



Specialized Nursing terminology for the care of people with chronic heart failure

Terminologia especializada de enfermagem para cuidado à pessoa com insuficiência cardíaca crônica

Terminología de Enfermería especializada para el cuidado de personas con insuficiencia cardíaca crónica

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ABSTRACT

Objective: To build specialized Nursing terminology for the care of people with chronic heart failure. **Method:** Methodological study, carried out in two stages: identification of relevant concepts in scientific articles related to the elected health priority and cross-mapping of the concepts identified with the ICNP® concepts. **Results:** A total of 333 unique concepts useful for Nursing care related to the condition in question were extracted, soon submitted to the cross-mapping stage with the concepts of ICNP® 2019-2020. 201 concepts were classified as constant and 132 as non-constant. In the analysis of similarity and comprehensiveness, 85% were classified as equal and 15% as similar. The non-constant concepts were characterized by 44% as more comprehensive, 11% more restricted and 45% without agreement. As for the classification of concepts in the seven ICNP® Axes, it was characterized by the Focus Axis (50%), Judgment Axis (13%), Middle Axis (12%), Action Axis (10%), Location Axis (9%), Time Axis (4%) and Customer Axis (2%). **Conclusions and contributions to the practice:** It was possible to build specialized Nursing terminology based on the ICNP® for the care of people with chronic heart failure, in which 40% of the concepts that make up the terminology are not included in the 2019-2020 version of the classification, being subjected to insertion in a later version.

Keywords: Nursing; Standardized Nursing Terminology; Classification; Cardiac Rehabilitation; Heart Failure.

RESUMO

Objetivo: Construir uma terminologia especializada de enfermagem para o cuidado à pessoa com insuficiência cardíaca crônica. **Método:** Estudo metodológico, realizado em duas etapas: identificação dos conceitos relevantes em artigos científicos relacionados à prioridade de saúde eleita e mapeamento cruzado dos conceitos identificados com os conceitos da CIPE®. **Resultados:** Extraíram-se 333 conceitos únicos úteis ao cuidado de enfermagem relacionado à afecção em questão, logo submetidos à etapa do mapeamento cruzado com os conceitos da CIPE® 2019-2020. Foram classificados 201 conceitos como constantes e 132 não constantes. Na análise de similaridade e abrangência, 85% foram classificados como iguais e 15% similares. Os conceitos não constantes caracterizaram-se 44% como mais abrangentes, 11% mais restritos e 45% sem concordância. Quanto à classificação dos conceitos nos sete Eixos da CIPE®, caracterizou-se por Eixo Foco (50%), Eixo Julgamento (13%), Eixo Meio (12%), Eixo Ação (10%), Eixo Localização (9%), Eixo Tempo (4%) e Eixo Cliente (2%). **Conclusões e implicações para a prática:** Foi possível construir terminologia especializada de enfermagem com base na CIPE® para o cuidado à pessoa com insuficiência cardíaca crônica, em que 40% dos conceitos que compõem a terminologia não estão constantes na versão 2019-2020 da classificação, sendo passíveis de inserção em versão posterior.

Palavras-chave: Enfermagem; Terminologia Padronizada em Enfermagem; Classificação; Reabilitação Cardíaca; Insuficiência Cardíaca.

RESUMEN

Objetivo: Construir una terminología de Enfermería especializada para el cuidado de personas con insuficiencia cardíaca crónica. **Método:** Estudio metodológico, realizado en dos etapas: identificación de conceptos relevantes en artículos científicos relacionados con la prioridad de salud elegida y mapeo cruzado de los conceptos identificados con los conceptos de ICNP®. **Resultados:** Se extrajeron 333 conceptos únicos útiles para la atención de enfermería relacionados con la afección en cuestión, que luego se sometieron a la etapa de mapeo cruzado con los conceptos de CIPE® 2019-2020. 201 conceptos se clasificaron como constantes y 132 como no constantes. En el análisis de similitud y exhaustividad, el 85% se clasificó como iguales y el 15%, como similares. Los conceptos no constantes se caracterizaron en un 44% como más completos, 11% más restringidos y 45% sin acuerdo. En cuanto a la clasificación de conceptos en los siete Ejes CIPE®, se caracterizó por el eje de Enfoque (50%), el Eje de Juicio (13%), el Eje Medio (12%), el Eje de Acción (10%), el Eje de Ubicación (9%), Eje de Tiempo (4%) y Eje de Cliente (2%). **Conclusiones y contribuciones a la práctica:** fue posible construir una terminología de enfermería especializada basada en CIPE® para el cuidado de personas con insuficiencia cardíaca crónica, en la cual el 40% de los conceptos que componen la terminología no están incluidos en la versión 2019-2020 de la clasificación, estando sujetos a inserción en una versión posterior.

