



EVALUATING THE IMPACT OF THE PRIMARY NURSING CARE MODEL ON NURSING OUTCOMES: A SCOPING REVIEW

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ABSTRACT

The Primary Nursing Care Model (PNCM) aims to enhance continuity of care, nurse autonomy, and therapeutic nurse-patient relationships. While widely implemented, its outcomes vary across settings, requiring a comprehensive assessment of its broader impact on nursing outcomes. This scoping review examines the influence of PNCM on patient care quality, nurse competence, and patient satisfaction in diverse healthcare environments. This study aims to explore and analyze the impact of PNCM on nursing outcomes, focusing on patient care quality, nurse competence, and patient satisfaction. Additionally, it seeks to identify existing research gaps and provide insights into the model's effectiveness across different healthcare settings. A systematic search was conducted in ProQuest, ScienceDirect, and PubMed for studies published between January 2020 and December 2024. From 880 identified articles, 212 underwent full-text screening, and 15 met the final inclusion criteria based on the Joanna Briggs Institute (JBI) framework. The review focuses on studies involving nurses and patients in hospitals, outpatient clinics, and community healthcare settings where PNCM is implemented. Key outcomes assessed include patient care quality, nurse competence, and patient satisfaction. PNCM enhances nursing outcomes by strengthening nurse-patient relationships, improving competence, and fostering a safety culture. It reduces care fragmentation, increases nurse accountability, and promotes holistic care. However, research gaps persist in evaluating long-term outcomes and its application to vulnerable populations. PNCM is effective in improving nursing outcomes and patient satisfaction. Further research should explore its long-term impact and adaptation for underserved populations to optimize its benefits.

Keywords: model; nurse competence; nursing outcomes; patient satisfaction; primary nursing care; scoping review

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INTRODUCTION

The implementation of the Primary Nursing Care Model (PNCM) has emerged as a transformative approach within nursing practice, emphasizing patient-centered care, continuity, and accountability. This model assigns a primary nurse to oversee all aspects of a patient's care throughout their healthcare journey, fostering stronger therapeutic relationships, improving nursing competence, and enhancing patient satisfaction (Gonçalves et al., 2023; Nadeau et al., 2016). Despite its growing adoption, the PNCM's impact on nursing outcomes, including patient care quality, nurse competence, and patient satisfaction, remains an area requiring deeper exploration. Healthcare systems worldwide face increasing complexities, including rising patient acuity, staff shortages, and heightened expectations for quality care. These challenges necessitate innovative care models, such as PNCM, which prioritizes the integration of holistic, empathetic, and safe practices into nursing care (Cocchieri et al., 2022). Existing studies indicate that PNCM supports better documentation, improves patient outcomes, and reduces fragmentation of care (Gonçalves et al., 2023). However, variations in

its effectiveness across diverse healthcare settings highlight the need for a comprehensive review to identify commonalities, challenges, and opportunities in its implementation.

Preliminary research into existing literature reveals limited systematic and scoping reviews explicitly addressing the outcomes of PNCM on nursing practices. While related systematic reviews explore specific aspects of patient care models, such as their effects on continuity or satisfaction, they fail to holistically address the integration of PNCM and its multifaceted impacts on nursing outcomes (Ventura-Silva et al., 2024). The absence of comprehensive reviews that explore its broader implications underscores the need for a scoping review to fill this critical gap. The Primary Nursing Care Model is defined as a patient-focused model where a designated nurse is responsible for the comprehensive management of an individual's care throughout their hospital stay (Manthey, 2019). Central to this model are principles of continuity, accountability, and therapeutic relationships, which distinguish it from task-oriented models such as team nursing or functional nursing (Mattila et al., 2018). Nursing outcomes in this context refer to measurable impacts on patient care quality, nurse competence, and patient satisfaction, aligning with organizational and patient-centered goals. The inclusion criteria for this review encompass healthcare settings where PNCM is implemented, focusing on its impact on patient care quality, nurse competence, and patient satisfaction. These criteria align with existing evidence suggesting that PNCM

A preliminary search of databases influences nursing documentation accuracy, care coordination, and professional development (Cocchieri, 2023). Additionally, this review includes studies that evaluate PNCM within diverse geographic and cultural contexts, as implementation strategies and outcomes may vary significantly across healthcare environments (Vaughan et al., 2022). Scoping reviews are particularly suited for examining broad and complex topics where diverse evidence exists. Given the multifaceted nature of PNCM and its varied applications across healthcare systems, a scoping review allows for the synthesis of a wide range of evidence types. This approach is instrumental in identifying existing research gaps, mapping key concepts, and informing future research directions (Peters et al., 2020).

Furthermore, a scoping review provides a comprehensive understanding of the PNCM's implementation and its implications, addressing the absence of prior consolidated studies, including MEDLINE, the Cochrane Database of Systematic Reviews, and JBI Evidence Synthesis, confirmed the lack of current or ongoing systematic or scoping reviews specifically addressing PNCM's impact on nursing outcomes. While related studies explore aspects such as patient-centered care and team nursing, no review to date comprehensively maps the breadth of evidence pertaining to PNCM's influence on nursing practice and outcomes. This finding reinforces the importance of conducting this scoping review to synthesize and contextualize existing knowledge.

