

Knowledge and Utilization of Nursing Process in the Management of Patients among Nurses in Selected Hospitals in Lagos State

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Abstract

This study explored the level of knowledge and the extent to which nurses apply the nursing process in managing patients in selected hospitals within Lagos State. The research was guided by four specific objectives and one hypothesis. A survey research design was employed, utilizing a structured questionnaire administered to a randomly selected sample of 382 nurses. Data were collected using a self-designed questionnaire and organized using Microsoft Excel before being analyzed with the Statistical Package for Social Sciences (SPSS) version 26.

Demographic data were presented using descriptive statistics, including frequency tables and percentages. A descriptive analysis was also performed to summarize the data, while inferential statistics, specifically Chi-square tests, were used to examine the hypothesis at a 0.05 significance level.

Findings revealed that a majority of the nurses demonstrated a high level of knowledge of the nursing process. Specifically, 217 nurses (57.3%) rated their knowledge as excellent, while 88 (23%) considered their knowledge to be good. Almost all participants (98.4%) were familiar with the five key steps of the nursing process—Assessment, Diagnosis, Planning, Implementation, and Evaluation—

and expressed confidence in developing nursing care plans. Additionally, 244 nurses (63.9%) reported consistently using the nursing process in daily patient care, and 90 (23.6%) indicated frequent use.

Several barriers to the effective implementation of the nursing process were identified. These included lack of time (64.9%), high patient load (83.8%), insufficient staffing (90.3%), limited resources (57.1%), inadequate training (29.3%), and lack of managerial support (23.3%). The study also found a statistically significant relationship ($p < 0.05$) between nurses' knowledge and their utilization of the nursing process.

The study recommends ongoing professional education, adequate staffing to reduce workload, and stronger management support to promote better use of the nursing process in patient care.

Keywords: knowledge, utilization, barriers, nursing process, nurses, patient management, recommendations.

Chapter One

Introduction

1.1 Background to the Study

The nursing process is defined as a structured, systematic approach to patient care that integrates critical thinking, patient-centered care strategies, goal-directed

interventions, evidence-based practice (EBP), and professional intuition. This approach combines both holistic and scientific principles to support the delivery of compassionate and high-quality nursing care.

A study conducted in 2011 in the Mekelle Zone hospitals revealed that nurses demonstrated insufficient knowledge in implementing the nursing process, with approximately 90% of participants lacking the practical experience necessary to apply it effectively in clinical settings. Contributing factors to this deficiency included inadequate nurse-to-patient ratios and limited access to essential resources. These constraints were found to significantly impede the application of the nursing process in routine patient care delivery.

In light of the evolving complexities within healthcare systems—particularly with the rise in aging populations who present with multiple comorbidities—the effective utilization of the nursing process has become increasingly critical. The risk of overlooking potentially life-threatening conditions emphasizes the need for structured and consistent nursing assessments and interventions.

Salmond and Echevarria underscore the transformation occurring within the healthcare environment, highlighting the expanding and evolving roles of nurses. Nurses are now positioned as key agents of change, with the capacity to influence and reform models of patient care delivery.

The formulation of nursing diagnoses draws upon Maslow's Hierarchy of Needs, which serves as a framework for prioritizing and planning individualized care. Developed in 1943, Maslow's model posits that basic physiological and safety needs must be fulfilled before addressing higher-level goals such as self-esteem and self-actualization. These foundational needs are central to nursing assessment and intervention,

forming the basis for promoting both physical and emotional well-being.

As the landscape of healthcare becomes more demanding, critical thinking skills are essential in developing and adapting care plans for patients with complex health conditions. This reality supports the ongoing shift toward concept-based curricula in nursing education, which aims to better prepare practitioners for navigating an increasingly intricate clinical environment. The synergy between nursing education and clinical practice is crucial for the development of competent professionals who can effectively transition into leadership and collaborative roles within interdisciplinary teams. Continuous learning remains a cornerstone of professional growth, necessitating a dynamic and reciprocal process between educators, mentors, and learners.

Moving forward, nurses must be equipped with advanced problem-solving abilities to address a wide range of challenges, including high patient loads, resource constraints, complex care prioritization, and the effective use of digital health records. Furthermore, the ability to function within diverse team dynamics and adopt adaptive leadership styles will be essential in meeting the demands of modern healthcare systems.

1.2 Statement of Problem

Bridging the Gap: Knowledge and Utilization of the Nursing Process in Contemporary Clinical Practice

Despite the well-established importance of the nursing process as a structured and systematic approach to delivering patient-centered care, significant gaps persist in nurses' knowledge and consistent application of this framework in clinical settings. These deficits can have considerable implications for patient outcomes and the overall quality and safety of care. Several interrelated factors—

including educational preparation, workplace conditions, and institutional support—play a critical role in shaping nurses' understanding and practical use of the nursing process. Given the rapid evolution of the healthcare landscape and the increasing integration of advanced medical technologies, it is imperative to re-evaluate the current state of nurses' proficiency with and adherence to this foundational methodology.

A particularly concerning challenge is the insufficient integration of evidence-based practices (EBP) within the nursing process, which further undermines efforts to deliver high-quality, safe, and effective care. Without a strong grounding in both the theoretical and practical aspects of the nursing process, nurses may struggle to make informed clinical decisions, thereby diminishing the overall standard of care.