Palabras clave: Enfermería; Terminología Normalizada de Enfermería; Clasificación; Reabilitación Cardíaca; Insuficiencia Cardíaca.

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INTRODUCTION

Chronic heart failure is a systemic clinical condition, in which the heart muscle cannot eject enough blood to meet the demands of tissue metabolism, comprising systolic, diastolic or both etiology and can result from other previous cardiovascular comorbidities.¹ It is estimated that there are approximately 23 million cases of heart failure worldwide,² with 17% to 45% deaths within the first year after diagnosis and most in the first five years after clinical diagnosis.³

People with heart failure are usually subjected to recurrent hospitalizations because they do not seek adequate and timely care in the control of the condition through cardiac rehabilitation, which is a daily challenge for the health professionals at the most varied levels of care and directly impacts on the increase in hospital admissions.⁴ The control of this condition is based on the prevention of acute processes and consequent complications, through qualified interdisciplinary assistance in the control and cardiac rehabilitation after diagnosis so that the daily routine can be resumed with autonomy.⁵

In daily work, the multidisciplinary team communicates by means of concepts that configure the phenomena of the domain of knowledge of the performance area, that is, to the terminology of specialty that characterizes the language that is proper and particular for such professionals.⁶ In Nursing, specifically, the phenomena characterized by the Nursing diagnoses, outcomes and interventions are held, as needs based on real and/or potential problems identified in people from their health situation and inserted context, which should be named through the use of standardized language systems/classification systems.⁷

The International Classification for Nursing Practice (ICNP[®]) is characterized by being a classification system that holds a unified language, covering Nursing diagnostic concepts/outcomes and interventions as interrelated and interdependent elements, in addition to primitive concepts, which enable the construction of Nursing statements based on their action context.⁸

Primitive concepts compose Nursing terminologies, which should be comprehensive and understand aspects related to certain health areas, as health priorities or needs of a specific population. In the cardiovascular context, the terminology produced for the person with metabolic syndrome stands out and, in other areas of specialty and/or specific populations, for people with pressure injury, for the person with spinal cord injury, for the person with leprosy and for the person with ostomy.⁹⁻¹³

There is scarcity in the literature when it comes to a specific, standardized and validated terminology, directed to Nursing care for people with chronic heart failure in its most varied aspects,¹⁴ this study presents innovative potential in order to contribute to the generation of Nursing care indicators for subsequent insertion in health information systems and with a possible impact on cardiac care and rehabilitation of people with heart failure. Thus, the objective was to build specialized Nursing terminology based on the International Classification for Nursing Practice for the care of people with chronic heart failure.

METHOD

A methodological study, following the recommendations for the construction of terminologies: 1) Identification of the concepts relevant to the chosen health priority; 2) Cross-mapping of the concepts identified with the ICNP[®] concepts.¹⁵

In the first stage, a literature review was conducted in August 2020 to identify Nursing care for people with heart failure. The search was conducted independently by two researchers, through the journals portal of the Coordination for the Improvement of Higher Level Personnel (*Coordenação de Aperfeiçoamento de Pessoal de Nível Superior*, CAPES) in the following databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Nursing Database (*Banco de Dados em Enfermagem*, BDEF), Latin American and Caribbean Literature in Health Sciences (*Literatura Latino-Americana e do Caribe em Ciências da Saúde*, LILACS) and Medical Literature Analysis and Retrieval System Online (MEDLINE via EBSCO), in addition to the gray literature, by means of an open manual search with the descriptors, given the interest in new findings that can be used as a theoretical framework.

The eligibility of the studies was based on the application of the inclusion criteria: original articles and case studies/reports; produced by nurses; available in full; without time scope delimitation; in Portuguese, English and Spanish; and the exclusion criterion: articles that did not answer the research question and addressed the multi-professional context.

The selected articles were used as empirical bases for the extraction of clinically and culturally relevant concepts for the Nursing practice. They were organized into individual files in the Word for Windows[®] version 2013 format, from which the titles, abstracts, descriptors, descriptive aspects about the journals, identification and credentials of the authors, references, charts and their titles and keys were excluded, leaving only the textual part of the articles, used for the extraction of the concepts.