The objective of this scoping review is to evaluate the extent and nature of evidence regarding the impact of the Primary Nursing Care Model (PNCM) on nursing outcomes, including patient care quality, nurse competence, and patient satisfaction, within diverse healthcare settings. By addressing this objective, the review aims to provide insights into PNCM's efficacy and inform its future implementation and research in nursing practice. This scoping review aims to evaluate the impact of the Primary Nursing Care Model (PNCM) on nursing outcomes, specifically patient care quality, nurse competence, and patient satisfaction, across diverse healthcare settings. By synthesizing existing literature, this study seeks to identify the benefits, challenges, and gaps in PNCM implementation, providing insights into its effectiveness and potential areas for further research.

METHOD

The preparation of this scoping review follows the updated methodological guidance from the Joanna Briggs Institute (JBI) (Peters & al., 2020) and the PRISMA-ScR framework (Tricco & al., 2018), which are designed to ensure a systematic, transparent, and credible review process. First, the research objectives and questions were defined using the Population, Concept, Context (PCC) framework, which was developed to clarify the focus and scope of the study (Peters & al., 2020). Second, a protocol was developed that included inclusion and exclusion criteria, search strategies, and data extraction methods to ensure a transparent and reproducible process; this protocol is also recommended for registration on platforms such as Open Science Framework or JBI Evidence Synthesis (Peters & al., 2020; Tricco & al., 2018). Third, a comprehensive literature search was conducted across academic databases and grey literature, involving expert librarians to refine the search strategy and document all steps clearly (Tricco & al., 2016). Fourth, the article selection process was conducted in multiple stages, beginning with title and abstract screening, followed by full-text evaluation, using the PRISMA-ScR flow diagram to ensure transparency and accountability (Tricco & al., 2018). Fifth, relevant data were extracted and analyzed descriptively to map key findings, research trends, and gaps in the literature (Peters & al., 2020). This entire process was designed to produce a systematic, credible scoping review that provides a comprehensive overview of the relevant literature.

Inclusion criteria

The method of conducting an article search was executed with the PCC framework.

Table 1.
PCC Framework

Component	Description
Population	Nurses and Patients Nurses working in healthcare settings where PNCM is implemented, including novice and experienced professionals. Patients receiving care under the PNCM, encompassing a range of demographics, including those in acute, chronic, and community care environments.
Concept	Primary Nursing Care Model (PNCM) The influence of PNCM on nursing outcomes, focusing on: Patient care quality: Improvements in continuity, safety, and holistic care. Nurse competence: Professional development, clinical decision-making, and leadership capabilities. Patient satisfaction: Perceptions of care, trust, and overall satisfaction with the nursing process.
Context	Diverse Healthcare Settings Hospital settings, including inpatient wards, intensive care units, and surgical units. Community-based healthcare facilities, outpatient clinics, and long-term care centers. Global healthcare systems, including high-resource and low-resource environments, to explore variations in PNCM implementation and outcomes across different contexts.

Types of sources

This scoping review will include a broad range of evidence sources to comprehensively address the research question. Both experimental and quasi-experimental study designs will be considered, including randomized controlled trials (RCTs), non-randomized controlled trials, before-and-after studies, and interrupted time-series studies. Analytical observational studies, such as prospective and retrospective cohort studies, case-control studies, and analytical cross-sectional studies, will also be included. Descriptive observational study designs, such as case series, individual case reports, and descriptive cross-sectional studies, will be considered to provide additional context and insight into the research topic. Furthermore, qualitative studies focusing on qualitative data collection and analysis, including

but not limited to phenomenology, grounded theory, ethnography, qualitative description, action research, and feminist research, will be included to capture diverse perspectives and experiences. By including a variety of study designs and sources, this scoping review aims to comprehensively map the available evidence, addressing potential gaps and highlighting the breadth of knowledge surrounding PNCM's implementation and outcomes across diverse healthcare contexts.

Eligibility Criteria

The eligibility criteria for this literature review were carefully established to ensure the relevance and quality of the articles analyzed. The specific inclusion criteria were as follows: 1) Articles must report findings on the effectiveness and efficiency of the Primary Nursing Care Model (PNCM) in improving patient health outcomes, enhancing nurse job satisfaction, and reducing care fragmentation; 2) Eligible studies may utilize quantitative, qualitative, or mixed-method study designs, 3) The study population must involve either nurses or patients associated with the implementation of PNCM, 4) Articles must be available in full-text format, 5) Articles must have been published between January 2020 and December 2024, 6) Articles must be written in English. Conversely, the exclusion criteria were defined as follows: 1) Articles categorized as literature reviews, systematic reviews, or scoping reviews were excluded in this study, and 2) Duplicate publications appearing in two or more journals were excluded to maintain the integrity and uniqueness of the findings.

Databases

The databases utilized in this study included PubMed, Science Direct, Google Scholar, and ProQuest. The researchers accessed all databases on 21 December 2024. The following is a list of the database links:

