Specialized nursing terminology in care of people infected with AIDS

Terminologia especializada de enfermagem no cuidado às pessoas vivendo com aids

Terminología especializada de enfermería en el cuidado de personas que viven con sida

Bárbara Coeli Oliveira da Silva[1] https://orcid.org/0000-0002-2933-0930
Rafael Medeiros Santos[1] https://orcid.org/0000-0002-9504-8191
Fernanda Rafaela dos Santos[1] https://orcid.org/0000-0002-6538-9411
Thais Monteiro da Silva Padilha[2] https://orcid.org/0000-0003-0165-3102
Olga Alice Alencar Moreira[1] https://orcid.org/0000-0002-5625-7011
Elieze da Silva Tavares[1] https://orcid.org/0000-0002-7444-7898
Richardson Augusto Rosendo da Silva[1] https://orcid.org/0000-0001-6290-9365

How to cite:
Silva BC, Santos RM, Santos FR, Padilha TM, Moreira AO, Tavares ES, et al. Specialized nursing terminology in care of people infected with AIDS. Acta Paul Enferm. 2021;34:eAPE03122.

DOI
http://dx.doi.org/10.37689/acta-ape/2021AO03122

Descritores
Cuidados de enfermagem; Terminologia padronizada em enfermagem; Síndrome de imunodeficiência adquirida; HIV

Keywords
Nursing care; Standardized nursing terminology; Acquired immunodeficiency syndrome; HIV

Descriptores
Atención de enfermería; Terminología normalizada de enfermería; Síndrome de imunodeficiência adquirida; VIH

Submitted
November 26, 2019

Accepted
June 3, 2020

Corresponding author
Bárbara Coeli Oliveira da Silva
E-mail: barbaracoeli@outlook.com

Abstract

Objective: To build and validate, in terms of content, a specialized nursing terminology in care of adults infected with AIDS, based on the Seven-Axis Model of the International Classification for Nursing Practice.

Methods: A methodological study carried out at a teaching hospital in northeastern Brazil. The following steps followed extraction of terms from the medical records of people infected with AIDS; normalization; cross-mapping between extracted and constant in the International Classification for Nursing Practice; distribution in seven axes and content validation through a concordance index among expert nurses.

Results: Two thousand terms have been extracted. Normalization resulted in 557 pertinent terms, 319 of which were constant and 238 not included in the International Classification for Nursing Practice. Five hundred and twenty-two terms were validated by experts, of which 319 were constant and 203 were not constant, which reached a concordance index ≥ 0.80.

Conclusion: This study allowed to identify and validate the terms used by nurses in assisting people infected with AIDS, which will subsidize the steps subsequent to the construction of a terminological subset for information and communication to nursing practice.

Resumo

Objetivo: Construir e validar quanto ao conteúdo uma terminologia especializada de Enfermagem, no cuidado a adultos vivendo com aids, fundamentado no Modelo de Sete Eixos da Classificação Internacional para a Prática de Enfermagem.

Métodos: Estudo metodológico, realizado em um Hospital Escola no Nordeste do Brasil. Seguiram-se as seguintes etapas: extração dos termos de prontuários de pessoas vivendo com aids; normalização; mapeamento cruzado entre os extraídos e os constantes na Classificação Internacional para a Prática de Enfermagem; distribuição destes nos sete eixos e validação de conteúdo por meio de índice de concordância entre enfermeiros peritos.

Resultados: Extraíram-se 2.000 termos. A normalização resultou em 557 termos pertinentes, estando 319 constantes e 238 não constantes na Classificação Internacional para a Prática de Enfermagem. Foram validados pelos peritos 522 termos, sendo 319 constantes e 203 não constantes, os quais atingiram um índice de concordância ≥ 0,80.

Conclusão: O estudo permitiu identificar e validar os termos utilizados por enfermeiros na assistência às pessoas vivendo com aids, o qual subsidiará as etapas subsequentes à construção de um subconjunto terminológico para informação e comunicação à prática de Enfermagem.

[1]Universidade Federal do Rio Grande do Norte, Natal, RN, Brazil.
[2]Instituto Nacional do Câncer, Rio de Janeiro, RJ, Brazil.
Conflicts of interest: nothing to declare.

Resumen

Objetivo: Elaborar y validar, en cuanto al contenido, una terminología especializada de enfermería en el cuidado de adultos que viven con sida, fundamentada en el Modelo de Siete Ejes de la Clasificación Internacional de la Práctica de Enfermería.

Métodos: Estudio metodológico, realizado en un hospital universitario en la región nordeste de Brasil. Se llevaron a cabo las siguientes etapas: extracción de los términos de historias clínicas de personas que viven con sida; normalización; mapeo cruzado entre los términos extraídos y los que constan en la Clasificación Internacional de la Práctica de Enfermería; distribución de estos en los siete ejes y validación de contenido mediante el índice de concordancia por enfermeros peritos.

Resultados: Se extrajeron 2.000 términos. La normalización dio como resultado 557 términos pertinentes, de los cuales 319 constaban en la Clasificación Internacional de la Práctica de Enfermería y 238 no. Los peritos validaron 522 términos, de los cuales 319 constaban y 203 no constaban, que alcanzaron un índice de concordancia ≥ 0,80.

Conclusión: El estudio permitió identificar y validar los términos utilizados por enfermeros en la atención a personas que viven con sida y contribuirá con las etapas subsiguientes de la construcción de un subconjunto terminológico para información y comunicación en la práctica de enfermería.

