ORIGINAL ARTICLE

# Specialized nursing terminology for the care of people with COVID-19

*Terminologia especializada de enfermagem para o cuidado à pessoa com COVID-19*

*Terminología especializada de enfermería para el cuidado a la persona con COVID-19*

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## ABSTRACT

**Objective:** To create specialized nursing terminology for the care of people with COVID-19. **Methods:** Methodological study, carried out based on the identification of concepts related to the care of the person with the infection, present in the official guidelines of the Brazilian Ministry of Health; the concepts were validated by three specialist nurses; and a cross-mapping of the extracted concepts was done with CIPE® 2019 primitive concepts. **Results:** Out of 436 unique concepts, being 399 of these validated; of these, 70.9% were in the Classification and referred to the nursing care of people with COVID-19. In the Axis, the concepts related to Focus, Action, and Environment stood out. As for the non-validated concepts, 78.4% were not included in the 2019 version of CIPE®. **Conclusion:** We were able to structure a specialized CIPE® terminology, with the potential to generate nursing care indicators for people with COVID-19.
**Descriptors:** Nursing; Standardized Nursing Terminology; Coronavirus Infections; Nursing Care; Nursing Methodology Research.

## RESUMO

**Objetivo:** Construir uma terminologia especializada de enfermagem para o cuidado à pessoa com COVID-19. **Métodos:** Estudo metodológico, realizado com base na identificação dos conceitos relativos ao cuidado à pessoa com a infecção, presentes nas diretrizes oficiais do Ministério da Saúde do Brasil; a validação dos conceitos foi realizada por três enfermeiras especialistas; e fez-se mapeamento cruzado dos conceitos extraídos com os conceitos primitivos da CIPE® 2019. **Resultados:** Do total de 436 conceitos únicos, 399 foram validados; destes, 70,9% constavam na Classificação e se referiam ao cuidado de enfermagem à pessoa com COVID-19. Nos Eixos, destacaram-se os conceitos relacionados ao Foco, Ação e Meio. Quanto aos conceitos não validados, 78,4% não constavam na versão 2019 da CIPE®. **Conclusão:** Estruturou-se uma terminologia especializada da CIPE® com potencial para geração de indicadores do cuidado de enfermagem à pessoa com COVID-19.
**Descritores:** Enfermagem; Terminologia Padronizada em Enfermagem; Infecções por Coronavírus; Cuidados de Enfermagem; Pesquisa Metodológica em Enfermagem.

## RESUMEN

**Objetivo:** Construir una terminología especializada de enfermería para el cuidado a la persona con COVID-19. **Métodos:** Estudio metodológico, realizado basado en la identificación de conceptos relativos al cuidado a la persona con la infección, presentes en las directrices oficiales del Ministerio de Salud de Brasil; la validez de los conceptos realizada por tres enfermeras especialistas; y hecho mapeo cruzado de los conceptos extraídos con los conceptos primitivos de la CIPE® 2019. **Resultados:** Del total de 436 conceptos únicos, 399 validados; de estos, 70,9% constaban en la Clasificación y se referían al cuidado de enfermería a la persona con COVID-19. En los Ejes, destacaron los conceptos relacionados al Foco, Acción y Medio. Cuanto a los conceptos no validados, 78,4% no constaban en la versión 2019 de la CIPE®. **Conclusión:** Estructuró una terminología especializada de la CIPE® con potencial para generación de indicadores del cuidado de enfermería a la persona con COVID-19.
**Descriptores:** Enfermería; Terminología Estandarizada en Enfermería; Infecciones por Coronavirus; Cuidados de Enfermería; Investigación Metodológica en Enfermería.