Table 2.
Database Links

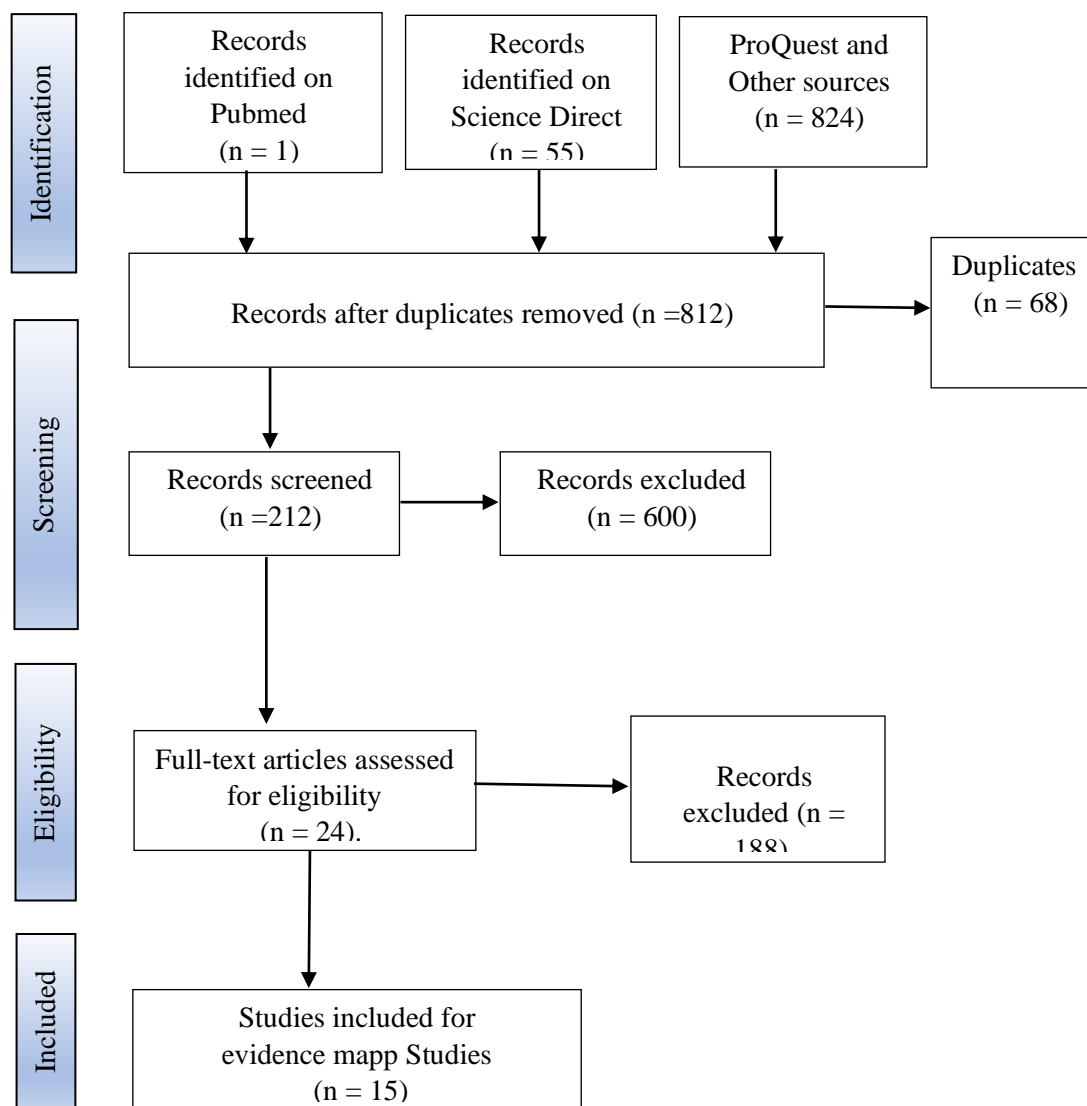
No.	Database Name	Link
1	PubMed	https://pubmed.ncbi.nlm.nih.gov
2	ScienceDirect	https://www.sciencedirect.com
3	ProQuest	https://www.proquest.com

Search Strategy

In the literature search, a combination of keywords with Boolean operators was utilized to obtain more specific results and facilitate the selection of relevant articles. The keywords used were "Primary Nursing Care," AND "Effectiveness" AND "Implementation". Using these keywords across four databases with the assistance of Boolean operators, the researchers identified 880 articles matching the criteria. This included 1 article from PubMed, 55 articles from Science Direct, 68 articles from ProQuest, and 756 articles from other sources.

Article Screening

This study utilized the PRISMA flow diagram, which includes identification, screening, eligibility, and inclusion stages. The screening procedure began with removing duplicate articles and filtering articles based on titles and abstracts relevant to the topic. Articles with designs categorized as literature reviews, scoping reviews, and systematic reviews were excluded. Additionally, articles with identical titles and authors or belonging to the same category within or across different databases were eliminated. Finally, full-text articles were screened for relevance and inclusion.



Picture 1. PRISMA Flowchart

Data Extraction

Data extraction will be guided by a pre-designed template capturing essential details such as study design, population, concept, context, and outcomes. Data will be independently extracted by two reviewers to minimize bias.

RESULT

The researchers utilized four primary search platforms for this study: PubMed, Science Direct, ProQuest, and other sources. During the identification stage, 880 articles were retrieved from all databases. Subsequently, the articles were screened to include only those published between 2020 and 2024, available in full-text format, and written in English. These criteria narrowed the selection down to 212 articles. Further screening was conducted based on the titles and abstracts of the articles deemed relevant to the study topic. Articles employing designs such as literature reviews, scoping reviews, and systematic reviews were excluded. Duplicate articles were also removed at this stage. This further screening resulted in 15 articles being reviewed in greater detail to ensure compliance with the inclusion criteria. Ultimately, six articles were included in the final review. The complete PRISMA procedure is illustrated in the flow diagram below.

Critical Appraisal Results

The initial assessment was conducted independently, and discussions were held to resolve differences in evaluations before reaching the final justification. In this study, the Joanna Briggs Institute (JBI) Critical Appraisal Tools version 2020 were used to evaluate various types of studies, including qualitative studies (n=7), Randomized Controlled Trials (RCTs) (n=2), cross-sectional studies (n=1), and quasi-experimental studies (n=5).