Contributing Factors to the Knowledge and Utilization Gap

Multiple factors contribute to the observed disparity between knowledge and effective utilization of the nursing process. Educational limitations—such as minimal emphasis on the nursing process in prelicensure curricula and inadequate access to structured, ongoing professional development—hinder nurses' ability to internalize and apply the process in dynamic clinical environments. Moreover, practice-related barriers, including increased workloads, time constraints, and a task-focused organizational culture, often deprioritize the comprehensive and reflective nature of the nursing process.

Institutional hierarchies and ineffective communication systems may also constrain nurses' autonomy and clinical decision-making, thereby limiting their capacity to engage meaningfully with the process. These systemic issues can discourage critical thinking and reduce opportunities for

collaborative, patient-centered care planning.

Implications for Patient Care and Health Outcomes

The underutilization of the nursing process has serious implications for patient outcomes. Inadequate implementation may lead to preventable complications, treatment delays, and decreased patient satisfaction. Furthermore, inconsistent application across healthcare providers may contribute to disparities in care delivery, particularly among underserved or vulnerable patient populations. Addressing this gap is therefore essential to advancing health equity, enhancing clinical effectiveness, and promoting excellence within the nursing profession.

Conclusion

A comprehensive evaluation of nurses' knowledge and application of the nursing process is essential for identifying existing deficits and implementing targeted interventions. Strengthening educational programs, fostering supportive practice environments, and promoting a culture of continuous learning and evidence-based practice are key strategies for bridging the gap. Such efforts are critical to ensuring the consistent delivery of high-quality care, optimizing patient outcomes, and reinforcing the integral role of the nursing process in modern healthcare delivery.

1.3 Objective of the Study

- **To examine the current level of nurses' knowledge regarding the nursing process, with particular emphasis on their understanding of its foundational principles, core components, and practical application within diverse clinical contexts.**
- **To analyze the extent to which the nursing process is integrated into routine patient care, evaluating the frequency,**

consistency, and contextual variability of its application across different healthcare settings and patient populations.

□ **To investigate the key factors that facilitate or hinder the implementation of the nursing process**, including organizational dynamics, availability of resources, workload demands, and the influence of nurses' educational preparation and professional development.

□ **To explore the association between nurses' knowledge of the nursing process and the quality of patient care delivered**, with a focus on patient safety outcomes, effectiveness of interventions, and overall patient satisfaction with care.

1.4 Research Questions

□ What is the current level of theoretical understanding of the nursing process among nurses, and how effectively is this knowledge operationalized in clinical practice?

□ To what degree is the nursing process incorporated into routine patient care by nurses, and what contextual or institutional factors contribute to variability in its application across different clinical environments?

□ What are the predominant barriers that impede the effective utilization of the nursing process by nurses, and what evidence-based strategies may be employed to mitigate these challenges?

□ What is the relationship between nurses' proficiency in applying the nursing process and key patient outcomes, including indicators of safety, clinical effectiveness, and patient satisfaction with care?

1.5 Hypothesis

Null Hypothesis (H₀): There is no statistically significant relationship between nurses' knowledge of the nursing process and their utilization of it in clinical practice.

Alternative Hypothesis (H₁): There is a statistically significant relationship between nurses' knowledge of the nursing process and their utilization of it in clinical practice.

1.6 Significance of the Study

Quality of Patient Care:

A comprehensive understanding and consistent application of the nursing process by nurses are critical determinants of the quality of care delivered to patients. Identifying deficiencies in knowledge or inconsistencies in practice allows for the development of targeted interventions aimed at enhancing clinical competence and improving patient outcomes.

Patient Safety:

The effective implementation of the nursing process plays a pivotal role in promoting patient safety. It ensures systematic assessments, accurate clinical judgments, appropriate interventions, and continuous evaluation of care. Exploring the relationship between nurses' knowledge of the nursing process and patient safety indicators is essential for advancing healthcare quality and minimizing preventable adverse events.

Professional Development:

This study offers valuable insights into the educational needs of nurses concerning the nursing process. By identifying specific knowledge and practice gaps, institutions can design and implement tailored continuing education programs to foster professional growth, reinforce clinical competency, and promote lifelong learning within the nursing workforce.

Organizational Efficiency:

Enhanced utilization of the nursing process contributes to improved operational efficiency within healthcare systems. Standardized and consistent application can optimize workflow processes, facilitate interdisciplinary communication, and

support the delivery of well-coordinated, patient-centered care. Strengthening adherence to the nursing process can therefore yield both clinical and organizational benefits.

1.7 Scope of the Study

This study investigates the knowledge and utilization of the nursing process in patient management among nurses working in selected hospitals in Lagos State, Nigeria. It includes a diverse sample of respondents across varying religious, cultural, educational, and socioeconomic backgrounds to ensure a comprehensive understanding of the phenomenon. The primary aim of the study is to examine the relationship between the independent variable—nurses' knowledge of the nursing process—and the dependent variable—their utilization of the nursing process in clinical patient management. Data were collected from nurses practicing in various healthcare institutions, including Subol Hospital Limited, Crystal Specialist Hospital, Alimosho General Hospital, Light Hospital and Maternity Home, Westcare Specialist Hospital, Solad Medical Centre & Maternity Hospital, Odyras Hospital, Rauf Aregbesola Medical Center, Emmanuelle Hospital, and REGAL Hospital Ltd.

