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THE NURSING PROCESS IN CARING FOR PEOPLE WITH PARKINSON'S DISEASE: INTEGRATIVE REVIEW

*O processo de enfermagem no cuidado as pessoas com doença de parkinson: revisão integrativa**El proceso de enfermería en el cuidado de personas con enfermedad de parkinson: revisión integrativa***Alcimar Marcelo do Couto**¹ **Isabella Maria de Oliveira**² **Milena Riêra Lopes**³ **Sônia Maria Soares**⁴ 

RESUMO

OBJETIVO: analisar a produção científica acerca da utilização do processo de enfermagem no cuidado as pessoas com Parkinson. **Método:** revisão integrativa nas bases de dados Lilacs, Medline, CINAHL, Scopus, Cochrane, Embase e Web of Science. A coleta dos dados ocorreu em agosto de 2021. Após seleção dos estudos, a amostra totalizou 20 artigos. **Resultados:** a partir da síntese das evidências foi possível organizar três categorias temáticas: “O Processo de Enfermagem na atenção à saúde de pessoas com Parkinson: contexto brasileiro”; “Linguagem Padronizada de Enfermagem e referenciais teóricos no suporte ao Processo de Enfermagem” e “Modelos de cuidado e as etapas do Processo de Enfermagem na atenção à saúde de pessoas com Parkinson: experiências e perspectivas”. **Conclusão:** o estudo de revisão possibilitou conhecer tanto em contexto nacional como internacional a oferta de cuidados de enfermagem e a utilização do Processo de Enfermagem no cuidado as pessoas com Parkinson.

DESCRIPTORES: Processo de enfermagem; Cuidados de enfermagem; Revisão; Terminologia padronizada em enfermagem; Doença de Parkinson.

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ABSTRACT

OBJECTIVE: to analyze scientific production about the use of the nursing process in caring for people with Parkinson's.

Method: integrative review in the Lilacs, Medline, CINAHL, Scopus, Cochrane, Embase and Web of Science databases. Data collection took place in August 2021. After selecting the studies, the sample totaled 20 articles. **Results:** from the synthesis of evidence, it was possible to organize three thematic categories: "The Nursing Process in health care for people with Parkinson's: Brazilian context"; "Standardized Nursing Language and theoretical references to support the Nursing Process" and "Care models and the stages of the Nursing Process in health care for people with Parkinson's: experiences and perspectives".

Conclusion: the review study made it possible to understand both in a national and international context the provision of nursing care and the use of the Nursing Process in caring for people with Parkinson's.

DESCRIPTORS: Nursing process; Nursing care; Review; Standardized nursing terminology; Parkinson Disease.

RESUMEN

OBJETIVO: analizar la producción científica sobre la utilización del proceso de enfermería en el cuidado de personas con Parkinson. **Método:** revisión integrativa en las bases de datos Lilacs, Medline, CINAHL, Scopus, Cochrane, Embase y Web of Science. La recolección de datos se realizó en agosto de 2021. Luego de seleccionar los estudios, la muestra totalizó 20 artículos. **Resultados:** a partir de la síntesis de evidencia fue posible organizar tres categorías temáticas: "El Proceso de Enfermería en la atención a la salud de personas con Parkinson: contexto brasileño"; "Lenguaje estandarizado de enfermería y referentes teóricos de apoyo al Proceso de Enfermería" y "Modelos de cuidado y etapas del Proceso de Enfermería en la atención a la salud de personas con Parkinson: experiencias y perspectivas". **Conclusión:** el estudio de revisión permitió comprender, tanto en el contexto nacional como internacional, la prestación de cuidados de enfermería y la utilización del Proceso de Enfermería en el cuidado de personas con Parkinson.

DESCRIPTORES: Proceso de enfermería; Atención de enfermería; Revisión; Terminología normalizada de enfermería; Enfermedad de Parkinson.

INTRODUCTION

Among the chronic degenerative and disabling diseases, Parkinson's Disease (PD) stands out, a degenerative disorder of the central nervous system that is on the rise, affecting 6.1 million people globally in 2016,¹ with high social and economic costs, making it a major challenge for health systems today, which deserves to be highlighted due to its characteristics and numerous repercussions for the individual, family and society.²⁻³

Defined as an idiopathic, chronic, degenerative and progressive neurological disorder, associated with Lewy bodies and loss of dopaminergic neurons in the substantia nigra, PD is characterized by the association of motor and non-motor alterations, with different stages of progressive impairment.⁴⁻⁵ It is important to note that as the disease progresses, in its different stages, the functional capacity of the elderly is affected and can directly impact their quality of life.⁶

In this context, health education is important from the moment the disease is diagnosed, through all the stages of disability progression, encouraging self-care and self-management of daily tasks, within the possibilities of the

current context of disease progression and physical impairment and cognitive and behavioral changes.⁷⁻⁸ In order to make the individual the protagonist of their care, they can be encouraged to make decisions and perform activities that they are still able to do.⁹

Nurses have an important role to play in this context, as they work through systematized nursing consultations that operationalize the Nursing Process (NP), and can motivate and prepare people with Parkinson's, with the participation of their families and caregivers, to become protagonists in managing their health problems.² For nurses working in primary health care and outpatient services, providing self-management support and promoting self-care actions for people with chronic diseases such as PD is considered an important part of professional care.¹⁰

In view of this, there is a need for trained nursing professionals who are able to effectively operationalize the NP and provide guidance to people with PD and their families and accompany them throughout the course of the disease. To this end, it is essential that research is carried out into nursing practice and the effectiveness of the interventions used to care

for this population, with emphasis on actions and strategies that promote self-care for people with PD.⁹

The aim of this study was to analyze scientific production on the use of the nursing process in caring for people with Parkinson's disease.