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## INTRODUCTION

In December 2019, in Wuhan, China, cases of pneumonia of unknown origin occurred. People mainly presented clinical symptoms such as dry cough, dyspnea, fever, and bilateral pulmonary infiltrates as seen on imaging studies[1]. On January 7, 2020, after analysis of respiratory samples carried out by the Chinese Center for Disease Control and Prevention, a type of pneumonia was identified caused by a new coronavirus, later called "coronavirus 2 of severe acute respiratory syndrome" (SARS-CoV-2), with the disease resulting from this pathogen named COVID-19 by the World Health Organization[2-3]. Since then, nursing professionals have been prominent in caring for people with the new coronavirus infection.

This virus is highly transmissible and causes acute respiratory syndrome, which ranges from mild cases (about 80%) to cases with severe respiratory failure (between 5% and 10%), and its lethality varies between 0.2% and 14.8%[2,4]. The severity of the clinical condition is associated with conditions such as chronic diseases, immunosuppression, high-risk pregnancies, obesity (BMI ≥ 40), and being elderly (age ≥ 60 years)[2,5].

COVID-19 has symptoms similar to those caused by the previous beta-coronavirus, with some distinct clinical features such as lower airway involvement, evidenced by upper respiratory tract symptoms including rhinorrhea, sneezing, and sore throat[6].

The current COVID-19 pandemic poses several challenges to professionals, services, health systems and health surveillance - public or private - in different countries around the world, as well as impacts on society in all its aspects, extrapolating the health context. Thus, it presents itself as a great challenge for health professionals and demands the generation of indicators that strengthen knowledge about the established disease and targeted care, which justifies the determination as a health priority.

Among the professional groups that make up the multi-professional health team that assists the person with COVID-19, the nursing team stands out, with the coordination of the nurse. These professionals perform direct and indirect functions at all levels of health care in the care network, contributing to the planning, implementation and coordination of the care plan for people, families, caregivers and the community, as well as in expanding knowledge about concepts related to nursing classification systems.

In view of the new clinical context imposed by the COVID-19 pandemic, many concepts are likely to be widely used; and new ones, which express identified scientific and technical concepts. Thus, it is necessary to structure them according to their usefulness and scientific characterization in the context of nursing, enabling the standardization of professional language. However, there is a limitation involving the scarce record in the medical records, in addition to the conditions imposed by the clinical characteristics of COVID-19, that hinder research in the locus of care for people with the infection. Limitations such as these can be overcome, a priori, by using literature and/or official documents in the area for the extraction of indicators[7].

The use of standardized language in nursing is the primary purpose of the International Council of Nurses (ICN) and it has been identified as one of the strategies for nursing to achieve consolidation as a science, to systematize care and direct health

priorities to specific clinical issues[8], such as the SARS-CoV-2 pandemic. In this perspective, the International Classification for Nursing Practice stands out (CIPE®)[8], a unified classification system comprising primitive and pre-coordinated concepts, composing nursing diagnosis, results, and interventions.

There was a gap in knowledge regarding specialized nursing terminology for people with COVID-19. The completion of this study presents an innovation, with the goal of contributing to the generation of nursing practice indicators to insert in health information systems in the future. With a possible positive impact on the treatment and rehabilitation of people affected by this health priority.

## OBJECTIVE

To build a specialized nursing terminology for the care of people with COVID-19.

## METHODS

### Ethical Aspects

The Research Ethics Committee of the Universidade Estadual de Montes Claros approved this study. The specialist nurses who agreed to participate in the study signed the Free and Informed Consent Form.

### Type of study

Methodological study, carried out between March and June 2020 by a group of nurse researchers from a public hospital caring for people with COVID-19 and from Universities in the Southeast and Northeast of Brazil.

### Methodological procedures

The construction of the specialized terminology of the present research followed the recommendations for the development of CIPE® terminology studies in Brazil[7]. The steps being proposed: 1) The identification of nursing concepts for the care of the elected health priority; 2) validation by a group of specialist nurses in the area of interest regarding the relevance of the identified concepts; and 3) cross-mapping of validated concepts with CIPE® primitive concepts. It is noteworthy that subsequent steps can be developed for the structuring of a terminological subset of CIPE® to the person with COVID-19, which may present proposals for diagnosis, results, and nursing interventions using the concepts that make up the present study.

