ICNP® terminology subset for people with chronic kidney disease under conservative treatment

Subconjunto terminológico CIPE® para pessoas com doença renal crônica em tratamento conservador

Subconjunto terminológico CIPE® para personas con enfermedad renal crónica en tratamiento conservador

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Abstract

Objective: To carry out content validity of the statements of International Classification for Nursing Practice (ICNP®) terminology subset diagnoses, outcomes and nursing interventions for people with chronic kidney disease on conservative treatment.

Methods: A methodological study, which followed the Brazilian method guidelines, with content validity conducted by the Delphi technique and carried out with 67 expert nurses. A total of 123 nursing diagnosis/outcome statements and 215 nursing intervention statements, distributed by Callista Roy's adaptation model of nursing modes were assessed. To assess the degree of agreement regarding the meaning and clinical use among experts, the Content Validity Index (CVI) was used, accepting statements that presented an index ≥ 0.80.

Results: After two Delphi rounds, 117 diagnoses/outcomes and 199 nursing interventions were validated. Of the diagnoses, 70 (60%) were classified in Physiological Mode, 19 (16%) in Self-Concept Mode, 17 (14%) in Real-Life Function Mode, and 11 (10%) in Callista Roy's Interdependence Mode. Among the most prevalent diagnostic statements were: "Altered Blood Pressure", "Peripheral Oedema", "Fluid Retention", "Lack of Knowledge of Dietary Regime", "Impaired Adaptation", "Self-Care Deficit" and "Impaired Access to Treatment". Valid nursing interventions underwent wording changes.

Conclusion: The development of an ICNP® terminology subset according to the adopted theoretical model proved to be valid in terms of content for the care of people with chronic kidney disease undergoing conservative treatment through clear and directive care plans.

Resumo

Objetivo: Realizar a validação de conteúdo dos enunciados de diagnósticos, resultados e intervenções de enfermagem do subconjunto terminológico da Classificação Internacional para a Prática de Enfermagem (CIPE®) para pessoas com doença renal crônica em tratamento conservador.

Métodos: Estudo metodológico, que seguiu as orientações do método brasileiro, com validação de conteúdo conduzida pela técnica Delphi e realizado com 67 enfermeiros especialistas. Foram avaliados 123 enunciados de diagnósticos/resultados de enfermagem e 215 intervenções de enfermagem distribuídos pelos modos adaptativos do modelo teórico de adaptação de Callista Roy. Para a avaliação do grau de concordância quanto ao significado e utilização clínica, entre os especialistas, foi utilizado o Índice de Validade de Conteúdo (IVC), sendo aceitos os enunciados que apresentaram índice ≥ 0,80.

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Conflicts of interest: nothing to declare.

Resultados: Após duas rodadas Delphi, foram validados 117 diagnósticos/resultados e 199 intervenções de enfermagem. Dentre os diagnósticos, 70 (60%) foram classificados no Modo Fisiológico, 19 (16%) no Modo de Autoconceito, 17 (14%) Modo de Função na Vida Real, e 11 (10%) no Modo de Interdependência de Callista Roy. Dentre os enunciados de diagnósticos mais prevalentes, estiveram: "Pressão Arterial, Alterada", "Edema Periférico", "Retenção de Líquidos", "Falta de Conhecimento sobre Regime Dietético", "Adaptação, Prejudicada", "Déficit de Autocuidado" e "Acesso a Tratamento, Prejudicado". As intervenções de enfermagem válidas sofreram mudanças na redação.

Conclusão: O desenvolvimento do subconjunto terminológico da CIPE® de acordo com o modelo teórico adotado, mostrou-se válido quanto ao conteúdo para o cuidado das pessoas com doença renal crônica em tratamento conservador por meio de planos de cuidados claros e diretivos.

Resumen

Objetivo: Realizar la validación de contenido de los enunciados de diagnósticos, resultados e intervenciones de enfermería del subconjunto terminológico de la Clasificación Internacional de la Práctica de Enfermería (CIPE®) para personas con enfermedad renal crónica en tratamiento conservador.

Métodos: Estudio metodológico, que siguió las instrucciones del método brasileño, con validación de contenido conducida por el método Delphi y realizado con 67 enfermeros especialistas. Se evaluaron 123 enunciados de diagnósticos/resultados de enfermería y 215 intervenciones de enfermería distribuidos por los modos adaptativos del modelo teórico de adaptación de Callista Roy. Para la evaluación del nivel de concordancia con relación al significado y utilización clínica por parte de los especialistas, se utilizó el Índice de Validez de Contenido (IVC), donde se aceptaron los enunciados que presentaron índice ≥ 0,80.