METHOD

This is an integrative literature review, carried out in six stages. This is a literature mapping technique in which research is summarized, and conclusions are established considering the research design, consequently making it possible to synthesize and analyze the scientific knowledge produced on a given topic for its incorporation into practice, as well as reflections on future research.¹¹

The first stage included drafting the review question, based on the search strategy known by the acronym PICO,¹² in which: Population (P): adults and elderly people with Parkinson's disease; Interest (I): use of the nursing process; Context (Co): nursing care. In this sense, the following research question was formulated: How has the nursing process been approached in scientific productions as a tool in the provision of nursing care to adult and elderly individuals with Parkinson's Disease?

In the second stage of the search and selection of primary studies, databases were chosen according to the research question. The search for studies was carried out in August 2021 in the Virtual Health Library (VHL), PUBMED and the journal portal of the Coordination for the Improvement of Higher Education Personnel (Capes).

The search covered the following databases: Latin American and Caribbean Health Sciences Literature (LILACS) through the Virtual Health Library (VHL); Medical Literature Analysis and Retrieval System Online (MEDLINE) through the U.S. National Library of Medicine National Institute of Health (PUBMED); Cumulative Index to Nursing and Allied Health Literature (CINAHL), Scopus, The Cochrane Library (Cochrane), Embase and Web of Science (WOS).

The third stage consisted of selecting the search terms based on the words that made up the review question, identifying whether the term was a descriptor or a keyword. As a research strategy, the Descriptors in Health Sciences (DeCS) were used for the Portuguese-language databases and the corresponding Medical Subject Headings (MeSH) in English, together with the Boolean operators and or, enabling the following cross-references: (Nursing Care OR Nursing Process OR Nursing Diagnosis OR Standardized Nursing Terminology) AND (Parkinson's Disease); (Nursing Care OR Nursing Process OR Nursing Diagnosis OR Standardized

Nursing Terminology) AND (Parkinson's Disease); (Atención de Enfermería OR Proceso de Enfermería OR Diagnóstico de Enfermería OR Terminología Normalizada de Enfermería) AND (Enfermedad de Parkinson).

In the fourth stage, which concerns the critical evaluation of the primary studies included in the review, the first stage of article selection consisted of reading the titles and abstracts in order to select works relevant to the aim of this study. After this selection, all the articles included were read in full, analyzed according to the established criteria and the information obtained was organized and presented in the form of a table containing a summary of the information extracted from the studies.

We included articles published between 2011 and 2021, available in full for free access, in English, Spanish and Portuguese, which addressed the proposed theme. Editorials, letters to the editor, manuals, theses, dissertations, repeated articles and studies that did not correspond to the theme relevant to the objective of the review were excluded.

In the fifth stage, which is the synthesis of the results of the review, the strategy used to collect data from the selected articles was to use an instrument designed by the authors solely for this purpose, made up of variables of interest to the research.

To analyze the information, a spreadsheet created using Microsoft Excel® software was used, consisting of the items covering the variables of interest to the research. The data was grouped according to similar themes, thus allowing the results to be presented in categories.

The sixth stage consisted of presenting this review in the form of a synoptic table, in order to summarize the most relevant findings, as well as drawing up the study's conclusions and the reflections that emerged during the analysis and discussion of the thematic categories.

RESULTS

The initial search found a total of 318 publications. By reading the titles and abstracts, it was possible to exclude those studies that did not meet the inclusion criteria or the object of investigation or were duplicated in the databases. Thirty-two articles were selected for reading in full. Of these, 20 answered the guiding question and met the inclusion criteria, making up the final sample of this review.

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology was used to systematize the article selection process.¹³ The stages of this process are described in the form of a flowchart (Figure 1).

The 20 articles selected 14-33 were published between 2014 and 2021. The years with the highest number of publications were 2015 with six articles and 2020 with four articles. The data showed a gap in publications between 2011 and 2013 and 2017.

As for where the studies were carried out, eight (40.0%) were Brazilian and 12 (60.0%) international, with five produced in the United States of America (USA) and another six in European countries (Spain, Sweden and the Netherlands). Only one publication was from Asia (Japan).

