







Specialized Nursing Terminology for Premature Newborns in Neonatal Intensive Care Units

Terminologia especializada de Enfermagem para recém-nascido prematuro em unidades de terapia intensiva neonatal

Danielle Lemos Querido¹ , Marialda Moreira Christoffel¹ , Viviane Saraiva de Almeida¹ ,
Elisa da Conceição Rodrigues¹ , Sílvia Maria de Sá Basílio Lins¹ , Juliana Melo Jennings¹ 

ABSTRACT

Objective: to build a terminology of specialized nursing language for premature newborns admitted to the Neonatal Intensive Care Unit based on the CIPE® 2019/2020. **Method:** descriptive, methodological study, with data from medical records of premature newborns and scientific publications. Extraction and standardization of relevant terms and cross-mapping with the CIPE® were performed. **Results:** 154 constant and 264 non-constant terms were extracted. In the Focus axis, 37% of the terms were found, 50 constant and 104 non-constant; Location (17%), 37 constant and 36 non-constant; Action (15%), 30 constant and 33 non-constant; Means (13%), 14 constant and 41 non-constant; Judgment (10%), 8 constant and 34 non-constant; Time (6%), nine constants and 15 non-constants and Customer (2%), 6 constants and 1 non-constant. **Conclusion:** a specialized terminology was built based on the CIPE®; however, clinical validation is necessary and nurses must to appropriate this terminology to strengthen the representation of newborns.

Descriptors: Classification; Standardized Nursing Terminology; Nursing Diagnosis; Infant, Newborn; Intensive Care Units, Neonatal

RESUMO

Objetivo: construir uma terminologia da linguagem especializada de enfermagem para recém-nascido prematuro internado na Unidade de Terapia Intensiva Neonatal a partir da CIPE® 2019/2020. **Método:** estudo descritivo, metodológico, com dados de prontuários de recém-nascidos prematuros e publicações científicas. Realizou-se extração e normalização de termos relevantes e mapeamento cruzado com a CIPE®. **Resultados:** extraímos 154 termos constantes e 264 não constantes da CIPE®. No eixo Foco encontramos 37% dos termos, 50 constantes e 104 não constantes; Localização 17%, 37 constantes e 36 não constantes; Ação 15%, 30 constantes e 33 não constantes; Meio 13%, 14 constantes e 41 não constantes; Julgamento 10%, oito constantes e 34 não constantes; Tempo 6%, nove constantes e 15 não constantes e Cliente 2%, seis constantes e um não constante. **Conclusão:** foi construída uma terminologia especializada com base na CIPE®, que deverá passar por validação clínica e apropriação por parte dos enfermeiros para fortalecer a representatividade da clientela neonatal.

Descritores: Classificação; Terminologia Padronizada em Enfermagem; Diagnóstico de Enfermagem; Recém-Nascido; Unidades de Terapia Intensiva Neonatal.

¹ Universidade Federal do Rio de Janeiro (UFRJ) – Rio de Janeiro (RJ), Brasil. E-mails: danyquerido@me.ufrj.br, marialdanit@gmail.com, vivianesaraiva@hotmail.com, elisadaconceicao@gmail.com, silviamarialins@gmail.com, julianapsmelo@gmail.com.

How to cite this article: Querido DL, Christoffel MM, Almeida VS, Rodrigues EC, Lins SMSB, Jennings JM. Specialized Nursing Terminology for Premature Newborns in Neonatal Intensive Care Units. Rev. Eletr. Enferm. [Internet]. 2022 [cited _____];24:71067. Available from: <https://doi.org/10.5216/ree.v24.71067>.

Corresponding author: Danielle Lemos Querido. E-mail: danyquerido@me.ufrj.br.

Received: 12/03/2021. Approved: 03/06/2022. Published: 12/13/2022.

INTRODUCTION

Prematurity is the leading cause of neonatal mortality in Brazil and can affect the physical health and cognitive and behavioral dimensions of newborns, making it one of the most significant challenges for modern public health⁽¹⁾. The main factors associated with neonatal death are low birth weight, gestational risk and newborn conditions. In addition, extreme preterm infants and those with extremely low birth weight are 200 to 300 times more likely to die in the first 28 days of life compared to term infants with birth weight \geq 2,500g⁽¹⁾.

In the Neonatal Intensive Care Unit (NICU), nurses develop a work methodology. From a specific theoretical framework, they can base their technical and critical skills, making it possible to build their standards of care through specialized terminology that allows the recognition and registration of their professional practice language⁽²⁾.

To develop this record, the International Council of Nurses (ICN) recommends that specialized language be used. It highlights the International Classification for Nursing Practice (Portuguese acronym: CIPE®) as a terminology that represents the domain of practice and unifies the language of nursing worldwide⁽³⁾.

Although the ICN strongly recommends that nurses develop research in their work environments to ensure the dynamic nature of the CIPE®⁽⁴⁾, there is a gap in relation to publications aimed at the population of premature newborns admitted to the NICU.

Regarding studies on specialized nursing terminology, it is observed that most are aimed at an adult population. Between 2020 and 2021, we found some publications dealing with nursing terminologies for caring for people with COVID-19⁽⁵⁾, prevention of falls in the elderly in primary care⁽⁶⁾, care for people with chronic heart failure⁽⁷⁾, chronic renal patients undergoing conservative treatment⁽²⁾, among others that do not address neonatology as a health priority.