The files in Word for Windows[®] were converted to .PDF format and applied in the PORONTO program, a tool for semi-automatic construction of ontologies from texts in Portuguese in the health area, developed in open source and free technology, which extracts the concepts and their taxonomic relationships, in addition to providing their frequency of appearances.¹⁶ It should be emphasized that articles in languages other than Portuguese were translated in full for their application in PORONTO, due to the tool recognizing only that language. Such a tool has been used in studies with the same methodological design and has demonstrated efficiency in the extraction of the concepts.^{13,17}

After extraction, the concepts were allocated in a spreadsheet in the Excel for Windows[®] version 2013 format for the normalization and standardization process with analysis and exclusion of synonyms, adequacy of verb tenses and grammatical gender, number (singular and plural) and acronym that identifies a certain concept. Concepts considered to be unrelated to Nursing care for people with chronic heart failure were excluded.

In the second stage, cross-mapping was performed of the concepts extracted with the concepts of the seven-axis model of ICNP[®] 2019-2020, which is characterized as a methodological

procedure for comparing concepts from different versions of the classification by means of data crossing and determining semantic equivalence, to resolve possible biases, enabling adaptation to a standardized language.¹⁸

Two Excel for Windows[®] version 2013 spreadsheets were used, one with the previously standardized and normalized unique concepts and another one with the concepts of ICNP[®] 2019-2020, these being spreadsheets inter-crossed by the Access for Windows[®] version 2013 program, to identify the constant and non-constant concepts in the current ICNP[®] version. According to the mapping, the concepts were standardized in relation to spelling and repetitions, in order to verify the adequacy of these concepts and those that were considered as similar were designated based on the Classification.

The concepts that were not classified as equal were also analyzed for similarity and comprehensiveness in relation to the concepts included in ICNP[®].¹⁹ The literature proposes that similar is when there is no spelling concordance, but its meaning is identical; more comprehensive when it has greater meaning than the existing concept in ICNP[®]; more restricted when the concept has lesser meaning than that the existing in ICNP[®]; and there is no agreement when the concept is totally different from the existing concept in ICNP[®], that is, a new concept. This stage also enabled the framing of the concepts in one of the seven axes of ICNP[®].²⁰

The results were analyzed descriptively, showing the absolute and relative frequency of the data. Considering the nature of methodological research and the non-involvement of human beings, there was no need for appraisal by the Research Ethics Committee.

RESULTS

From the 27 selected articles, 86,013 simple and compound concepts (including repetitions) were extracted, of which 15,763 were unique concepts. Soon afterwards, the concepts considered useful for Nursing care related to the condition in question were selected, with 333 unique concepts remaining among simple and compound ones.

The significant decrease in the number of concepts is justified given the process of normalization and standardization, which took into account aspects such as synonymous words, acronyms already described, medical concepts, diseases and medications, different verbal tenses, typos and/or spelling errors, casual concepts and words with different grammatical classes, but with the same semantic meaning.

The number of appearances of the concepts varied from one to 473. The concepts extracted with a frequency of appearance in the *corpus* of analysis greater than or equal to 30 in decreasing order are described in Table 1.

The extracted concepts were subjected to the cross-mapping process with the concepts of ICNP[®] version 2019-2020, 201 (60%) constant concepts (Chart 1) being verified, analyzed for similarity and scope, with 170 (85%) classified as equal to ICNP[®] and 31 (15%) considered to be similar. It is noteworthy that the

concepts classified as equal to those of ICNP[®] were presented with the respective ICNP[®] classification code.

Of the 333 concepts, 132 (40%) were classified as not included in the classification system (Chart 2), which characterized 58 concepts as more comprehensive (44%), 15 as more restricted (11%) and 59 as without agreement (45%) with the concepts of ICNP[®].

Regarding the classification of concepts in one of the seven ICNP[®] Axes, specialized Nursing terminology was characterized by 167 (50%) concepts in the Focus Axis, 45 (13%) in the Judgment Axis, 39 (12%) in the Middle Axis, 32 (10%) in the Action Axis, 29 (9%) in the Location Axis, 14 (4%) in the Time Axis and seven (2%) in the Client Axis, where it is possible to view all the constant and non-constant concepts.

DISCUSSION

The construction of specialized Nursing terminology, as an initial step to support the construction of a terminological subset for Nursing care for people with chronic heart failure, meets the standardization and universalization of the Nursing language, in order to highlight the concepts used in the practice, contributing to scientific advancement in this area, which contributes to improving the assistance provided to this specific population.¹¹

Concepts with an appearance frequency greater than or equal to 30 in the *corpus* of analysis are discussed prominently in the literature, reflections of its impact on the care of people with heart failure, such as “family”, “adherence”, “communication”, “anxiety”, “educational”, “approach” and “spirituality”, despite the fact that the last three are not included in the classification, which indicates the importance of evaluating the literature in the area in search of new concepts that may be useful to the care.