Articles Included in the Literature Review

The results of the initial analysis, further review, and identification ultimately included 15 articles. The following table provides detailed information about each article:

Table 3.
Accumulated Critical Assessment of Articles

ID	Title	Criteria													Mark
		1	2	3	4	5	6	7	8	9	10	11	12	13	
JBI Qualitative Study															
PNMC2	Nurses' Well-Being and Primary Nursing	✓	-	✓	-	-	✓	✓	✓	✓	✓				70%
PNMC4	The Practice of Primary Nursing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				100%
PNMC6	The Primary Nursing Care Delivery System within a Hemodialysis Context	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				100%
PNMC8	The Experience of Pregnant Women in Contexts of Vulnerability of Prenatal Primary Nursing Care	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				100%
PNMC10	Application of the Nursing Model "Primary Nursing" to the Bone Marrow Transplant Service	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				100%
PNMC11	Maximizing Impact: A Grounded Theory Study of Primary Nursing Relationships in the NICU	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				100%
PNMC15	Care Perceptions in Two ICU Nursing Care Delivery Models	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				100%
JBI RCT															
PNMC1	The Effect of Primary Nursing Care on Patient Satisfaction after Coronary Angioplasty	✓	-	✓	-	-	-	✓	✓	✓	✓	✓	✓	✓	69,2%
PNMC12	Patient-related effects of primary nursing: Protocol of a pilot randomized controlled trial	✓	-	-	-	✓	✓	-	✓	✓	✓	✓	✓	✓	69,2%
JBI Cross-sectional Study															
PNMC13	Describing Nurses' Competence in Primary Nursing Care Model	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				100%
JBI Quasi-eksperimental Study															
PNMC3	The Effect of Patient Companion Programmed Participation in Primary Nursing Care on Chest Pain	✓	✓	✓	✓	✓	-	✓	✓	✓	-				80%
PNMC5	The Effect of Case Method and Primary Nursing Method on the Social Dimension in Quality of Patient Care	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				100%
PNMC7	Clinical Effects of Primary Nursing on Diabetic Nephropathy Patients Undergoing Hemodialysis	-	✓	✓	-	✓	✓	✓	✓	✓	✓				80%
PNMC9	Primary Nursing Intervention for Hypertensive Intracerebral Hemorrhage	✓	✓	✓	✓	✓	✓	-	✓	✓	✓				90%
PNMC14	Implementation of the Primary Nursing Care Model in a Hospital Service	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				100%

Table 4.
Analysis of Literature Results

ID Number	Author and Journal Identity	Journal Title	Objective	Population and Sample	Method	Summary of Results
PNMC1	Author: Fatemehkobra Shafiei et al. Journal Identity: Scientific Journal of Nursing, Midwifery and Paramedical Faculty, Vol. 5(3), Winter/2019 (Shafiei, 2019)	The Effect of Primary Nursing Care on Patient Satisfaction after Coronary Angioplasty	To assess the impact of primary nursing care on patient satisfaction after coronary angioplasty	60 patients in the CCU at Razi Hospital, Birjand (30 in the control group and 30 in the experimental group)	Randomized controlled trial analyzed using SPSS-16	No significant difference in patient satisfaction was observed between the control and experimental groups, possibly due to the short duration of hospitalization.
PNMC2	Author: Nicastro M, Liguori P, Fabio M. Journal Identity: Journal of Nursing Practice, Vol. 3(1), pp. 124-128, 2019 (Nicastro et al., 2019)	Nurses' Well-Being and Primary Nursing	To analyze the impact of primary nursing on the well-being of nursing staff	22 nurses (initial phase), 12 nurses (final phase) in the emergency surgical ward at Piacenza, Italy	Qualitative analysis using McCloskey Mueller Satisfaction Scale (MMSS), Team Climate Inventory (TCI), and focus group discussions	Primary nursing significantly improved job satisfaction, team interaction, autonomy, and the overall quality of teamwork.
PNMC3	Author: Yarmohammadi nezhad E, et al. Journal Identity: Journal of Nursing Education, Vol. 12(4), pp. 1-8, October-November/2023 (Yarmohammad inezhad, 2023)	The Effect of Patient Companion Programmed Participation in Primary Nursing Care on Chest Pain	To examine the effect of family participation in primary nursing on chest pain in cardiac ICU patients	48 patients (24 in the control group, 24 in the intervention group) in the cardiac ICU at Razi Birjand Hospital	Semi-experimental, pre-test and post-test with control group, analyzed using SPSS-16	Family participation in primary nursing significantly reduced patients' chest pain compared to the control group.
PNMC4	Author: Marie Manthey. Journal Identity: Theoretical Framework and Experience from the U.S., Vol. 4(1), pp. 1-5, 2019 (Manthey, 2019)	The Practice of Primary Nursing	To provide a theoretical framework for the implementation of primary nursing in care systems	No specific sample (experience- and theory-based analysis)	Descriptive analysis of theoretical frameworks, integrating Watson's Theory of Caring	Primary nursing is rooted in the unique nurse-patient relationship, emphasizing professional accountability and compassion as the core of nursing practice.
PNMC5	Author: Simin Sharafi et al. Journal Identity: Journal of Holistic Nursing Midwifery, Vol. 28(4), pp. 252-258, September 2018 (Sharafi et al., 2018)	The Effect of Case Method and Primary Nursing Method on the Social Dimension of Quality of Patient Care	To compare the impact of the primary nursing method with the case method on the social dimension of patient care	60 patients across 4 CCUs in Mashhad, Iran	Experimental study with comparison groups, analyzed using SPSS	Primary nursing significantly enhanced psychosocial dimensions at both individual and group levels compared to the case method.
PNMC6	Author: Pia Johansson et al. Journal Identity: Clinical Nursing Studies, Vol. 3(4), pp. 7-15, 2015 (Johansson, 2015)	The Primary Nursing Care Delivery System within a Hemodialysis Context	To explore the adaptation of primary nursing in hemodialysis care	Hemodialysis nurses from 4 hospitals in Sweden	Semi-structured interviews analyzed using a phenomenographic approach	Primary nursing in hemodialysis faced high emotional challenges among nurses, requiring adaptation to clarify pedagogical responsibilities.
PNMC7	Author: Yujuan Guo et al. Journal Identity: Evidence-Based Complementary and Alternative Medicine, Vol.	Clinical Effects of Primary Nursing on Diabetic Nephropathy Patients Undergoing	To evaluate the effects of primary nursing on diabetic nephropathy patients undergoing	80 diabetic nephropathy patients at Qingdao Hospital, China	Retraction notice due to inconsistencies in ethical approval and peer-review process	This article was retracted due to manipulation of the publication process, rendering its content unreliable.