The construction of specialized terminologies constitutes the initial phase of the elaboration of the CIPE® terminological subsets. An integrative literature review with a bibliometric approach characterized the intended subsets published between 2008 and 2017 and found no studies with newborns admitted to the NICU⁽⁸⁾. Another study developed from the search for works on the theme of the CIPE® between 2000 and 2018 found 133 works. Of these studies, only 10.1% were on the subject of child and adolescent health, but the authors do not highlight neonatology⁽⁹⁾.

Considering the problem presented, the development and importance of this study is justified by its innovative potential for the construction of a specialized language terminology for the population studied. In this way, subsidizing the construction of diagnoses, results and nursing interventions to be inserted into information systems, facilitating

clinical decision-making, affecting the quality of care and strengthening nursing as a science.

OBJECTIVE

To build a terminology of specialized nursing language for premature newborns admitted to the Neonatal Intensive Care Unit based on the CIPE® 2019/2020.

METHODS

Methodological study, conducted by the first and second stages of the guidelines for the elaboration of terminological subsets (identification of terms and cross-mapping between the terms/concepts extracted from the CIPE®⁽¹⁰⁾ 2019/2020) (Figure 1). Data collection took place from July to December 2019 and consisted of two sample sources of specialized documentation: nursing records of (physical) medical records of premature newborns admitted to the NICU of a maternity hospital in Rio de Janeiro and publications found in national and international database.

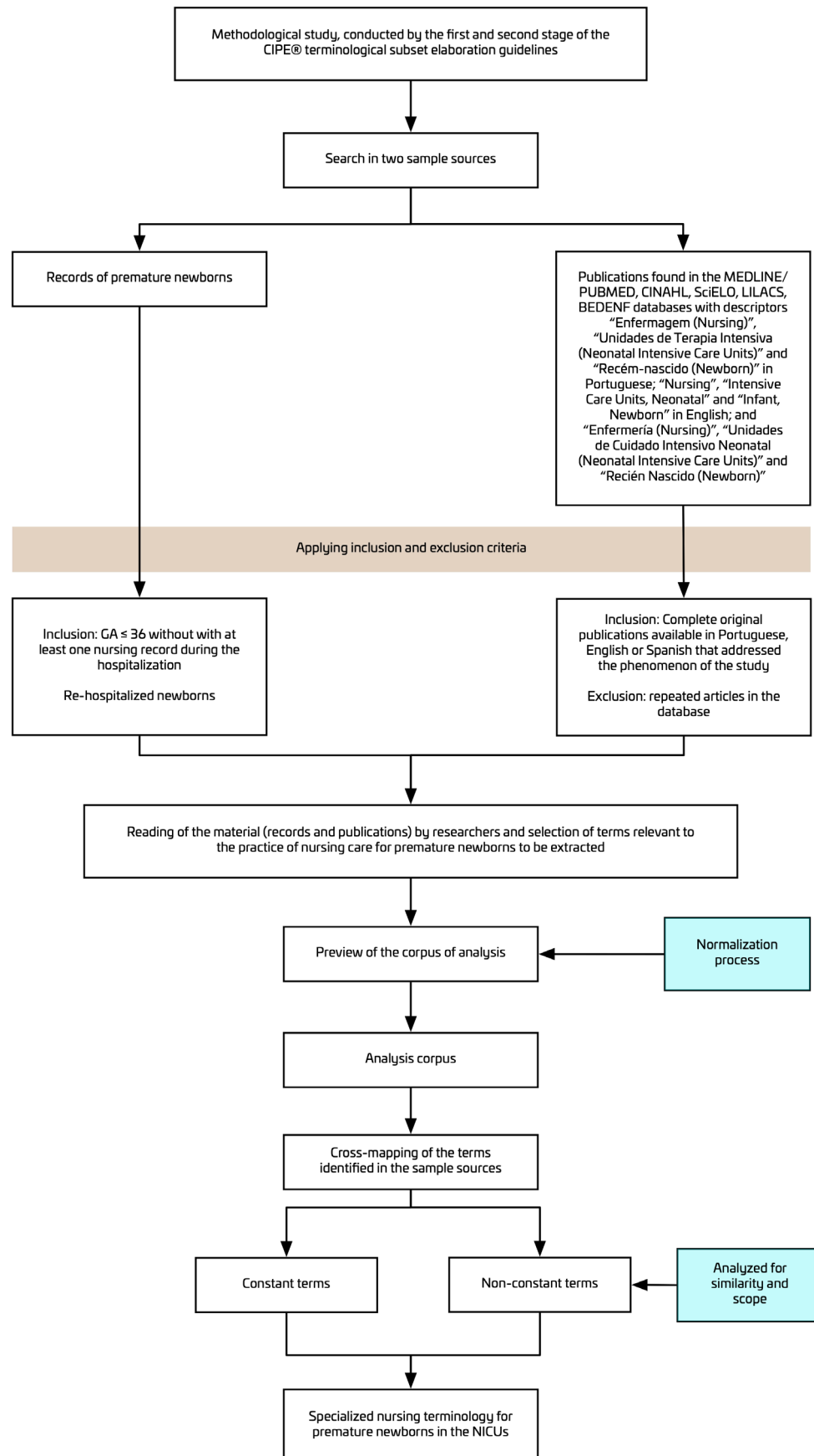
The sample of medical records consisted of registers of newborns admitted to the NICU, complying with the following inclusion criteria: (I) gestational age at admission \leq 36 weeks; (II) have at least one nursing record during the hospitalization. Re-hospitalized newborns were excluded, so that they would not be counted more than once; and those who were transferred to another unit were excluded, due to unavailability of medical records.

After applying these criteria, 70 medical records (physical) were evaluated during the study period, consisting of 2,520 nursing records, which corresponds to an average of 36 per medical record (18 during the day and 18 at night). At the time of hospital discharge, the records made by nurses were collected in a specific form.