The “approach” concept is referred to by the authors as a relationship between the person cared for-professional binomial that must preserve the dignity of each, listening to the needs and their inclusion in the decision-making process centered on the individual, an important factor in the care of the person with heart failure, based on their cardiac rehabilitation after clinical diagnosis and individualized actions, according to needs and inserted context.²⁰

Concepts such as “family” and “educational” are also evidenced when referring to educational interventions with family members associated with the reduction of readmissions of these people in the hospital network, in addition to the concepts of “communication” and “adherence” in elucidating which strategies used for health education are paramount, with regard to adherence to treatment, when the family is inserted in the communicative process, especially when associated with a greater number of previous Nursing consultations.^{21,22}

The concept of “spirituality” was referred to as a theme that has positive effects on heart failure, due to the fact of empowering and acting in coping with the condition, indicated as a positive result, with greater adherence after the diagnosis of heart failure.²³ It is important to debate about aspects that go beyond the biological and social dimensions, as is the case with the spiritual, in a complementary and interdependent manner, intending to understand the person cared for as an indivisible entirety.

Table 1. Concepts with a frequency of appearance in the *corpus* of analysis greater than or equal to 30, Crato, Brazil, 2020.

CONCEPT	F*	CONCEPT	F*	CONCEPT	F*	CONCEPT	F*
Family	473	Weight	124	Measure	73	Self-managing	43
Hospital	416	Home	121	Using	72	Congestion	43
Treatment	410	Role	121	Self-care	71	Difficulty	42
Quality	310	Change	120	Time	69	Spirituality	42
Educational	254	Medication-related	118	Examination	67	Continuity	41
Knowledge	251	Developing	117	Fatigue	67	Observing	40
Professional	229	Heart-related	113	Presence	65	Liquid	39
Control	222	Characteristic	107	Self-management	62	Thinking	39
Behavior	214	Management	101	Analysing	60	Event or Episode	38
Evaluating	212	Reduction	101	Member	60	Hope	36
Rate	202	Frequency	100	Area	57	Nutritional	36
Depression	175	Dyspnoea	98	Chronic	57	Spiritual	34
Increasing	173	Monitoring	96	Community	56	Demand	33
Symptom	172	Skill	93	Exercising	56	Intolerance	33
Accompanying	171	Attention	91	Restriction	54	Low	32
Style	171	Answer	89	Applying	50	Degree	32
Therapy	170	Cardiac output	88	Effective	50	Procedure	32
Status	165	Perception	87	Preoccupation	49	Respiratory	31
Risk	154	Individual	84	Communication	48	Satisfactory	31
Caregiver	149	Approach	82	Size	48	Sleep	30
Adherence	145	Environment	78	Pain	47	Therapeutic	30
Need	137	Oedema	77	Deviation	46		
Anxiety	136	Diet	74	Deficit	45		
Ability	124	Improved	74	Catheter	44		

*F: absolute frequency

The findings also showed an expressive number of concepts included in ICNP® 2019-2020, which explains that the vast majority of these referring to the clinical Nursing practice for people with heart failure are included in the terminology. This demonstrates its usefulness as a technology that can be used to insert data in electronic health information systems, assistive instruments and registration of the clinical Nursing practice worldwide, contributing to generate Nursing indicators.

Despite having lower prevalence, it is worth mentioning the number of concepts not included in the classification (40%), which confirms the need to update and insert these concepts in ICNP® in order to fill gaps in the construction of pre-coordinated concepts and highlight the phenomena of interest in the field of the Nursing practice for people with heart failure.

Regarding the classification of the concepts by ICNP® axes, the prevalence of concepts belonging to the Focus Axis of the classification (50%), such as Physical Exercise, Fatigue, and Dyspnea stands out, demonstrating the potential for the construction

of coordinated concepts, with regard to Nursing diagnoses and outcomes. Other Nursing terminologies also refer to a higher prevalence of Focus Axis concepts.^{9,11}

Also regarding the prevalence of concepts based on the Axes, the Action Axis stood out in relation to the constant concepts and the Judgment Axis in relation to the non-constant ones, these primitive concepts being essential in the construction of pre-coordinated concepts of Nursing interventions and diagnoses/outcomes, respectively.