Introduction

AIDS is an important global public health problem.[1] According to the report published in 2019 by the Joint United Nations Program on HIV/AIDS (UNAIDS), in 2018 there were 37.9 million people infected with this disease in the world, of which 966,058 are in Brazil.[2]

As it is considered a chronic disease, it requires actions directly influencing the lives of people infected with AIDS to be directly involved in care.[3] Furthermore, nurses have an important role in caring for these people by developing health promotion, protection and rehabilitation actions, with an emphasis on adherence to treatment and self-care.[4]

Therefore, it is up to nurses before and during care to develop technical-scientific skills that favor the organization and Systematization of Nursing Care (SNC).[3] According to COFEN (*Conselho Federal de Enfermagem* – Federal Nursing Council), Resolution 358/2009, SNC "organizes professional work in terms of method, personnel and instruments, making it possible to operationalize the Nursing Process (NP)". This is "a methodological instrument that guides both professional nursing care and documentation of professional practice".[5]

Moreover, it is evident in nursing literature the importance of using classification systems during application in all phases of NP through existing terminology in nursing. Such terminologies serve to unify the language of the profession, favoring increase, improvement of documentation and quality of nursing registries.[6]

The International Classification for Nursing Practice (ICNP®) stands out among the classification systems in nursing. Its structure of terms and definitions allows collection, description and systematic documentation of NP stages by mentioning, listing and linking the episodes that occur in professional practice.[7]

As there are no specific classifications for all areas of activity of nurses, it is necessary to collect and code terms used by nursing in clients and specific areas, which can be used later for the structuring of terminological subsets (TS).[8] TS are defined as a set of statements of nursing diagnoses, results and interventions for a specific selected area or specialty of nursing care based on the ICNP® Seven-Axis Model.[9] TS are essential for providing individualized care to clients and their families as an accessible reference for nurses.[10]

In addition, TS assist in generating diagnostic indicators. They are useful in practice, making it possible for nurses to quantify and qualify the results through their interventions, seeking through them to improve the quality of care.[10]

Considering the presented scenario, we searched for scientific productions on a specialized nursing terminology for people infected with AIDS at Latin American & Caribbean Literature in Health Sciences, Medical Literature Analysis and Retrieval System Online, Nursing Database, Scopus, Cumulative Index to Nursing and Allied Health Literature, Scientific Electronic Library Online, and Web of Science.

Shortage of studies related to the theme was identified, with only one research focusing on elderly women with HIV/AIDS[11] that started from a publication of the Ministry of Health focused on the female sex, not being ideal its use in this study, since a specialized nursing terminology was sought that also included the young adult population infected

with AIDS and which was extracted from nursing registries. The other studies dealt with specific terms related to the medical, surgical, neonatal and adult intensive care unit, physical-motor rehabilitation, ostomates, people with pressure injury, leprosy, and under palliative care.[12-20] Considering that elderly women have peculiarities associated with their life cycle and sex, which differentiate them from the young adult population of both sexes, it is justified to build a specialized terminology for adult people with AIDS.

It is important to highlight that nursing registries show nursing care, however, when incomplete or inaccurate, they can be misinterpreted.[12] Using specialized terminology allows detection of concepts that help in constructing nursing diagnoses, results and interventions, thus collaborating with nursing care.[20]

From this context, the question is: what terms are used by nurses in care of people infected with AIDS? What can constitute a specialized terminology that guides clinical practice and the effective recording of nursing data in patient care after their process of extraction, normalization and validation?

Thus, this study aimed to construct and validate specialized nursing terminology in care of adults infected with AIDS, based on the ICNP® Seven-Axis Model.

Methods

This is a methodological study developed with registry of nurses from the medical records of people infected with AIDS. The research was carried out in a public hospital in northeastern Brazil, a reference in infectious disease treatment.

The registries made by nurses from the physical records of people infected with AIDS, between January and December 2015, made available by the hospital's Medical and Statistical Archive Service, were selected. There is a specific space for nursing registries in these registries. During the established period, 198 patients with AIDS were admitted to the hospital, according to data obtained by the hospital's Medical Archives Service.

To determine the number of medical records needed for the study, we used the sample calculation for finite populations with a 10% sampling error, 95% confidence level ($Z\infty=1.96$) and 50% prevalence, constituting a sample of 65 medical records.[21] It is noteworthy that, because a study was not found that estimated the general prevalence of specialized terminology in nursing for hospitalized adult patients with AIDS, a 50% conservative value was considered.

In order to avoid selection bias, the systematized sampling process was used, and one medical record was selected every three listed sequentially. The interval every three was determined by dividing the total number of patients hospitalized in 2015 (198) by the sample of medical records (65) required for the study.

Medical records with registries of nurses during the hospitalization period of people aged 18 years and older infected with AIDS have been included in the study; and medical records with no registry in at least one shift of hospitalization, characterizing discontinuity of nursing registries have been excluded from the study.

Data collection took place from January to March 2016, and was performed by the main researcher, students and collaborators belonging to the research group of a federal educational institution, being supervised by the study advisor. A previous training was conducted for selection of employees and standardization of data collection. Thus, a 20-hour short course was carried out through the methodology of problematization, with discussions of texts, resolution of clinical case studies and simulation of extraction of terms from nursing registries. The topics addressed were ICNP®, standardization and cross-mapping of terms, elaboration of specialized nursing terminologies and nursing care of people infected with AIDS.

To calculate the number of experts, the methodological framework proposed by the authors was adopted,[22] using the formula $n = Z\alpha 2 * P* (1 - P)/ e^2$, in which "Zα" refers to the level of confidence adopted (95%); "P" represents the proportion of experts who indicate adequacy of items (85%); and "e"

represents the acceptable proportional difference in relation to what can be expected (15%). Therefore, as the Zα coefficient according to the normal distribution pattern assumes a tabulated value of 1.96 for a 95% confidence level, sample size calculation was defined by n=1,962*0.85*0.15/0.152 = 22 experts.