Regarding the sample composed of publications, a literature review was carried out from articles indexed in the databases Medical Literature Analysis and Retrieval System Online (MEDLINE/ PUBMED), Cumulative Index to Nursing and Health Literature (CINAHL), Scientific Electronic Library Online (SciELO), Latin American and Caribbean Literature on Health Sciences (LILACS) and Nursing Database (BDENF). The research was guided by the following question: what are the terms of specialized nursing language that guide clinical practice related to care for premature newborns in the NICU present in the literature?

The Health Sciences Descriptors (DeCS) and Medical Subject Headings (Mesh) associated with the Boolean operator AND were: “Enfermagem (Nursing)”, “Unidades de Terapia Intensiva (Neonatal Intensive Care Units)” and “Recém-nascido (Newborn)” in Portuguese; “*Nursing*”, “*Intensive Care Units, Neonatal*” and “*Infant, Newborn*” in

Figure 1. Methodological description of the study, 2021



English; and “*Enfermería* (Nursing)”, “*Unidades de Cuidado Intensivo Neonatal* (Neonatal Intensive Care Units)” and “*Recién Nacido* (Newborn)” in Spanish.

The complete original publications available in Portuguese, English or Spanish dealing with the study topic were included in the sample⁽¹⁰⁾. That is, those dealing with relevant concepts directly or indirectly associated with premature newborns admitted to the NICU. Articles repeated in the databases were excluded.

Initially, 180 articles were selected and, after reading the title and abstract, 70 were read in full. Upon further reading, 35 publications were included in the study.

For the collection and organization of data, the study had the participation of the researcher and two more nurses (doctors), members of the Commission for the Implementation of the Systematization of Nursing Care of the Maternity where the research was carried out, appointed through an institutional ordinance. In addition, they are specialists in neonatology.

The researchers performed the collection independently and after reading the material individually (records or scientific publication), the terms were identified and transcribed manually. Subsequently, these were typed into a Microsoft Excel for Windows 2013 spreadsheet, constituting a preview of the analysis corpus, validated by consensus by the data collection and organization team.

This material was submitted to the standardization process. For this, the terms were organized in alphabetical order, synonyms were analyzed and excluded, the verb tenses and grammatical gender and number (singular and plural) and acronyms were written in full. For terms found both in the masculine and in the feminine gender, the term in the masculine was adopted as a rule; for terms found both in the singular and in the plural, the term in the singular was adopted as a rule and, for terms related to therapeutic nursing actions, the verb was kept in the infinitive⁽¹⁰⁾.

In a second step, the terms extracted (prior to the validated analysis corpus) were cross-mapped with those contained in the CIPE[®]⁽¹¹⁾. Thus, the listing of terms in the specialized documentation was cross-referenced with those existing in the CIPE[®] Seven Axis Model. For this crossing, the Access for Windows 2010 program was used, allowing the identification of constant and non-constant terms in this terminology.

The terms were distributed among the Action, Customer, Focus, Judgment, Location, Means and Time axes, according to the CIPE[®] 2019/2020 Seven Axis Model. The constant terms were replicated using the corresponding codes taken from the CIPE[®] browser. Non-constant terms were analyzed for similarity/similitude and scope⁽¹²⁾, and, considering the congruence of the meaning of the term and the operational definitions of each axis, they were distributed among the seven axes of the CIPE[®]. These definitions were constructed

from scientific articles and Portuguese-language dictionaries and from technical health terms⁽¹⁰⁾.

After this stage, the data collection and organization team met again to validate by consensus the definitions and classification of terms in the CIPE[®] axes. This material constituted the corpus of analysis with the final data that were organized into tables and graphs for descriptive analysis (simple frequency) and discussed in the light of national and international literature associated with premature newborns admitted to the NICU.

The present study met the ethical requirements of Resolution 466/12 of the National Health Council. The anonymity of the participants whose medical records were researched was maintained, and the proposing institution (No. 2,618,413) and co-participant (2,684,047) received a favorable opinion for its implementation.

RESULTS

528 terms that should compose the sample were extracted from the documentary sources, after consensual selection of the researchers. 418 terms considered useful to describe nursing care related to premature newborns admitted to the NICU, according to Figure 2.

It is observed that the Focus axis encompasses 37% of these terms, followed by Location (17%), Action (15%), Means (13%), Judgment (10%), Time (6%) and Customer (2%).

Regarding the constant terms, 154 terms were extracted, which are shown in the Figure 3 with their respective codes.

Regarding terms not included in the CIPE[®], 264 terms were found, of which 118 were considered new terms, 88 similar, 44 more restricted and 14 more comprehensive, as shown in the table below.

