**Bank of terms for clinical nursing practice with community elderly**

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**ABSTRACT**

The aim of this methodological research was to build a database of terms for clinical nursing practice with elderly followed by the Family Health Strategy teams based on official documents on elderly published in Brazil, and the International Classification for Nursing Practice (ICNP®), and validate it with specialist nurses in the area. It was performed from 2013 until 2014, based on document analysis, identification, extraction, normalization, validation and cross-mapping of terms relevant to clinical practice. In total were identified 332 terms, then they were submitted to the cross-mapping process, resulting in 271 constant and 61 non-constant terms in the ICNP® version 2013. The use of these terms is expected to allow the unification of the professional language of nurses and the implementation of nursing care systematization at this level of attention.

**Descriptors:** Aged; Vocabulary; Terminology; Nursing; Primary Health Care.

**INTRODUCTION**

The discussion about human aging and the elderly population’s access to health services has intensified in recent years given its rapid and intense growth, particularly in developing countries like Brazil. Despite the great advance, this process results in increased burden of diseases and more disabilities in the population, with consequent higher demand for health services. Moreover, the progressive changes resulting from the aging process associated to a primary disease or not, cause several functional and structural changes in organs and tissues that reflect in all the body of seniors with a negative impact on their functionality,
autonomy and independence\textsuperscript{(1)}.

This phenomenon arouses interest on the need to provide special attention that favors individualized care and meets the real demands of this age group. In this direction, Primary Health Care (PHC), through the Family Health Strategy (FHS) is a privileged space for comprehensive care to the elderly, highlighting the role of nurses in the care and planning of promotion, prevention, education and intervention actions in context with the reality experienced by this population in the family and community sphere\textsuperscript{(2)}. For the effectiveness of clinical practice, nurses must develop systematized care actions based on scientific knowledge and focused on the elderly’s needs.

The use of nursing classification systems has become essential to provide systematized nursing care. Among these systems, the International Classification for Nursing Practice (ICNP\textsuperscript{*}) stands out. The development of its structure is based on the Seven Axes Model and contains terms to be used in the structuring of nursing diagnosis, outcomes and interventions\textsuperscript{(3)}. This classification favors the organization of clinical nursing care and the scientific, technological and innovative advances of the profession\textsuperscript{(4)}.

Despite the advantages of classification systems and the ICNP\textsuperscript{*} for clinical nursing practice, its use by FHS nurses is still commencing, especially regarding the care offered to the elderly. Moreover, the lack of a specific language of the profession and proper records of its clinical practice are problems highlighted at this level of attention that directly affect the quality of care and recognition of the profession because the records of practice allow the evaluation and generation of knowledge\textsuperscript{(5)}.

Thus, nurses need to make use of a specific vocabulary because the standardization of language will provide essential elements to describe and qualify the assistance, improve communication among nursing professionals and other members of the health team in different contexts and cultures, ensure greater autonomy and visibility to the work of nurses and support the provision of evidence-based care\textsuperscript{(6)}.

The International Council of Nurses (ICN) need to collect and codify the terms used by nursing in clients and specific areas to structure terminology subsets defined as a set of diagnoses statements, nursing outcomes and interventions for different care specialties. Hence, the aim of the present study was to construct a database of terms for clinical nursing practice with elderly followed by the FHS teams, based on official documents on elderly published in Brazil, and the ICNP\textsuperscript{*}, and validate it with specialist nurses of the area.

**METHODS**

This is a methodological study based on document analysis of official documents on the elderly and the Seven Axes Model of the ICNP\textsuperscript{*} version 2013 for the identification of terms considered clinical and culturally relevant for the clinical practice of nursing in PHC. It was performed in the period of 2013-2014.

The process of term extraction occurred during 2013, and was performed by a single researcher, who adopted guidelines that allowed the standardization of strategies used\textsuperscript{(6)}. The following references were used: National Elderly Policy\textsuperscript{(7)}, Statute of the Elderly\textsuperscript{(8)}, National Health Policy for the Elderly\textsuperscript{(9)}, Primary Care
Booklet number 19 – Aging and Health of the Elderly\textsuperscript{10} and the Practical Guide for Caregivers\textsuperscript{11}. These documents were submitted to comprehensive reading and subsequent extraction of terms that were broken down into simple terms (nouns, verbs, adverbs and adjectives), forming a list of terms. The list was transcribed for terminological tables created in a spreadsheet in Microsoft Office Excel totaling 880 terms initially. Next, the terms relating to medical procedures, disease processes and drugs were excluded, resulting in 616 terms. These went through a standardization and normalization process to remove duplicates, perform graphic corrections and adjustments of gender and number, totaling 373 terms.

