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PERCEIVED BARRIERS AND STRATEGIES IN IMPLEMENTATION OF NURSING THEORIES IN CLINICAL PRACTICE

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Abstract

Background: *Nursing theories provide the foundation for evidence-based nursing practice; however, their implementation in clinical settings remains limited.*

Objective: *This study aimed to assess nurses' knowledge, identify perceived barriers, and explore strategies for implementing nursing theories in clinical practice.*

Methods*: A quantitative cross-sectional study was conducted among 218 registered nurses using a structured questionnaire.*

Inclusion Criteria: *The study population comprises all registered nurses working at services hospital settings who are directly involved in patient care and have at least 6months of clinical experience to apply nursing care theories in practice.*

Exclusion Criteria: *Nurses working in administrative, managerial, or academic roles who are not involved in direct patient care Student nurses, interns, or trainees who have not yet achieved full professional registration, Nurses with less than the minimum required clinical experience (e.g., less than 6 months or 1 year), Nurses who decline to participate or do not provide informed consent. Data were analyzed using descriptive statistics,*

Results*: Nurses demonstrated moderate knowledge, while actual implementation was lower than expected, indicating a theory–practice gap. Heavy workload, lack of time, inadequate training, limited institutional support, and insufficient resources were identified as major barriers.*

Conclusion: *Strengthening nursing education, organizational support, and continuing professional development can enhance the implementation of nursing theories and improve evidence-based patient care.*

1. Introduction

1.1Background

Nursing theories provide the scientific and philosophical foundation of professional nursing practice by guiding clinical decision-making, promoting critical thinking, and supporting evidence-based, patient-centered care. Theoretical frameworks such as Orem's Self-Care Deficit Theory, Roy's Adaptation Model, and Watson's Theory of Human Caring have significantly influenced nursing education and clinical practice worldwide (Alligood, 2023). The integration of nursing theories into clinical practice enables nurses to deliver holistic care, improve patient outcomes, and strengthen professional identity (Rosa et al., 2020).

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1.2Problem Statement

Implementation of nursing theories could guide nursing practice, improve decision-making process, and enhance patient care quality. Nursing theories describe and explain professional nursing practice from scientific and systematic approaches. However, theory implementation during patient care is rarely found in clinical settings. Multiple barriers including lack of knowledge about nursing theory and training on theory implementation into practice, overwhelming workload, shortage of staff members, time constraints, lack of administrative support, and theory practice inconsistency deter nurses from appropriately integrating nursing theories into daily patient care routines.

1.3 Significance

This study is very important and significant since it emphasizes the need of using nursing theories in the real life clinical to improve patient care standards and build professional nursing practice. By knowing nurses' own challenges, the study will help healthcare companies to know the elements limiting the application of nursing theories in real clinical environments. Increasing nurses' theoretical knowledge and comprehension of theory-based nursing care will be aided by the results of this study.

1.4Objectives

At the completion of this study we will be able to

1. Identify the perceived barriers in the implementation of nursing theories in clinical practice.
2. Assess nurses' knowledge and understanding regarding nursing theories.
3. Explore the strategies that can promote the effective implementation of nursing theories in clinical settings.
4. Determine the impact of nursing theory implementation on the quality of patient care and professional nursing practice.

2. LITERATURE REVIEW

2.1 Theoretical Background

Nursing theories provide the framework for guiding nursing practice, education, and research. Early foundational theories such as Florence Nightingale's Environmental Theory emphasized hygiene and environment in patient care (Turkowski & Turkowski, 2024). Subsequent works, including Watson's Theory of Human Caring and Orem's Self-Care Deficit Nursing Theory, provided a focus on holistic and individualized care (Hartweg & Metcalfe, 2022). These theories, while pivotal; often lack the adaptability to address modern complexities such as technological advancements and diverse patient needs.

2.3. Empirical Review

Current nursing theories often do not align with the demands of contemporary healthcare settings. Bridging this gap is essential for enhancing the applicability and relevance of theoretical frameworks. Developing a flexible and integrative theory will address the dynamic needs of diverse patient populations, leading to improved health outcomes. By aligning theoretical models with evidence-based approaches; the proposed research will facilitate more effective clinical decision-making

Moreover, various studies have pointed out a troubling disconnect between what is taught in academic institutions and what is implemented in hospitals and clinics(Saleh, Mujahiddin, & Institute-Journal, 2020)

2.4. Gap Analysis

Recent studies from 2011 to 2025 highlight a persistent gap between nursing theory and clinical practice, impacting both nursing education and patient care. A 2024 qualitative review identifies key obstacles, including inadequate integration of theoretical knowledge into clinical settings and a lack of context-based curricula that consider local cultural factors. The review suggests that developing such curricula could enhance the readiness of nursing students for practical placements, thereby addressing the theory-practice discrepancy.