ID Number	Author and Journal Identity	Journal Title	Objective	Population and Sample	Method	Summary of Results
	2022, Article ID 1011415, 2022 (Guo, 2022)	Hemodialysis	hemodialysis			
PNMC8	Author: Émilie Hudon et al. Journal Identity: BMC Pregnancy and Childbirth, Vol. 23, Article ID 187, 2023 (Hudon, 2023)	The Experience of Pregnant Women in Contexts of Vulnerability of Prenatal Primary Nursing Care	To describe factors influencing prenatal primary nursing care experiences among vulnerable pregnant women	24 vulnerable pregnant women in Quebec, Canada	Qualitative interpretative descriptive study using semi-structured interviews	The success of prenatal primary nursing is significantly influenced by individual patient needs, nurse approaches, and the organization of prenatal care services.
PNMC9	Author: Liqian Wu et al. Journal Identity: American Journal of Translational Research, Vol. 13(4), pp. 2955-2961, 2021 (Wu, 2021)	Primary Nursing Intervention for Hypertensive Intracerebral Hemorrhage	To evaluate the effects of primary nursing on the prognosis of patients with hypertensive intracerebral hemorrhage	106 patients with hypertensive intracerebral hemorrhage at Tangshan Gongren Hospital, China	Randomized controlled trial	Primary nursing significantly reduced postoperative complications and improved patients' quality of life compared to conventional nursing methods.
PNMC10	Author: Mariana Bertotti Mendes Nunes et al. Journal Identity: Cogitare Enfermagem, Vol. 24, Article e59652, 2019 (Nunes et al., 2019)	Application of the Nursing Model "Primary Nursing" to the Bone Marrow Transplant Service	To describe the application of primary nursing for patients undergoing hematopoietic stem cell transplantation	20 nursing professionals from a bone marrow transplant unit in Brazil	Convergent-care research using semi-structured interviews and thematic analysis	The primary nursing model improved care processes, though challenges remained in shift organization and establishing strong nurse-patient relationships.
PNMC11	Author: Stephanie J. Bailey Journal Identity: Dissertation, University of Texas Medical Branch/2019 (Bailey, 2019)	Maximizing Impact: A Grounded Theory Study of Primary Nursing Relationships in the NICU	To understand how primary nurses in NICUs build relationships with patients and their families	11 primary nurses in NICUs from the Southern, Southwestern, and Western regions of the United States	Qualitative, semi-structured interviews analyzed using Classical Grounded Theory (CGT)	The study identified the "Safeguarding this Family" process as a core mechanism in building nurse-patient-family relationships and enhancing family satisfaction and nurses' work experiences. It highlights the importance of meaningful relationships in primary nursing in NICUs.
PNMC12	Author: Lars Krüger et al. Journal Identity: Medizinische Klinik - Intensivmedizin und Notfallmedizin/2023/Vol.118:2 57–262 (Krüger, 2023)	Patient-related effects of primary nursing: Protocol of a pilot randomized controlled trial	To assess the impact of primary nursing on delirium duration, patient anxiety, and family satisfaction in ICUs	400–500 ICU patients in Germany; randomly recruited	Quantitative; randomized controlled trial using CAM-ICU (Confusion Assessment Method), anxiety rating scales, and family satisfaction questionnaires	The study aims to demonstrate that primary nursing reduces delirium duration by up to 8 hours, decreases patient anxiety, and increases family satisfaction. This article outlines the protocol to test the feasibility and effectiveness of primary nursing in ICUs.
PNMC13	Author: Antonello Cocchieri et al. Journal Identity: The Open Nursing Journal/2023/Vol.17:e187443462 301300 (Cocchieri, 2023)	Describing Nurses' Competence in Primary Nursing Care Model	To evaluate the relationship between primary nursing care models and nurses' competence based on work experience and demographic variables	142 nurses from units with primary nursing and team nursing models in a teaching hospital in Italy	Cross-sectional study: data collected using the Nurse Competence Scale (NCS) to measure seven dimensions of competence	In primary nursing care models, nurses reported higher competence in situation management, helping roles, teaching-coaching, diagnostic functions, and therapeutic interventions. The findings highlight a positive relationship between primary nursing models and the development of nurses' competencies.
PNMC14	Author: J. M. Ventura-Silva et al. Journal Identity: Nursing Forum/2024/Art	Implementation of the Primary Nursing Care Model in a Hospital Service	To evaluate the impact of implementing a primary nursing care Model on care quality,	48 nurses in an internal medicine department in Portugal	Quasi-experimental; pre- and post-intervention measurements using validated	The implementation reduced missed care, improved safety culture, increased nurse job satisfaction, and enhanced care quality perceptions.