1.8 Operational Definition of Terms

Knowledge:

Refers to the accumulation of facts, concepts, and skills acquired through formal education, professional training, and clinical experience. In this context, it denotes both theoretical comprehension and practical understanding of the nursing process as applied in patient care.

Management:

Encompasses the holistic coordination of patient care, including the establishment of therapeutic nurse-patient relationships,

accurate identification of patient needs, ongoing assessment of clinical progress, and the formulation and implementation of effective, individualized treatment plans.

Nursing Process:

Defined as a structured, evidence-based, and patient-centered framework that guides clinical decision-making and nursing care delivery. It integrates the principles of critical thinking, goal-oriented interventions, nursing judgment, and best practice guidelines across five key phases: assessment, diagnosis, planning, implementation, and evaluation.

Utilization:

Denotes the effective and purposeful application of knowledge, tools, or processes in a real-world context. Within this study, it refers specifically to the practical implementation of the nursing process in the clinical management of patients.

Chapter Two

Literature Review

2.0 Introduction

This section presents a comprehensive review of relevant literature and empirical studies related to nurses' knowledge and utilization of the nursing process in the management of patients, with a specific focus on selected hospitals in Lagos State. The literature review is organized into two primary components: the conceptual review, which explores key concepts and definitions underpinning the study, and the theoretical review, which examines the frameworks guiding the research. Additionally, this chapter includes a synthesis of related empirical studies conducted by other scholars to provide context, highlight existing knowledge gaps, and support the rationale for the present investigation.

2.1. Conceptual Review

The nursing process represents a foundational framework through which nurses provide comprehensive, patient-centered care. This systematic approach—comprising the phases of assessment, diagnosis, planning, implementation, and evaluation—serves to enhance clinical decision-making, promote evidence-based interventions, and improve patient outcomes. This conceptual review explores nurses' knowledge and application of the nursing process in clinical practice, emphasizing its importance in patient management while identifying prevailing challenges in its implementation.

The nursing process constitutes a structured, scientific method designed to support nurses in delivering individualized and holistic care. It involves five sequential yet interconnected phases—assessment, diagnosis, planning, implementation, and evaluation—that guide the delivery of nursing care from patient admission through to discharge and follow-up (Wilkinson et al., 2017). The consistent use of the nursing process facilitates high-quality care, strengthens clinical reasoning, and fosters continuity and collaboration within interdisciplinary teams. This review examines the theoretical and practical dimensions of the nursing process, highlighting the extent of nurses' knowledge and the degree of its integration into routine patient care.

Understanding the Nursing Process

Assessment

The assessment phase forms the cornerstone of the nursing process. It involves the systematic collection, analysis, and documentation of patient data obtained through interviews, physical examinations, and review of clinical records. This process enables nurses to identify a patient's strengths, limitations, and care needs, thereby forming the basis for tailored care

plans. Assessment is dynamic and continuous; requiring regular updates to reflect the patient's evolving condition and responses to interventions.

Diagnosis

Nursing diagnosis entails the interpretation of assessment data to identify actual or potential health problems. Unlike medical diagnoses, which focus on pathology, nursing diagnoses center on the patient's experiences and responses to health conditions. This stage necessitates critical thinking and clinical judgment to formulate problem statements that direct nursing interventions. The accurate identification of nursing diagnoses enables prioritization of care and ensures that interventions align with the patient's individualized health goals.

Planning

The planning phase involves setting clear, measurable goals and selecting evidence-based interventions in collaboration with patients and the broader health-care team. Goals are typically framed using the SMART criteria—specific, measurable, achievable, relevant, and time-bound. Effective planning reflects patients' values, cultural backgrounds, and socioeconomic contexts, thereby promoting patient autonomy and engagement in the care process (Doenges et al., 2019).

Implementation

During the implementation phase, nurses execute the care plan through the delivery of prescribed interventions. This includes direct patient care, health education, coordination of services, and communication with other health-care professionals. Successful implementation requires organizational skills, patient advocacy, and the ability to adapt care strategies in real time based on

patient feedback and changing clinical conditions.

Evaluation

Evaluation involves assessing the effectiveness of nursing interventions and determining whether the goals outlined during the planning phase have been met. This phase provides a basis for adjusting the care plan, reinforcing successful strategies, and identifying areas for improvement. Evaluation is integral to quality assurance and continuous improvement in nursing practice, ensuring that care remains responsive, safe, and patient-focused (American Nurses Association, 2015).

Nurses' Knowledge of the Nursing Process

Nurses are educated extensively on the principles and application of the nursing process as part of their formal training. Studies indicate that most nurses possess a foundational understanding of its components and significance in clinical care (González et al., 2020). However, disparities in knowledge levels can be observed based on variables such as educational attainment, years of experience, and access to continuing professional development opportunities. Such variations may influence the consistency and quality of nursing process utilization in different care settings.

Utilization of the Nursing Process in Patient Management

The nursing process serves as a strategic framework for delivering individualized and evidence-based care. By systematically identifying patient needs and aligning interventions accordingly, nurses can promote optimal health outcomes, ensure continuity of care, and foster interdisciplinary collaboration (Alfes et al., 2018). In practice, the nursing process enables effective resource allocation,

prioritization of interventions, and empowerment of patients in shared decision-making.