Resultados: Después de dos rondas Delphi, se validaron 117 diagnósticos/resultados y 199 intervenciones de enfermería. Entre los diagnósticos, 70 (60 %) se clasificaron dentro del Modo fisiológico, 19 (16 %) en el Modo de autoconcepto, 17 (14 %) en el Modo de rol y 11 (10 %) en el Modo interdependiente de Callista Roy. Los enunciados de diagnósticos más prevalentes fueron: "presión arterial, alterada", "edema periférico", "retención de líquidos", "falta de conocimiento sobre régimen dietético", "adaptación, perjudicada", "déficit de autocuidado" y "acceso al tratamiento, perjudicado". Las intervenciones de enfermería válidas sufrieron cambios de redacción.

Conclusión: De acuerdo con el modelo teórico adoptado, la elaboración del subconjunto terminológico de la CIPE® demostró ser válida en cuanto al contenido para el cuidado de las personas con enfermedad renal crónica en tratamiento conservador por medio de planes de cuidados claros y directivos.

Introduction

Chronic Kidney Disease (CKD) is a global public health concern and has been progressively more common in developed and developing countries, with diabetes and hypertension as the main risk factors.[1] CKD can be classified into five progressive stages based on a Glomerular Filtration Rate (GFR) of less than 60 ml/min/1.73m^2 or by markers of kidney damage, or both, lasting at least three months.[2]

Brazil faces this reality, as the progression in the prevalence of CKD in the population is pointed out, which demands the need for care planning as well as the effectiveness of treatment, and the necessary support to face the problem.[3] Therefore, considering the imminent collapse, health authorities have invested in programs aimed at establishing an early diagnosis of the disease, facilitating the referral of patients to medical attention, and consequently delaying the progression of the disease to the terminal phase, when dialysis treatment is arbitrary.[4]

Conservative treatment is identified as guiding care due to the possibility of improvements related to the quality of life of patients and family members who live with the disease and its complications, through a prevention strategy and minimization of its effects.[5] It is during this period that a person needs to adapt to the new changes in their lifestyle, including drug, nutritional and emotional treatment with the new condition. In this context, it is necessary to assess the interactions and responses to stimuli arising from the environment, since the person is an adaptive and holistic system and, when faced with the need for answers, coping mechanisms are activated, as advocated by the Roy Adaptation Model (RAM). Therefore, it is necessary to effectively contribute to the rehabilitation and quality of life of people undergoing conservative treatment.[6]

Thus, it is necessary for health teams to devise strategies for monitoring and monitoring patients in order to preserve Kidney Function as much as possible. Among the team members, nurses have the necessary knowledge to establish the correlation between research, education, care practice and management through technological advances and scientific evidence related to care.[7]

An instrument that can adequately subsidize care by the nursing team are the International Classification for Nursing Practice (ICNP®) terminology subsets. Such instruments are composed of nursing diagnosis/outcome (ND/NO) and intervention (NI) statements. The ICNP® directs the care for specific groups of people, and uses terms and structures of axes. It is a standardized language system that represents nursing practice worldwide and provides nursing data collection, storage and analysis.[8,9]

However, there are few studies that correlate the ND/NO and NI aimed at people with CKD undergoing conservative treatment using classification systems, and most are aimed at colostomy patients, victims of domestic violence, care for women and children in the breastfeeding process, prostatectomy patient, community older adult, palliative care, and people hospitalized with acquired immunodeficiency syndrome, thus verifying a lack of studies regarding this group, a fact that justifies the need for this research.[10] Furthermore, a study carried out in 2013 pointed out a set composed only of ND for people in stage five of CKD, a stage in which the kidneys are no longer able to maintain their basic functioning, requiring renal replacement therapy initiation.[11]

Thus, the present study proves to be innovative in responding to the gap of a subset aimed at people with CKD undergoing conservative treatment, a phase in which clinical measures that postpone the start of some invasive treatment can be valued as well as encouraging health education in this scenario. The subset shows up as a systematic and well-developed opportunity to promote what is known about nursing practice and the best way to demonstrate improvements in clinical outcomes.

Therefore, this study aims to carry out the content validity of ND/NO, NI statements of ICNP® terminology subset for people with CKD on conservative treatment.

Methods

This is a methodological study, developed in 2021, which is part of the last step of a larger project, which aimed to validate a terminology subset following the steps based on the Brazilian method: 1) Identification of related terms based on the literature; 2) Mapping of terms identified in the literature with ICNP® terms, version 2019/2020; 3) Construction of ND/NO and NI; 4) Structuring of terminology subset; and 5) Content validity of statements, which consists of assessing the meaning and usefulness for practice.[12,13]

The empirical basis used was the ICNP® terminology subset structured for people with CKD undergoing conservative treatment and refers to an excerpt from a doctoral thesis from the Academic Program in Health Care Sciences, *Universidade Federal Fluminense*.[14] Based on specialized nursing terminology constructed, 957 terms were obtained about the conservative treatment of chronic kidney disease, which enabled the construction of statements.[15]

This subset was reviewed and updated, consisting of 123 ND/NO and 215 NI, distributed in RAM's adaptive modes: Physiological (Oxygenation, Nutrition, Elimination, Activity/Rest, Protection, Senses, Fluids/Electrolytes, Endocrine Function and Neurological Function); Self-Concept; Role Function; and Interdependence.[16] This model was adopted to compose terminology subset construction, organization and subsequent structuring. Operational definitions were constructed from the ND statements. Such definitions refer to the way of assessing the ND, which were elaborated concurrently with the creation of ND. As an example: "Impaired Kidney Function: Gradual loss of renal structure and function, resulting in progressive loss of physiological functions of the kidneys. The diagnosis can be made through routine laboratory tests, such as blood creatinine and glomerular filtration rate".