The concepts of physical exercise, fatigue and dyspnea are discussed based on the evidence that the first is characterized as a practice that generally causes intolerance in people with heart failure, presenting symptoms such as fatigue and dyspnea, that is, the concepts are primitive, although they are related in the context of people with heart failure.²⁴

In this sense, tolerance or not to physical activity should be assessed, always taking into account the stages of the condition in the person being cared for, based on an interdisciplinary

Chart 1. Primitive concepts classified as included in ICNP® 2019-2020, Crato, Brazil, 2020.

Axis	Concepts included in ICNP® 2019-2020
Judgment (n=22)	Accentuated, High (10009007), Increased, Low (10011438), Tiredness, Dependence (10026671), Decreased, Effective, Effective (10014956), Excessive, Expanded, Extent (10007423), Degree (10005663), Limited, Improved (10026692), Moderate (10025865), Normal (10013295), Small (10018315), Impaired (10012938), Presence (10046624), Risk (10015007), Size (10018218)
Focus (n=110)	Abandonment (10041692), Acceptance (10000329), Adaptation (10001741), Adherence (10022210), Achievement (10000364), Allergy (10041119), Distress (10006118), Anxiety (10006118), Appetite (10002455), Learning (10011246), Aspiration (10002656), Attention (10002924), Attitude (10002930), Self control (10017690), Self care (10017661), Autonomy (10003054), Bath, Walking (10020886), Ability (10000034), Characteristic (10004170), Shock (10018050), Cognition (10004485), Complication (10025459), Behavior (10003217), Communication (10004705), Status (10018793), Comfort (10004655), Confusion (10004947), Congestion (10004952), Knowledge (10011042), Continuity (10005064), Control (10005135), Belief (10003229), Guilt (10008603), Culture (10005458), Cardiac output (10003887), Demand, Dementia (10031091), Discomfort (10023066), Disuse (10006139), Dyspnoea (10006461), Readiness (10016414), Pain (10013950), Oedema (10041951), Elimination (10006720), Coping (10005208), Emotional, Balance (10003110), Hope (10009095), Stress (10018888), Exhaustion (10007327), Exercising (10007315), Expectoration (10007362), Fatigue (10007717), Faith, Weakness (10024897), Ability, Haemorrhaging (10008954), Mood (10036241), Powerlessness (10015394), Disability (10005980), Infection (10010104), Integrity (10010416), Injury (10010284), Management, Meditation (10011897), Fear (10007738), Mobility, Movement (10012274), Nausea (10012453), Need (10012495), Necrosis (10012482), Obese (10013457), Organism (10013783), Orthopnoea (10013823), Role (10017321), Thinking (10019663), Perception (10014270), Perfusion, Weight (10021034), Pleasure (10014682), Preference (10040572), Preoccupation (10015466), Pressure (10015608), Blood Pressure (10003335), Procedure (10034409), Fall (10007512), Recovery (10016507), Regimen (10016609), Response, Rhythm (10017210), Routine (10017384), Noise (10013230), Bleeding (10003303), Blood (10003319), Secretory Substance (10017635), Symptom (10019368), Suffering (10019055), Loneliness (10011417), Sleep (10041399), Supply (10019119), Tachycardia (10019415), Rate (10016390), Cough (10005249), Sadness (10017418), Gas Exchange (10008309), Ventilation (10020704), Bonding (10003548), Alertness (10002144), Vomiting (10020864)
Middle (n=9)	Analgesia, Physical activity, Bed (10003168), Catheter (10004087), Education in health, Hydration, Meal (10011809), Solution (10018499), Therapy (10019628)
Location (n=16)	Abdominal, Artery (10002562), Hospital, Lower (10011440), Mid (10012022), Mucous, Muscular, Nasal, Oral, Skin (10018239), Peripheral (10014386), Neck (10012476), Lung (10011486), Upper (10020325), Thorax (10019692), Vascular
Action (n=28)	Accompanying (10042609), Counselling (10005254), Administering (10001773), Acquiring, Scheduling (10017528), Adjusting (10001760), Alleviating (10002171), Analysing (10002298), Applying (10002464), Supporting (10019142), Increasing (10009961), Evaluating (10007066), Catheterising (10004094), Developing (10005848), Determining (10005824), Elevating (10006691), Encouraging (10006823), Providing (10015935), Immobilizing (10009762), Modifying, Monitoring (10012154), Observing (10013474), Obtaining (10013572), Preparing (10015478), Preventing (10015620), Reducing, Regularizing (10016613), Measuring (10011813)
Time (n=11)	Acute (10001739), Continuous (10005086), Chronic (10004395), Examination (10007241), Event Or Episode (10007239), Frequency (10008234), Onset (10013689), Morning (10012226), Night (10013207), nocturnal, Week (1002101010)
Client (n=5)	Adult (10001889), Community (10004733), Caregiver (10003958), Family (10007554), Individual (10010018)

*n: absolute value. Source: Research data and ICNP®.