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Similarly, a 2023 descriptive study explores nursing students' experiences during clinical learning, revealing that both academic and clinical environments contribute to the theory-practice gap.

3. MATERIAL/SUBJECTS & METHODS

3.1 Study Design

A quantitative cross-sectional descriptive study was conducted to assess nurses' knowledge regarding nursing theories, evaluate their implementation in clinical practice, and identify perceived barriers to theory-based nursing care.

3.2 Study Variables:

Independent Variable was perceived barriers to implementation of nursing theories, Lack of knowledge and training, heavy workload, Time constraints lack of administrative support and gap between theory and practice.

Dependent Variables were Implementation of nursing theories in clinical practice, quality of nursing care and professional nursing practice.

3.3 Operational Definitions

I. Perceived Barriers

Perceived barriers refer to the difficulties or obstacles identified by nurses that hinder the effective implementation of nursing theories in clinical practice, such as lack of knowledge, workload, time limitations, staff shortage, and lack of administrative support.

II. Nursing Theories

Nursing theories are organized concepts, definitions, and principles that provide a scientific framework for guiding nursing practice, patient care, education, and decision-making.

III. Clinical Practice Implementation

Implementation of nursing theories refers to the practical application and integration of nursing theoretical concepts into daily patient care activities and clinical decision-making by nurses.

3.4 Study Setting and Participants

The study was conducted among registered nurses working in tertiary care hospitals in Lahore, Pakistan. Nurses from different clinical departments, including medical, surgical, intensive care units, emergency departments, and other specialty areas, were invited to participate.

3.5 Sample Size and Sampling Technique

A total of 218 registered nurses participated in the study. Participants were selected using a stratified random sampling technique to ensure representation from various clinical departments.

3.4 Data Collection Instrument

Data were collected using a structured self-administered questionnaire consisting of four sections:

1. Demographic characteristics.
2. Knowledge and understanding of nursing theories.
3. Actual and expected implementation of nursing theories in clinical practice.
4. Perceived barriers to implementing nursing theories.

Responses were recorded using a four-point Likert scale ranging from 1 (Strongly Disagree) to 4 (Strongly Agree).

3.5 Reliability

Internal consistency of the questionnaire was evaluated using Cronbach's alpha. The knowledge scale demonstrated good reliability ($\alpha = 0.852$), the practice scale showed acceptable reliability ($\alpha = 0.734$), and the perceived barriers scale demonstrated acceptable internal consistency ($\alpha = 0.682$)

3.6 Data Analysis

Data were analyzed using IBM SPSS Statistics Version 26. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were results calculated to summarize participant characteristics and questionnaire responses. Reliability analysis was performed using Cronbach's alpha. Paired-samples *t*-tests were conducted to compare actual and expected nursing practice, while Pearson correlation analysis examined the relationships among knowledge, nursing practice, and perceived barriers. Statistical significance was established at $p < .05$.

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4. RESULTS

A total of 218 registered nurses completed the questionnaire. Participants represented a range of educational qualifications, years of clinical experience, and hospital departments, providing a diverse sample of practicing nurses.

4.1 Demographic Characteristics

Statistics Table 4.1.1 Age Distribution of Participants (N=218)

		Age group	Gender	Qualification	Experience	Department
N	Valid	218	218	218	218	218
	Missing	0	0	0	0	0