### Study protocol

The first stage covered the identification of official care guidelines with clinical and cultural relevance for nursing practice, focusing on COVID-19. Three nurse researchers carried out the search for guidelines simultaneously. Two masters and one doctor, in order to identify the guidelines with relevant data for the extraction of concepts relevant to the clinical practice of nurses for health priority.

The inclusion criteria were: official guidelines available on the website of the Brazilian Ministry of Health (https://coronavirus.saude.gov.br/), until April 24, 2020 and in Portuguese, due to the concept extraction tool recognizing only those which are in that language, totaling, at the end, five official guidelines[5,9-12].

We extracted these concepts using the PORONTO program[13], electronic tool for semi-automatic construction of ontologies in healthcare. The tool facilitates the process of normalization and standardization of concepts with analysis and exclusion of synonyms[14]. Verbal tense and grammatical gender were also adapted, excluding concepts belonging to other areas, such as medical diagnosis and procedures.

In the development of operational definitions for standard concepts, we used CIPE ® 2019, scientific articles and dictionaries of technical health and Portuguese language terms, contributing to the subsequent validation by specialists. This occurred according to the steps recommended by literature[15]: 1) development of a preliminary definition; 2) literature revision; 3) elaboration or identification of specific characteristics; 4) mapping the meaning of the concept; and 5) statement of operational definition.

To validate the findings, we used the consensus validation technique[16], that proposes an analysis by a specific group of clinical nurses, minimum of three and maximum of five, in order to establish consensus opinion (100%) of specialists in the area of interest on the pertinence and relevance of a given concept. The disagreement of one or more specialists resulted in the non-validation of respective concepts. A study with a similar methodological approach also employed this same technique[14].

For the inclusion of specialists, we used the following criteria: being a nurse; minimum degree of specialty in infection control or related areas. Considering the need for scientific knowledge of nurses for critical analysis of the elected health priority; be an active professional/resident, for a minimum of two years, in the field of infectious diseases; be an author, coauthor or advisor of studies involving infectious diseases. Via the Lattes Platform, we selected three specialists, taking into consideration geographical proximity and availability to participate in the validation process by consensus.

Due to the context of the pandemic and the social distancing measures recommended and implemented by several Brazilian states and municipalities, the validation process took place through three online videoconferences via the Google Meet® app, with each meeting lasting an average of three hours each.

Based on ISO 12300: 2016[17], we carried out the cross mapping of the concepts validated by the specialists with the primitive concepts of the CIPE 2019's Seven Axis Model, comparing them and deciding on semantic equivalence, identifying similarity, and consolidating specialized nursing terminology to achieve the objective of this study.

### Data analysis

To carry out the study steps, two spreadsheets were prepared in Excel for Windows®, one with the extracted and validated concepts and the other with the CIPE® 2019 primitive concepts[18], these being crossed with each other by using the Access for Windows® program, for the identification of constant and non-constant primitive concepts. At this stage of the mapping process, we analyzed non-constant concepts for similarity and scope[19] in relation to the primitive concepts contained in CIPE® 2019, making it possible to fit the former in the Seven Axis of Classification Model.

Then, we added the data to a Microsoft Excel 2013® spreadsheet for descriptive analysis (simple frequency), organized in tables with the concepts fully validated: constant, using the respective codes extracted from the CIPE® browser; non-constant and non-validated ones, discussed through national and international literature related to health priority.

### RESULTS

39,649 concepts were extracted from the official guidelines, from which the repeated ones were excluded and, subsequently, we carried out the process of normalization, standardization, and analysis of similarity and comprehensiveness in relation to CIPE.® 2019, consolidating 436 unique concepts. Of the total of unique concepts, 399 (91.5%) were validated by specialist nurses. 283 (70.9%) concepts were identified and 116 (29.1%) were not included in CIPE® 2019 relevant to nursing care for people with COVID-19. As for the constant concepts, there was a predominance in the Focus (49.8%) and Action (20.1%) axis, as shown in Chart 1.