After including these terms in a form, began the validation by nursing experts in the field. The recommendations of a specific theoretical framework were used to choose the number of experts\textsuperscript{12}. It suggests the participation of five to ten subjects in the process.

The following criteria were used for the inclusion of experts: nurses with at least a master’s degree, working with the nursing process and ICNP$^\circledast$, and focused on elderly health in assistance, teaching and/or research.

For the identification of specialist nurses who met the inclusion criteria, a search was performed in the Lattes Platform (on the website of the National Scientific and Technological Development Council - CNPq). Invitations were sent to 15 nurses who met the inclusion criteria, of which only five agreed to participate. They returned the previously submitted form completed, and signed the Informed Consent (IC), forming the final sample.

The group of experts was asked to express the level of agreement or disagreement with the terms identified for professional nursing practice to the elderly followed in the FHS. In case of disagreement, whenever possible, we asked for suggestions to adjust it to the reality of clinical nursing practice.

For the processing of data collected from the survey, we calculated the Concordance Index (CI) between experts for each term using the formula: $CI = \frac{NC}{NC+NA}$, where $NC =$ number of concordance and $ND =$ number of discordance\textsuperscript{13}. The terms that reached $CI \geq 0.80$ were considered validated.

The validated terms were imported from Microsoft Office Excel spreadsheets to the Microsoft Office Access program to construct a table of terms. Data were subjected to a cross-mapping process with the terms of the Seven Axes Model of ICNP$^\circledast$ version 2013\textsuperscript{14}. This resulted in the connection of terms identified in the documents with terms of ICNP$^\circledast$, identifying the constant and non-constant terms in this terminology. After this process, the constant and non-constant terms were grouped in alphabetical order to constitute the bank of terms for the nursing clinical practice for the elderly in primary care.

The present study was approved by the Research Ethics Committee of the Universidade Estadual do Ceará in compliance with the ethical aspects of Resolution number 466/12 of the National Health Council of the Ministry of Health\textsuperscript{15} under protocol number 501.721, CAAE: 18669013.7.0000.5534.

RESULTS

Of the 373 terms submitted to the content validation process by specialist nurses, 332 terms were
considered validated by obtaining concordance ≥ 0.80. These terms were crossed with terms of ICNP® version 2013, resulting in 271 constant terms and 61 non-constant terms in this classification. The 271 constant terms were classified according to the Seven Axes Model of the ICNP®, distributed as follows: 49 in the Action axis, eight in the Client axis, 138 in the Focus axis, ten in the Judgement axis, 29 in the Location axis, 27 in the Means axis, and ten in the Time axis. To classify the 61 non-constant terms according to the axes of ICNP® version 2013, the axis definition and its consistency with the meaning of the identified terms were taken into account, resulting in: seven terms in the Action axis; one in the Client axis; 29 in the Focus axis; one in the Judgement axis; eight in the Location axis; 12 in the Means axis; and three in the Time axis (Tables 1, 2 and 3).

**Table 1:** Relevant terms for clinical nursing practice with community elderly according to the Action and Client axes of ICNP® version 2013. Fortaleza, CE, Brazil, 2014.

<table>
<thead>
<tr>
<th>Axis</th>
<th>Constant terms in ICNP®</th>
<th>Non-constant terms in ICNP®</th>
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<tbody>
<tr>
<td>Action (56 terms)</td>
<td>Advising; Action; Feeding; Changing; Applying; Supporting; Ensuring; Attending; Evaluating; Bathing; Catheterizing; Collaborating; Consulting; Putting on clothes; Contacting; Controlling; Coordinating; Developing; Referring; Encouraging; Establishing; Stimulating; Avoiding; Explaining; Facilitating; Guiding; Attending intervention; Inspecting; Monitoring; Notifying; Guiding; Planning; Preparing; Prescribing; Preventing; Prioritizing; Promoting; Providing; Protecting; Rehabilitating; Reinforcing; Recording; Regulating; Restraining; Supervising; Transferring; Changing; Verifying; Getting dressed or undressed.</td>
<td>Following up; Watching TV; Updating; Searching; Contributing; Doing alone; Programming.</td>
</tr>
<tr>
<td>Client (9 terms)</td>
<td>Adult; Couple; Caregiver; Family; Group; Elder; Individual; Patient.</td>
<td>Friend</td>
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</tbody>
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Table 2: Relevant terms for clinical nursing practice with community elderly according to Focus axis of ICNP® version 2013. Fortaleza, CE, Brazil, 2014.