To identify the experts, the criteria of a study[11] were used and adapted. Thus, nurses called experts participated in the research group of a research group on studies of ICNP® from a federal university in Brazil, needing to present at least two of the following criteria: nurse with master's degree or PhD; researchers in ICNP®; assistant nurses in HIV/AIDS; and to have an article published on terminology or nursing process using ICNP®.

After refinement of the established criteria as well as the possibility of contacting them, nurses from a research group on ICNP® studies from a federal university were invited to participate in the research. Upon acceptance to participate, the Informed Consent Form and a structured form with the terms were sent via Google Forms. Assessment of the form occurred in only one round.

Of the 22 experts invited to participate in the study, only eight accepted, who responded to the instrument, constituting as experts of that study. The experts were mostly female (90%), between 25 and 35 years old (78%), holding master's degree in nursing (55%), and working in the hospital (80%). Validation took place between September and October 2019.

At the time, when the manuscript was written, the 2017 version of ICNP® was available, with which a first content validation was carried out, then the 2019 version was subsequently released. Whereas Standard ISO 12300[23] highlights that mappings should have continuous improvement processes as well as being maintained and regularly updated during its life cycle, it was considered necessary to update with this new version and, therefore, to perform a new mapping, which evidenced divergences between the terms contained between the two versions of ICNP® that make up the specialized terminology. In this sense, a new content validation was performed in 2019, justifying the time interval to complete the study.

The steps recommended by the authors[24] adapted for the elaboration of specialized terminology were extraction of terms from medical records and elimination of repetitions; standardization of terms; cross-mapping between extracted terms and the terms contained in ICNP® 2019; refinement of terms. In the second stage, they included adequacy of acronym and pharmacological classification of medications; in the third stage, ICNP® 2019 was used.

To extract the terms, a Microsoft Office Excel spreadsheet® 2016 was prepared, which contained two individualized columns for each medical record. The first had the transcription of the paragraphs of the records; and the second had the terms extracted from that paragraph.

After deleting repetitions after the completion of the organized-alphabetically spreadsheet and leaving only the first time the term appeared and counting the number of repetitions, the terms found were normalized. To that end, proofreading; standardization of verbal tenses, grammatical genres, and number; adequacy of acronyms; and exclusion of pseudoterminological expressions have been carried out.

The drugs were grouped by their pharmacological class, which are: Antibiotics, Antimycotics, Antivirals, Antiparasitics, Sulfonamides, Antihistamines, Expectorants, Bronchodilators, Cardiotonics, Beta-Blockers, Vasoconstrictors, Vasodilators, Antihypertensives, Coagulants, Anticoagulants, Platelet Antiaggregators, Antilipemics, Central Nervous System Depressants, Sedatives, Opioid Analgesics, Non-Opioid Analgesics, Anticonvulsants, Antiparkinsonian, Tranquilizers, Antidepressants, Anxiolytics, Nonsteroidal Anti-Inflammatory Drugs, Gastric Antisecretors, Antacids, Antiemetics, Laxatives, Antidiarrheals, Hypoglycemics, and Diuretics.

Subsequently, cross-mapping was performed in order to identify constant and non-constant terms in ICNP® 2019, and, in this phase, ISO 12300/2006 was used. Thus, the terms extracted from the medical records were crossed with those of ICNP® from Microsoft Office Access® 2016.

It is noteworthy that operational definitions were constructed for all standard terms using ICNP®, Brazilian Portuguese scientific articles and dictionaries and health technical terms, in order to facilitate validation by experts. The construction of operational definitions occurred according to the steps recommended by nursing literature:[25] 1) development of a preliminary definition; 2) literature review; 3) development or identification of specific characteristics; 4) mapping the meaning of the concept; 5) statement of the operational definition.

Then, a form containing the terms, their allocations in the seven axes of ICNP® and definitions, submitted to content validation, aligned with the basic human needs theory theoretical framework[26] in the three levels of psychic life, psychobiological, psychosocial, and psychospiritual, in order to support the study.

Thus, the group of expert nurses can indicate whether it considered it applicable or not and insert suggestions. The adjustments performed were discussed with the experts.

Finally, the concordance index (CI) among the experts for each term was calculated using the formula: CI=NA/(NA+ND), where NA = number of agreement and ND = number of disagreement.[27] Terms that reached a CI ≥ 0.80 among experts were validated.

The Research Ethics Committee approved the research, under Opinion 1,177,410. Regulatory guidelines and standards for research involving human subjects were observed.

Results

Two thousand terms were extracted from nursing registries from the medical records of people infected with AIDS, which, after normalization, resulted in 557 useful terms. Such terms were submitted to cross-mapping, totaling 319 constant terms and 238 non-constant in ICNP®. Five hundred and twenty-two terms were validated by experts, of which 319 were constant (Chart 1) and 203 were not constant (CI ≥ 0.80) (Chart 2).

Discussion

Nursing terminology has a relevant contribution to the profession, since its proper use and recognition contribute to increase of clinical reasoning capacity, important in the daily care practice of the class. Such terminology provides advantages for a qualifying and directed registry, enabling the development of a specific vocabulary of the field and in the search for reduction of ambiguity and incentive for completeness of the care system.[13]

Nursing registries should not be seen only as a bureaucratic part of the nurse's work, requiring a professional awareness of their importance and consequences of not filling out existing documentation correctly. On the other hand, among the limitations related to effective registry are the lack of human resources, lack of time to perform the documentation, lack of institutional interest and the culture that nursing is a support service to other health professionals.[20]

However, in this study, the results indicated a good quality of registries, and, after mapping, it was concluded that 319 terms were constant in ICNP® 2019, which denotes that nurses may be following nursing literature and applying terms in their daily practice, thus reinforcing their writing based on scientific evidence. A study[11] that identified terms for elderly women with HIV/AIDS from a specialized document of the Ministry of Health showed a greater scope also in the terms contained in ICNP®, corroborating the present study.