As for the concepts that are not included in CIPE® 2019, the Focus (45.7%), Medium (20.7%) and Action (13.8%) axis stand out, as explained in Chart 2.

The specialist nurses judged that 37 analyzed concepts were not relevant, with emphasis on those that were already covered, involving contexts not related to the SARS-CoV-2 infection or that did not reflect the use in nursing practice directed at the person with infection by the new coronavirus. We emphasize that 78.4% of these concepts were not included in the 2019 version of the Classification (Chart 3).

### DISCUSSION

The need to standardize, unify, and research the professional language of nursing aims to produce knowledge in the area, consolidate nursing as a science, understand the needs of the population, incorporate new technologies to health care, thus contributing to the improvement of professional practice[20]. The study and use of CIPE® as a classification system collaborates to the construction of specialized terminologies and terminological subsets applicable to professional practice; is a resource for technological innovation, important for the qualification and standardization of the clinical nursing practice[21-22].

It is also evident the innovative character of the study in the nursing scenario, as it proposes a terminological basis to support nursing care for people with COVID-19. With the pandemic on the rise, in which about two million professionals, mostly nurses, work in the front line of health services in defense of the population, offering direct care, face to face with the virus, at the front of combat[23].

**Chart 1** – Validated concepts for the care directed to the person with COVID-19, contained in CIPE® 2019, Montes Claros, Brazil, 2020