The Delphi technique was used, with consultation with expert nurses on the proposition of subset statements, requiring at least two rounds to reach consensus.[17] For this purpose, expert nurses, registered in the *Plataforma Lattes*, supported by the Brazilian National Council for Scientific and Technological Development (CNPq - *Conselho Nacional de Desenvolvimento Científico e Tecnológico*),

were selected. To carry out the search, the term "chronic kidney disease" was used for the subject and the following filters were chosen: Academic Background/Degree: All; Country Brazil; Region/State: All; Professional Activity: Major Area: Health Sciences; Area: Nursing; Subarea: Adult and Elder Health Nursing; Specialty: All. The initial search comprised 185 nurses.

Nurses with at least a master's degree, who worked with ND and the ICNP® and/or focused on CKD in care, teaching and/or research, were included. To calculate the sample of experts, the following formula was used: $n = Z^2\ 1\text{-}\alpha/2.\ p.(1\text{-}p)/n2$, where "$Z^2\ 1\text{-}\alpha/2$" = confidence level adopted; "p" = expected proportion of experts; and "e" = acceptable proportion difference in relation to what would be expected. A 95% confidence level was adopted ($Z^2\ 1\text{-}\alpha/2 = 1.96$), an expected proportion of 85% of experts and a sampling error of 15%, obtaining an ideal sample of 22 experts.[18]

Considering the difficulty of returning experts in validity studies, it was decided to invite a larger number. Contact was made by sending an invitation letter via email, together with the Informed Consent Form (ICF) and the online instruments of Google Documents forms, with the following information: participant characterization and validity instrument containing ND/NO and NI statements arranged according to RAM.

After refining the established criteria, 67 nurses were invited to participate in the validity, obtaining a return of 42 in the first round and 25 in the second. It should be noted that these two rounds were conducted by the main researcher together with a team of experienced researchers in the object in question.

The instrument was sent for item-by-item assessment, and each expert nurse decided to keep, insert, change or delete items, in addition to assessing the relevance of the elements. Answer stability was defined through the degree of agreement among experts, using the Content Validity Index (CVI), determined by the sum of agreements of items "3" and "4". The CVI is defined in the formula: CVI = ∑ answers "3" and "4"/ ∑ answers. Items that obtained agreement of at least CVI ≥ 0.80 were considered validated.[19,20]

In the validity instrument for ND/NO and NI statements, expert nurses agreed by marking an "x" on a Likert-type scale containing: 1) Nothing pertinent; 2) Little relevant; 3) Relevant; and 4) Very relevant. Moreover, they filled in suggestions for writing statements regarding their use in clinical practice.

It was proposed that each round last up to 30 days. In order to remind and support nurses at this stage, weekly emails were sent to experts as a strategy. Each nurse provided their answers and analysis in an Excel® spreadsheet. The result of the previous round was informed to the group when assessing the new version, which included the proposed changes.

After returning the instruments, data were tabulated in Microsoft Excel® 2010. Finally, a compilation of valid ND/NO and NO statements was carried out, arranged in tables.

Study approved by the Research Ethics Committee of *Universidade Federal Fluminense*'s University Hospital, under Opinion 3.798.213 (CAAE (*Certificado de Apresentação para Apreciação Ética* - Certificate of Presentation for Ethical Consideration) 08642919.1.0000.5243).

Results

The statements were submitted to content validity by expert nurses participating in the two rounds, who were mostly female (95%), aged between 40 and 45 years (65%), residing in southeastern Brazil (58%), working in higher education (80%), with a master's degree (55%). After the 2nd round, all diagnoses/outcomes had a CVI of 1.0, totaling 117, as shown in Chart 1. Among the diagnoses, 70 (60%) were classified in the Physiological Mode, since it presents five needs and complex processes: "Oxygenation", with two diagnoses, "Nutrition", with six diagnoses, "Elimination", with 10 diagnoses, "Activity and

Rest", with seven diagnoses, "Protection", with 12 diagnoses, "Senses", with six diagnoses, "Fluids and Electrolytes", with 18 diagnoses, "Endocrine Function", with five diagnoses and "Neurological Function", with four diagnoses. In Self-Concept Mode, 19 (16%) diagnoses were allocated; in Role Function Mode, 17 (14%) were allocated; and in Interdependence Mode, 11 (10%) diagnoses were allocated. Among the eliminated ND/NO, we can cite as examples "Risk for Diabetic Foot Ulcer", "Risk for Violence", "Dizziness", "Urgent Urinary Incontinence" and "Chest Pain", and suggestions were given for allocation of statements in previously established adaptive modes. Of the proposed NI statements, 199 statements were validated, where there were also suggestions in writing them, which have a CVI of 1.0 after the 2nd round (Chart 1).