It should be noted that the research for elderly women with HIV/AIDS[11] brought similarities to the current study since 20 terms were found in both studies, which are: "Self-care", "Caretaking", "Body Process, Diagnosis And Outcome", "Injury", "Death", "Need", "Health" (Focus), "Presence" (Judgment), "Drug" (Means), "Applying", "Collaborating", "Consulting", "Controlling", "Developing", "Referring", "Advising", "Promoting", "Treating" (Action), "Body" (Location) and "Family", "Elderly" (Client). Although the first study was based on a publication by the Ministry of Health and the second from the

Chart 1. ICNP® 2019 constant terms

ICNP® axes	ICNP® 2019 constant terms
Focus	(n = 124) Tobacco Abuse (10019766); Access (10000340); Intravenous Access (10010780); Adaptation (10001741); Positive Affirmation (10024809); Agitation (10002035); Allergy (10041119); Medication Allergy (10011878); Hallucination (10008635); Distress (10006118); Appetite (10002455); Apnoea (10035012); Air (10002061); Ascites (10041946); Hearing (10008814); Self-Care (10017661); Fluid Balance (10034114); Bradycardia (10003613); Shiver (10018045); Cachexia (10003802); Characteristic (10004170); Shock (10018050); Crying (10005415); Coma (10004629); Complication (10025459); Aggressive Behavior (10002026); Communication (10004705); Concentration (10004910); Physiological Status (10014546); Comfort (10004655); Confusion (10004947); Consciousness (10004975); Constipation (10004999); Seizure (10046505); Caretaking (10004002); Cardiac Output (10003887); Defaecation (10005628); Swallowing (10019347); Dementia (10031091); Malnutrition (10042077); Diabetes (10005876); Diarrhoea (10005933); Body Process, Diagnosis And Outcome (10034421); Dyspnoea (10006461); Sprain (10018698); Pain (10013950); Oedema (10041951); Elimination (10006720); Balance (10003110); Rash (10016388); Sputum (10018717); Physical Examination (10032243); Expectoration (10007362); Fatigue (10007717); Fever (10007916); Wound (10021178); Faeces (10007764); Weakness (10024897); Heart Rate (10008833); Respiratory Rate (10016904); Blood Glucose (10030832); Adequate Hydration (10042342); Hyperglycaemia (10027521); Hypertension (10009394); Hyperthermia (10009409); Hypoglycaemia (10027513); Hypotension (10009534); Hypothermia (10009547); Depressed Mood (10005784); Inflammation (10010127); Eating (10006517); Restlessness (10017138); Insecurity (10010311); Insomnia (10010330); Skin Integrity (10018241); Injury (10010284); Airway Clearance (10002090); Urination (10020450); Death (10005560); Movement (10012274); Nausea (10012453); Need (10012495); Necrosis (10012482); Obstruction (10013555); Orientation (10013810); Hygiene Pattern (10009292); Oral Hygiene Pattern (10032204); Tissue Perfusion (10019745); Weight (10021034); Blood Pressure (10003335); Procedure (10034409); Itching (10010934); Fall (10007512); Arterial Blood Gas Result (10002543); Enteral Feeding Regime (10031223); Parenteral Feeding Regime (10032215); Cardiac Rhythm (10003904); Bleeding (10003303); Blood (10003319); Blood Oxygen Saturation (10030845); Health (10008711); Secretory Substance (10017635); Sedation (10040156); Vital Sign (10020829); Symptom (10019368); Nervous System (10013085); Sleep (10041399); Somnolence (10018512); Gastric Substance (10008313); Perspiration (10014449); Tachycardia (10019415); Temperature (10019556); Diagnostic Test (10031138); Cough (10005249); Tremor (10020146); Sadness (10017418); Ulcer (10020237); Pressure Ulcer (10015612); Urine (10020478); Ventilation (10020704); Effective Fluid Volume (10042054); Impaired Fluid Volume (10042008); Vomiting (10020864).
Judgment	(n = 18) Abnormal (10013269); Dependence (10026671); State (10018786); Extent (10007423); Large (10011116); Independence (10026721); Started (10018764); Mild (10025854); Improved (10026692); Moderate (10025865); Normal (10013295); Partial (10014081); Small (10018315); Impaired (10012938); Prescribed State (10015506); Presence (10046624); Progress (10015789); Actual (10000420).
Means	(n = 55) Central Line (10004115); Food (10008089); Analgesic (10002279); Antibiotic (10002383); Antipyretic (10037253); Suction Apparatus (10019029); Bandage (10003123); Wheelchair (10021052); Bed (10003168); Catheter (10004087); Urinary Catheter (10020373); Shower (10018084); Surgery (10019212); Surgeon (10019190); Urine Bag (10020484); Wound Dressing (10021227); Gauze Dressing (10008378); Restraint (10017164); Cream (10005352); Device (10005869); Covering Device (10005306); Respiratory Device (10016958); Drug (10006314); Draw Sheet (10006248); Enema (10006881); Nurse (10013333); Drip (10006295); Physiotherapist (10024003); Physiotherapy (10036434); Diaper (10005914); Haemodialysis (10008949); Insulin (10010400); Glove (10008487); Pacemaker (10013945); Mask (10011752); Oxygen Mask (10013909); Medication (10011866); Physician (10014522); Inhalation Therapy (10010213); Oxygen therapy (10013921); Pulse Oximeter (10032551); Plan (10014630); Patient Record (10014178); Protocol (10015926); Bed Linen (10003175); Social Worker Service (10018475); Solution (10018499); Suture (10019323); Technique (10019525); Aseptic Technique (10002639); Ambulation Technique (10002222); Intravenous Therapy (10010808); Endo Tracheal Tube (10006868); Gastrointestinal Tube (10008350); Commode (10004693).
Action	(n = 50) Administering (10001773); Scheduling (10017528); Alleviating (10002171); Altering (10002185); Applying (10002464); Aspirating (10002641); Increasing (10009961); Auscultating (10003012); Authorising (10003020); Assisting (10002850); Collaborating (10004542); Collecting (10004574); Verifying (10020727); Consulting (10005017); Contacting (10005038); Controlling (10005142); Developing (10005848); Decreasing (10005600); Draining (10006211); Elevating (10006691); Referring (10016576); Intubating (10010831); Stabilising (10018729); Stimulating (10018842); Drawing (10006230); Hygiene (10009285); Informing (10010162); Inserting (10010324); Installing (10010353); Cleaning (10004444); Maintaining (10011504); Massaging (10011768); Measuring (10011813); Mobilising (10012120); Advising (10001917); Observing (10013474); Obtaining (10013572); Permitting (10014408); Preparing (10015478); Prescribing (10015510); Promoting (10015801); Providing (10015935); Puncturing (10016152); Regulating (10016613); Requesting (10016873); Tracing (10019967); Transferring (10020030); Treating (10020133); Changing (10004162); Measuring (10011813).
Time	(n = 18) Admission (10001843); Acute (10001739); Discharge (10006000); Tomorrow (10019811); Continuous (10005086); Chronic (10004395); Day (10005502); Duration (10006379); Encounter (10006810); Examination (10007241); Present (10015581); Week (10021010); Frequency (10008234); Onset (10013689); Morning (10012226); Night (10013207); Afternoon (10001955); Visit (10020817).
Location	(n = 48) Abdomen (10000023); Forearm (10008164); Anus (10002417); Joint (10010968); Arm (10002504); Head (10008688); Oral Cavity (10013720); Clinic (10004459); Body (10003388); Scalp (10017494); Thigh (10019659); Heart (10008822); Prone (10015829); Finger (10007937); Right (10017234); Hospital Ward (10009133); Anal Sphincter (10002280); Urinary Sphincter (10020413); Left (10011267); Stomach (10018861); Face (10007481); Hospital (10009114); Lower (10011440); Intestine (10010557); Lip (10011377); Breast (10003650); Hand (10008661); Oral Mucous Membrane (10013731); Muscle (10012290); Nose (10013314); Foot (10008155); Skin (10018239); Lung (10011486); Penis (10014243); Peripheral (10014386); Leg (10011298); Neck (10012476); Position (10014788); Foreskin (10008186); Sacrum (10017402); Upper (10020325); Thorax (10019692); Trachea (10019922); Tracheostomy (10019933); Intensive Therapy Department (10010444); Urethra (10020339); Vein (10020665); Intramuscular route (10010705); Intravenous Route (10010798); Subcutaneous route (10018963).
Client	(n = 6) Adult (10001889); Family (10007554); Elderly (10006604); Sister (10021653); Mother (10027257); Patient (10014132).