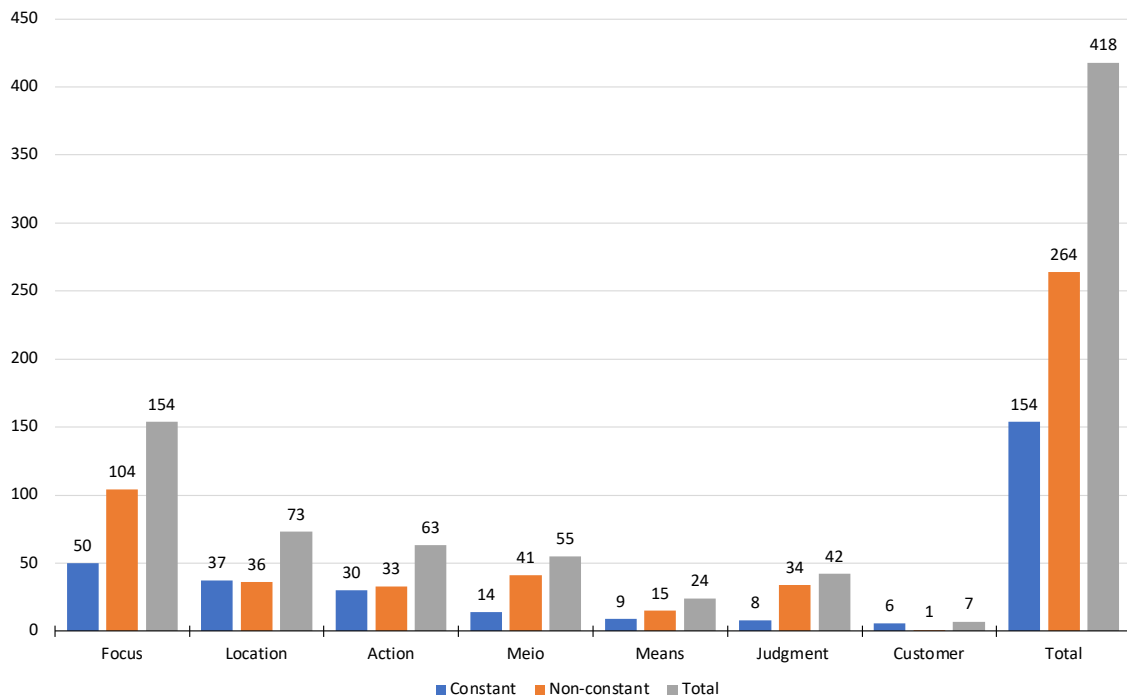
DISCUSSION

The use of specialized language elevates Nursing as a science and strengthens the applicability of concepts, whether in teaching, research or care, assuming a fundamental role in the creation and organization of knowledge⁽¹³⁾.

The constant concepts linked to the CIPE[®] are present in the work process and contemplate important phenomena of the profession, collaborating for the development of Nursing⁽¹⁴⁾.

It can be seen that most of the terms extracted from the specialized documentation for the study target population were classified as non-constant. In addition, most of these terms were considered new, that is, much of the specialized language of neonatal nursing is not present in the CIPE[®], because nurses either use similar terms or totally different terms.

Figure 2. Quantitative distribution by the CIPE® axis of terms of specialized neonatal nursing language extracted from sample sources, Rio de Janeiro, RJ, Brazil, 2021



In the Focus axis, terms such as “apnea”, “dyspnea”, “hypoxia” and “nasal cpap” stand out”. Premature newborns have pulmonary immaturity that presents as prolonged apnea with bradycardia and associated drop in saturation, or brief pauses in breathing, periodic breathing, and intermittent hypoxia. The severity of clinical symptoms is inversely proportional to gestational age and they are a common occurrence in the NICU⁽¹⁵⁾.

Still on the Focus axis, other terms are relevant, such as “thin skin” and “jelly skin”. These characteristics are peculiar to premature newborns, as the stratum corneum will only be morphologically mature at the end of the second trimester. In addition, its thickness, as well as that of the epidermis and dermis, increases depending on the gestational age and gives the skin an improved barrier function⁽¹⁶⁾.

In this sense, care for the skin of premature newborns is a constant concern of professionals working in NICUs, started soon after birth to maintain its integrity. Very thin skin becomes friable and extremely fragile, and can be injured during the removal of adhesives, punctures and due to excess local pressure; which can cause possible infections.

In the context of the NICU, terms such as “low weight” and “extremely low weight” are directly related to others such as “Kangaroo Method” and “Skin-to-Skin Contact”, being familiar to the nurse’s vocabulary as they are terms included in the national public health policy for Humanized Care for Low Weight Newborns – Kangaroo Method⁽¹⁷⁾. This policy describes, through a detailed (and frequently updated) rule, issues related to the humanization of care, which is a

facilitator for its adherence and for the transformation of care for premature newborns and their families⁽¹⁸⁾. Premature and newborns with low weight are potentially eligible to be included in these specialized care that include the use of non-pharmacological measures for pain relief; encourage early skin-to-skin contact that starts with touch and gradually reaches the kangaroo position; care with the NICU environment (excessive noise and light); parental participation in care, encouraging breastfeeding and bonding⁽¹⁷⁾.

The term Peripherally Inserted Central Catheter (PICC), from a clinical point of view, can be defined as a device used as an effective and safe venous access alternative for critically ill patients⁽¹⁹⁾. In the context of the NICU, the nurse is responsible for the entire process of indication, insertion, maintenance and removal of this catheter⁽²⁰⁾. In this way, the nurse is the protagonist in the management of any problem arising from the use of the device as well as in solving adverse situations.

To promote adequate intravenous therapy in the NICU environment, the PICC becomes essential, as, in addition to other advantages, it reduces the frequency of peripheral punctures⁽¹⁹⁾. Consequently, reducing the stress and pain related to this procedure.