| AXIS | n* | CONSTANT CONCEPTS |
|---|---|---|
| Focus | n = 141 | Abandonment (10041692), Abstinence (Distancing or Withdrawal of Something) (10035422), Acceptance (10000329), Access (10000340), Screening Monitoring (10037173), Adaptation (10001741), Adherence (10030298), Agitation (10025705), Water (10020957), Allergy (10041119), Self-feeding (10017730), Breastfeeding (10003645), Sample (or Specimen) (10018531), Anguish (10006118), Anxiety (10002429), Air (10002061), Arrhythmia (10002536), Aspiration (10002656), Autonomy (10003054), Capacity (10000034), Sensory Capacity (10024035), Shock (10018050), Septic Shock (10017898), Cognition (10004485), Coma (10004629), Complication (10025459), Behavior (10003217), Resting Behavior ( 10017129), Communication (10004705), Hemodynamic Condition (10051564), Neurological Condition (10013141), Respiratory Condition (10016962), Confusion (10004947), Congestion (10004952), Knowledge (10011042), Consciousness (10004975), Consciousness, Impaired (10012634), Contamination (10025369), Control (10005135), Seizure (10046505), Cardiac Output (10003887), Discomfort (10023835), Dehydration (10041876), Diabetes (10005876), Diarrhea (10005933), Dyspnea (10006461), Willingness (or Readiness) (10016414), Pain (10013950), Arthritic Pain (10047104), Muscle Pain (10012316), Edema (10041951), Medication Effect (10006333), Elimination (10006720), Coping (10005208), Sputum (10018717), Stress (10018888), Physical Examination (10032243), Physical Exercise (10007315), Expectation (10023679), Contagion Exposure (10044009), Contamination Exposure (10025324), Fatigue (10007717), Fever (10007916), Weakness (10024897), Heart Rate (10008833), Respiratory Rate (10016904), Hand Hygiene (10041190), Self-Hygiene (10017769), Hypertension (10009394), Hyperthermia (10009409), Hypotension (10009534), Hypothermia (10009547), Hypoxia (10009608), Body Image (10003405), Disability (or Limitation) (10005980), Infection (10010104), Fluid Intake (10006276), Integrity (10010416), Activity Intolerance (10000408), Injury (10010284), Management (Self Control), (10046837), Fear (10007738), Metabolism (10012005), Microorganism (10012014), Death (10005560), Movement (10012274), Nausea (10012453), Necessity (10012495), Necrosis (10012482), Obesity (10013457), Obstruction (10013555), Organism (10013783), Orientation (10013810), Hygiene Standard (10009292), Paper (10017321), Sensory Perception (10024042), Weight (10021034), Weight, Impaired (10013016), Worry (10015466), Pressure (10015608), Blood Pressure (10003335), Procedure (10034409), Impaired Immune System Process (10041093), Pathological Process (10014121), Recovery (10016507), Regimen (10016609), Resistance (10006875), Panting (10033334), Result (10017186), Laboratory Result (10011074), Respiratory Rhythm (10016915), Routine (10017384), Bleeding (10003303), Blood (10003319), Blood Oxygen Saturation (10030845), Secretion (10017635), Sign (10018130), Discomfort Sign (10037282), Vital Sign (10020829), Symptom (10019368), Cardiovascular System (10003936), Respiratory System (10016970), Suffering (10025588), Solitude (10011417), Solution (10018499), Sleep (10041399), Susceptibility (10019296), Suspicious (10019310), Tachycardia (10019415), Temperature (10019556), Temperature (Temperature) Body (10003507), Thermoregulation (10019644), Diagnostic Test (10031138), Cough (10005249), Ulcer (10020237), Pressure Ulcer (Injury) (10015612), Urine (10020478), Ventilation (10020704), Postural Vertigo (Dizziness) (10006160), Surveillance (10002144), Vomiting (10020864) |
| Judgment | n = 14 | High (10009007), Abnormal (10013269), Delayed (or Slow) (10022089), Low (10011438), Continuous (10005086), Dependency (10026671), Diagnosis and Result, Positive (10016479), Degree (10005663), Severity (10025849), Light (10025854), Moderate (10025865), Small (10018315), Presence (10046624), Risk (10015007) |
| Action | n = 57 | Follow (10042609), Advise (10005254), Relieve (10002171), Change (10002185), Analyze (10002298), Apply (10002464), Aspirate (10002641), Increase (10009961), Hear (10003012), Auxiliary (10002850), Evaluate (10007066), Collaborate (10004542), Collect (10004574), Place (or Put) (10016201), Confirm (or Check) (10020727), Contain (or Limit) (10017155), Discard (10006063), Develop (10005848), Disinfect (10006044), Decrease (10005600), Raise (10006691), Stage (10018738), Stimulate (10003077), Avoid (10003077), Examine (10005600), Explain (10007370), Facilitate (10007499), Sanitize (or Caring for Hygiene) (10009285), Identify (10009631), Implement (10009840), Induce (10010039), Inform (10010162), Insert (10010324), Interrupt (10010526), Isolate (10010906), Wash (10020935), Clean (10004444), Manipulate (10011710), Mediate (10011845), Measure (or Check) (10011813), Monitor (10012154), Notify (10001917), Observe (10013474), Offer (10013636), Guide (10019502), Prioritize (10015736), Protect (10015864), Provide (Supply) (10015935), Reinforce (10016650), Register (10016498), Report (10016771), Remove (10016763), Trace (or Track) (10019967), Transfuse (10051670), Vaccinate (10020552), Measure (or Check) (10011813), Watch (or Investigate) (10019283) |
| Medium | n = 28 | Aerosol (or Spray) (10001940), Analgesic (10002279), Antibiotic (10002383), Cannula (10003856), Catheter (10004087), Surgery (10019212), Clinical Management (10004463), Peritoneal Dialysis (10014393), Respiratory Device (10016958), Drugs (10006314), Inter-professional Team (10039400), Hemotherapy (10003361), Mask (10011752), Medication (10011866), Oxygen Therapy (10013921), Pulse Oximeter (10032551), Plan (10014630), Protocol (10015926), Restrict (or Contain) (10017172), Soap (10018358), Emergency Service (10031206), Nutritional Supplement (10037016), Technique (10019525), Therapy (10019628), Inhalation Therapy (or Nebulization) (10010213), Respiratory Therapy (10037085), Tube (10020216), Vaccine (10020568) |
| Location | n = 29 | Abdomen (10000023), Forearm (10008164), Arm (10002504), Head (10008688), Heart (10008822), Body (10003388), Face (10007481), Hospital (10009114), Lower (10011440), Intestine (10010557), Lip (10011377), Tongue (10019824), Workplace (10021145), Hand (10008661), Mucous Membrane (10012288), Muscle (10012290), Nose (10013314), Eyes (10007452), Foot (10008155), Skin (10018239), Lung (10011486), Kidney (10022439), Upper (10020325), Thorax (10019692), Trachea (10019922), Tracheostomy (10019933), Intensive Care Unit (10010444), Nasal Pathway (10012430), Ocular Way (10013615) |
| Time Period | n = 07 | Admission (10001843), Acute (10001739), Chronic (10004395), Exam (10007241), Frequency (10008234), Visit (10020817), Home Visit (10009082) |
| Client | n = 07 | Community (10004733), Caregiver (10003958), Family (10007554), Group (10008544), Individual (10010018), Family Member (10007596), Patient (10014132) |