ID Number	Author and Journal Identity	Journal Title	Objective	Population and Sample	Method	Summary of Results
	icle ID:5549115 (Ventura-Silva et al., 2024)		safety culture, and job satisfaction		questionnaires	The study underscores the benefits of primary nursing in reducing patient safety risks.
PNMC15	Author: William Iván López Cárdenas et al. Journal Identity: Investigación y Educación en Enfermería/2022 /Vol.40(3):e15 (López Cárdenas et al., 2022)	Care Perceptions in Two ICU Nursing Care Delivery Models	To compare care perceptions in primary nursing versus delegation models in ICUs regarding nurse-patient interactions and care outcomes	19 nurses and 23 nurse assistants from two different ICUs in Colombia	Qualitative, semi-structured interviews and focus group discussions an ethnographic approach	Primary nursing care was perceived as more holistic and empathetic. The primary nursing Model showed better patient safety outcomes than the delegation-based Model.

The results of the literature analysis are as follows:

The Primary Nursing Care Model (PNCM) has emerged as a crucial framework for improving the quality of nursing care. It emphasizes nurse-patient relationships, continuity of care, nurse autonomy, and holistic approaches. This scoping review synthesizes key issues, specific aspects, and research gaps related to PNCM implementation, based on a comprehensive analysis of relevant literature.

Nurse-Patient Relationship. The therapeutic relationship forms the core of PNCM. Manthey (2019) identifies this relationship as the foundation of PNCM, emphasizing the nurse's full accountability for patient care. Johansson (2015) highlights how direct and sustained interactions foster trust and continuity, which are essential for effective care delivery. Additionally, Cocchieri et al. (2021) note that evaluating hospital adherence to PNCM principles underscores the importance of maintaining this relationship throughout care processes. Continuity of care further enhances patient and family engagement. Shafiei et al. (2019) demonstrate that structured family involvement in PNCM significantly reduces patient pain, while Hudon et al. (2023) emphasize the model's ability to address the specific needs of vulnerable patients. Johansson (2015) adds that ongoing engagement fosters positive interactions, enhancing the overall care experience.

Development of Nurse Competence. PNCM plays a pivotal role in advancing nursing competence, particularly in clinical decision-making and situational management. Nicastro et al. (2019) describe how the model provides opportunities for nurses to refine their autonomy and professional judgment. Cocchieri et al. (2021) reinforce this, noting that PN checklists promote effective implementation and decision-making. Johansson (2015) observes that well-trained nurses consistently meet patient needs, reflecting the importance of sustained professional development. Additionally, PNCM fosters nurse autonomy and accountability, leading to higher job satisfaction. Johansson (2015) highlights that full responsibility for comprehensive patient care empowers nurses, while Ventura-Silva et al. (2024) note that this autonomy enhances the quality of care and improves the work environment.

Safety Culture. The PNCM framework promotes a robust safety culture by reducing the risk of "missed care." Ventura-Silva et al. (2024) report significant improvements in safety through clear accountability and streamlined processes, while Krüger et al. (2023) emphasize how minimizing errors fosters greater patient trust. Holistic approaches within PNCM further contribute to safety, as evidenced by Wu (2021), who demonstrates a reduction in postoperative complications through comprehensive, patient-centered care.

Holism and Empathy. Holistic and empathetic care are central to PNCM. Hudon et al. (2023) illustrate how PNCM enables nurses to understand and address emotional and social patient needs. Johansson (2015) highlights the personal connection between nurses and patients, which enriches care delivery. Cocchieri et al. (2021) stress the importance of maintaining social and emotional dimensions within care plans, ensuring comprehensive and meaningful care.

Implementation Challenges. Despite its benefits, PNCM presents several challenges, particularly the emotional burden placed on nurses. Johansson (2015) notes the complexity of managing full patient

responsibility, which necessitates strong organizational support. Cocchieri et al. (2021) identify emotional support as a critical factor for the successful implementation of PNCM. Infrastructure limitations also hinder PNCM in resource-constrained settings. Hudon et al. (2023) and Vaughan et al. (2022) emphasize the need for investment in training and infrastructure to overcome these barriers. Without adequate support, implementation efforts risk being ineffective.

Research Gaps, While the evidence supports the efficacy of PNCM, several research gaps remain. Longitudinal studies on PNCM’s impact on patient quality of life are limited. Ventura-Silva et al. (2024) call for further research to assess long-term outcomes, while Johansson (2015) and Cocchieri et al. (2021) highlight the need for validating PNCM’s efficiency and quality measures over time. Additionally, there is insufficient focus on vulnerable populations within PNCM research. Hudon et al. (2023) and Vaughan et al. (2022) stress the importance of exploring tailored approaches for these groups to ensure equitable and effective care delivery.

Table 5.
Key issues emerging.