Chart 1. Distribution of statements of nursing diagnoses/outcome and interventions according to adaptive modes

NURSING DIAGNOSES/OUTCOMES	NURSING INTERVENTIONS
PHYSIOLOGICAL MODE	
Oxygenation	
Functional Dyspnea/No Dyspnea; Cough/No Cough.	Examine lung conditions; Auscultate respiratory sounds, observing areas of reduced or absent ventilation and the presence of adventitious sounds; Record chest movements, noting symmetry, use of accessory muscles, and supraclavicular and intercostal muscle retractions.
Nutrition	
Decreased Appetite/Positive Appetite; Impaired Ability To Manage Dietary Regime/Improved Ability To Manage Dietary Regime; Compulsive Eating Behaviour/Impaired Eating Behaviour; Lack Of Knowledge of Dietary Regime/Improved Knowledge of Dietary Regime; Risk For Impaired Nutritional Status/Positive Nutritional Status; Impaired Weight/Weight Within Normal Limits.	Assess anthropometric data; Investigate complaints about food; Question about swallowing; Observe if patient uses dental prosthesis; Advise on the need for a daily oral care routine; Guide the person to brush their teeth, gums and tongue; Recommend a healthy diet; Investigate a person's food preferences; Monitor the mucous membranes, skin turgor; Assess insufficient water intake; Monitor evolution of patient data: weight in all consultations.
Elimination	
Low Fluid Output/Improved Fluid Output; Fluid Imbalance/Fluid Balance Within Normal Limits; Fluid Retention/ Effective Fluid Volume; Nausea/No Nausea; Effective Constipation/Gastrointestinal System Function; Risk For Constipation/Effective Gastrointestinal System Function; Frequent Pain During Urination/No Pain During Urination; Decreased Urinary Frequency/Normal Urinary Frequency; Decreased Urinary Elimination/Improved Urinary Elimination; Proteinuria/Effective Urinary System Function.	Investigate bowel control; Instruct the person to avoid retaining urine, urinating whenever they feel like it; Encourage the person to always maintain proper personal hygiene; Identify the risks for developing constipation; Investigate insufficient water intake; Ask about pain when urinating; Assess signs of hypovolemia, such as bleeding, diarrhea, vomiting and other losses; Check for signs of low cardiac output; Investigate low food intake; Look for signs of dehydration and poor tissue perfusion; Assess the 24-hour urinalysis; Assess laboratory tests; Monitor laboratory tests, paying attention to electrolyte disturbances.
Activity and Rest	
Impaired Ability to Manage Exercise Regime/Ability to Manage Exercise Regime improved; Hypoactivity/Effective Pathological Process Related Activity Tolerance; Fatigue/Reduced Fatigue; Leg Cramps/Improved Leg Cramps; Risk For Fall/ Risk For Fall Control; Impaired Sleep/Adequate Sleep; Improved Discomfort/Comfort.	Monitor the person's satisfaction with pain control at specified intervals. Identify factors that trigger fatigue; Guidance on the practice of physical activity; Supervise polypharmacy and drug under prescription; Strengthen a healthy diet; Encourage lifestyle changes; Periodically review and adjust the prescription of medications that increase the risk for falling; Check the use of diuretics, laxatives; Assess sleep pattern; Investigate customs of sleep schedules; Assess medical prescriptions about medications that can alter sleep and cause drowsiness; Ask about sleep interruptions.

Continue...