Note: *n: absolute number.

**Chart 2** – Validated concepts for care directed at people with COVID-19, not included in CIPE® 2019, Montes Claros, Brazil, 2020

| AXIS | n* | NON CONSTANT CONCEPTS |
|---|---|---|
| Focus | n = 53 | Blood sample, Secretion sample, Anorexia, Asymptomatic, Atrophy, Venous catheter, Headache, Cyanosis, Understanding, Direct contact, Home contact, Runny nose, Decision, Acid-Base Imbalance, Dissemination, Health Education, Effort, Rattle, Stridor, Adverse Event, Blood Flow, Lung Function, Arterial Gasometry, Blood Glucose, Hemodynamics, Hemoptysis, Nasal Hygiene, Oral Hygiene, Hypoxemia, Immunity, Inappetence, Incontinence, Infrastructure, Mobility, Level of Consciousness, Nutrition, Death, Nasal Obstruction, Respiratory Pattern, Precaution of Contact, Prevention, Pulse, Therapeutic Regime, Rest, Wheezing, Emotional Suffering, Mental Suffering, Transmission, Community Transmission, Vertical Transmission, Thromboembolism, Mechanical Ventilation, Viruses |
| Judgment | n = 10 | Active, Critical, Deficit, Difficulty, High, Unstable, Insufficient, Minor, Prophylactic, Reduced |
| Action | n = 16 | Approach, Welcome, Adopt, Present, Classify, Stratify, Encourage, Indicate, Intervene, Modify, Enable, Prevent, Accomplish, Recommend, Recognize, Request |
| Medium | n = 24 | Drug administration, Alcohol, Antiretroviral, Barrier, Coagulation, Contact, Equipment, Scale, Radiographic examination, Serological examination, Cold, Respiratory droplet, Blood culture, Hemogram, History, Isolation, Home isolation, Surgical mask, Fabric mask, Disinfectant solution, Saline Solution, Transport, Treatment, Screening |
| Location | n = 08 | Mouth, Domicile, Endotracheal, Gastrointestinal, Bed, Nasopharynx, Oropharynx, Orotracheal |
| Time Period | n = 01 | Quarantine |
| Client | n = 04 | Client, Pregnant Woman, Population, Visitor |

Note: *n: absolute number.