<table>
<thead>
<tr>
<th>Axis</th>
<th>Constant terms in ICNP®</th>
<th>Non-constant terms in ICNP®</th>
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<tr>
<td>Focus</td>
<td>Abandonment; Sexual Abuse; Adaptation; Adherence; Alcohol Dependence; Pleasure; Distress; Anxiety; Appetite; Emotional Support; Attention; Attitude; Hearing; Self care; Self esteem; Autonomy; Self Bathing; Ability to smell; Ability to dress; Complication; Behavior; Aggressive Behavior; Sexual Behavior; Communication; Comfort; Confusion; Constipation; Bowel Continence; Urinary Continence; Control; Care; Walking; Swallowing; Delirium; Dementia; Teeth; Depression; Discomfort; Ability to perform role; Faint; Diabetes; Diarrhoea; Dignity; Patient Right; Discrimination; Pain; Oedema; Medication Side Effect; Analgesia Effect; Side Effect; Coping; Balance; Exhaustion; Hope; Stress; Physical Examination; Exercising; Fatigue; Fever; Wound; Faeces; Flatulence; Hunger; Fracture; Hydration; Hygiene; Hyperglycaemia; Hypertension; Hyperthermia; Hypoglycaemia; Hypotension; Hypothermia; Impaction; Impotence; Sexual Impotence; Incapacity; Urge Incontinence; Bowel Incontinence; Urinary Incontinence; Infection; Inflammation; Food Intake; Fluid Intake; Insecurity; Insomnia; Integrity; Skin Integrity; Social Isolation; Leisure; Injury; Bonding; Mourning; Malnutrition; Chewing; Fear; Memory; Urination; Mobility Pattern; Death; Change of position; Need; Neglect; Nutrition; Obesity; Family Role; Weight; Polypharmacy; Pleasure; Blood Pressure; Procedure; Body Process; Itching; Quality of life; Fall; Achievement; Urinary Retention; Health; Thirst; Safety; Sitting; Musculoskeletal System; Overweight; Suffering; Sleep; Suicide; Tobacco Abuse; Temperature; Diet Tolerance; Decision Making Process; Dizziness; Cough; Trauma; Sadness; Pressure Ulcer; Urine; Shame; Violence; Vomiting.</td>
<td>Integral approach; Monitoring; Affliction; Stretching; Physiological Changes; Retirement; Activities of Daily Living; Self Confidence; Self Neglect; Self Medication; Well-being; Comorbidity; Creativity; Functional Decline; Physical Disability; Frailty; Infantilization; Postural Instability; Joint Instability; Drug Interaction; Rehabilitation; Therapeutic Regimen; Social Relation; Rest; Sedentary Lifestyle; Sexuality; Overload; Treatment; Bond.</td>
</tr>
</tbody>
</table>

Table 3: Relevant terms for clinical nursing practice with community elderly according to Judgement, Location, Means and Time axes of ICNP® version 2013. Fortaleza, CE, Brazil, 2014.

<table>
<thead>
<tr>
<th>Axis</th>
<th>Constant terms in ICNP®</th>
<th>Non-constant terms in ICNP®</th>
</tr>
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<tbody>
<tr>
<td>Judgement</td>
<td>Normal; High; Complex; Dependence; Effective; State; Partial; Impaired; Risk; Total.</td>
<td>Asymptomatic.</td>
</tr>
<tr>
<td>Location</td>
<td>Abdomen; Outpatient Department; Anal Sphincter; Urinary Bladder; Oral Cavity; Arm; Head; Hair; Body; Day Center; Intestine; Breast; Muscle; Eye; Shoulder; Ear; Skin; Penis; Posterior; Prostate; Lung; Perineum; Vagina; Vein; Intramuscular Route; Intravenous Route; Oral Route; Subcutaneous Route; Neighborhood.</td>
<td>Environment; Coverage Area; Home; Community Center; Residence; Knee; Ostomy; Basic Health Unit.</td>
</tr>
<tr>
<td>Means</td>
<td>Food; Amputation; Social Worker; Home Care Service; Walking Stick; Wheelchair; Bed; Shower; Surgery; Wound Dressing; Drug; Enema; Interprofessional Team; Nurse; Diaper; Contact Lens; Medication; Physician; Orthotic Device; Patient Record; Prosthetic Device; Chemotherapy; Radiation Therapy; Progressive Muscle Relaxation; Health Service; Vaccine; Clothing.</td>
<td>Companion; Community Health Agent; Aggressor; Helper; Walker; Grab Bars; Health Handbook of the Elderly; Health Education; Bedpan; Condom; Probe; Urinal.</td>
</tr>
<tr>
<td>Time</td>
<td>Acute; Chronic; Day; Frequency; Today; Hospitalization; Age; Menopause; Situation; Home Visit.</td>
<td>Time; Subacute; Old Age.</td>
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</tbody>
</table>