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NURSING DIAGNOSES/OUTCOMES	NURSING INTERVENTIONS
Protection	
Impaired Skin Protection Capacity/Effective Skin Protection Capacity; Impaired Skin Integrity/Improved Skin Integrity; Dry Skin/Improved Dry Skin; Risk For Impaired Skin Integrity Risk/Skin Integrity Control; Rash/Improved Rash; Impaired Medication Schedule/Improved Medication Schedule; Impaired Dentition/Improved Dentition; Hyperthermia/Positive Thermoregulation; Contamination Exposure/Decreased Contamination Exposure; Risk For Urinary Tract Infection/Risk For Urinary Tract Infection Control; Susceptibility To Infection/Infection Control; Chronic Inflammation/Improved Chronic Inflammation.	Record allergies in the medical record; Assess medical prescription in order to assess drug interactions; Maintain skin hydration; Identify signs such as cold skin, edema and lung congestion; Observe peripheral pulse; Monitor dryness and excessive moisture of the skin; Monitor skin color; Monitor skin temperature; Advise not to use drugs without a prescription.
Senses	
Acute Pain/Reduced Pain; Chronic Pain/Reduced Pain; Musculoskeletal Pain/Improved Musculoskeletal Pain; Impaired Sensory Perception: Hearing/Improved Sensory Perception; Impaired Sensory Perception: Sight/Improved Sensory Perception; Impaired Tactile Perception/Effective Tactile Perception.	Encourage rest in an environment with low light and silence; Conduct a comprehensive pain survey to include location, characteristics, onset/duration, frequency, quality, intensity or severity of pain, and precipitating factors; Assure the person the precise care of analgesia; Assess with the person and the health care team the effectiveness of pain control measures that have been used; Encourage self-monitoring of pain and intervene appropriately; Assess the need for neurological assessment; Promote the use of prescribed medication; Control underlying diseases; Discuss measures to prevent accidents at home; Forward to the otorhinolaryngology service; Forward to the ophthalmology service; Investigate causes for loss of sensitivity.
Fluids and Electrolytes	
Risk For Altered Blood Pressure Risk/Blood Pressure Control; Risk For Arrhythmia /No Arrhythmia; Impaired Fluid Volume/Effective Fluid Volume; Hypervolemia/Fluid Balance Within Normal Limits; Peripheral Oedema/No Peripheral Oedema; Presence Of Hyperphosphatemia/Improved Electrolyte Balance; Presence Of Hypernatremia/Improved Electrolyte Balance; Presence Of Hyperkalaemia/Improved Electrolyte Balance; Presence Of Hypocalcemia/Improved Electrolyte Balance; Presence Of Hypophosphatemia/Improved Electrolyte Balance; Risk For Electrolyte Imbalance/Improved Electrolyte Balance; Metabolic Acidosis/Improved Acid Base Balance; Impaired Kidney Function/Effective Kidney Function; Impaired Heart Function/Effective Heart Function; Altered Blood Pressure/Blood Pressure Within Normal Limits; Impaired Cardiac Output/Effective Cardiac Output; Risk For Impaired Cardiac Function/Effective Cardiac Function; Risk For Fluid Volume Imbalance/Fluid Volume Control;	Advise on the use of diuretics and anti-inflammatory drugs; Encourage dietary change with fruits and vegetables; Note hyperkalemia; Monitor serum creatinine at each appointment; Control volume of net gains; Assess kidney function; Assess sodium intake; Investigate water loss in large quantities; Assess dosage of serum calcium and ionized calcium, phosphorus, PTH, calcitriol; Assess calcium replacement with the medical team; Inform the person of normal blood pressure values; Monitor serum electrolyte levels; Identify possible causes of electrolyte imbalances; Monitor nausea, vomiting and diarrhea; Identify treatments capable of altering the electrolyte status; Look for symptoms of uremia; Assess the control of drug treatment; Assess need for hydration; Forward to the nutrition service for adequacy of dietary regime.
Neurological Function	
Impaired Memory/Effective Memory; Impaired Learning/Improved Learning; Impaired Communication/Effective Communication; Dizziness/No Dizziness.	Assess mental state, level of development and cognitive ability; Assess the psychological state; Assess communication about conservative treatment care; Check the person's cognitive learning regarding their health; Assess barriers in communication in the person's daily life; Listen carefully to the person and family and respond in a simple and understandable way; Ensure that the person understands the guidance provided about their health status; Allow the person to show their expectations about their health condition; Institute measures that provide for the memorization of the person's treatment; Identify signs and symptoms before vertigo.
Endocrine Function	
Impaired Blood Glucose Self-Monitoring/Improved Blood Glucose Self-Monitoring; Hyperglycaemia/Blood Glucose Level Within Normal Limits; Hypoglycaemia/Blood Glucose Level Within Normal Limits; Risk for Altered Blood Glucose/Blood Glucose Level Within Normal Limits; Hypovitaminosis/Improved Hypovitaminosis.	Encourage hand hygiene; Educate about sharps and their disposal; Guidance on device calibration and general care; Guidance on hypertension and diabetes treatment; Assess blood glucose tests; Research on the feeding regime; Monitor evolution of patient data: weight in all consultations; Provide guidance on weight reduction measures; Calculate BMI in consultations; Assess insufficient control of diabetes; Assess signs of hyperglycaemia and hypoglycaemia.