Terms related to newborn feeding, such as “breastfeeding”, “gastric tube”, “cup” and “diet”, gain thematic relevance in relation to premature newborns. Nursing care in breastfeeding encompasses a series of specific actions for promotion, protection and support, involving the guidance of the mother to maintain milk production with human milk expression

Figure 3. Terms of specialized neonatal nursing language contained in the CIPE®, according to classification axes, Rio de Janeiro, RJ, Brazil, 2021

Axis	Terms contained in the CIPE® (Code)
Focus (f=50)	Acceptance (10000329), Breast-feeding (10003645), Apnea (10035012), Anxiety (10002429), Aspiration (10002656), Bilirubin (10041443), Bradycardia (10003613), Length (10011312), Shock (10018050), Cry (10005415), Comfortable (10025330), Dehydration (10041876), Diarrhea (10005933), Dyspnea (10006461), Pain (10013950), Edema (10041951), Elimination (10006720), Physical exam (10032243), Fever (10007916), Feces (10007764), Hematoma (10008931), Hyperglycemia (10027521), Hypertension (10009394), Hypoglycemia (10027513), Hypotension (10009534), Hypothermia (10009547), Hypoxia (10009608), Injury (10010284), Fear (10007738), Obstruction (10013555), Weight, effective (10027385), Weight, effective (10027385), Blood pressure (10003335), Suction reflex (10019017), Motor reflex (10012257), Zero Diet Regime (10046386), Regurgitation (10016632), Bleeding (10003303), Secretion (10017635), Sedation (10040156), Safety (10032676), Environmental safety (10031247), Vital Sign (10020829), Sleep (10041399), Suction (10019001), Tachycardia (10019415), Temperature (10019556), Tremor (10020146), Pressure ulcer (10015612), Ventilation, Spontaneous (10018651), Vomit (10020864)
Action (f=30)	Accompany (10042609), Manage (10001773), Apply (10002464), Support (10019142), Aspire (10002641), Evaluate (10007066), Cover (10005296), Control (10005142), Decrease (10005600), Raise (10006691), Forward (10016576), Wrap (with cloth, etc.) (10006224), Encourage (10018842), Avoid (10003077), Sanitize (or Take Care of Hygiene) (10009285), Identify (10009631), Insert (10010324), Install (10010353), Maintain (10011504), Measure (or Check) (10011813), Observe (10013474), Guide (10019502), Weight (10021023), Plan (10014648), Position (10014757), Promote (10015801), Punch (10016152), Register (10016498), Remove (10016763), Supervise (10019093)
Location (f=37)	Abdomen (10000023), Areola (10002493), Urinary bladder (10020360), Head (10008688), Oral (or Buccal) Cavity (10013720), Central (10004104), Colostomy (10004590), Thigh (10019659), Right (10017234), Distal (10006085), Left (10011267), Stomach (10018861), Face (10007481), Forehead (10008172), Ileostomy (10009727), Inferior (10011440), Lip (10011377), Tongue (10019824), Hand (10008661), Nose (10013314), Eyes (10007452), Shoulder (10041174), Ear (10006488), Foot (10008155), Skin (10018239), Peripheral (10014386), Perineum (10014340), Neck (10012476), Position (10014788), Prone Position (or Ventral Position) (10015829), Supine Position (or Dorsal Decubitus) (10019103), Later (10014994), Proximal (10015942), Higher (10020325), Chest (10019692), Tracheostomy (10019933)
Means (f=14)	Analgesic (10002279), Antibiotic (10002383), Catheter (10004087), Compress-es/gauzes (10008378), Drain (10006207), Nurse (10013333), Diaper (10005914), Incubator (10009988), Medication (10011866), Doctor (10014522), Oxygen ther-apy (10013921), Pulse oximeter (10032551), Continuous Positive Airway Pressure (Nasal CPAP) (10041208), Mechanical Fan (10044842)
Time (f=9)	Continuous (10005086), Day (10005502), Gestational Age (10037063), Morning (10012226), Night (10013207), Childbirth (or Birth) (10004307), Present (10015581), Week (10021010), Afternoon (10001955)
Judgment (f=8)	Low (10011438), Effective (10014956), Positive (10010981), Light (10025854), Improved (10026692), Small (10018315), Presence (10046624), Risk (10015007)
Customer (f=6)	Family (10007554), Sister (10021653), Brother (10021648), Dad (10027261), Parents (10014023), Newborn (10013187)

in the impossibility of offering it through the breast, direct supervision of breastfeeding, maintenance of the bond, among others.

Premature babies often start the diet with a gastric tube through which expressed human milk or formula is offered and, as they mature, they can be stimulated to suck. However, women with premature babies may not always be in the hospital to breastfeed their babies and need an alternative approach to feeding, such as a baby bottle or a cup⁽²¹⁾.

Some concepts classified as new, which refer to the management of neonatal pain, are also highlighted, such as “glucose 25%”, “non-pharmacological pain relief measures”, “humanized” and “non-nutritive sucking”. Clinical management in neonatal pain relief needs to be part of the care of nurses who need the ability to detect any change or manifestation of pain. This management can be done through non-pharmacological measures such as the use of 25% oral glucose and non-nutritive sucking. The comparison between

the effect of oral glucose at 25%, non-nutritive sucking and the two combined measures showed that, when interventions are offered in an associated way, premature newborns are able to return to their baseline calm state more quickly. Therefore, the adoption of this practice in care protocols in neonatal units is recommended⁽²²⁾.

In the Judgment axis, an expressive amount of terms was extracted, which may reflect the specificity of neonatal nurses

in giving a clinical opinion, a synthesis or perception related to the focus of their practice. Terms such as “organized”, “labile” and “extreme” refer directly to premature newborns. The term “labile” is used by nurses to qualify the clinical or behavioral state of low birth weight or premature newborns and refers to what is unstable, which changes easily⁽²³⁾. Common characteristics in premature newborns, due to the need to adapt to the extrauterine environment.