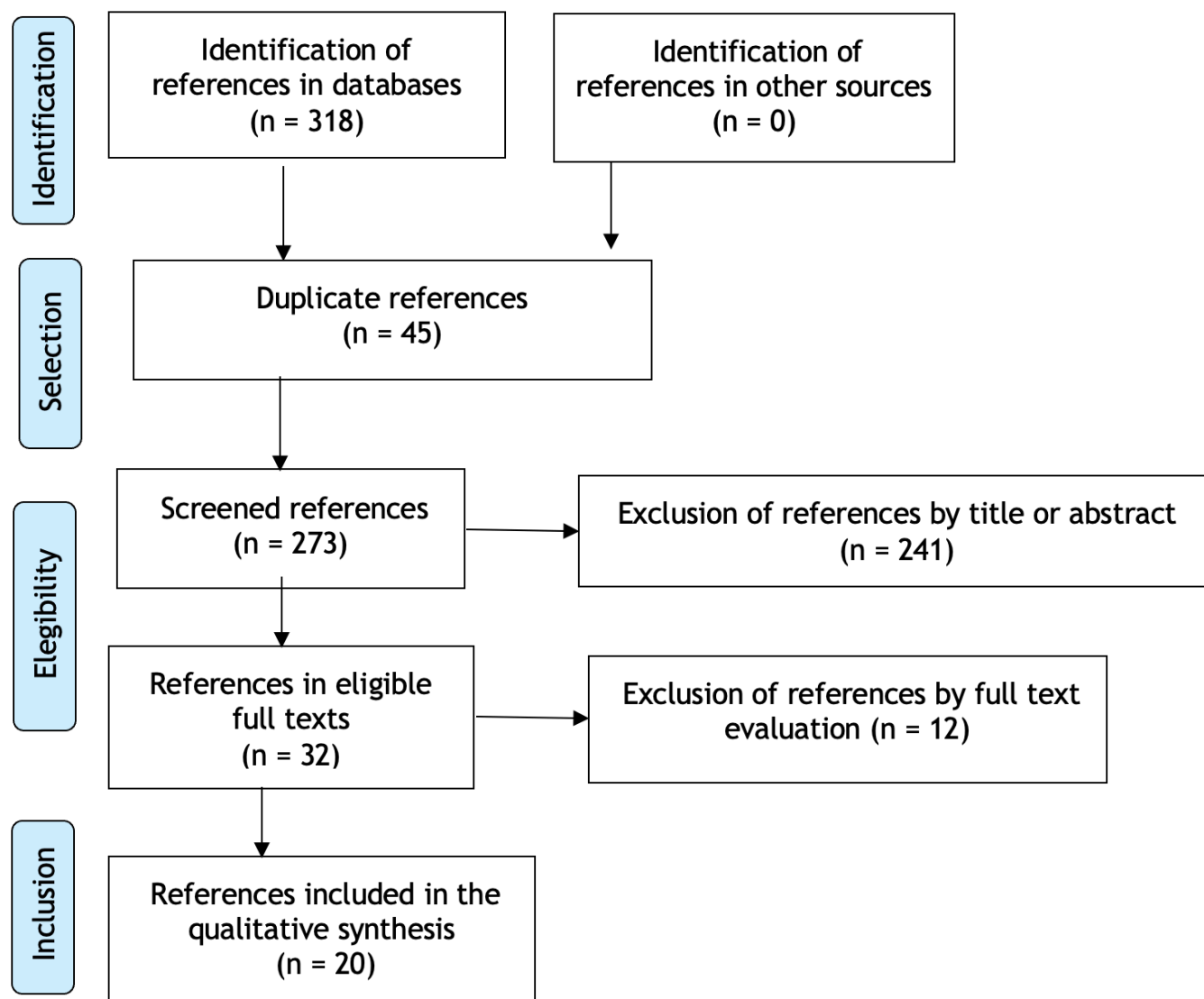


Figure 1 - Flowchart of the selection of publications in the databases adapted from the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA), Belo Horizonte, MG, 2021.

In view of the survey carried out, it is noteworthy that there has been little production of articles evaluating the effectiveness of nursing interventions (clinical trials) in the Brazilian context.

After selecting the publications to be used in the synthesis of the review, a table was built to analyze the profile of the publications (Chart 1).

Chart 1 - Characterization of the articles selected from 2011 to 2021. Belo Horizonte, MG, Brazil, 2021

Code	Journal and database	Country of origin and year of publication	Study design	Study sample	Main results and conclusions
A1 ¹⁴	Rev Enferm UFSM / LILACS	Brazil; 2014	Qualitative descriptive study	Nine nurses working in primary health care.	The study showed that there were no records of patients with PD in the area covered by the units. This lack of records indicates that nursing care is compromised when it comes to establishing specific actions for patients with the disease.
A2 ¹⁵	Revista de Pesquisa Cuidado é Fundamental Online / LILACS	Brazil; 2016	Qualitative descriptive study	Five people with Parkinson's disease.	It pointed to the fragmentation of the team in providing comprehensive care to people with PD, the lack of an effective bond with the target public, care hampered by a lack of guidance, treatment focused on pharmacological care, without multi-professional action.
A3 ¹⁶	Revista da Escola de Enfermagem da USP / MEDLINE	Brazil; 2015	Descriptive, cross-mapping study	67 electronic medical records of patients with PD.	A total of 454 Nursing language terms were identified which, after cross-mapping, culminated in 54 diagnoses, present in 11 domains of the Nanda I taxonomy.
A4 ¹⁷	Acta Paulista de Enfermagem / LILACS	Brazil; 2015	Descriptive, cross-mapping study	67 electronic medical records of patients with PD.	The comprehensiveness of the taxonomy in identifying urinary alterations was observed. Seven nursing diagnoses were mapped, with "impaired urinary elimination" being the most frequent.
A5 ¹⁸	OBJN: Online Brazilian Journal of Nursing / LILACS	Brazil; 2015	Descriptive, cross-mapping study	67 electronic records of patients with PD.	Of the 93 nursing language terms, 15 diagnoses standardized with NANDA-I emerged from the cross-mapping. The most frequently mapped were "Impaired physical mobility" and "Risk of falls".