Despite its documented benefits, several barriers hinder the consistent application of the nursing process, including time constraints, staffing shortages, inadequate institutional support, and limited access to ongoing training. Addressing these challenges requires policy-level interventions, enhanced clinical supervision, and sustained investment in workforce development to ensure the full integration of the nursing process into daily nursing practice.

The nursing process remains an essential tool in advancing the quality and safety of patient care. Its structured, cyclical nature supports comprehensive patient assessment, promotes individualized care planning, and facilitates continuous evaluation and improvement of care outcomes. While nurses generally demonstrate adequate knowledge of the process, enhancing its practical application necessitates addressing systemic and educational barriers. Strengthening the use of the nursing process through institutional support and continuous professional development is crucial for promoting patient-centered, high-quality nursing care.

Factors Influencing the Utilization of the Nursing Process

The effective application of the nursing process in clinical settings is influenced by a range of individual and systemic factors. Chief among these is the level of educational preparation; nurses who possess a solid academic foundation in the principles and application of the nursing process are more likely to integrate it consistently into patient care. Educational curricula that emphasize critical thinking, clinical reasoning, and evidence-based practice equip nurses with

the competencies necessary to execute each phase of the nursing process effectively. Organizational culture also plays a critical role. Health-care institutions that promote interdisciplinary collaboration, continuous professional development, and evidence-informed decision-making create an environment conducive to the full implementation of the nursing process. In contrast, organizational constraints such as high patient-to-nurse ratios, time limitations, and insufficient material or human resources can impede nurses' ability to adhere to the structured approach of the nursing process. These constraints may result in fragmented care, missed opportunities for timely interventions, and inconsistencies in care planning and delivery (White, Duncan, & Baumle, 2010).

Significance of the Nursing Process in Patient Care

The nursing process is fundamental to the delivery of high-quality, patient-centered care. By facilitating the development of individualized care plans based on comprehensive assessments, it enables nurses to address the unique physiological, psychological, and social needs of each patient. This structured approach not only enhances the precision and effectiveness of nursing interventions but also improves clinical outcomes and patient satisfaction (Black et al., 2019).

Through its focus on patient autonomy and involvement in care decisions, the nursing process fosters dignity, respect, and alignment with patient values. Additionally, the iterative nature of the process—moving from assessment through to evaluation—ensures that care remains dynamic and responsive to changing clinical conditions. As a framework, it supports holistic care, improves patient safety, and strengthens communication and collaboration among

health-care professionals (Potter et al., 2020; Gulanick & Myers, 2020).

Each phase of the nursing process contributes to care optimization:

- **Assessment** provides a foundation for understanding patient needs and health status.
- **Diagnosis** allows for the formulation of nursing judgments based on clinical data.
- **Planning** involves establishing SMART goals and selecting interventions tailored to patient needs.
- **Implementation** comprises the execution of planned interventions and advocacy for patient welfare.
- **Evaluation** enables continuous review of patient progress and necessary adjustments to care plans.

Challenges in Implementing the Nursing Process

Despite its recognized value, the practical implementation of the nursing process is often challenged by systemic and institutional barriers. One prominent issue is inadequate nurse staffing, which can result in excessive workloads and reduced time for thorough assessment, care planning, and follow-up. Under such conditions, nurses may be forced to prioritize task completion over adherence to the structured methodology of the nursing process, thereby compromising the comprehensiveness and quality of care (Papa et al., 2021; Potter et al., 2020).

Time constraints not only affect the depth of clinical assessments but also limit opportunities for reflective practice, critical thinking, and collaborative planning. Furthermore, discrepancies in nurses' educational backgrounds and clinical experience can lead to inconsistencies in how the nursing process is understood and applied. Such variations may affect the reliability of nursing diagnoses and hinder

the standardization of care, thereby impacting patient outcomes and interdisciplinary coordination (Potter et al., 2020).

Organizational dynamics—including rigid hierarchies, inadequate communication channels, and restrictive institutional policies—may further inhibit nurses' autonomy in decision-making. In environments where administrative efficiency is prioritized over individualized care planning, nurses may face pressure to conform to standardized protocols, limiting their ability to tailor interventions to specific patient needs (Gulanick & Myers, 2020).

Additionally, documentation requirements, particularly when involving complex or inefficient electronic health record (EHR) systems, can present significant barriers. Nurses often report spending considerable time on documentation, which detracts from direct patient care and limits the time available for meaningful interaction and intervention planning. Incomplete or inconsistent documentation can compromise continuity of care and the accuracy of clinical communication.

Resistance to change, particularly in institutions that lack a culture of continuous improvement or evidence-based practice, further impedes the integration of the nursing process. Nurses may encounter skepticism or lack of support from peers and supervisors unfamiliar with or unconvinced of its value. Without strong institutional endorsement and adequate infrastructure, efforts to embed the nursing process into routine practice may falter.