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NURSING DIAGNOSES/OUTCOMES	NURSING INTERVENTIONS
SELF CONCEPT MODE	
Negative Self Image/Positive Self Image; Stigma/Reduced Stigma; Impaired Sexual Performance/Improved Sexual Performance; Anxiety/Reduced Anxiety; Self Esteem/Positive Self Esteem; Conflicting Spiritual Belief/Improved Spiritual Belief; Impaired Adaptation/Improved Adaptation; Aggressive Behaviour/No Aggressive Behaviour; Improved Hopelessness/Hope; Difficulty Coping With Illness/Reduced Difficulty Coping With Illness; Depressed Mood/Decreased Depressed Mood; Lack Of Resilience/Improved Resilience; Suffering/Reduced Suffering; Sadness/Reduced Sadness; Crying/No Crying; Spiritual Distress/Decreased Spiritual Distress; Fear About Death/Decreased Fear About Death; Fear About Abandonment/Decreased Fear About Abandonment; Fear About Being A Burden To Others/Decreased Fear About Being A Burden To Others.	Identify suffering; Assess expression of guilt; Establish integration with significant people; Assess expression of anger or despair; Assess the person's expectations; Listen to complaints that make anxiety possible; Encourage self-confidence; Help the person adapt to their disabilities; Listen carefully to the person's expectations; Define activities for self-care; Recognize situations in which the person can self-manage their treatment; Assess family relationships; Assess level of education; Reinforce presence in consultations; Maintain respect and let the person rant about their motives; Assess help from other professionals to better manage the situation; Promote good interaction; Create a safe environment for the person; Awaken feelings of hope; Know the values of religion for the person; Question the reasons for their unmotivated belief; Promote measures for the integration of religion and health care; Identify reasons that lead to the difficulty of follow-up; Assess treatment dissatisfaction; Promote multidisciplinary measures that contribute to improving body image; Assess possible measures to improve body image in the community; Promote biopsychosocial work with the person and family; Involve the sexual partner in the treatment; Provide information about treatment that is appropriate for each patient, considering the cultural level of each one and how much the person wants to be informed; Value personal hygiene for a better quality of life; Promote adaptation to new lifestyles; Assess the person's and family's beliefs, attitudes and values; Assess measures that support the person's confidence; Identify the spiritual aspects that affect suffering; Offer emotional support;
ROLE FUNCTION MODE	
Stress/Decreased Stress; Risk For Dissatisfaction With Healthcare/Satisfaction With Healthcare; Tobacco Abuse/No Tobacco Abuse; Ineffective Health Self Control/Improved Self Control; Self Care Deficit/Able To Perform Self Care; Impaired Ability To Manage Medication Regime/Positive Ability To Manage Medication Regime; Impaired Ability To Dress And Groom Self/Improved Ability To Dress And Groom Self; Impaired Ability To Prepare Food/Improved Ability To Prepare Food; Impaired Acceptance Of Health Status/Effective Acceptance Of Health Status; Denial About Illness Severity/No Denial; Unrealistic Expectation About Treatment/Improved Expectation About Treatment; Low Follow-Up Appointment Attendance/Improved Follow-Up Appointment Attendance; Continuity Of Care Problem/Effective Continuity Of Care; Impaired Role Performance/Effective Role Performance; Impaired Safety Role/Improved Safety Role; Impaired Work Role/Improved Work Role; Impaired Family Role/Improved Family Role.	Assess the person's alcohol/smoking abuse and its impact on health; Encourage demand for outpatient medical service; Reinforce health behaviour; Value resilience; Meaning spirituality; Assess self-perception about health status; Recognize the person's social support; Promote measures for self-care; Encourage leisure activities; Remove common sense beliefs about the disease; Help identify the role in the family; Reinforce capacities to perform the role; Value religious belief; Assess social support received in religious environments; Assess expectations about treatment; Provide information about health condition; Guide on preventive measures of the disease; Obtain information per person and family about acceptance of diet; Provide telephone contact for queries; Obtain data on used drugs; Recognize doubts about drug treatment; Recognize intellectual level for understanding the drugs; Seek information for denial of disease; Enable communication of feelings; Obtain data on friendship relationships; Obtain hobby data; Forward to the nutrition service; Forward to the psychology service;

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Continuation.

NURSING DIAGNOSES/OUTCOMES	NURSING INTERVENTIONS
INTERDEPENDENCE FUNCTION MODE	
Impaired Ability To Perform Leisure Activity/Improved Ability To Perform Leisure Activity; Impaired Access To Treatment/Improved Access To Treatment; Lack Of Access To Transportation/Improved Access To Transportation; Risk For Impaired Family Coping/Effective Family Coping; Impaired Family Decision Making Process/Improved Family Decision Making Process; Impaired Family Process/Effective Family Process; Impaired Communication Between Health Care Provider And Individual/Improved Communication Between Health Care Provider And Individual; Lack Of Trust In Health Care Provider/Trust In Health Care Provider; Impaired Social Condition/Improved Social Condition; Lack Of Social Support/Effective Social Support; Social Isolation/Decreased Social Isolation; Impaired Marital Satisfaction/Improved Marital Satisfaction.	Arrange transport service; Assess accessible public transport; Recognize the person's transport access area; Assess the family network to accompany the person to the outpatient clinic; Obtain data on the risk for violence; Assess psychological care; Reflect together with the person the reasons for low confidence; Present welcoming strategies; Present all spaces of the service; Assess the person's and family's employment relationships; Adapt care plan to socioeconomic condition; Recognize work strategies; Assess communication failures; Assess expectations; Determine how the person wants to communicate; Understand empathy without value judgment; Assess behaviour that generates communication failure; Refer the caregiver to the psychology service; Identify the level of intellectual knowledge on the part of the person and the caregiver; Assess the health situation of another weakened family member, which also requires care; Determine psychological and/or psychiatric problems; Recognize caregiver burden; Assess family, social and economic support; Reunite person and family; Promote family communication; Provide mechanisms for family members to keep in touch with each other; Encourage the expression of feelings and expectations; Promote family involvement; Optimize binding pattern of family members; Assess family coping; Assess role interaction; Assess functional dynamic relationship; Advise relaxation measures; Assess care strategies for the person that generate stress; Assess the level of satisfaction that harms the treatment; Forward to Psychology service; Forward to Social Service;