Code	Journal and database	Country of origin and year of publication	Study design	Study sample	Main results and conclusions
A6 ¹⁹	Revista Latino-Americana de Enfermagem / MEDLINE	Brazil; 2016	Descriptive, cross-mapping study	67 electronic records of patients with PD.	A total of 1,077 standardized interventions were identified which, after cross-referencing with the taxonomy and refinement by the experts, resulted in 32 interventions equivalent to the Nursing Interventions Classification system.
A7 ²⁰	REBEn - Revista Brasileira de Enfermagem / MEDLINE	Brazil; 2019	Qualitative study, Convergent Care Research (CCR)	Nine elderly people with PD.	The application of gerontechnology resulted in self-care, empowerment and knowledge on the part of the elderly through the game, revealing an interest in changing behavior, independence and learning, as well as serving as a facilitating tool for care.
A8 ²¹	Revista da Escola de Enfermagem da USP / MEDLINE	Brazil; 2021	Qualitative study, Convergent Care Research (CCR)	Nine elderly people with PD and ten professionals.	The educational gerontechnology developed has relevant content and can be used by the elderly, family members and caregivers in order to clarify issues on the subject of fall prevention for the elderly with PD.
A9 ²²	Gerokomos / LILACS	Spain; 2018	Review study	Nineteen publications.	Most of the articles analyzed focused on the more advanced stages of PD and pointed to the progressive acceptance of the disease by the individual. The most prominent physical problems are related to mobility, elimination and rest/sleep.
A10 ²³	Revista de Enfermería Neurológica / LILACS	Spain; 2019	Review study	Not presented in the review.	It was found that in order to guarantee nursing care for patients with PD, it is necessary to adopt records that allow, guide, unify and scientifically support the work of nurses. The results showed that there is little research into nursing care records.

Code	Journal and database	Country of origin and year of publication	Study design	Study sample	Main results and conclusions
A11 ²⁴	Journal of Advanced Nursing / CINAHL	Spain; 2020	Non-randomized controlled trial	140 people with PD and 127 informal caregivers.	Patients and informal caregivers in both the experimental and control groups showed significant psychosocial improvement after the intervention. There was also a significant improvement in the patient's quality of life and in the caregiver's skills. The effects of the psychoeducational intervention are no different from the effects of programmed education.
A12 ²⁵	Elsevir / MEDLINE	Sweden; 2015	Qualitative descriptive study	7 PD patients and their spouses.	It highlights the importance of knowledge about the disease, as well as the uniqueness of care, understanding the individual as a whole and not just the clinical relationship of the disease, considering social and emotional issues that support the individual.
A13 ²⁶	International Journal of Environmental Research and Public Health / EMBASE	Sweden; 2021	Qualitative descriptive study	127 people with PD and 75 caregivers.	It points out that the patient's social context, as well as those close to them, are important factors in dealing with the disease, as well as support from professionals to develop new strategies and knowledge for self-care and self-management.
A14 ²⁷	The Gerontological Society of America / MEDLINE	USA; 2015	Methodological descriptive study	36 patients with PD.	It develops and examines an innovative healthcare model that removes barriers such as physical access to a multidisciplinary healthcare team specializing in PD in order to improve care and quality of life, based on a hybrid model of telehealth and home care.
A15 ²⁸	Connor et al. BMC Neurology / COCHRANE	USA; 2015	Randomized clinical trial	346 patients with PD.	The program consists of telephone assessment, the use of evidence-based protocols and tools aimed at improving patient self-management, care planning and care coordination between providers.

Code	Journal and database	Country of origin and year of publication	Study design	Study sample	Main results and conclusions
A16 ²⁹	Class of Evidence / COCHRANE	USA; 2019	Randomized clinical trial	328 PD patients.	The work of the nursing management for the "Coordination of Care for Health Promotion and Activities in Parkinson's Disease (CHAPS)" platform has resulted in increased adherence to the quality of care indicators for patients with PD.
A17 ³⁰	BMC Neurology / MEDLINE	USA; 2020	Randomized clinical trial	140 PD patients.	Nurse managers in the CHAPS program carried out 27 types of interventions, with the most frequent activities being emotional counseling and medication management. Participants reported adherence to numerous self-care actions after the implementation of the program.
A18 ³¹	BMC Neurology / MEDLINE	USA; 2020	Randomized clinical trial	140 PD patients.	Nurse care managers reported that CHAPS was a facilitator of care for their patients. Improvement was observed in the patient's management of self-care.
A19 ³²	Radder et al. Trials / MEDLINE	Netherlands; 2020	Randomized clinical trial	240 PD patients.	The incorporation of specialist PD nurse care does not point to an increase in costs, while with a better defined care plan, the number of neurology consultations should decrease, in line with the increase in nursing care potential.
A20 ³³	Hindawi / EMBASE	Japan; 2021	Descriptive study	21 patients with PD.	Clear differences in nursing care were observed between Hoehn and Yahr (HY) stages, suggesting that stage-based protocols regarding the nature and frequency of nursing visits may be useful in ensuring consistent and effective care for PD patients.