Chart 2. Primitive concepts classified as not included in ICNP® 2019-2020, Crato, Brazil, 2020.

Axis	Concepts not included in ICNP®
Judgment (n=23)	Adventitious, Anthropometric, Handshake, Absent, Caloric, Conflicting, Depressive, Decompensated, Diastolic, Spiritual, Pharmacological, Glycemic, Inadequate, Inefficient, Negative, Positive, Paroxysmal, Disturbed, Psychological, Psychosocial, Systolic, Satisfactory, Calm
Focus (n=57)	Approach, Acuity, Angina, Activity, Self-management, Self-managing, Fluid balance, Cardiac pulse, Circumference, Cholesterol, Commitment, Conduct, Co-living, Crackling, Deficit, Ambulation, Depression, Diet, Difficulty, Dimension, Vein distension, Disturbance, Filling, Spirituality, Style, Stimulus, Risk factor, Smoke, Habit, Hygiene, Inappetence, Body Mass Index, Ingestion, Isolation, Intolerance, Irritation, Mind, Murmur, Nutrition, Offer, Standard, Peace, Pulse, Quality, Religion, Religious, Restriction, Retention, Respect, Sensation, Sensitivity, Feeling, Smoking, Content, Urgency, Dizziness, Volume
Middle (n=30)	Self-medication, Self-report, Biopsychosocial, Decubitus, Diuresis, Educational, Excretion, Glucose, Water, Liquid, Medicinal, Motor, Operative, Oxygen, Oximetry, Health promotion, Reflection, Relaxation, Rest, Sensory, Sexual, Social, Clothes, Insurance, Measure, Prayer, Residue, Snoring, Therapeutic, Way
Location (n=13)	Environment, Area, Cardiac, Body, Home, End, Church, Jugular, Limb, Quadrant, Respiratory, Tissue, Urinary
Action (n=4)	Empowering, Measuring, Changing, Using
Time (n=3)	Daily, Time, Routine
Client (n=2)	Partner, Spouse

*n: absolute value. Source: Research data.

assessment and not performed only by Nursing. Thus, dyspnea is referred to as caused by efforts and by positioning (decubitus), in addition to being mentioned as an emotional symptom triggered by anxiety and nervousness, impairing quality of life.²⁵ Anxiety is highlighted as a concept of the Focus Axis, also found in the terminology.

Thus, there is an interrelation between the most varied concepts present in the daily care of people with heart failure, revealing language common to the context, which requires an essential stage in its construction. Cross-mapping of concepts not included with those of ICNP® 2019-2020 is an essential process that helps in the consolidation of Nursing care, by means of standardization of language, documentation of information, generation of indicators sensitive to the Nursing practice, and also facilitates communication between nurses and the other health professionals.²⁶

This process makes it possible to verify the similarity between the statements present in the most varied systems of classification in Nursing, unmet or incomplete needs and, from this analysis, act on the consolidation of language.²⁷ Studies that have been developed in this context stand out, as a current trend in Nursing, indispensable in the process of building and understanding its phenomena.^{14,26}

The contribution of this study is based on filling the knowledge gap about the construction of specialized terminology, as an instrument with the potential for the development of Nursing diagnostic concepts, outcomes and interventions and its applicability in the practice for nurses, as essential aspects of

the Nursing care provided to the person with chronic heart failure in the clinical practice.

CONCLUSIONS AND IMPLICATIONS FOR THE PRACTICE

It was possible to build specialized Nursing terminology based on ICNP® for the care of people with chronic heart failure, in which 40% of the concepts are not included in the 2019-2020 version of the classification, with a considerable number of concepts classified in the Focus Axis. The construction of this terminology implies the process of consolidating the Nursing language and its body of knowledge, with regard to the care of people with heart failure, with potential for application in the praxis, with regard to the construction of care instruments, such as terminology subsets and/or protocols.

As a limitation of this study, we highlight the extraction of primitive concepts only from the literature in the area, characterized as a possibility of not reflecting all the particularities of the Nursing care directed to people with heart failure; however, this aspect did not affect the quality of the study, which reflected convergences with the literature in the area, in relation to the concepts specifically directed to the health priority.