Figure 4. Terms of specialized neonatal nursing language not included in the CIPE®, classified according to the seven-axis Model and analyzed for similarity and scope, Rio de Janeiro, RJ, Brazil, 2021

Axis	Extracted terms	Analysis
Focus (f=104)	Concussion; Ascitic abdomen; Beats per minute; Distended bladder; Knowledge of parents; Uncomfortable; Development; Dysthermia; Diuresis; Sleeping; Elimination; Defecation; Eschar; Operative wound; Hydrated; Perineal hyperemia; Hypoactive; Breathing incursion per minute; Restless; Injury; Superficial injury; Pain management; mucosa; Total parenteral nutrition; Skin around the stoma; Intact skin; Peripheral perfusion; Cephalic perimeter; Breathing; Nosebleed; Maternal breast; Exclusive maternal breast; Sialorrhea; Respiratory system; Epitalization tissue; Elevated temperature; Ventilating; Bond.	Similar (f=38)
	Diarrheal episode; Body fluids; Hyperactive; maternity; paternity; Temperature.	More comprehensive (f=6)
	Peripheral Access; Agitated; Distilled water; Ambient Air; Active; Low weight at birth; TB (Total Bilirubin); Calorie; shocked; Comatose; Crust; Output; Urinary output; Dermatitis; Respiratory discomfort; Right handed; Diet; Toxic erythema; Easy to pain; Anal fissure; Hemoglucotest (HGT); Hypohydrate; Hypotonia; Hypertonia; Hypovolemia; Jaundice; Nauseated; Regurgitation; Saturation; Bloody; Phlogistic signs; Vomit.	More restricted (f=32)
	Distended abdomen; Bubble; Peripherally Inserted Central Catheter (PICC); Cyanosis; Breathing effort; Vaccination status; Evisceration; Hypoxic-ischemic encephalopathy; Extremely low weight; Respiratory groaning; Luminosity; Malformation; Meconium; Very low weight; Neurodevelopment; Apical pulse; Thin skin; Jelly skin; Jaundice skin; Mottled skin; Colostrum therapy regimen; Venous network; Handle relief; Patient safety; Necrotic tissue; Granulation tissue; Transport; Mechanical ventilation.	New (f=28)
Action (f=33)	Accompany; Annotate; Continue; Decrease; Rise; Measure; Monitor; Modify; Change; Offer; Overlay; Withdraw.	Similar (f=12)
	Accommodate; Nest; Teach.	More restricted (f=3)
	Pay attention; Welcome; Schedule; Warm; Date; Detect; Hydrate; Limit; Change; Program; Provide; Posture; Accomplish; Recognize; Check; Use; Utilize; Touch.	New (f=18)
Location (f=36)	Anal; Armpit; Scrotum; calcaneus; Cephalic; Dorsal; Lower limb; Upper limb; Ostomy; Pododactyl; Chirodactyl.	Similar (f=11)
	Female genitalia; male genitalia; Perianal; Perioral; cephalic region.	More comprehensive (f=5)
	Umbilical scar; End; palpebral fissure; By air.	More restricted (f=4)
	Stump; Lap; Vertebral Column; Cleft palate; fontanelle; cubital fossa; Hemithorax; Jugular; Lip; Bed; Pupils; Anogenital region; Cervical region; Retroauricular region; Dorsal region; Urinary tract.	New (f=16)

Continue...

Figure 4. Continuation

Axis	Extracted terms	Analysis
Means (f=41)	Vacuum cleaner; Enema; Curative; Chest drain; Multiprofessional Team; Medicine; Ostomy; Oximeter; Point; Skin to skin; Enteral tube; Gastric tube; Bladder Probe; Pipe; Tracheostomy.	Similar (f=15)
	Analgesia; Oxygen; Oximetry.	More comprehensive (f=3)
	Chest drain; Infusion; Intravenous; Intravenous Catheter – Jelco®; Pediatrician.	More restricted (f=5)
	Essential Fatty Acid (EFA); Adhesive; Bandage; Nasal catheter; Aqueous chlorhexidine; Cup; Transparent Film; Gastrostomy; Glucose 25%; Hydrocolloid; Hydrogel; Expressed human milk; Non-pharmacological measures for pain relief; Kangaroo Method; Micropore; Ofurotherapy; Saline solution; Non-nutritive sucking.	New (f=18)
Time (f=15)	Postoperative; Preoperative; In 24 hours; Times a day; Regular	Similar (f=5)
	Stage; Time; Intercurrence; Minute; Period; Duty; Caster; Routine; Alternating; Scale	New (f=10)
Judgment (f=34)	Changed; Good; Discreet; Extensive; Serious; Average amount; Suspended.	Similar (f=7)
	Accentuated; Augmented; Absent; Adequate; Good; Calm; Ruddy; Discreet; Difficult; Decreased; Stable; Extreme; Humanized; Incomplete; Inappropriate; Ineffective; Righteous; Unstable; Labile; Sustained; Smaller; Much; Organized; Little; Extended; Preserved.	New (f=27)
Customer (f=1)	Premature newborn.	New (f=1)

The newborn's behavioral state must be perceived by professionals and reflects an internal organization of his/her subsystems and the ability to control external stimuli. In the NICU, care must be focused on their neurodevelopment and there are numerous measures suggested in the literature so that this care does not become iatrogenic and has a positive impact on the quality of neonatal care⁽²⁴⁾.

In the Time axis, terms that refer to a period related to the focus of nursing practice, such as “gestational age” and “delivery”, are observed. Gestational age is a concept used to determine prematurity and, based on that, some actions taken in the NICU are determined in a different way. Regarding the concept of childbirth, it is associated with the end of pregnancy, when birth occurs and in which numerous complications can determine the baby's arrival at the NICU. The choice of mode of delivery may be associated with non-medical causes and influence maternal and neonatal morbidity and mortality⁽²⁵⁾.