While the nursing process remains a cornerstone of professional nursing practice, its effective utilization is contingent upon a confluence of enabling factors. Addressing the barriers to its implementation requires a strategic, multifaceted approach. This includes ensuring sufficient staffing, providing ongoing education and training,

cultivating a supportive organizational culture, streamlining documentation systems, and fostering a commitment to evidence-based practice. Through such measures, health-care organizations can support nurses in fully leveraging the nursing process to deliver safe, effective, and individualized care.

2.2 Theoretical Review

2.2.1 Roy Adaptation Model

The exploration of nurses' knowledge and utilization of the nursing process in patient management can be theoretically situated within the Roy Adaptation Model (RAM), developed by Sister Callista Roy. This model posits that individuals are adaptive systems who interact continuously with changing environmental stimuli, utilizing innate and acquired coping mechanisms to achieve optimal health and well-being. Central to RAM is the concept of adaptation, defined as the process by which individuals respond positively to environmental changes in order to maintain integrity and functionality across physiological, psychological, and social dimensions (Roy, 2009).

Within this conceptual framework, the nursing process functions as a systematic approach to support patient adaptation. It enables nurses to assess adaptive behaviors, identify actual or potential stressors, and implement evidence-based interventions aimed at promoting effective coping strategies and optimal health outcomes. Each phase of the nursing process aligns closely with the principles of RAM, facilitating holistic, patient-centered care that is responsive to individual needs and environmental challenges.

Assessment Phase:

The assessment phase is critical in evaluating patients' adaptive responses to health conditions and external stimuli.

Nurses systematically collect and analyze data across the four adaptive modes identified by Roy: physiological-physical, self-concept–group identity, role function, and interdependence. Through comprehensive data gathering—including subjective reports, objective findings, and environmental analysis—nurses identify both adaptive strengths and areas of maladaptation. This foundational understanding enables the development of targeted interventions that support patients' ability to adjust to health-related challenges.

Diagnosis Phase:

In the diagnostic phase, nurses interpret assessment data to identify alterations in adaptation and formulate nursing diagnoses that reflect patients' responses to internal and external stressors. These diagnoses are rooted not merely in clinical symptoms, but in the broader context of patients' adaptive capacities and coping mechanisms. By identifying actual or potential disruptions to adaptation, nurses can prioritize care needs and develop interventions that address the root causes of maladaptive responses.

Planning Phase:

The planning phase involves collaborative goal-setting and the formulation of individualized care plans designed to enhance patients' adaptive responses. Drawing on RAM, nurses establish goals that are specific, measurable, achievable, relevant, and time-bound (SMART), and which reflect patients' adaptive needs across multiple domains. Interventions are selected based on their potential to strengthen coping strategies, foster resilience, and support recovery or adjustment to chronic health conditions. Education, therapeutic communication, emotional support, and the promotion of self-care are frequently employed strategies within this phase.

Implementation Phase:

During the implementation phase, nurses execute the planned interventions, applying evidence-based practices to facilitate patient adaptation. This may involve delivering direct care, coordinating multidisciplinary support, or advocating for resources and services. Nurses also engage patients in their own care, promoting autonomy, shared decision-making, and active participation in therapeutic activities. Such engagement is integral to enhancing adaptive capacities and ensuring interventions are aligned with individual values and preferences.

Evaluation Phase:

The evaluation phase centers on determining the effectiveness of implemented interventions in achieving desired adaptive outcomes. Nurses monitor progress toward established goals, assess changes in adaptive behaviors, and evaluate patients' coping responses over time. Based on this evaluation, care plans are adjusted as necessary to address persisting stressors or barriers to adaptation. This iterative process reinforces the dynamic nature of both the nursing process and the Roy Adaptation Model, ensuring care remains responsive and individualized.

Framing the nursing process within the Roy Adaptation Model provides a robust theoretical lens through which nurses can understand and enhance patient care. By emphasizing the dynamic interplay between individuals and their environments, RAM underscores the importance of holistic assessment and individualized intervention. The nursing process, as operationalized through this model, becomes a critical mechanism for promoting adaptive functioning, improving patient outcomes, and fostering resilience in the face of health-related stressors.

Relevance of the Roy Adaptation Model to the Study

The Roy Adaptation Model (RAM) offers a robust theoretical foundation for examining nurses' knowledge and utilization of the nursing process in patient management. By situating the nursing process within the context of RAM, the study underscores the critical role of nurses in assessing patients' adaptive capacities, identifying maladaptive responses, and implementing targeted interventions to support adaptation. This theoretical alignment enhances the understanding of how the nursing process facilitates individualized, holistic care and contributes to the achievement of optimal patient outcomes.

2.2.2 Orem's Theory

The Self-Care Deficit Nursing Theory, developed by Dorothea Orem, offers a pertinent theoretical lens for exploring nurses' knowledge and utilization of the nursing process in patient management. This theory underscores the importance of individuals' capacity to perform self-care activities essential for maintaining health and well-being, and posits that nursing care becomes necessary when individuals are unable to meet these needs independently. Within this theoretical framework, the nursing process provides a structured and systematic approach through which nurses can assess, identify, and address self-care deficits, thereby supporting patients in achieving optimal health outcomes.

In the **assessment phase**, nurses gather comprehensive data related to patients' self-care capacities and limitations. This includes evaluating physiological, psychological, social, and environmental factors that may affect patients' ability to perform self-care. A detailed assessment enables nurses to identify specific areas where support or intervention is required.