Key Issues	Specific Aspects	Sources	Quotations
Nurse-Patient Relationship	The therapeutic relationship as the core of PNCM	Manthey (2019); Johansson (2015); Cocchieri et al. (2021)	“The therapeutic relationship is the cornerstone of PNCM, emphasizing the full accountability of the nurse for patient care.” (Manthey, 2019, p. 2-3). “Nurses taking direct responsibility for the full care cycle foster patient trust.” (Johansson, 2015, p. 8-9). “Evaluations of hospital adherence to PN principles underscore the importance of this continuity.” (Cocchieri et al., 2021, p. 2).
	Continuity of care enhances patient and family engagement	Shafiei et al. (2019); Hudon et al. (2023); Johansson (2015)	“Structured family involvement in PNCM significantly reduces patients’ physical pain.” (Shafiei et al., 2019, p. 51-52). “The model allows the specific needs of vulnerable patients to be met more effectively.” (Hudon et al., 2023, p. 4). “Ongoing engagement fosters positive relationships between patients and nurses.” (Johansson, 2015, p. 9).
Development of Nurse Competence	Competence in situational management and clinical decision-making	Nicastro et al. (2019); Cocchieri et al. (2021); Johansson (2015)	“PNCM provides opportunities for nurses to enhance their skills in situational management and develop professional autonomy.” (Nicastro et al., 2019, p. 125-126). “The PN checklist evaluates implementation effectiveness, promoting clinical decision-making.” (Cocchieri et al., 2021, p. 3). “Highly trained nurses consistently meet patient needs.” (Johansson, 2015, p. 9).
	Autonomy and accountability increase job satisfaction	Johansson (2015); Ventura-Silva et al. (2024)	“Nurses feel empowered by full responsibility for patient care, improving job satisfaction.” (Johansson, 2015, p. 8). “PNCM creates a supportive work environment that fosters nurse autonomy, enhancing care quality and job satisfaction.” (Ventura-Silva et al., 2024, p. 3-4).
Safety Culture	Reducing the risk of “missed care” through clear accountability allocation	Ventura-Silva et al. (2024); Krüger et al. (2023)	“PNCM enhances safety culture by significantly reducing missed care, ensuring all patient needs are met.” (Ventura-Silva et al., 2024, p. 4). “By minimizing care errors, PNCM increases patient trust in healthcare services.” (Krüger et al., 2023, p. 6).
	Decreasing postoperative complications through holistic approaches	Wu (2021); Hudon et al. (2023)	“PNCM significantly reduces complications by emphasizing a holistic care approach.” (Wu, 2021, p. 7). “The holistic approach helps balance the physical and emotional needs of patients effectively.” (Hudon et al., 2023, p. 5-6).
Holism and Empathy	Providing emotional and social care tailored to patient needs	Hudon et al. (2023); Johansson (2015); Cocchieri et al. (2021)	“PNCM enables nurses to better understand and respond empathetically to patient needs.” (Hudon et al., 2023, p. 5). “A personal connection with patients helps nurses provide meaningful holistic care.” (Johansson, 2015, p. 8-9). “The PN checklist supports maintaining social and emotional dimensions in care plans.” (Cocchieri et al., 2021, p. 3).
Implementation Challenges	High emotional burden on nurses managing full patient responsibility	Johansson (2015); Cocchieri et al. (2021)	“The complexity of the PNCM role requires organizational support to help nurses manage emotional burdens.” (Johansson, 2015, p. 9). “Emotional support for nurses is a critical element for successful PN implementation.” (Cocchieri et al., 2021, p. 4).
	Infrastructure limitations in resource-constrained settings	Hudon et al. (2023); Vaughan et al. (2022)	“PNCM requires investments in training and development to ensure success in resource-limited areas.” (Hudon et al., 2023, p. 6). “Without sufficient infrastructure support, PNCM implementation will face significant challenges.” (Vaughan et al., 2022, p. 2-3).
Research Gaps	Lack of longitudinal evidence on PNCM’s impact on patient quality of life	Ventura-Silva et al. (2024); Johansson (2015); Cocchieri et al. (2021)	“Further research is needed to assess the long-term impact of PNCM on patients and organizations.” (Ventura-Silva et al., 2024, p. 4). “The long-term effects of PNCM remain poorly understood and warrant greater attention.” (Johansson, 2015, p. 9). “Further validation is required to measure the efficiency and quality outcomes associated with PNCM.” (Cocchieri et al., 2021, p. 5).
	Limited focus on vulnerable populations in PNCM implementation	Hudon et al. (2023); Vaughan et al. (2022)	“Research must focus on adapting PNCM to meet the needs of vulnerable populations.” (Hudon et al., 2023, p. 6). “Vulnerable populations face unique challenges that require specific approaches in PNCM implementation.” (Vaughan et al., 2022, p. 3).

DISCUSSION

Nurse-Patient Relationship

The implementation of the Primary Nursing Care Model (PNCM) has a profound impact on fostering strong nurse-patient relationships by assigning one primary nurse to manage the care of a patient from admission to discharge. This approach ensures continuity of care, enabling nurses to build trust and rapport with patients over time. Through consistent interactions, the primary nurse gains a comprehensive understanding of the patient's medical, psychosocial, and emotional needs, allowing for personalized care (Gonçalves et al., 2023). This close relationship enhances the quality of communication between nurses and patients. In PNCM, the primary nurse serves as the main point of contact, which minimizes the risks of miscommunication and ensures that patients feel heard and valued. Studies have shown that patients appreciate this consistency, which significantly improves their satisfaction and confidence in the healthcare system (Cocchieri et al., 2022). Moreover, the PNCM facilitates better emotional support for patients, as the nurse becomes deeply familiar with their individual concerns and preferences. This empathetic engagement creates a therapeutic environment conducive to healing and recovery. The consistent relationship also allows for more effective advocacy on behalf of the patient, contributing to improved health outcomes and fostering a positive perception of care quality.