**Chart 3** – Non validated concepts for the care directed to the person with COVID-19, constant and not included in the CIPE® 2019, Montes Claros, Brazil, 2020

| CIPE® 2019 | n* | NON VALIDATED CONCEPTS |
|---|---|---|
| Constant | n = 08 | Characteristic (10004170), Fetus (10007900), Gloves (10007900), Material (10011775), Meditation (10011897), Medium (10012022), Situation (10018202), Rate (10016390) |
| Not Constant | n = 29 | Absenteeism, Anemia, Angina, Antiviral, Refresh, Disposable apron, Communicable Disease, Space, Inspiratory Rattle, Experience, Hyperinflation, Impermeable, Acquired Immunity, Interval, Intubate, Contact Isolation, Respiratory Isolation, Procedure Glove, Protective Mask, Facial Mask, Goggles, Community Paper, Sensory, Hypotonic Solution, Serology, Afternoon, Environmental Therapy, Invasive Ventilation, Manual Ventilation |

Note: *n: absolute number.

The validation of the concepts by specialists was essential for the construction of the terminology, given the literature[14] refers to that, for those extracted from official guidelines, this method is recommended in order to verify the pertinence and relevance of the concepts identified in relation to a population or health priority, in this case, COVID-19. The consensus validation of the present study refined the concepts extracted for health priority, based on the expertise of specialists in the area, to subsequently collaborate in the process of building pre-coordinated concepts. It is also reiterated the scarcity in the literature regarding the involvement of terminology/nursing language that submitted the concepts to expert analysis, referring to this stage, in its majority, in the construction of nursing diagnosis/results and interventions.

The expressive amount of concepts classified is verified, in this study, as constant in the CIPE® 2019. This expresses that, even in the face of a new context of care, that several concepts that reflect the nursing practice to the person with COVID-19 are already present in the Classification. Thus confirming its reliability as a technological instrument for inserting data in electronic health information systems, and records of clinical nursing practice[24-25] and identification of indicators sensitive to the nursing practice worldwide.

The concepts contained in CIPE® classified in Focus and Action Axis grouped the highest quantity, which can be observed in other studies with similar design[14,24-25], being the same for other health priorities. This aspect is due to the fact that the Focus Axis represents the relevant area of attention for nursing and must be included in the formulation of nursing diagnosis and results. The definition of the Action Axis is the intentional process applied to/performed by a client, which is mandatory in the elaboration of nursing interventions[26].

In the Focus Axis, the *concepts infection, symptom, muscle pain, obesity and fever* stood out due to the direct relationship with care for the elected health priority and presence in CIPE® 2019, as was validated by the experts. The *infection* concept has been addressed since the Florence Nightingale era, which dealt with the importance of infection control, and again nowadays due to the pandemic. The discussion reinforces the celebration of Florence's bicentenary anniversary, and considering 2020 as the international year of nurses[27].

The concepts identified in the Focus Axis also include nursing phenomena contemplated in the first phase of the nursing process (anamnesis and physical examination)[28], understanding real and/or potential human needs presented by the person with COVID 19, these being intrinsic to the care and direction of nursing actions, individually[29].

In the Action Axis, the concepts of *providing, guiding, and sanitizing* were more frequent in the literature, appearing in the CIPE® version used and validated by specialists. It appears that there is a direct connection to the specific actions of the care for the person with COVID-19, evidencing, once again, that the concepts present in the CIPE® are amenable to use in clinical practice and scientific nursing research at the national level and international health priority.

The concepts of the Action Axis are based on the construction of knowledge towards the person being cared for, in order to provide information and guide them on the management of their condition, a task considered arduous in the face of evidence in the literature that points out the difficulty in adhering to interventions such as achieving social distancing, often underestimated by a population that believes they are not sick[30].

Regarding the concepts not included in CIPE®, the Focus, Medium, and Action Axis represented the highest percentage. Regarding the Focus and Action Axis, the results are similar in other studies[14,24]. As for the Medium Axis, we define this as the way or method of carrying out the intervention[26], which involves important aspects for the care of people with COVID-19 in the perspective of advancing knowledge about the means of care in the face of a new health priority.

It is noteworthy that, despite ongoing research, so far, there is no vaccine or any specific medication available, and the supportive treatment is nonspecific for COVID-19. Thus, because it is a new clinical context, it is clear that the official guidelines, made available by the Brazilian Ministry of Health, propose to subsidize health professionals with methods of carrying out interventions to the person with COVID-19, basing the actions on the best global scientific evidence available at the time.