DISCUSSION

The data found in the different studies included in this integrative literature review were synthesized into three categories: The Nursing Process in the health care of people with Parkinson's: Brazilian context; Standardized Nursing Language and theoretical references in support of the Nursing Process; Models of care and the stages of the Nursing Process in the health care of people with Parkinson's: experiences and perspectives.

The Nursing Process in the health care of people with Parkinson's: the Brazilian context

With regard to the nursing care provided to individuals with PD and their families in Brazilian primary health care, the two studies that aimed to analyze the care actions carried out by nurses for users with PD in the Family Health Strategy found gaps in care.¹⁴⁻¹⁵

The study carried out in Rio Grande do Sul found that in the municipality studied there were no individuals with PD registered with the Family Health units. And the nurses at the units were unable to tell us what nursing care could help improve the quality of life of these patients.¹⁴

Similarly, the study carried out in Rio Grande do Norte showed the need to implement actions aimed at caring for individuals with PD, since there was no therapeutic plan aimed at the health of these patients, and the need for nurses to work effectively in this area.¹⁵

Home visits were the strategy most used by nurses to act and intervene in the needs of individuals with PD, but in the patients' view the necessary guidance and care actions are still not carried out effectively by nurses.¹⁵ Another strategy that has proved effective is the gerontotechnologies (educational booklets and memory games) presented in the studies, which can be incorporated into the planning and implementation stages of the Nursing Process.²⁰⁻²¹

In the studies carried out in the context of outpatient rehabilitation, it was possible to see that nurses carry out consultations based on the Nursing Process in order to be guided by clinical reasoning. However, even without adopting a standardized language, nursing diagnoses, interventions and expected results are defined and described in the medical records. In the planning stage, the nurse assesses whether the outcome to be achieved requires intervention through an individual or group approach.¹⁹

The lack of knowledge about the possibilities of nursing care reflects a gap in care and the absence of effective actions

for these patients and their families. The possibility of receiving nursing care in primary care in a shared way with teams from specialized centers needs to be realized, as this is the closest point of health care to the individual, with the possibility of providing care at home, which is often necessary due to the patient's motor impairment, which makes it difficult to travel to secondary care services.

Standardized Nursing Language and theoretical references to support the Nursing Process

In order to understand the care demands of patients in the early stages of the disease and their families, as well as the role of nursing in primary care, a literature review study analyzed the needs of patients and, based on this analysis, proposed the development of a standardized care plan, using the NANDA, NOC and NIC taxonomies, in response to the most common demands.²²

Another study indicated the importance of establishing the NP and adopting protocols to guide, unify and scientifically support the actions of the nursing team, in order to guarantee continuity of care, as well as organizing and consolidating nursing actions and evaluating the success or failure of care, validating the quality of health care offered in PD.²³

The studies¹⁶⁻¹⁹ use the cross-mapping methodology to identify nursing language terms with NANDA-I and NIC terminologies, contained in the medical records of PD patients undergoing rehabilitation.

An analysis of the medical records for data collection revealed a lack of standardization of the language system for diagnosis. The use of the classification system makes it possible to draw up a care plan based on scientific evidence. Therefore, it is recognized that there is a need to assess the defining characteristics of each diagnosis in order to support nurses' clinical reasoning, as this will guarantee diagnostic accuracy, enabling more appropriate planning of the care provided to patients with PD.¹⁸

The use of NIC terminology can help to systematize nursing care in the rehabilitation of patients with PD, in order to give quality to professional care, leading to important benefits for the profession.¹⁹

Models of care and the stages of the Nursing Process in the health care of people with Parkinson's: experiences and perspectives

Carrying out the sequence of specific stages of the nursing process with the collection of multidimensional information on the state of health, identification of the conditions that require

nursing interventions, planning of the necessary interventions, implementation and evaluation of the actions provides nursing care to the individual/family, in a way that considers their singularities, and in an expanded way.¹⁹

Among the selected studies evaluating the effectiveness of interventions in the care of individuals with PD, the American studies²⁸⁻³⁰ and the Spanish study²⁴ use elements of the "Chronic Care Model" (CCM), with emphasis on the coordination of patient care as a key element, a role played by nurses in the care proposals presented. The CCM has become an international reference for improving the care of people with long-term conditions, however, it has still been little used in interventions for patients with PD.²⁴

In this context, the nurse-led proactive clinical implementation program called "Care Coordination for Health Promotion and Activities in Parkinson's Disease" (CHAPS) consists of telephone assessments, evidence-based protocols and tools to improve patient self-management.²⁸

In "CHAPS", nurse care managers conduct structured telephone assessments based on validated and standardized instruments to identify patients' problems and unmet needs.²⁹⁻³⁰ All the activities of the nurse care manager have been classified into five categories of the Nursing Process: nursing investigation, nursing diagnoses, planning results, implementation of interventions (most frequently counseling/emotional support) and evaluation.³⁰⁻³¹ This has made it possible, through a clinical trial, to show patients' adherence to various self-care actions and improvements in the quality of care.³⁰⁻³¹

