proposed content validation by Fehring.</td>
</tr>
<tr>
<td>3) NANDA-17</td>
<td>ND - Impaired gas exchange</td>
<td>Proposed content validation by Fehring.</td>
</tr>
<tr>
<td>4) NANDA-18</td>
<td>ND - Ineffective Protection</td>
<td>Proposed content validation by Fehring.</td>
</tr>
<tr>
<td>5) NANDA-19</td>
<td>ND - Anxiety</td>
<td>Diagnostic validation (Delphi Technique) and content validation by Fehring.</td>
</tr>
<tr>
<td>6) NANDA-20</td>
<td>ND - Risk for vascular trauma</td>
<td>Proposed content validation by Fehring.</td>
</tr>
<tr>
<td>7) NIC/NOC-21</td>
<td>Interventions/results - Excessive fluid volume</td>
<td>Proposed content validation by Fehring.</td>
</tr>
<tr>
<td>8) NANDA-22</td>
<td>ND - Impaired Memory</td>
<td>Proposed content validation by Fehring.</td>
</tr>
<tr>
<td>9) NIC-23</td>
<td>Interventions - Bathing/hygiene self-care deficit; impaired physical mobility; risk for infection</td>
<td>Diagnostic validation survey from the Delphi technique.</td>
</tr>
<tr>
<td>10) NANDA-24</td>
<td>ND - Spiritual Anguish</td>
<td>Proposed content validation by Fehring.</td>
</tr>
</tbody>
</table>

The study, development and validation of nursing diagnosis: Protection ineffective from ocular surroundings (Table 1), proposed contribute to the classification of NANDA-I and created a nursing diagnosis for the ophthalmology area, since the authors have mentioned the need for a diagnosis that depicts data the patients in this area of care. This diagnosis was validated by experts in relation to title, definition, related factors and defining characteristics. It is a diagnosis of type real, because human responses to describes health conditions or life processes and that there are in fact in an individual or the fence, being defined as the reduction or ability to protect itself from internal or external threats such as diseases or injuries.

The process of creation and refinement of nursing diagnosis is of paramount importance to fill gaps in nursing practice. This procedure also contributes to the development of assistance processes, teaching, research and knowledge development in nursing, in addition to guiding the choice of interventions relevant to each case and make it easier to obtain the best possible results.

Content validation of Deficient knowledge is another thematic study, where the focus were the defining characteristics in coronary heart disease and myocardial revascularization. This is defined as the absence or deficiency of cognitive information related to a specific topic. The defining characteristics classified as main were the verbalization of the problem, poor performance in testing and express incorrect perceptions about their State of health. Inappropriate or exaggerated behaviors was regarded as insufficient to characterize the diagnostic category.
Content validation of Impaired gas exchange occurred in the evaluation of experts who reviewed the defining characteristics pointed by the NANDA-I, as well as some other references. The defining characteristics are observable factors or clinical manifestations which substantiates actual diagnosis or health club. In this study, headache upon awakening decreased Gastric motility and gastric emptying extended has not been validated. The study was carried out considering the patients in emergency care and concluded that there is a need for further research to improve the same.

The Ineffective protection, focus on another study, is regarded as the decrease in the ability to protect themselves from internal or external threats, such as injury or illness. Has as some of the defining characteristics the agitation, weakness, immobility, insomnia, disorientation and breathlessness. Among related factors are adequate nutrition, therapies such as medicines and extremes of age. In this study was performed the content validation of the defining characteristics of Ineffective Protection in patients under hemodialysis treatment, for 63 expert nurses dialysis centers of Rio Grande do Sul, Brazil. Were validated 18 defining characteristics described by the NANDA-I. The five major interim indicators (deficiency in immunity, neural change, dyspnea, pruritus and malnutrition) were related to chronic kidney disease as liable to lead to Ineffective Protection in subjects who underwent hemodialysis. Malnutrition was added from the literature and clinical importance. These situations are the consequences of hemodialítico treatment and acute and chronic renal insufficiency, especially in immunity deficiency that leads to secondary problems of great impact, hence the importance of choice, identification and implementation of interventions to the concerned.

Another article published in an international journal held anxiety content validation. The study showed that the majority of the evaluators considered appropriate the definition established by the NANDA-I, but there were some considerations related to the defining characteristics, such as the suggestion of discarded items pain abdominal, urinary urgency and hesitancy and weakness, as well as pointing out that some defining characteristics are due to culture. It is suggested that there are other research on this nursing diagnosis.