In the Costumer axis, which refers to the subject to whom the diagnosis refers and who is the beneficiary of the intervention⁽³⁾, the terms “family”, “parents”, “premature newborn” are present in the team's records and deserve highlighted, considering that a partnership between the team and the family is always sought. The premature newborn in the NICU needs the presence of the parents for a healthy development. The initial proximal processes to establish the

bond between mother and baby result from the combination of three main elements: physical contact, conversation and appreciation of breastfeeding⁽¹⁷⁾.

It is understood as a limitation of the study the lack of validation of the terms found. However, considering that this research is part of a doctoral thesis, we chose to validate the concepts of diagnoses/results and nursing interventions constructed from these terms, in a later stage of this study.

The development of a specialized terminology for the care of premature newborns hospitalized in the NICU strengthens the process of consolidating the language of Nursing. As well as the body of knowledge in this area, with potential for application in praxis, regarding the construction of care instruments and implementation of tools that support the development of the nursing process and the systematization of nursing car.

CONCLUSION

The search in medical records, complemented by the literature review, identified 418 terms relevant to the clinical practice of nurses in the studied population. Most of these terms were not included in the axes of the CIPE® 2019/2020, which indicates the need to expand this terminology to

encompass, in some way, the specific phenomena of neonatal nursing.

Despite this, there was an expressive amount of constant terms in the terminology, which demonstrates the potential usefulness to be implemented in electronic information systems, institutional assistance forms for nursing care for newborns in the NICU, corroborating the construction of indicators of health.

Of the extracted terms, 154 were constant (36.8%) and 264 were non-constant (63.2%). The Focus axis covered the largest number of terms, 154 (37%), with 50 constant and 104 non-constant. In the Location axis, 73 (17%) terms were extracted, 37 constant and 36 non-constant. In the Action axis, there were 63 (15%) terms, 30 constant and 33 non-constant. The Means axis had 55 (13%) terms, 14 constant and 41 non-constant. From the Judgment axis, 42 terms (10%) were extracted, 8 constant and 34 non-constant. In the Time axis, there were 24 (6%) terms, 9 constant and 15 non-constant and, in the Customer axis, there were seven (2%) terms, 6 constant and 1 non-constant.

The extraction of terms from the specialized documentation allowed the construction of a specialized nursing language for premature newborns admitted to the Neonatal Intensive Care Unit based on the CIPE® 2019/2020. Although many versions of the CIPE® have been published over the years with an increase in new terms, there are still a notable amount of terms that are used in nursing practice in the care of premature newborns that are not included in the terminology.

As future perspectives, the terminology constructed can be used as a starting point for the elaboration of a terminological subset that constitutes a group of diagnoses, results and nursing interventions for the newborn hospitalized in the NICU. In addition, from its validation, it will be possible to apply it in this context, strengthening nursing as a science.

REFERENCES

1. Lansky S, Friche AAL, Silva AAM, Campos D, Bittencourt SDA, Carvalho ML et al. Pesquisa Nascer no Brasil: perfil da mortalidade neonatal e avaliação da assistência à gestante e ao recém-nascido. *Cad. Saúde Pública* [Internet]. 2014 [cited 2022 Nov 10];30 (Suppl. 1):S192-S207. Available from: <https://doi.org/10.1590/0102-311X00133213>.
2. Menezes HF, Camacho ACLF, Lins SMSB, Campos TS, Lima FR, Jales AKFA et al. Terms of specialized nursing language for chronic renal patients undergoing conservative treatment. *Rev. Bras. Enferm.* [Internet]. 2020 [cited 2022 Nov 10];73 (Suppl. 6):e20190820. Available from: <https://doi.org/10.1590/0034-7167-2019-0820>.
3. Garcia TR, organizador. *Classificação Internacional para a Prática de Enfermagem (CIPE®): versão 2019*. 1ª ed. Porto Alegre: Artmed; 2019. 280p.
4. Carvalho CMG, Cubas MR, Nóbrega MML. Brazilian method for the development terminological subsets of ICNP®: limits and potentialities. *Rev Bras Enferm* [Internet]. 2017 [cited 2022 Nov 10];70(2):430-5. Available from: <https://doi.org/10.1590/0034-7167-2016-0308>.
5. Araújo DD, Nascimento MNR, Mota EC, Ribeiro MM, Gonçalves RPF, Gusmão ROM et al. Specialized nursing terminology for the care of people with COVID-19. *Rev. Bras. Enferm.* [Internet]. 2021 [cited 2022 Nov 10];74 (Suppl 1):e20200741. Available from: <https://doi.org/10.1590/0034-7167-2020-0741>.
6. Santos PHF, Rodrigues JP, Stival MM, Félix NDC, Lima LR, Funghetto SS. Specialized nursing terminology for the prevention of falls in the elderly in primary care. *Rev. esc. enferm. USP* [Internet]. 2021 [cited 2022 Nov 10]; 55:e20210271. Available from: <https://doi.org/10.1590/1980-220X-REEUSP-2021-0271>.
7. Nascimento MNR, Moreira AEA, Ramos NM, Gomes EB, Félix NDC, Oliveira CJ. Terminologia especializada de enfermagem para cuidado à pessoa com insuficiência cardíaca crônica. *Esc. Anna Nery* [Internet]. 2021 [cited 2022 Nov 10];25(2):e20200306. Available from: <https://doi.org/10.1590/2177-9465-EAN-2020-0306>.
8. Querido DL, Christoffel MM, Nóbrega MML, Almeida VS, Andrade M, Esteves APVS. Subconjuntos terminológicos da Classificação Internacional para Prática de Enfermagem: uma revisão integrativa da literatura. *Rev. esc. enferm. USP* [Internet]. 2019 [cited 2022 Nov 10];53:e03522. Available from: <https://doi.org/10.1590/S1980-220X2018030103522>.
9. Clares JWB, Guedes MVC, Freitas MC. International Classificação Internacional para a Prática de Enfermagem em dissertações e teses brasileiras. *Rev. Eletr. Enferm.* [Internet]. 2020 [cited 2022 Nov 10];22:56262. Available from: <https://doi.org/10.5216/ree.v22.56262>.
10. 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, organizadores. *Atenção Primária em Saúde: diagnósticos, resultados e intervenções*. Rio de Janeiro: Elsevier; 2015. p. 3-25.
11. International Organization for Standardization. *ISO 12300: health informatics: principles of mapping between terminological systems*. Genebra: ISO; 2016. p. 1-46.
12. Leal MLT. *A CIPE e a visibilidade da enfermagem: mitos e realidades*. 1ª ed. Lusociência: Lisboa; 2006. 218 p.