As future stages, for continuity and collaboration in the consolidation of the Nursing language for people with heart failure, it is intended to carry out studies for the construction of Nursing diagnoses, outcomes and interventions and structuring the ICNP® terminological subset for the Nursing care provided to the referred health priority.

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REFERENCES

- Rohde LEP, Montera MW, Bocchi EA, Clausell NO, Albuquerque DC, Rassi S et al. Sociedade brasileira de cardiologia. diretriz brasileira de insuficiência cardíaca crônica e aguda. *Arq Bras Cardiol.* 2018;111: <http://dx.doi.org/10.5935/abc.20180190>.
- Writing Group Members, Mozaffarian D, Benjamin EJ, Go AS, Arnett DK, Blaha MJ, et al. Heart disease and stroke statistics-2016 update: A report from the American Heart Association. *Circulation.* 2016;133(4):e38-360. <http://dx.doi.org/10.1161/CIR.0000000000000350>.
- Ponikowski P, Voors AA, Anker SD, Bueno H, Cleland JGF, Coats AJS et al. 2016 ESC guidelines for the diagnosis and treatment of acute and chronic heart failure: the Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC): developed with the special contribution of the Heart Failure Association (HFA) of the ESC. *Eur J Heart Fail.* 2016;37(27):2129-200. <http://dx.doi.org/10.1093/eurheartj/ehw128>.
- Taniguchi C, Okada A, Seto N, Shimizu Y. How visiting nurses detect symptoms of disease progression in patients with chronic heart failure. *Int J Qual Stud Health Well-being.* 2020;15(1):1735768. <http://dx.doi.org/10.1080/17482631.2020.1735768>.
- Souza TCTOA, Correia DMS, Nascimento DC, et al. The difficult daily life of heart failure bearing patients. *J Res: Fundam Care.* 2019;11(5):1340-1346. <http://dx.doi.org/10.9789/2175-5361.2019.v11i5.1340-1346>
- Garcia TR. Professional language and nursing domain. *Texto Contexto Enferm.* 2019;28:e20190102. <http://dx.doi.org/10.1590/1980-265x-tce-2019-0001-0002>.
- Morais SCR, Nóbrega MML, Carvalho EC. Cross-mapping of results and Nursing Interventions: contribution to the practice. *Rev Bras Enferm.* 2018;71(4):1883-90. <http://dx.doi.org/10.1590/0034-7167-2017-0324>.
- Tosin MHS, Mecone CAC, Oliveira BGRB. International Classification for Nursing Practice – ICNP®: Application to the Brazilian reality. *Rev Bras Enferm.* 2015;68(4):730-1. <http://dx.doi.org/10.1590/0034-7167.2015680422i>.
- Félix NDC, Nascimento MNR, Ramos NM, Oliveira CJ, Nóbrega MML. Specialized nursing terminology for the care of people with metabolic syndrome. *Esc Anna Nery.* 2020;24(3):e20190345. <http://dx.doi.org/10.1590/2177-9465-EAN-2019-0345>.
- Duarte FHS, Santos WN, Silva FS, Lima DM, Fernandes SF, Silva RAR. Terms of specialized nursing language for people with pressure injury. *Rev Bras Enferm.* 2019;72(4):1028-35. <http://dx.doi.org/10.1590/0034-7167-2018-0492>.
- Clares JWB, Fernandes BKC, Guedes MVC, Freitas MC. Specialized nursing terminology for the care of people with spinal cord injury. *Rev Esc Enferm USP.* 2019;53:e03445. <http://dx.doi.org/10.1590/s1980-220x2018014203445>.
- Oliveira MDS, Roque e Lima JO, Garcia TR, Bachion MM. Useful terms for nursing practice in the care of people with leprosy. *Rev Bras Enferm.* 2019;72(3):744-52. <http://dx.doi.org/10.1590/0034-7167-2017-0684>.
- Carvalho CMG, Cubas MR, Nóbrega MML. Terms of the specialized nursing language for the care of ostomates. *Rev Bras Enferm.* 2017;70(3):461-7. <http://dx.doi.org/10.1590/0034-7167-2015-0058>.