Development of Nurse Competence

PNCM contributes significantly to the professional development and competence of nurses by giving them full accountability for the care of their patients. This responsibility spans the entirety of the care continuum, from assessment and planning to implementation and evaluation, which helps nurses refine both clinical and decision-making skills. By managing the full spectrum of patient care, nurses are able to deepen their expertise and take ownership of their professional growth (Chen et al., 2020). Collaboration with multidisciplinary teams is another crucial aspect of PNCM. Nurses are required to engage with physicians, therapists, and other healthcare providers to coordinate care effectively. This interaction not only broadens their knowledge of complex health issues but also enhances their interpersonal and communication skills, which are critical in modern healthcare environments (Bochatay N. M.; Blondon, K. S.; Junod Perron, N.; Cullati, S.; Nendaz, M. R., 2017; Gonçalves et al., 2023). Additionally, PNCM encourages lifelong learning and reflective practice. Nurses are motivated to continuously update their knowledge and skills to provide evidence-based care and maintain the highest standards of professional competence. This model supports the development of critical thinking, adaptability, and leadership qualities, which are essential for navigating the complexities of contemporary healthcare systems.

Safety Culture

Safety culture is a fundamental element of PNCM, as the model assigns primary responsibility for patient safety to the nurse. With a single nurse overseeing the patient's care, there is a reduced likelihood of errors due to fragmented communication. The comprehensive documentation maintained by the primary nurse serves as a vital resource for making informed clinical decisions and ensures that all team members are aligned in their understanding of the patient's condition (Cocchieri et al., 2022; Gonçalves et al., 2023). By closely monitoring the patient's status throughout the care process, the primary nurse can quickly identify and respond to any changes in the patient's condition. Early detection of complications or adverse events is pivotal in preventing escalation and maintaining patient safety. This proactive approach is a key advantage of PNCM, as it creates an environment of vigilance and accountability (Duijn J.; Jones, R., 2022). The emphasis on continuity and accountability inherent in PNCM fosters a culture of safety that benefits both patients and healthcare providers. When nurses are empowered to take comprehensive responsibility for

patient care, they are more likely to prioritize safety and adhere to best practices, ultimately improving overall care quality and reducing risks.

Holism and Empathy

The PNCM excels in promoting a holistic and empathetic approach to patient care by ensuring that nurses address not only the physical needs of patients but also their emotional, social, and spiritual well-being. With a primary nurse responsible for the entire care process, patients receive personalized attention that considers their unique circumstances and preferences (Ginting, 2018; Suryanti, 2018). Empathy is a cornerstone of the PNCM, as the consistent relationship between the nurse and the patient allows for deeper emotional connections. This relationship ensures that patients feel understood and valued, which is particularly important in sensitive care contexts, such as palliative or end-of-life care. By addressing the emotional and psychological aspects of health, PNCM creates a supportive environment that enhances patient satisfaction and overall well-being (Cocchieri et al., 2022). The model also incorporates cultural and social factors into care planning, recognizing that these elements significantly influence health outcomes. By understanding the broader context of a patient's life, primary nurses can develop interventions that are both effective and culturally sensitive. This comprehensive, patient-centered approach not only improves health outcomes but also reinforces the nurse's role as an advocate for holistic well-being.

Effective Implementation

The effectiveness of PNCM in clinical practice lies in its ability to provide seamless and patient-centered care through clear delegation of responsibility to the primary nurse. This model ensures that nurses are fully accountable for the planning, execution, and evaluation of patient care, leading to more precise and consistent delivery of healthcare services (Gonçalves et al., 2023). PNCM enhances coordination among healthcare teams by designating a single nurse as the central point of communication. This reduces fragmentation and promotes collaborative care, particularly in complex cases requiring input from multiple disciplines. Such coordination ensures that patient needs are met comprehensively and efficiently, minimizing the potential for errors or oversight (Sharafi et al., 2018). Moreover, PNCM fosters a professional environment where nurses can exercise autonomy and develop innovative solutions to address patient needs. This empowerment translates into higher job satisfaction among nurses and better engagement with their professional responsibilities. The model's focus on personalized, continuous care also aligns with modern healthcare goals of improving patient outcomes and fostering trust in the healthcare system (Gonçalves et al., 2023).

Research Gaps

Research on the Primary Nursing Care Model (PNCM) highlights significant gaps that require attention to enhance its effectiveness and applicability. There is a lack of longitudinal studies examining PNCM's long-term impact on patient outcomes and quality of care, as emphasized by Ventura-Silva et al. (2024) and Cocchieri et al. (2021). Additionally, limited exploration of PNCM's application to vulnerable populations, including the elderly and socioeconomically disadvantaged, remains a concern. Hudon et al. (2023) and Vaughan et al. (2022) underscore the need for tailored approaches to ensure equitable and inclusive care. Addressing these gaps through comprehensive research will strengthen PNCM's evidence base, adaptability, and potential to improve healthcare outcomes in diverse settings.

CONCLUSION

The Primary Nursing Care Model (PNCM) is a transformative approach that effectively enhances therapeutic relationships, nurse competence development, safety culture, and

holistic care in nursing practice. However, its implementation faces challenges, such as the emotional burden on nurses and infrastructure limitations. Furthermore, research on PNCM reveals several gaps, including the lack of longitudinal studies on its impact on patients' quality of life and insufficient focus on vulnerable populations.

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