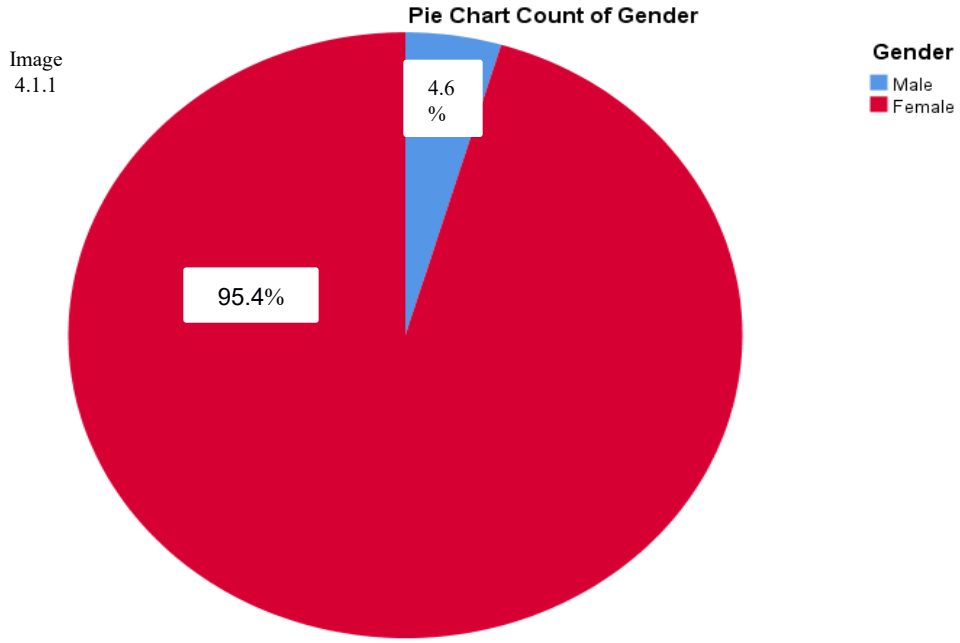
Age group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-25years	62	28.4	28.4	28.4
	26-30years	71	32.6	32.6	61
	31-35years	45	20.6	20.6	81.6
	35-40years	24	11.0	11.0	92.6
	above 40years	16	7.3	7.3	100.0
	Total	218	100.0	100.0	

Interpretation: Most participants (32.6%) belonged to the 26–30 years age group.

4.1.2 Gender Distribution

Image 4.1.1



Interpretation: Female nurses constituted the majority of respondents.

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4.1.3 Educational Qualification

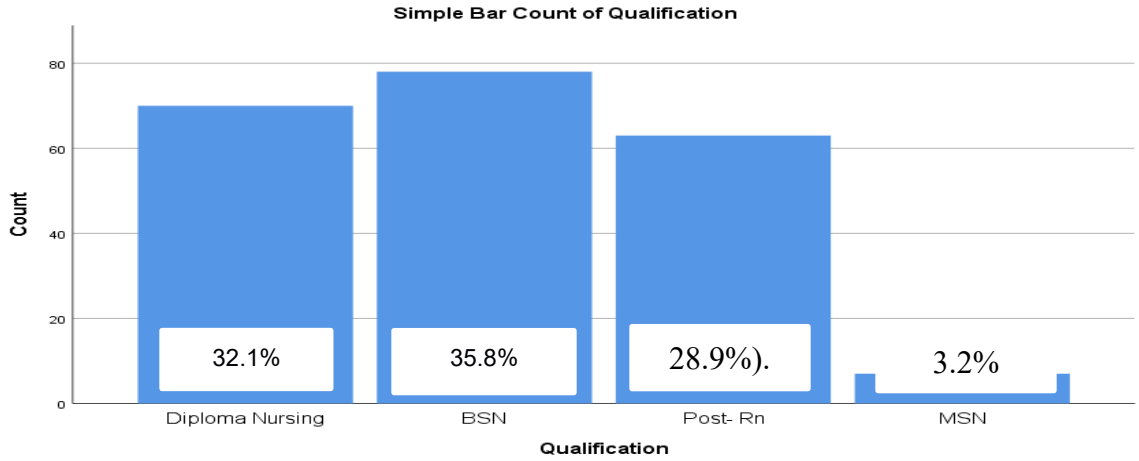


Image 4.1.2

3.2%

Interpretation: BSN-qualified nurses were the largest group of participants (35.8%), followed by Diploma Nursing (32.1%) and Post-RN nurses (28.9%). Only 3.2% of participants had an MSN qualification, indicating that most respondents possessed undergraduate-level nursing education.