Discussion

Nursing care for people with CKD undergoing conservative treatment is complex, i.e., it complies with a holistic approach, in order to observe a person as a whole, especially because it is a path in which behaviors must be adjusted and adapted to in order to prevent disease progression. In this context, using RAM was relevant, as it corroborates the understanding of ways that nurses can use to assess persons' adequacy to new established goals and allows the organization of clinical nursing reasoning, taking into account the comprehensiveness of care and scope of the human being.[9]

The Physiological Adaptive Mode collected 70 of the diagnoses, with a prevalence of statements validated in the complex process "Fluids and electrolytes", with 18 validated ND/NO, the most prevalent being "Altered Blood Pressure" and "Peripheral Oedema". Such a process is commonly characterized in the nursing care of a person with CKD, since, in its evolution, hydroelectrolyte balance control is important not only for blood pressure maintenance, but also for edema control. In the more advanced stages, the presence of edema is a very common condition, especially in people with low compliance with dietary salt restriction.[4]

Thus, when a drug therapy is used, the numerous drugs can help in different manifestations of the body, such as in edema control and in blood pressure level reduction, i.e., body fluids. In this regard, it is important for nurses to assess indicators; in this case, diagnoses that are related to therapy, since the wrong use of drugs can cause complications such as hypovolemia, worsening of cramps, hypo or hypernatremia, hypokalemia, in addition to making it difficult to control calcemia.[21] Thus, with such diagnoses, nurses in practice have the possibility of expanding their reasoning in multiple aspects and contributing to the finding of affected clinical needs.

Other needs that covered important diagnoses were "Elimination" and "Nutrition", with the prev-

alent diagnoses "Fluid Retention" and "Lack Of Knowledge Of Dietary Regime", respectively. The first diagnosis is related to the presence of alterations caused by decreased GFR, which disables the course of regulatory functions and the removal of metabolic degradation products, which can also cause changes in urinary quantity and frequency.[22] Thus, the applicability in practice of a search for factors that determine such diagnoses in people with CKD undergoing conservative treatment is relevant.

The need for nutrition is an area of vital importance during kidney disease treatment, since nutritional status depletion is often observed as the loss of kidney function evolves.[23] In the early stages of CKD, dietary interventions can delay disease progression and the onset of symptoms, while in later stages it can delay the need for renal replacement therapy. Nutritional therapy also plays an important role in preventing and treating protein-energy wasting, electrolyte imbalances, and bone and mineral abnormalities. However, dietary regimes for kidney disease are also among the most restrictive of any chronic disease.[24]

Outpatient nurses' practice must take into account that dietary habits impose a high rate of protein-saline intake, and any attempt to reduce it is not well regarded by the person, who often feels stigmatized, since associates food preferences, lifestyle, purchasing power and cultural values.[4,25] Nurses should be aware of dietary patterns and encourage healthy habits, with a higher intake of fruits and vegetables and a lower intake of animal-based proteins, which may have potential benefits in delaying CKD progression, postponing the onset of uremic toxicity in advanced stages of CKD and even decrease mortality.[21] In this way, a multidisciplinary team's joint action brings greater benefits, since people can be subjected to regular follow-ups and periodic assessments, in addition to the guarantee of relevant resources and care.[26]

With regard to psychosocial needs, "Self-Concept", "Role Function" and "Interdependence" modes comprised statements of ND and NI that allow the observation of responses to psychological integrity, social integrity and emotional adequacy. As examples of validated diagnoses, there are "Impaired Adaptation", "Self-Care Deficit", "Impaired Access to Treatment", respectively. It is known that, with the discoveries arising from treatment, it is recognized that a process of adaptation and changes in routine and life habits are required, which challenge the perception that individuals have of themselves, of their aptitudes and their environment.