The study carried out in primary care centers in northern Spain evaluated the effects of two multidisciplinary interventions coordinated by nurses, based on the "Chronic Care Model" to promote an active role in the management of PD in patients and their family caregivers, based on a group psychoeducational approach, with reflection on the exchange of experiences. This procedure was designed to help participants recognize their cognitive and behavioral coping skills, reflect on them and identify other skills that could help them adjust even more to living with and caring for PD.²⁴

Studies carried out in Sweden²⁵⁻²⁶ explore the professional role of the PD specialist nurse from the perspective of patients and their spouses, describe the factors that are important for developing and improving self-management and self-care skills and actions in PD and present, based on Orem's self-care deficit theory, a proposal for a nursing care model to support nurses in providing self-management support and promoting self-care in clinical nursing care.²⁶

Other models of nursing care are presented in the American²⁷ and Dutch studies.³² The American study presents a model of care called the Nurse Managed Health Center (NMHC) that provides access to specialized and advanced multidisciplinary care in PD, based on a collaborative structure that uses telehealth technology via synchronous videoconferencing, to help provide specialized care to PD patients and their caregivers. The interdisciplinary model, with nursing participation, allows for the diagnosis, treatment and ongoing management of PD.²⁷

The Dutch study presents the intervention protocol of the NICE-PD study which aims to evaluate the cost-effectiveness of specialist nursing care provided by a Parkinson's Disease Nurse Specialist (PDNS) compared to usual care without a PDNS for people with PD at all stages of the disease.³²

The PDNS nurse carries out a specific nursing assessment related to the biological, physical, psychological and social domains, including an assessment of the individual care needs of people with PD and their caregivers. A multidisciplinary treatment plan is then developed based on the results of the individual assessment and prioritized by the patient and caregiver (shared decision-making), which is patient-centered and supports the patient and caregiver in self-management.³²

From the results found in this review study, it was possible to see that when structuring the nursing process in the care of individuals with PD, it is essential to consider the participation of the family in the care relationship^{14-15,19,26-27} and the stage of progression of the disease.³³ Clear differences in nursing care were observed between the Hoehn and Yahr (HY) stages, suggesting that protocols based on stages in relation to the nature and frequency of nursing consultations may be useful to ensure consistent and effective care for patients with PD.³³

In addition, studies point to the need to include family support, especially in the more advanced stages of the disease, when the individual suffers more pronounced cognitive losses, in which there is a greater loss of self-care capacity, and consequently an increase in social isolation.

CONCLUSION

The review study made it possible to find out both nationally and internationally about the provision of nursing care and the use of the Nursing Process in nursing care for people with Parkinson's disease.

In Brazil, scientific production on nursing care for people with Parkinson's is still relatively scarce, especially in relation to evaluating the effectiveness of interventions. Most of the

studies are descriptive and have small samples, with a low level of evidence.

Although some studies show that self-care support is provided by nurses working as part of an interdisciplinary team for people with Parkinson's, there are still some gaps in knowledge about what these interventions should include in terms of their content, the best way to develop them so that they are in fact effective, as well as validated instruments specifically on the subject of PD that cover all five stages of the Nursing Process.

The experiences and care models identified in international studies can be adapted and tested for incorporation into clinical practice and the organization of comprehensive PD care services in Brazil. Thus, it is believed that the results of this review can be used to promote the expansion of studies on the NP in PD and support the construction of instruments and protocols to facilitate the effective use of the NP in the clinical practice of nurses in the health care of people with Parkinson's disease.