registries of nurses, the common terms reflect biological aspects of care of people infected with AIDS.

Among the existing axes, "Focus" covered the highest frequency of constant terms in ICNP® in this study, justified by the fact that it presents the main areas of relevant care for nursing. This fact shows that nurses point out important situations in their registries and that they dignify in practice.

In "Focus", the constant term that presented a considerable frequency was "Vital Sign", while among the non-constant "Diet" stood out. Vital signs are considered clinical indicators of the he-

Chart 2. ICNP® 2019 non-constant terms

ICNP® axes	ICNP® 2019 non-constant terms
Focus	(n = 58) Abscess; Anasarca; Anorexia; Anuria; Apathy; Asystole; Asthenia; Welfare; Bronchoaspiration; Heartbeat; Headache; Cyanosis; Scar; Clot; Cholesterol; Induced Coma; Comorbidity; Vaginal Discharge; Crackles; Urinary Debt; Dehiscence; Dermatitis; Diet; Liquid Diet; Eupnea; Exudate; Phlebitis; Fluid; Inspiratory Oxygen Fraction; Hematuria; Hemiparesis; Hemothorax; Hypochromia; Hypotonia; Jaundice; Impatience; Ingestion; Isocoria; Fasting; Liquid; Lucidity; Melena; Vesicular Murmur; Normocardia; Normothermia; Enteral Nutrition; Pallor; Intestinal Pneumatosis; Positive Final Expiratory Pressure; Pulse; Rest; Restriction; Adventitious Noises; Heart Murmur; Tachypnea; Granulation Tissue; Fibrous Fabric; Torpor; Productive Cough.
Judgment	(n = 11) Absent; Deficiency; Motor Disability; Disabled; Stretched; Stable; Flaccid; Globous; Serious; Preserved; Satisfactory.
Means	(n = 78) Essential Fatty Acid; Sterile Water for Injection; Calcium Alginate; Ampoule; Anxiolytic; Antiarrhythmic; Antibiogram; Antidiarrheal; Antiemetic; Antispasmodic; Antiflatulent; Antifungal; Antihypertensive; Anti-Infectious; Antiretroviral; Bath; Shower Bath; Bed Bath; Benzyl Benzoate; Benzodiazepine; Bicarbonate; Infusion Bomb; Headboard; Chair; Bath Chair; Cardiologist; Venous Catheter; Potassium Chloride; Degenerative Chlorhexidine; Collagenase; Static Air Mat; Tablet; Red Blood Cell Concentrate; Platelet Concentrate; Iodinated Contrast; Corticoid; Culture of Koch's Bacillus; Occlusive Dressing; Wet Dressing; Urinary Device; Vasoactive Drug; Electrocardiogram; Glasgow Scale; Ramsay Scale; Sphygmomanometer; Adhesive Tape; Blood Test; Intermediate Extender; Flask; Employee; Gastrostomy; Blood Component; Blood Culture; Blood-Derived; Hydrocolloid; Hydrogel; Infusion; Thermal Blanket; Stretcher-Bearer; Papain; Parasitological Analysis of Feaces; On-Duty; Plasma; Pleurotomy; Ointment; Doctor's Prescription; X-ray; Alcoholic Solution; Physiological Solution; Glucose Solution; Nursing Technician; Oral Rehydration Therapy; Computed Tomography; Blood Transfusion; Trichotomy; Ultrasonography; Urine Culture; Mechanical Ventilation.
Action	(n = 23) Opening; Accepting; Waiting; Anticipating; Presenting; Calling; Consuming; Cooperating; Shutting Down; Closing; Fixing; Indicating; Introducing; Releasing; Modifying; Changing; Staying; Filling In; Searching; Accomplishing; Suspending; Using; Verbalizing.
Time	(n = 5) Daily; Frequent; Schedule; Moment; Sudden.
Location	(n = 23) Environment; Ambulatory; Bathroom; Cavity; Spine; Lateral Decubitus; Drugstore; Throat; Gluteal; Jejunostomy; Laboratory; Lymph Node; Urinary Meatus; Lower Limb; Upper Limb; Mucosa; Morgue; Fowler position; Emergency Room; Pupil; Inguinal Region; Jugular Vein; Upper Airway.
Client	(n = 5) Companion; Client; Wife; Son; Young.