- Nascimento MNR, Silva MY, Viana MCA, Oliveira CJ, Martins AKL, Félix NDC. Nursing diagnoses for people with heart failure: cross mapping. *Rev enferm UFPE on line.* 2019;13:1-8. <http://dx.doi.org/10.5205/1981-8963.2019.240194>.
- Nóbrega MML, Cubas MR, Egry EY, Nogueira LGF, Carvalho CMG, Albuquerque LM. Desenvolvimento de subconjuntos terminológicos da CIPE® no Brasil. In: Cubas MR, Nóbrega MML. *Atenção primária em saúde: diagnóstico, resultado e intervenções de enfermagem.* Rio de Janeiro: Elsevier; 2015. p. 25-36.
- Zahfra FM, Carvalho DR, Malucelli A. Poronto: tool for semi-automatic ontology construction in portuguese. *J Health Inform [Internet].* 2013 [citado 2018 abr 12];5(2):52-9. Disponível em: <http://www.jhi-sbis.saude.ws/ojs-jhi/index.php/jhi-sbis/article/view/232/167>
- Félix NDC, Ramos NM, Nascimento MNR, Moreira TMM, Oliveira CJ. Nursing diagnoses from ICNP® for people with metabolic syndrome. *Rev Bras Enferm.* 2018;71(Suppl 1):467-74. <http://dx.doi.org/10.1590/0034-7167-2017-0125>.
- International Organization for Standardization. ISO 12300: health informatics: principles of mapping between terminological systems. Genebra: ISO; 2016. p. 1-46.
- Nóbrega MML, Cubas MR, Egry EY, Nogueira LGF, Carvalho CMG, Albuquerque LM. Desenvolvimento de subconjuntos terminológicos da CIPE® no Brasil. In: Cubas MR, Nóbrega MML. *Atenção Primária em Saúde: diagnósticos, resultados e intervenções de enfermagem.* Rio de Janeiro: Elsevier; 2015. p. 3-14.
- Sampaio C, Renaud I, Leão PP. "The roller coaster ride of heart failure": Nursing staff's perceptions of dignity. *Acta Paul Enferm.* 2020;33:1-8. <http://dx.doi.org/10.37689/acta-ape/2020A00165>.
- Agarwal KS, Bhimaraj A, Xu J, Bionat S, Pudlo M, Miranda D et al. Decreasing heart failure readmissions among older patients with cognitive impairment by engaging caregivers. *J Cardiovasc Nurs.* 2020;35(3):253-61. <http://dx.doi.org/10.1097/JCN.0000000000000670>.
- Silva AF, Cavalcanti ACD, Malta M, Arruda CS, Gandin T, Fé A et al. Treatment adherence in heart failure patients followed up by nurses in two specialized clinics. *Rev. Latino-Am. Enfermagem.* 2015;23(5):888-94. <http://dx.doi.org/10.1590/0104-1169.0268.2628>.
- Moshki M, Khajavi A, Minaee S, Vakilian F, Hashemizadeh H. Perceived benefits of the disease: A qualitative study of patients' experiences of heart failure. *Nurs Health Sci.* 2020;22(2):464-71. <http://dx.doi.org/10.1111/nhs.12682>.
- Padua BLR, Vieira GCA, Pereira JMV, Figueiredo LS, Flores PVP, Cavalcanti ACD. Nursing diagnoses activity intolerance in patients with chronic heart failure. *Nursing.* 2019 [citado 2019 nov 09];22(250):2716-2720. Disponível em: <http://www.revistanursing.com.br/revistas/250/pg12.pdf>
- Souza TCTOA, Correia DMS, Nascimento DC, Christovam BP, Batista DCS, Cavalcanti ACD. The Difficult Daily Life of Heart Failure Bearing Patients El difícil cotidiano de los pacientes com insuficiência cardíaca. *J Res: Fundam Care.* online. 2019;11(5):1340-1346. <http://dx.doi.org/10.9789/2175-5361.2019.v11i5.1340-1346>

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Nascimento MNR, Moreira AEA, Ramos NM, Gomes EB, Félix NDC, Oliveira CJ

26. Silva DVA, Sousa INM, Rodrigues CAO, Pereira FAF, Gusmão ROM, Araujo DD. Nursing diagnoses in a home-based program: cross-mapping and NANDA-I Taxonomy. *Rev Bras Enferm.* 2019;72(3):584-91. <http://dx.doi.org/10.1590/0034-7167-2018-0323>.
27. Tannure MC, Salgado PO, Chianca TCM. Cross-Mapping: Diagnostic labels formulated according to the ICNP[®] versus diagnosis of NANDA International. *Rev Bras Enferm.* 2014;67(6):972-8. <http://dx.doi.org/10.1590/0034-7167.2014670616>.