In the Focus Axis, the concepts not included in CIPE® 2019 identified most frequently in this study were *viruses, transmission, contact precautions, and death*. In the Medium Axis, the concepts of *contact, equipment and isolation* stood out. In the Action Axis, the concepts of *realizing and preventing* stood out. These concepts, validated by the specialists, can occasionally relate to the clinic, and to specific situations of care for the person with COVID-19. With the current pandemic, studies[28-29] hat address the role and experience of nursing in caring for people with COVID-19 express such concepts in their findings.

With emphasis on the concepts *of isolation and home isolation*. Despite being widely used and frequently identified in official guidelines, we understand that the approach should focus on understanding measures of social distancing to prevent and control the spread of the new coronavirus. It is necessary to pay attention to social representation, which can result in unfavorable emotional and behavioral manifestations, mainly due to the stigmatization of the patient affected with COVID-19 and other psychological repercussions such as anxiety, loneliness, depression, anger, and a sense of confinement[31-32]. Thus, nurses must understand that human responses go beyond biomedical or physiological questions: they must provide care in a comprehensive perspective, that is, biopsychosocial and spiritual.

Although the concepts of *contact isolation and respiratory isolation* came from the official guidelines for the care of people with COVID-19, there was no validation from the experts. In addition to the issue related to the use of the term *isolation*, there are equivalent terms standardized by the National Health Surveillance Agency, namely; contact precautions, droplet precautions and aerosol precautions[33].

Concepts that describe personal protective equipment, such as *gloves, procedure gloves, apron and goggles*, have not been validated, as they must be used by health professionals or in support of people with COVID-19. Procedural gloves are not indicated for use by patients and companions, but hand hygiene, which should be reinforced as the most sensitive and effective method to prevent and control the risk of cross-transmission of the new coronavirus by hands. Exceptions concern the concept of *surgical mask*, which has been validated for being indicated for use in symptomatic patients and companions; and *fabric mask*, as it is indicated to the general population[33].

It should be noted that, as it is a new health priority, changes are likely to happen over time, with the evolution of discoveries about the respective condition, its clinical management, treatment, and prevention. New concepts may emerge and may be incorporated into existing ones.

The specialized terminology constructed can be useful for nursing care for the person with COVID-19 with regard to the elaboration of statements/concepts, diagnosis, results, nursing interventions, assistive, educational, and managerial technologies such as clinical protocols, scales, flowcharts, software, applications, which can be used at all levels of health care and with different populations.

### Study limitations

The summary of the limitations of the study are: in the use of official guidelines related to COVID-19 in a period, to extract the concepts, not considering original articles in the field of nursing; and the fact that the operational definitions of the concepts are not included in the article, which may have restricted the scope of the results. However, it infers that the guidelines used contained the best existing evidence up to the moment of selection, in addition to this the careful analysis of the extracted concepts and their definitions by specialists in the health priority, contributing to the reduction of bias in the study.

### Contributions to the Nursing Area

The construction of specialized nursing terminology contributes to knowledge about the concepts that represent the domain of nursing practice in the care of people with COVID-19, applicable to different levels of health care and population contexts. Such terminology has an impact on nursing care for this health priority at a time of pandemic in which the nursing team has stood out in the process of health, disease and rehabilitation of this clientele, contributing to improve the care provided and the visibility of nurses.

### CONCLUSION

It was possible to achieve the objective by presenting a specialized nursing terminology for people affected by COVID-19, with most of the concepts contained in CIPE® 2019 and inserted in the Focus and Action Axis, in addition to non-constant concepts to be included in the Classification. The potential for the construction of educational, assistance, and management technologies is highlighted, in particular the structuring of a terminological subset of CIPE® for systematization of actions, generation of indicators of nursing care for people with the infection, impacting the quality of care and providing increased visibility of the profession as a science.

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