REFERENCES

1. Dorsey ER, Elbaz A, Nichols E, Abbasi N, Abd-Alla F, Abdelalim A, et al. Global, regional, and national burden of Parkinson's disease, 1990 - 2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet Neurol.* [Internet]. 2018 [cited 2021 sep 29];17(11). Available from: [http://dx.doi.org/10.1016/S1474-4422\(18\)30295-3](http://dx.doi.org/10.1016/S1474-4422(18)30295-3).
2. Lennaerts H, Groot M, Rood B, Gilissenc K, Tulpd H, Wensen E, et al. A Guideline for Parkinson's Disease Nurse Specialists, with Recommendations for Clinical Practice. *J. Parkinsons Dis.* [Internet]. 2017 [cited 2021 mar 14];7(4). Available from: <http://dx.doi.org/10.3233/JPD-171195>.
3. Yamaguchi B, Ferreira MP, Israel VL. Aquatic Physiotherapy and Parkinson's Disease: Effects on Functional Motor Skills. *Advances in Parkinson's Disease.* [Internet]. 2020 [cited 2021 mar 26];9. Available from: <https://doi.org/10.4236/apd.2020.91001>.
4. Hayes MT. Parkinson's Disease and Parkinsonism. *The American Journal of Medicine.* [Internet]. 2019 [cited 2021 mar 26];132(7). Available from: <https://doi.org/10.1016/j.amjmed.2019.03.001>.
5. Chou KL. Diagnosis and differential diagnosis of Parkinson disease. *UpToDate.* [Internet]. 2020. [cited 2021 mar 26]. Available from: <https://www.uptodate.com/contents/diagnosis-and-differential-diagnosis-of-parkinson-disease>.
6. Zhao N, Yang Y, Zhang L, Zhang Q, Balbuena L, Ungvari, G et al. Quality of life in Parkinson's disease: A systematic review and meta-analysis of comparative studies. *CNS neuroscience & therapeutics.* [Internet]. 2021 [cited 2022 feb 18];27(3). Available from: <https://doi.org/10.1111/cns.13549>.
7. Kalia LV, Lang AE. Parkinson disease. *The Lancet.* [Internet]. 2015 [cited 2021 mar 14]; 386(9996). Available from: [https://doi.org/10.1016/S0140-6736\(14\)61393-3](https://doi.org/10.1016/S0140-6736(14)61393-3).
8. Gondim ITG, Lins CCSA, Coriolano MGWS. Exercícios terapêuticos domiciliares na doença de Parkinson: uma revisão integrativa. *Rev. bras. geriatr. gerontol.* [Internet]. 2016 [acesso em 26 de março 2021];19(2). Disponível em: <https://doi.org/10.1590/1809-98232016019.150040>.
9. Shin JY; Habermann B. Nursing Research in Parkinson's Disease From 2006 to 2015: A Systematic Review. *Clinical Nursing Research, Newark.* [Internet]. 2016 [cited 2021 mar 14];26. Available from: <https://doi.org/10.1177/1054773816634912>.
10. Westland H, Schröder CD, de Wit J, Frings J, Trappenburg JCA, Schuurmans MJ. Self-management support in routine primary care by nurses. *Br. J. Health Psychol.* [Internet]. 2017 [cited 2021 mar 26];23(1). Available from: <https://doi.org/10.1111/bjhp.12276>.
11. Mendes KS, Silveira RCCP, Galvão CM. Use of the bibliographic reference manager in the selection of primary studies in integrative reviews. *Texto context enferm.* [Internet]. 2019 [cited 2021 apr 06];28:e20170204. Available from: <http://dx.doi.org/10.1590/1980-265xtce-2017-0204>.
12. Sousa LMM, Marques JM, Firmino CF, Frade F, Valentim OS, Antunes AV. Modelos de formulação da questão de investigação na prática baseada na evidência. *Rev Investig Enferm.* [Internet]. 2018 [acesso em 12 de abril 2021]. Disponível em: <https://repositorio-cientifico.essatla.pt/bitstream/20.500.12253/1287/1/artigo31-39.pdf>.
13. Moher D, Liberati A, Tetzlaff J, Altman DG, Altman D, Antes G, et al. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PLoS Med.* [Internet]. 2009 [cited 2021 apr 25];6(7). Available from: <https://doi.org/10.1371/journal.pmed.1000097>.
14. Kuster BJK, Silva LAA, Leite MT, Costa MC. Cuidados de enfermagem a usuários com Doença de Parkinson na atenção básica de saúde. *Rev Enferm UFSM.* [Internet]. 2014 [acesso em 18 de agosto 2021];4(1). Disponível em: <https://doi.org/10.5902/217976929074>.
15. Galvão TLA, Oliveira KKD, Maia CAAS, Miranda FAN. Assistência à pessoa com Parkinson no âmbito da