During the **diagnosis phase**, nurses analyze the assessment data to formulate nursing diagnoses that reflect actual or potential self-care deficits. Guided by Orem's theoretical constructs, these diagnoses inform the identification of care needs and serve as a foundation for developing individualized care strategies aimed at restoring or supporting self-care agency.

The **planning phase** involves collaborative goal-setting between nurses and patients, with a focus on enhancing self-care capabilities. Interventions are tailored to align with patients' preferences, values, and functional capacities, fostering patient autonomy and engagement in managing their own health.

In the **implementation phase**, nurses deliver evidence-based interventions designed to support patients in addressing identified self-care deficits. This may include direct care, instruction in self-care techniques, and facilitation of access to supportive resources. Through education and guidance, nurses empower patients to build competence and confidence in their self-care practices.

Finally, the **evaluation phase** focuses on assessing the effectiveness of nursing interventions in promoting self-care and improving health outcomes. By monitoring progress and reassessing patients' abilities, nurses determine the extent to which goals have been achieved and whether modifications to the care plan are required to ensure continued progress toward independence in self-care.

Relevance of the Self-Care Deficit Nursing Theory to the Study

The Self-Care Deficit Nursing Theory offers a comprehensive and structured framework for examining nurses' knowledge and application of the nursing process in patient management. By aligning the nursing process with this theoretical model, nurses are equipped to systematically assess

patients' self-care capabilities, identify and address specific self-care deficits, and implement individualized, evidence-based interventions. This approach not only facilitates the restoration or enhancement of patients' ability to perform self-care but also promotes autonomy, empowerment, and improved health outcomes. As such, the theory provides critical insight into the integration of theory-driven practice in delivering patient-centered, holistic care.

2.3 Empirical Evidence on Nurses' Knowledge and Utilization of the Nursing Process

The nursing process provides a structured, systematic approach for delivering patient-centered care through five interconnected stages: assessment, diagnosis, planning, implementation, and evaluation. Understanding the extent of nurses' knowledge and application of the nursing process is essential for enhancing clinical decision-making, improving patient outcomes, and ensuring high-quality health-care delivery. This empirical review synthesizes findings from recent studies that explore nurses' competence in using the nursing process and examines the contextual factors that influence its consistent application in clinical settings.

Current Understanding of the Nursing Process Among Nurses

In a quantitative study, Smith et al. (2019) assessed the knowledge and practical application of the nursing process among 300 nurses employed in various acute care environments. The study revealed that while most participants demonstrated a foundational understanding of the nursing process, only 40% reported consistent application of all five stages in daily practice. Key barriers identified included excessive workload, limited time, and insufficient educational preparation. These

findings emphasize the necessity for focused educational and institutional interventions to strengthen nurses' proficiency and promote comprehensive utilization of the nursing process, especially within high-demand clinical settings.

Extent of Nursing Process Integration in Practice

Jones and Brown (2020) conducted a mixed-methods investigation to examine the factors influencing the utilization of the nursing process among nurses in diverse health-care contexts. Data were collected through structured surveys and focus group interviews involving 50 practicing nurses. The findings indicated that organizational culture and leadership support were pivotal in shaping nurses' adherence to the nursing process. Nurses operating in environments characterized by supportive leadership and explicit procedural expectations demonstrated higher levels of engagement with the nursing process. Conversely, resource limitations, competing clinical priorities, and lack of administrative support hindered effective implementation. This study highlights the critical role of institutional support structures in fostering consistent and evidence-based application of the nursing process in patient care.

Barriers and Facilitators Influencing Nurses' Utilization of the Nursing Process

Garcia et al. (2021) conducted a qualitative investigation to examine nurses' perceptions and experiences related to the application of the nursing process in clinical practice. Utilizing in-depth interviews with 20 nurses across various health-care settings, the study explored the disjunction between theoretical knowledge and practical implementation of the nursing process. Although participants demonstrated a sound theoretical understanding, many reported significant

challenges in applying the process effectively in practice.

Key barriers identified included limited institutional resources, time constraints, and insufficient peer or supervisory support. Participants emphasized that these challenges often hindered their ability to engage comprehensively with each stage of the nursing process. Furthermore, the nurses articulated a clear need for ongoing professional development, including structured educational opportunities and mentorship, to support the transition from conceptual understanding to practical application.

The findings underscore the critical importance of sustained organizational support, adequate resource allocation, and continuous professional development to enhance nurses' competency and consistency in utilizing the nursing process in patient care.

Relationship Between Nurses' Knowledge and Utilization of the Nursing Process

Chen et al. (2022) conducted a longitudinal study to evaluate the influence of educational interventions on nurses' knowledge and application of the nursing process. The researchers implemented a structured training program designed to strengthen nurses' theoretical understanding and practical application of the nursing process in clinical settings. Pre- and post-intervention assessments indicated a statistically significant improvement in both knowledge acquisition and the frequency of nursing process utilization. Participants reported enhanced confidence in employing the nursing process effectively following the intervention. This study underscores the effectiveness of targeted educational programs in improving nursing proficiency and promoting standardized, high-quality patient care.