A study reveals that the symptoms of depression and anxiety are directly related to the stages of CKD, since there seems to be an increase in these symptoms at levels two and five. And the same occurs with the psychological dimension of these people, in which the emotional aspect is especially affected, triggering considerable psychological distress, which can lead to difficulties in managing and coping with the illness.[27]

It is important that nurses encourage the recognition of their patients' emotional responses through tools in follow-up appointments, which can help assess and assist in the early diagnosis of psychiatric illnesses, including depression and anxiety. Furthermore, it is recommended to raise awareness of the psychological well-being of people with CKD among staff.[28] Thus, NI should be comprehensive in addressing general issues about the disease, and the ways of dealing with the implemented changes can be significant, in order to achieve better results among people with kidney conditions. However, it is important to remember the various stages and meanings of the disease, which require different knowledge and coping strategies.[29,30]

The subset proposed here contains in its nature a range of elements consistent with practice, as it allows the projection of trends on affected needs, the prediction of complications, ways to treat such needs, the use of resources and results of nursing care people with CKD.[15] The main objective of nurses should be to give birth to an understanding of how these elements impact and interconnect in promoting adequate treatment, often reflected in the best possible therapeutic follow-up, thus reflecting on the approach of scientific knowledge and the reality of practice.[8,31]

As implications of this study for practice, the usefulness of the results presented here is reinforced with the aim of facilitating the understanding of a health information system, as it can achieve improvement of internal communication quality,

comparison of data between institutions, populations, geographic areas as well as document and predict future trends in care and resource allocation for health policies at various levels.

Studies have been published with evidence for nursing practice that converge with the current study, as they are based on other classification systems and reinforce the need for its use. Two studies can be cited, one with the diagnosis classification by NANDA International Inc. (NANDA-I), and another with the connection NANDA-I, Nursing Outcomes Classification (NOC) and Nursing Interventions Classification (NIC) to create a care plan.[22,32] However, such studies are aimed at people already on renal replacement therapy, whether undergoing hemodialysis or peritoneal dialysis, which justifies the importance of the current study.

Finally, the subset on screen brings important nursing phenomena about CKD that are not exhausted. The proposed statements portray relevant problems and indicate the identification of outcomes and the establishment of the best NI, which can be adapted according to nurses' clinical reasoning and each person's individuality. The subset is a concrete base that encompasses a person in their totality and that includes evident phenomena and those that can become evident, in which the person and their community are related.

Therefore, ND/NO and NI submission to validity allowed for the improvement and legitimization of old and new elements for classification, enabling its generalization and increased prediction. Content validity through the Delphi technique allowed for an exhaustive but homogeneous discussion in a diverse group, as there was a deepening of knowledge regarding the expansion of the classification, since there was a general contribution from nurses regarding the permanence or removal of the proposed statements, in addition to changes in wording of subset items to suit professional practice.

The proposition of terminology subsets contributes to sensitive areas of nursing, since it can influence continuity of care, consistency in written communication and safety intensification, since it instructs the supply of data that demonstrate its technological contribution in health care, thus promoting changes through education, administration and research, in addition to resulting in greater visibility, recognition and autonomy of the profession.[33,34]

It is also reinforced as a contribution the advancement of this study by demonstrating ICNP® use as a standardized language system for the terminological organization of care for the specialty of nursing in nephrology. The first published study, associating the specialty and ICNP®, brought a subset composed only of diagnostic statements, based on version 2 of ICNP®, published in 2011 by the International Council of Nurses.[11] The present study presented 70 diagnoses organized according to Wanda de Aguiar Horta 's Theory of Basic Human Needs, aimed at end-life patients. The study differs from the current one in relevant aspects such as the chosen health priority, the expansion of diagnoses, the complementation with outcomes and interventions, the theoretical model adopted and the use of ICNP® current version, thus being able to provide the extension to the specialized area of study.

As limitations, the high number of statements demanded more time given to expert nurses to validate content, since the online instrument was long and exhaustive. This characteristic may have been influenced by participants' personal demands and the limited time available. The exclusion of some of the statements and the absence of clinical applicability testing are also limitations in this study.

Conclusion

An ICNP® terminology subset had its content validated with 117 ND/NO statements, and 199 interventions for the care of people with CKD undergoing conservative treatment, structured in RAM. This theory, in addition to serving as a building block for subset organization, promoted theoretical-conceptual subsidy for the study, bringing theory and practice closer together and strengthening the principles that guide the profession. The relevant points of this study are in the profile of valid statements, since characteristic phenomena of people with CKD were contemplated, which provides a profound assessment of the health status on screen.

The main focus of conservative treatment is changing lifestyle habits, nutritional adaptation, and medication adjustment, thus reinforcing nursing performance systematically and objectively.

Collaborations

Menezes HF, Camacho ACLF, Sant'Anna RM, Matos TLM, Santos IS, Silva ABP, Rufino CG and Silva RAR declare that they contributed to the project design, data interpretation, relevant critical review of intellectual content and approval of the final version be published.

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