DISCUSSION

The effort to standardize and unify the professional language of nurses fulfils the purpose of producing knowledge in nursing, which is to understand the needs of the population and incorporate new technologies in health care, contributing to the improvement of clinical practice and consolidation of the Unified Health System (SUS – Sistema Único de Saúde)(16).
The exploratory and comprehensive analysis of official documents on elderly published in Brazil (National Elderly Policy, Statute of the Elderly, National Health Policy for the Elderly, Primary Care Booklet number 19 and Practical Guide for Caregivers) enabled the identification and extraction of terms. Their subsequent standardization, validation and cross-mapping resulted in 271 constant terms and 61 non-constant terms in the ICNP® version2013.

The identification of elderly-related terms in the literature reflects the real demands presented by this population throughout their follow up by the FHS teams. The use of these terms will support the systematic documentation of clinical nursing care with ICNP® as a reference terminology. Therefore, it is a possibility of improving clinical practice by improving nurses’ skills in the identification, management and prevention of changes in the elderly.

Regarding the categorization of terms in the axis according to the Seven Axes Model of the ICNP® version 2013(14), the predominance of terms in the Focus axis (138 constant terms and 29 non-constant in this terminology) can be justified by its relation with a relevant focus area for nursing. Thus, it will have a substantial number of terms given the complexity and specificity of care to the elderly. Such care requires skilled nurses to intervene in a preventive and therapeutic manner, according to each individual’s needs and considering the broadness of the human aging process(17).

The fact that most of the identified terms were classified as constant in the ICNP® ensures the reliability of this terminology as a technological instrument for insertion in information systems and records of clinical practice worldwide, with a view to scientific and technological development of the profession(18).

The validation of 61 terms considered non-constant in the ICNP® also draws attention in this study, and provides evidence of the use of a specific language in clinical nursing practice with the elderly in PHC. Therefore, the terms used in this particular area should be described and inserted into the ICNP®, ensuring the dynamism and continuous evolution of this terminology, as recommended by the ICN(19-20).

The validation of terms identified by the field experts is a crucial step because it ensures the necessary reliability to validate the relevant elements for nurses’ clinical practice and their subsequent inclusion in the ICNP®.

Thus, the difficulty of attracting competent specialists to participate in the term validation step can be related to the fact that the debate on the use of ICNP® as a reference terminology in Brazil is still new and not widespread, despite the evident growing number of researchers interested in the subject and concerned with a unified language for the profession(16,21).

The construction of a database of clinical nursing practice terms that meets the elderly’s needs and is used effectively by nurses working in the FHS is still considered a big challenge. However, it is expected that the bank developed in this study can be a technological product with possibility of standardizing nursing practices focused on the elderly monitored in this level of attention. Moreover, it is a fundamental step for the preparation of statements of diagnoses, outcomes and interventions in nursing for this specialty that constitutes the terminology subsets. These subsets are used to support and improve clinical practice,
research and teaching, encourage adoption of a unified and accessible language to nurses worldwide, and facilitate decision making in clinical care to the elderly living in the community, although they do not replace the clinical judgment and decision making of nurses\(^6\)\(^,\)\(^14\).

**CONCLUSION**

In this study were identified the relevant terms for clinical nursing practice with community elders through extraction, standardization and normalization of terms in official documents on elderly published in Brazil. The terms were validated by competent experts in the nursing field and cross-mapped with terms of ICNP\(^\text{®}\) version 2013, resulting in 271 constant terms and 61 non-constant terms in this terminology. This shows the possibility of using this classification system in clinical nursing practice with the elderly in the FHS.

These terms will be used to build a subset of statements of diagnoses, outcomes and interventions of nursing that will form the basis for the systematized nursing care for elderly people seen at this level of attention.

The main study limitation was that the process of extraction and analysis of terms was performed by a single researcher, which does not prevent the occurrence of significant losses despite following the guidelines proposed in the literature.

The results of this research will bring important contributions to clinical nursing practice for the elderly in primary care by proposing the use of a specific language of the profession and the standardization of communication between professionals working at this level of attention, consequently resulting in greater visibility, professional recognition and autonomy of FHS nurses.

**REFERENCES**