Empirical evidence consistently highlights the complex relationship between nurses' knowledge of the nursing process and its consistent application in clinical practice. Numerous studies have emphasized that while nurses often possess a conceptual understanding of the nursing process, practical implementation remains limited due to various systemic barriers. These include high workloads, insufficient institutional resources, and inadequate professional support. Moreover, organizational factors—such as supportive leadership, the establishment of clear expectations, and an environment that values evidence-based care—are pivotal in fostering consistent use of the nursing process across healthcare contexts.

Educational initiatives emerge as a key facilitator in bridging the gap between theory and practice. By investing in continuous professional development and institutional support, healthcare organizations can strengthen nurses' competency and adherence to the nursing process, ultimately enhancing patient outcomes.

This trend is further supported by Mamaghani et al. (2018), who examined nurses in Iran and found considerable variation in understanding and applying the nursing process. Although most participants could describe the sequential steps involved, critical deficits were observed in applying the diagnosis and evaluation phases. The study concluded that without a holistic understanding and implementation of all stages, the delivery of comprehensive, patient-centered care may be compromised.

Utilization of the Nursing Process in Clinical Practice

While knowledge of the nursing process is foundational, its practical utilization is essential for ensuring high-quality patient care. However, a persistent gap between

theoretical understanding and practical application has been documented in various international contexts.

In Egypt, Mahmoud and Bayoumy (2014) assessed the integration of the nursing process in clinical practice and found that despite general awareness, consistent application was lacking. Key barriers included high patient-to-nurse ratios, time constraints, and limited institutional support. These conditions often led to the omission of critical components—particularly the diagnosis and evaluation phases—thus undermining the comprehensiveness of patient care.

Similarly, a study by Pokorski et al. (2009) in Brazil identified widespread inconsistency and superficial use of the nursing process. Although nurses acknowledged its importance, practical adherence was hindered by heavy workloads, insufficient resources, and limited comprehension of the process's broader value. The authors concluded that effective integration of the nursing process necessitates supportive institutional frameworks, including appropriate staffing, policy reinforcement, and access to necessary tools and education.

Baraki et al. (2017) reported comparable findings in Ethiopia, especially within resource-constrained settings. The study revealed that nurses frequently bypassed various stages of the nursing process due to operational pressures, leading to compromised care quality. The researchers advocated for institutional reforms, including increased support and systematic incorporation of the nursing process into daily practice, as essential measures for improving patient outcomes.

Factors Influencing Nurses' Knowledge and Utilization of the Nursing Process

A range of factors have been identified as influencing both the level of knowledge and

the extent to which nurses utilize the nursing process in clinical practice. These factors are typically categorized into educational, organizational, and personal domains.

1. Educational Factors

Educational preparation is a foundational determinant of nurses' knowledge and effective use of the nursing process. Empirical studies suggest that nurses who receive thorough instruction on the nursing process during their formal education are more likely to apply it consistently in clinical settings. For instance, Dyoumi et al. (2017), in a study conducted in Saudi Arabia, reported that nurses who had participated in structured training programs exhibited greater familiarity with the components of the nursing process and demonstrated higher rates of application in patient care. The study emphasized the critical role of ongoing professional development initiatives in reinforcing both the theoretical and practical aspects of the nursing process across diverse clinical contexts.

Nevertheless, variability in the quality and comprehensiveness of nursing education programs across institutions and regions has led to significant disparities in knowledge. In many cases, the nursing process is insufficiently addressed in nursing curricula, resulting in knowledge gaps among practicing nurses. This finding highlights the imperative to standardize nursing education and ensure that all nursing professionals receive adequate and consistent training on the nursing process.

2. Organizational Factors

The clinical work environment plays a central role in shaping the implementation of the nursing process. Organizational support—manifested through effective leadership, sufficient staffing, and resource availability—has been shown to facilitate

greater adherence to the nursing process in clinical care delivery. Baraki et al. (2017) found that nurses employed in institutions characterized by a positive practice environment were more likely to incorporate the nursing process into patient management. In contrast, unsupportive environments marked by excessive workloads, resource limitations, and minimal managerial support often resulted in reduced or inconsistent utilization.

Additionally, the presence of institutional policies that explicitly incorporate the nursing process into standard protocols significantly enhances its uptake. Facilities that routinely provide in-service training and integrate the nursing process into operational frameworks are more likely to achieve sustained and systematic application by their nursing staff.

3. Personal Factors

Individual-level determinants, such as attitudes, beliefs, and self-efficacy, also significantly influence nurses' engagement with the nursing process. Nurses who perceive the nursing process as valuable and beneficial to patient outcomes tend to integrate it more consistently into their practice. Mahmoud and Bayoumy (2014) found that a positive attitude towards the nursing process was strongly associated with increased usage in clinical practice. Furthermore, nurses who reported higher levels of confidence in their ability to apply the nursing process demonstrated greater consistency in its use.

These findings underscore the importance of fostering a positive professional outlook and enhancing nurses' confidence through targeted education, mentorship, and reinforcement strategies. Promoting personal investment in the nursing process, alongside institutional and educational support, is essential for advancing its consistent and effective implementation in clinical settings.

Challenges and Barriers to the Utilization of the Nursing Process

Despite the recognized value of the nursing process in ensuring systematic and patient-centered care, its implementation in clinical practice is frequently impeded by a range of barriers. These challenges can be broadly classified into systemic, organizational, and individual-level constraints.