modynamic conditions of any patient, and systemic blood pressure, respiratory rate, pulse/heart rate, temperature and pain were the most verified in clinical practice.[28]

People infected with AIDS have fluctuations in their clinical patterns, since the disease promotes immunosuppression of defenses, leaving patients susceptible to various diseases. For instance, hyperthermia episodes that may be linked to increased viremia, exacerbating the production of substances that affect the thermoregulatory system. Such clinical picture can affect other systems, such as cardiovascular, changing their physiological dynamics.[29]

Appropriate diet to people infected with AIDS is essential to reduce the repercussions of physiological stress, prevent or treat malnutrition, recover the individual in the long term and improve quality of life. It is feasible to point out that these patients have significant nutritional losses coming from pathological mechanisms, such as increase in catabolism, which may be related to the viral load of the individual. Moreover, the use of antiretroviral drugs that release coenzymes and change the pH of the juice of the taste buds affect the taste buds of patients. Thus, nursing plays a fundamental role in the success of this therapy. Nursing is responsible for diet administration; access of the gastrointestinal tract, when prescribed; maintenance of this route, and response to complications.[30]

In "Judgment", the term "Dependence" was observed more frequently as constant in ICNP®, indicating the commitment of people infected with AIDS assisted in the hospital. The later the diagnosis, the greater the complications related to the disease and the need for help in performing basic activities of daily living such as feeding, bathing, dressing and undressing, and medication administration.[29]

The non-constant term "Stable" reflects the patients' condition and denotes the impotence of assessment of their health status during their hospitalization period. Correct identification of the problems presented by patients, through a careful clinical assessment, becomes essential for the development of the nurses' actions.[5,6]

In "Means", the terms "Medication", constant, and "Shower Bath", non-constant, stood out. Medication is of paramount importance for the treatment of people infected with AIDS, since they need to use antiretroviral therapy (ART).

Non-adherence to ART can be considered a threat at individuals and collective levels, leading to impairment of drug therapy effectiveness and favoring dissemination of viruses that present resistance to available medications, respectively, in addition to the impact on public policies for the supply of antiretroviral drugs and the health system.[29] Thus, the role of nurses as paramount in supervising medication use, patient counseling and interventions adapted to the reality of each user, contributing to reduce mortality and improve the quality of life of these people.[5,6]

Shower bath is recommended as a measure of self-care stimulation. This is due to its potential to achieve functional gains, in promoting independent self-management and continuous performance of activities of daily living.[31]

In "Action", the most frequent constant term was "Administering"; among the non-constant, "Accepting" stood out. "Administering" is mainly related to ART, diet and care of people with AIDS hospitalized. Hypercaloric and high-protein diets are recommended for these patients, which contributes to the reduction of malnutrition and improvement of the clinical picture.[29]

The initial antiretroviral regimen recommended by the Ministry of Health is composed of tenofovir, lamivudine, and dolutegravir. This aims to prevent viral replication, consequently reducing viral load and thus decreasing patient mortality.[29] Nurses must have a domain about the scheme, dose, frequency and adverse effects, thus prioritizing patient safety, which is a fundamental principle of care.

The term "Accepting" is related to the prescribed medication, diet and disease diagnosis. In this context, nurses can contribute to the patient's acceptance of this diagnosis, necessary orientations in view of the changes imposed by the new health condition, in the treatment and health education actions.[3] Moreover, acceptance is a strategy of coping/psychological adaptation that contributes to the overcoming and self-care of people infected with AIDS.[32]

Concerning "Time", the terms "Admission" and "Schedule" were identified as more frequent. In turn, "Admission", a constant term in ICNP®, represents an important moment to collect data, facilitate the adaptation of patients to the hospital, besides providing comfort and safety. Moreover, information obtained at admission allows follow-up of clients until discharge.

"Schedule" is linked to nursing care and technical procedures, standardized according to the institution. The actions found in the prescription need to be verified after carrying out care schedule, such as checking vital signs, administering medications, changing decubitus and type of diet, thus allowing a comprehensive care of patients with AIDS.[3]

In "Location", there was a predominance of the term "Right", constant in ICNP®, and the term "Bathroom", non-constant in this classification system. "Right" in nursing registries refers to body structure and was strictly linked to the site of venous punctures, both central and peripheral, which due to the specific protocol of the unit where the data were collected, are primarily performed on the right side and upper limb, respectively. A prospective study conducted in a hospital unit in southeastern Brazil identified the right basil vein as the main puncture site, followed by the right brachial vein.[33]

The term "Bathroom" corresponds to the place of patient hygiene, being one of the care prescriptions of nurses in the institution, in order to stimulate self-care and independence.