13. Garcia TR. Professional language and nursing domain. Texto contexto - enferm [Internet]. 2019 [cited 2022 Nov 10];28:e20190102. Available from: <https://doi.org/10.1590/1980-265X-TCE-2019-0001-0002>.
14. Félix NDC, Nascimento MNR, Ramos NM, Oliveira CJ, Nóbrega MML. Terminologia especializada de enfermagem para o cuidado de pessoas com síndrome metabólica. Esc. Anna Nery [Internet]. 2020 [cited 2022 Nov 10];24(3):e20190345. Available from: <https://doi.org/10.1590/2177-9465-EAN-2019-0345>.
15. Erickson G, Dobson NR, Hunt CE. Immature control of breathing and apnea of prematurity: the known and unknown. J Perinatol [Internet]. 2021 [cited 2022 Nov 10];41(9):2111-23. Available from: <https://doi.org/10.1038/s41372-021-01010-z>.
16. Reed RC, Johnson DE, Nie AM. Preterm Infant Skin Structure Is Qualitatively and Quantitatively Different From That of Term Newborns. Pediatr Dev Pathol [Internet]. 2021 [cited 2022 Nov 10];24(2):96-102. Available from: <https://doi.org/10.1177/1093526620976831>
17. Ministério da Saúde, Secretaria de Atenção à Saúde, Departamento de Ações Programáticas Estratégicas. Método canguru: diretrizes do cuidado [Internet]. 1ª ed. Brasília: Ministério da Saúde, 2018 [cited 2022 Nov 10]. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/metodo_canguru_diretrizes_cuidado_revisada.pdf.
18. Luz SCL, Backes MTS, Rosa R, Schmitz EL, Santos EKA. Kangaroo Method: potentialities, barriers and difficulties in humanized care for newborns in the Neonatal ICU. Rev. Bras. Enferm. [Internet]. 2022 [cited 2022 Nov 10];75(2):e20201121. Available from: <https://doi.org/10.1590/0034-7167-2020-1121>.
19. Bahoush G, Salajegheh P, Anari AM, Eshghi A, Aski BH. A review of peripherally inserted central catheters and various types of vascular access in very small children and pediatric patients and their potential complications. J Med Life [Internet]. 2021 [cited 2022 Nov 10];14(3):298-309. Available from: <https://doi.org/10.25122/jml-2020-0011>.
20. Ferreira CP, Querido DL, Christoffel MM, Almeida VS, Andrade M, Leite HC. A utilização de cateteres venosos centrais de inserção periférica na Unidade Intensiva Neonatal. Rev. Eletr. Enferm. [Internet]. 2020 [cited 2022 Nov 10];22:56923. Available from: <https://doi.org/10.5216/ree.v22.56923>.
21. Allen E, Rumbold AR, Keir A, Collins CT, Gillis J, Suganuma H. Avoidance of bottles during the establishment of breastfeeds in preterm infants. Cochrane Database of Systematic Reviews [Internet]. 2021 [cited 2022 Nov 10];(10):CD005252. Available from: <https://doi.org/10.1002/14651858.CD005252.pub5>.
22. Silveira ALD, Christoffel MM, Velarde LGC, Rodrigues EC, Magesti BN, Souza RO. Efeito da glicose e sucção não nutritiva na dor de prematuros na punção: ensaio clínico *crossover*. Rev. esc. enferm. [Internet]. 2021 [cited 2022 Nov 10];55:e03732. Available from: <https://doi.org/10.1590/S1980-220X2020018303732>.
23. Michaelis. Dicionário Escolar da Língua Portuguesa. Melhoramentos: São Paulo, 2016.
24. Millette I, Martel MJ, Ribeiro da Silva M, Coughlin McNeil M. Guidelines for the Institutional Implementation of Developmental Neuroprotective Care in the Neonatal Intensive Care Unit. Part A: Background and Rationale. A Joint Position Statement From the CANN, CAPWHN, NANN, and COINN. Can J Nurs Res [Internet]. 2017 [cited 2022 Nov 10];49(2):46-62. Available from: <https://doi.org/10.1177/0844562117706882>.
25. Larcade R, Rossato N, Bellecci C, Fernández A, García C, Vain N. Edad gestacional, vía de parto y relación con el día y hora de nacimiento en dos instituciones del sector privado de salud. Arch Argent Pediatr [Internet]. 2021 [cited 2022 Nov 10];119(1):18-24 Available from: <https://doi.org/10.5546/aap.2021.18>.