- estratégia de saúde da família. *Rev de Pesq Cuid Fundam Online*. [Internet]. 2016 [acesso em 18 de agosto 2021];8(4). Disponível em: <https://doi.org/10.9789/2175-5361.2016.v8i4.5101-5107>.
16. Tosin MHS, Campos DM, Blanco L, Santana RF, Oliveira BGRB. Mapeamento dos termos da linguagem de enfermagem na doença de Parkinson. *Rev Esc Enferm USP*. [Internet]. 2015 [acesso em 18 de agosto 2021];49(3). Disponível em: <https://doi.org/10.1590/S0080-623420150000300008>.
17. Campos DM, Tosin MHS, Blanco L, Santana RF, Oliveira BGRB. Diagnósticos de Enfermagem sobre alterações urinárias na doença de Parkinson. *Acta Paul Enferm*. [Internet]. 2015 [acesso em 18 de agosto 2021];28(2). Disponível em: <https://doi.org/10.1590/1982-0194201500032>.
18. Tosin MHS, Campos DM, Blanco L, Santana RF, Oliveira BGRB. Diagnósticos de enfermagem sobre capacidade funcional na doença de Parkinson: mapeamento cruzado. *Online Braz J Nurs*. [Internet]. 2015 [acesso em 18 de agosto 2021];14(suppl.). Disponível em: <https://doi.org/10.17665/1676-4285.20155115>.
19. Tosin MHS, Campos DM, Andrade LT, Oliveira BGRB, Santana RF. Nursing interventions for rehabilitation in Parkinson's disease: cross mapping of terms. *Rev. Latino-Am. Enferm*. [Internet]. 2016 [cited 2021 aug 18];24(e2728). Available from: <https://doi.org/10.1590/1518-8345.0689.2728>.
20. Ferreira JM, Hammerschmidt KSA, Siewertl JS, Alvarez AM, Locks MOH, Heidemann ITSB. Gerontotecnologia para prevenção de quedas dos idosos com Parkinson. *Rev Bras Enferm*. [Internet]. 2019 [acesso em 18 de agosto 2021]; 72(Suppl-2). Disponível em: <http://dx.doi.org/10.1590/0034-7167-2018-0704>.
21. Ferreira JM, Hammerschmidt KSA, Heidemann ITSB, Alvarez AM, Santos SMA, Fabrizio GC. Gerontotecnologia para prevenção de quedas: cuidado de enfermagem ao idoso com Parkinson. *Rev Esc Enferm USP*. [Internet]. 2021 [acesso em 18 de agosto 2021];55. Disponível em: <https://doi.org/10.1590/S1980-220X2020018403748>.
22. Manzanares MCG, Navascués MLJ, Tobar EB, Martínez MN, Calleja MP. Enfermedad de Parkinson: abordaje enfermero desde atención primaria. *Gerokomos*. [Internet]. 2018 [acesso em 18 ago 2021];29(4). Disponible en: https://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S1134-928X2018000400171.
23. Suárez DR, Figueredo MP. Los protocolos de actuación y la calidad de la atención de enfermería del paciente con enfermedad de Parkinson. *Revista de Enfermería Neurológica*. [Internet]. 2020 [acceso en 18 ago 2021];18(3). Disponible en: <https://doi.org/10.37976/enfermeria.v18i3.289>.
24. Sánchez MVN, Ambrosio L, Portillo MC, Ursúa ME, Senosiain JM, Riverol M. Evaluation of a psychoeducational intervention compared with education in people with Parkinson's disease and their informal caregivers: a quasi-experimental study. *J Adv Nurs*. [Internet]. 2020 [cited 2021 aug 18];76. Available from: <https://doi.org/10.1111/jan.14476>.
25. Hellqvist C, Berterö C. Support supplied by Parkinson's disease specialist nurses to Parkinson's disease patients and their spouses. *Applied Nursing Research* [Internet]. 2015 [cited 2021 aug 18];28(2). Available from: <https://doi.org/10.1016/j.apnr.2014.12.008>.
26. Hellqvist C. Promoting Self-Care in Nursing Encounters with Persons Affected by Long-Term Conditions - A Proposed Model to Guide Clinical Care. *Int J Environ*. [Internet]. 2021 [cited 2021 aug 18];18(5). Available from: <https://doi.org/10.3390/ijerph18052223>.
27. Pretzer-Aboff I, Prettyman A. Implementation of an Integrative Holistic Healthcare Model for People Living with Parkinson's Disease. *The Gerontologist*. [Internet]. 2015 [cited 2021 aug 18];55(Suppl1):S146-53. Available from: <https://doi.org/10.1093/geront/gnv004>.
28. Connor K, Cheng E, Siebens HC, Lee ML, Mittman BS, Ganz DA et al. Study protocol of "CHAPS": a randomized controlled trial protocol of Care Coordination for Health Promotion and Activities in Parkinson's Disease to improve the quality of care for individuals with Parkinson's disease. *BMC Neurol*. [Internet]. 2015 [cited 2021 aug 18]; 15(258). Available from: <https://doi.org/10.1186/s12883-015-0506-y>.
29. Connor KI, Cheng EM, Barry F, Siebens HC, Lee ML, Ganz DA et al. Randomized trial of care management to improve Parkinson disease care quality. *Neurology*. [Internet]. 2019 [cited 2021 aug 18];92(16). Available from: <https://doi.org/10.1212/WNL.0000000000007324>.
30. Connor KI, Cheng EM, Barry F, Siebens HC, Lee ML, Ganz DA et al. Quality and extent of implementation of a nurse-led care management intervention: care coordination for health promotion and activities in Parkinson's disease (CHAPS). *BMC Health Serv Res*. [Internet]. 2020 [cited 2021 aug 18];20(732). Available from: <https://doi.org/10.1186/s12913-020-05594-8>.

31. Connor KI, Siebens HC, Mittman BS, Smith DKMN, Ganz DA, Barry F et al. Stakeholder perceptions of components of a Parkinson disease care management intervention, care coordination for health promotion and activities in Parkinson's disease (CHAPS). *BMC Neurol.* [Internet]. 2020 [cited 2021 aug 18];20(437). Available from: <https://doi.org/10.1186/s12883-020-02011-9>.
32. Radder DLM, Lennaerts HH, Vermeulen H, Asseldonk TV, Delnooz CCS, Hagen RH et al. The cost-effectiveness of specialized nursing interventions for people with Parkinson's disease: the NICE-PD study protocol for a randomized controlled clinical trial. *Trials.* [Internet]. 2020 [cited 2021 aug 18];21(88). Available from: <https://doi.org/10.1186/s13063-019-3926-y>.
33. Iwasa Y, Saito I, Suzuki M. Differences in Home Health Nursing Care for Patients with Parkinson's Disease by Stage of Progress: Patients in Hoehn and Yahr Stages III, IV, and V. *Hindawi Parkinson's Disease* [Internet]. 2021 [cited 2021 aug 18];(5). Available from: <https://doi.org/10.1155/2021/8834998>.