With regard to "Client", the use of the constant term "Patient", as well as the non-constant term "Client", demonstrates that care was focused, above all, on the individual, not mentioning the participation of the family in care, in the nursing registries analyzed in that hospital. Moreover, "Patient" is a very frequent word within the hospital environment, suggesting a position that indicates passivity in relation to health professionals.

It is important to highlight that the current study validated non-constant 203 terms in ICNP®. In a research conducted on database terms for nursing practice with elderly women with HIV/AIDS,[11] only 69 non-constant terms were validated, and this may be related to the methodological magnitude given to this investigation, since it was

used for analysis of registries of nurses from 65 medical records.

A study that sought to define non-constant terms in ICNP® 2015 for nursing practice with elderly women with vulnerabilities to HIV/AIDS reports that, even though they are not included in ICNP®, the terms translate determining factors of the clientele that have been identified in the theme of interest aimed at a population that needs effective and emancipatory nursing care. Thus, these terms characterize, with greater precision, specificities of this population, representing a contribution to the verbal structuring of nursing diagnoses, outcomes and interventions.[34]

Therefore, high number of non-constant terms validated in this study indicates an advance in nursing terminology in care of people living with HIV/AIDS since they progressed with terms resulting from an experience that is unique. The fact that the updated versions of ICNP® contemplate new terms demonstrates the relevance of constant updating of a classification that aims to universally represent nursing practice. It is emphasized that standardized systems of registries of elements of nursing practice based on ICNP® require adaptation to classification reviews not to become obsolete.[34]

Given these perspectives, the terms will be the basis for constructing statements of diagnoses, results and nursing interventions, characterizing, thus, a progress in the nursing nomenclature as well as subsidizing the advancement of the profession. They will be part of an incentive for the following phases of construction of a TS that serves the human being comprehensively.[35]

Therefore, the terms herein may contribute to a systematic approach to nursing care in clinical practice, giving greater clarity and ease in its implementation, when transformed into statements for NP. This is possible by use of observable empirical data and by determination of concepts, giving direction and favoring the decision-making of nursing professionals about their actions.[35]

The limitation of the search refers to the non-use of software for extracting terms. However, a previous training was carried out in order to maintain a methodological rigor.

Conclusion

This research allowed the construction of a specialized nursing terminology for care of adults with AIDS, with the terms in ICNP® 2019 prevailing in "Focus" and "Means". It should be noted that a significant number of non-constants have also been identified, for which inclusion in the International Nurses Council in a future version of this Classification will be suggested. As potential studies for further research, it will enable the structuring of a terminological subset of ICNP® directed to care of people infected with AIDS, as well as clinical instruments, identification of nursing indicators and conceptual models. Extraction of the terms from the nurses' registries stands out as a potentiality of this research, since it reflects particularities of nursing care. Moreover, it contributes to the advancement of knowledge related to ICNP® use in care of people with AIDS. It also contributes to the standardization of professional language and nursing development, in addition to providing subsidies for teaching and continuing education, with a focus on patient safety.

Acknowledgments

The research was funded by the Brazilian National Council for Scientific and Technological Development (*Conselho Nacional de Desenvolvimento Científico e Tecnológico*, abbreviated CNPq) through Universal Call 01/2016 - Range A, under Process 402978/2016-1 - "*Diagnósticos/resultados e intervenções de enfermagem da CIPE® para pessoas vivendo com Aids: estruturação de um subconjunto terminológico*".

Collaborations

Silva BCO, Santos RM, Santos FR, Padilha TMS, Moreira OAA, Tavares ES and Silva RAR declare that they contributed to the study design, analysis and interpretation of data, writing of the article, rel-

evant critical review of the intellectual content and approval of the final version to be published.