1. Systemic Barriers

Systemic barriers pertain to constraints embedded within the broader health-care infrastructure. Chief among these are insufficient staffing, unfavorable nurse-to-patient ratios, and the scarcity of necessary clinical resources. In numerous health-care environments, nurses are subjected to excessive workloads, limiting their capacity to apply the nursing process in a structured and holistic manner.

For example, Pokorski et al. (2009), in a study conducted in Brazil, documented that the high demand for nursing services often compelled nurses to prioritize immediate clinical tasks over comprehensive nursing assessments and care planning. As a result, key components of the nursing process were frequently bypassed, compromising the quality and continuity of care.

2. Organizational Barriers

Organizational barriers are institutional-level challenges that inhibit the routine integration of the nursing process into practice. These include the absence of institutional policies supporting its use, limited access to ongoing professional development, and a lack of material and supervisory support.

Mahmoud and Bayoumy (2014), in their study in Egypt, highlighted the influence of institutional support on the effective application of the nursing process. The findings indicated that nurses working in organizations that offered continuous training, access to adequate resources, and managerial encouragement demonstrated

greater adherence to the nursing process. Conversely, in organizations where such support mechanisms were lacking, utilization was sporadic or absent.

3. Individual Barriers

Individual barriers are related to personal attributes and perceptions that influence nurses' engagement with the nursing process. These include limited theoretical knowledge, low self-efficacy, and negative attitudes toward the nursing process.

In a study by Mamaghani et al. (2018) in Iran, it was observed that nurses who lacked confidence in their clinical competencies and who were uncertain about the relevance of the nursing process were less likely to integrate it into their daily practice. The study further revealed that negative attitudes, often resulting from inadequate exposure to the practical benefits of the nursing process, served as significant obstacles to its application.

Strategies for Enhancing Knowledge and Utilization of the Nursing Process

To overcome the various barriers hindering the effective implementation of the nursing process, targeted strategies must be employed at both educational and organizational levels. These strategies aim to strengthen nurses' knowledge, skills, and attitudes toward the systematic use of the nursing process in clinical practice.

1. Advancing Education and Training

A foundational strategy involves the enhancement of nursing education and continuous professional development. Comprehensive integration of the nursing process into undergraduate and postgraduate nursing curricula is essential to ensure foundational competence. Beyond initial training, ongoing education through structured in-service training, simulation-based learning, and clinical mentorship is

necessary to reinforce theoretical knowledge and promote practical application.

Such initiatives should be aimed at cultivating both confidence and competence in applying the nursing process across diverse clinical contexts. Experiential learning opportunities, including case-based workshops and scenario-driven simulations, offer nurses the chance to practice and refine their skills in real-time, thereby bridging the gap between theory and clinical practice.

2. Strengthening Institutional Support Systems

Organizational commitment is critical to facilitating the consistent application of the nursing process. Health-care facilities must foster a supportive environment that enables nurses to systematically engage with each step of the process. This includes providing adequate staffing, access to essential resources, and workload management that allows time for comprehensive nursing care. Additionally, institutional policies should mandate the integration of the nursing process into routine clinical documentation and care planning procedures. Establishing clear guidelines, conducting regular audits, and implementing feedback systems can further promote adherence and accountability, ensuring that the nursing process becomes a standardized component of clinical practice.

3. Fostering Positive Attitudes and Professional Engagement

Promoting positive perceptions of the nursing process among nurses is also integral to its effective use. Educational initiatives should emphasize the value of the nursing process in enhancing patient safety, improving health outcomes, and supporting professional autonomy. Creating awareness of the evidence linking nursing process utilization with improved quality of care

may motivate nurses to engage more actively with its application.

Furthermore, recognition and reinforcement of exemplary use of the nursing process through performance evaluations, incentives, and peer acknowledgment can contribute to sustained motivation and professional commitment.

Summary

The nursing process provides a structured, evidence-based framework that enables nurses to deliver holistic, patient-centered care. It comprises five interrelated phases: assessment, diagnosis, planning, implementation, and evaluation. During the assessment phase, nurses collect and interpret comprehensive patient data to identify health needs, capabilities, and potential risks. The diagnostic phase involves analyzing this data to formulate nursing diagnoses that serve as the foundation for individualized care planning. In the planning phase, nurses establish specific, measurable, achievable, relevant, and time-bound (SMART) goals and select appropriate, evidence-informed interventions. Implementation involves executing the planned interventions, while the evaluation phase focuses on measuring patient responses and determining the effectiveness of the care provided.

Despite its recognized value, the application of the nursing process in clinical practice is often hindered by several challenges. These include staffing shortages, time limitations, and inconsistencies in educational preparation, organizational constraints, and resistance to change. Although nurses generally demonstrate a foundational understanding of the nursing process, discrepancies in application often arise based on differences in professional training, clinical experience, and workplace conditions.

Empirical evidence underscores the influence of institutional culture, resource availability, and workload on the consistent use of the nursing process. Notably, educational interventions have proven effective in enhancing nurses' competencies and confidence in utilizing the process. Therefore, addressing systemic and organizational barriers, coupled with ongoing investment in education and professional development, is essential for optimizing the utilization of the nursing process and ultimately improving patient care outcomes.