The sixth study analyzed proposed a new risk diagnosis, which is characterized by describing the human responses to health conditions or life processes that may develop in individuals, family or community. Is supported by risk factors that contribute to increased vulnerability. The Risk for vascular trauma was developed through conceptual and content validation. The concept of this diagnosis is linked to risk of damage to surrounding tissues and vein related to presence of catheter and or solutions infused. The same was considered validated by experts and subsequently inserted in the classification of NANDA-I. However, the study suggested further research to assess some of the risk factors addressed.

The only study found on the classification of nursing, not only on this issue. This is a pilot study which addresses the priority measures and results validation to the Excessive fluid volume in cardiac patients. This has as increased fluid retention definition isotonic, and one of their defining characteristics are, change in pulmonary arterial pressure, pulmonary congestion, dyspnea, edema, jugular vein distension, electrolyte changes, central venous pressure increased, hematocrit decreased, heart sound B3, among others. And related factors, such as excessive intake of liquids, excessive sodium intake, and regulatory mechanisms involved.

The validation study encompassed grading 83 interventions NIC and 53 outcomes NOC classification. The study pointed out that most of the interventions and outcomes studied were considered useful by experts in nursing practice and highlighted the importance of exercise in clinical studies for validation of the NIC and NOC classifications on clinical protocols.

Another international publication refers to content validation of Impaired memory and the proposed inclusion of ageing as one of its related factors. Have been validated the definition and the defining characteristics for this diagnosis by experts and proposed conducting other studies to validate clinically aging as a factor related to this of NO. The continuity of this study becomes extremely important, since the age group over 60 years has increased growth in most countries.

The ninth study constitutes a publication of impact to the Brazilian nursing, since it is one of the few to illustrate the interface with the classification of nursing interventions. It was intended to validate the mapping of 52 nursing care prescribed for orthopedic patients with this classification, for the diagnosis Bathing/hygiene self-care deficit; Impaired physical mobility; Risk for infection. The authors present their findings
that no mapped care reached 100% consensus showing the various possibilities of comparison and the importance of validation studies.

The last study of this integrative review consists of Spiritual anguish and aimed perform content validation of this diagnosis and compare the existing structure in the NANDA-I with the new changes and additions that have been proposed. After evaluation by experts, the diagnosis and its modifications were considered to be validated, but it has also been suggested the need for a clinical validation to these changes in order to get more consistency to the findings.

It is important to mention that, in recent years, the spirituality has been studied since its inclusion in the care for patients is of utmost importance. The NANDA-I organizes your taxonomy with domains and classes and the 10 domain is what covers this issue, called the principles of life, where are the nursing diagnoses that help the nurse to assess the presence of risk factors or signs and symptoms that require attention to the spiritual care of the individual, family or community. Article about the spiritual anguish suggested changing the title of this diagnosis of spiritual anguish for impaired spirituality, stressing that this change could increase the diagnostic possibilities with regard to spirituality dimension, making it the most flexible nomenclature. Currently, NANDA-I features in their latest publication this with the title of spiritual suffering and has impaired capacity definition of experience and integrate meaning and purpose to life through a connection with yourself, with others, art, music, literature, and nature or be greater.

Content validation studies are an important tool for the constant improvement and updating of the classifications NANDA-I, NIC and NOC, once the results produced by them, as verified in this integrative review, can provide the refinement. These studies still favors the exercise of critical thinking and decision-making, since present clinical practice situations described by the use of standardized terms, which refers to the improvement of communication and nursing records.

Nursing ratings, despite not being able to meet all the needs of clinical practice, allow you to describe diagnoses with standardized terms, based on clinical judgment, guide the best choices of measures and thus provide a service with the best possible results to the patient.

**CONCLUSION**

The present study, in response to the proposed objective, identified through the construction of an integrative review, as is the establishment and distribution of publications that present this research methodology with regard to interface this with taxonomies NANDA-I, NIC and NOC. The results of even showed that use of content validation methodology of Fehring was constituted as the greater use by researchers, and the NANDA-I classification was object of study more frequently in Brazil.

This distribution showed, in the period researched, that there was only one study published in Portuguese and from Brazil about validating content in interface with the NOC. This was the indication of a gap in this field of knowledge and that you need to increase the creation of new research, dealing with the results of nursing offered by this classification.

Build a solid body of knowledge, through research that qualify the assistance provided, is a challenge that presents itself in the daily life of nursing in their various specialties. When I accept, symbolizes the professional commitment to yourself and your profession.

Inserted in this reality are the research on classification systems, illustrated by validation studies of diagnoses, interventions and outcomes of nursing. With regard to the practice of nursing in their daily activities, it is essential to pay attention to the fact that any actions taken have elements described by nursing classifications, which gives visibility to the discipline of nursing.

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