References

1. Avong YK, Jatau B, Gurumnaan R, Danat N, Okuma J, Usman I, et al. Addressing the under-reporting of adverse drug reactions in public health programs controlling HIV/AIDS, tuberculosis and malaria: a prospective cohort study. PLoS One. 2018;13(8):e0200810.
2. Joint United Nations Program on HIV/AIDS Brasil. Estatísticas. Brasília: Joint United Nations Program on HIV/AIDS Brasil; 2019.
3. Souza Neto VL, Silva RA, Silva CC, Negreiros RV, Rocha CC, Nóbrega MM. [Proposal of nursing care plan in people hospitalized with AIDS]. Rev Esc Enferm USP. 2017:51(e03204):1-9. Portuguese.
4. Rocha GS, Angelim RC, Andrade AR, Aquino JM, Abrão FM, Costa AM. [Nursing care of HIV-positive patients: considerations in the light of phenomenology]. Rev Min Enferm. 2015;19(2):258-61. Portuguese.
5. Conselho Federal de Enfermagem (COFEN). Resolução nº 358 do Conselho Federal de Enfermagem, de 15 de outubro de 2009. Brasília (DF): COFEN; 2009.
6. Leal RG, Bastos CR, Rodrigues AL, Pires SM, Carvalho DR, Cubas MR. [Validation of the definition of terms identified in electronic records of nursing of a university hospital]. Cienc Cuid Saude. 2017;16(1):1-8. Portuguese.
7. Garcia TR. [ICNP®: a standardized terminology to describe professional nursing practice] Rev Esc Enferm USP. 2016;50(3):376-79. Portuguese.
8. Strudwick G, Hardiker NR. Understanding the use of standardized nursing terminology and classification systems in published research: A case study using the International Classification for Nursing Practice(®). Int J Med Inform. 2016;94:215-21.
9. Bittencourt GK, Siqueira MC, Beserra PJ, Nóbrega MM, Nogueira JA, Silva AO. [Mapping of nursing diagnosis for elderly women in the context of vulnerability to HIV/AIDS]. Rev Enferm UFPE on line. 2015;9(4):7364-74. Portuguese.
10. Tannure MC. Sistematização da Assistência de Enfermagem – Guia prático. 2a ed. Rio de Janeiro: Guanabara Koogan; 2010.
11. Siqueira MC, Bittencourt GK, Nóbrega MM, Nogueira JA, Silva AO. [Term base for nursing practices with elderly women with HIV/AIDS]. Rev Gaúcha Enferm. 2015;36(1):28-34. Portuguese.
12. Carvalho CM, Cubas MR, Nóbrega MM. [Terms of the specialized nursing language for the care of ostomates]. Rev Bras Enferm. 2017;70(3):461-7. Portuguese.
13. Duarte FH, Santos WN, Silva FS, Lima DM, Fernandes SF, Silva RA. [Terms of specialized nursing language for people with pressure injury]. Rev Bras Enferm. 2019;72(4):1028-35. Portuguese.
14. Oliveira MD, 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. Portuguese.
15. Andrade LL, Costa KN Nóbrega MM, Oliveira JS, Accioly CM. [Termos identificados em uma clínica médica e classificados como não constantes na CIPE®]. Rev Eletr Enf. 2012;14(2):330-6.
16. Norat EM, Trigueiro EV, Nóbrega MM, Garcia TR. Banco de termos da linguagem especial de enfermagem da clínica cirúrgica de um hospital universitário. J Nurs UFPE online. 2009;3(2):204-14.
17. Nóbrega MM, Garcia TR, Nóbrega RV, Araújo RT. Banco de termos da linguagem especial de enfermagem da unidade de terapia intensiva neonatal de um hospital de ensino. Online Braz J Nurs. 2009;8(2):1-16. Portuguese.
18. Souza DR, Andrade LT, Napoleão AA, Garcia TR, Chianca TC. [Terms of International Classification for Nursing Practice in motor and physical rehabilitation]. Rev Esc Enferm USP. 2015;49(2):2009-15. Portuguese.
19. Silva RS, Nóbrega MM, Medeiros AC, Jesus NV, Pereira A. [Terms of the ICNP® used by the team of nurses assisting people in palliative cares]. Rev Eletr Enf. 2015;17(2):269-77. Portuguese.
20. Gomes DC, Cubas MR, Pleis LE, Shmeil MA, Peluci AP. [Terms used by nurses in the documentation of patient progress]. Rev Gaúcha Enferm. 2016;37(1):e53927:1-8. Portuguese.
21. Fontelles MJ, Simões MG, Almeida JC, Fontelles RG. Metodologia da pesquisa: diretrizes para o cálculo do tamanho da amostra. Rev Para Med. 2010;24(1):57-64.
22. Lopes MV, Silva VM, Araujo TL. Validação de diagnósticos de enfermagem: desafios e alternativas. Rev Bras Enferm. 2013;66(5):649-55.
23. International Organization for Standardization (ISO). ISO 12300: health informatics: principles of mapping between terminological systems. Genebra: ISO; 2016.
24. Tannure MC, Chianca TC, Garcia TR. Construção de um banco de termos da linguagem especial de enfermagem. Rev Eletr Enf. 2009;11(4):1026-30.
25. Lenz E. Basic principles of measurement: operationalizing nursing concepts. In: Waltz CF, Strickland OL, Lenz E. Measurement in nursing and health research. 5th ed. New York: Springer Publishing Company; 2017.
26. Horta WA. Processo de enfermagem. Rio de Janeiro: Guanabara Koogan; 2011.
27. Batista CG, Matos MM. O acordo entre observadores em situação de registro cursivo: definições e medidas. Psicologia. 1984;10(3):57-69.
28. Teixeira CC, Boaventura RP, Souza AC, Paranaguá TT, Bezerra AL, Bachion MM, et al. [Vital signs measurement: an indicator of safe care delivered to elderly patients]. Texto Contexto Enferm. 2015;24(4):1071-8. Portuguese.
29. Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Vigilância, Prevenção e Controle das Infecções Sexualmente Transmissíveis, do HIV/aids e das Hepatites Virais. Protocolo clínico e diretrizes terapêuticas para manejo da infecção pelo HIV em adultos. Brasília (DF): Ministério da Saúde; 2018.
30. Miranda RN, Kauffmann LKO, Pinto AF, Gonçalves RSL, Guterres AS. Caracterização antropométrica, dietética e alterações gastrointestinais de pacientes hospitalizados imunodeprimidos. Para Res Med J. 2019;3(2):e24:1-9.
31. Prado AR, Ramos RL, Ribeiro OM, Figueiredo NM, Martins MM, Machado WC. [Bath for dependent patients: theorizing aspects of nursing care in rehabilitation]. Rev Bras Enferm. 2017;70(6):1408-13. Portuguese.
32. Silva RT, Silva RA, Rodrigues ID, Souza Neto VL, Silva BC, Souza FM. [Coping strategies of people living with aids in face of the disease] Rev Latino-Am. Enfermagem. 2018;26(e2985)1-8. Portuguese.
33. Santo MKD, Takemoto D, Nascimento RG, Nascimento AM, Siqueira E, Duarte CT, et al. Peripherally inserted central venous catheters: alternative or first choice vascular access?. J Vasc Bras. 2017 ;16(2):104-12.

34. Ferreira KS, Santos MC, Beserra PJ, Bittencourt GK. [Definition of non-constant terms in the international classification for nursing practice for elderly women with vulnerabilities to HIV/AIDS]. Rev Enferm UFPE on line. 2017;11(11):4424-34. Portuguese.

35. Silva CL, Cubas MR, Silva LL, Cabral LP, Grden CR, Nichiata LY. Nursing diagnoses associated with human needs in coping with HIV. Acta Paul Enferm. 2019;32(1):18-26.