4.2 Reliability Analysis for knowledge about nursing theories

Item-Total Statistics				
Statements	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I have received formal education regarding nursing theories during my training.	7.94	3.839	.556	.573
I can identify at least one major nursing theory or theorist.	7.99	4.276	.539	.590
I understand the role of nursing theories in guiding clinical practice.	8.02	3.898	.730	.509
My education has adequately prepared me to apply theory in practice.	7.98	4.852	.277	.698
I regularly update my knowledge regarding nursing theories.	7.56	5.012	.180	.745

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I have sufficient access to resources related to nursing theories.	16.63	9.212	.472	.858

Reliability Statistics

Cronbach's Alpha	N of Items
.682	6

4.2.2 Reliability Analysis for practice (Actual & expected)

Item-total statistics

Statements	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach's alpha if item deleted
1. Nursing theories should be used in patient care planning.(actual)	34.53	14.741	.266	.635
2. Nursing theories should be used in patient care planning.(expected)	33.94	16.718	.097	.661
3. Clinical decisions should be guided by nursing theories(actual)	34.69	13.103	.591	.555
4. Clinical decisions should be guided by nursing theories.(expected)	33.32	15.940	.496	.605
5. Nurses should feel confident applying nursing theories.(actual)	34.71	13.059	.602	.552
6. Nurses should feel confident applying nursing theories.(expected)	33.32	15.847	.547	.601
7. Nursing theories are applicable in current healthcare settings.(actual)	34.43	22.080	-.488	.794
8. Nursing theories are applicable in current healthcare settings.(expected)	33.31	15.883	.553	.601
9. Nursing practice should be modified based on theory and evidence.(actual)	33.33	16.851	.251	.632
10. Nursing practice should be modified based on theory and evidence.(expected)	33.31	15.883	.553	.601
11. Applying nursing theories improves patient care quality.(actual)	34.69	13.103	.591	.555
12. Applying nursing theories improves patient care quality.(expected)	33.31	15.883	.553	.601

Reliability statistics

Cronbach's alpha	N of items
.711	12

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4.2.3 Reliability Analysis for perceived barriers to Implementation nursing theories.

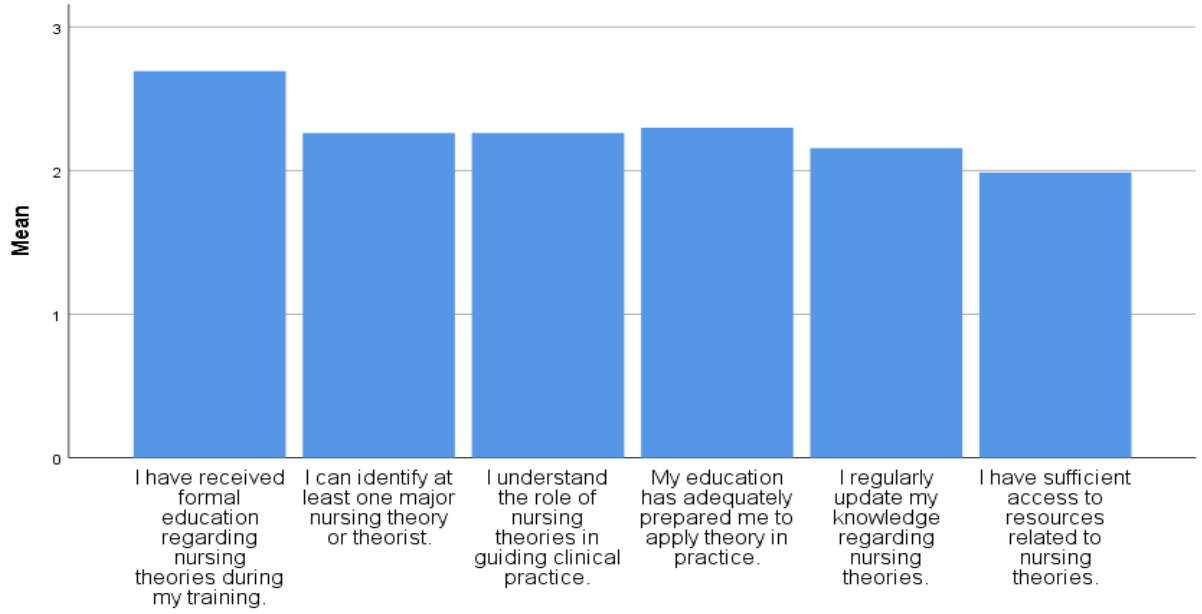
Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Heavy workload limits the use of nursing theories.	16.61	7.952	.825	.791
Lack of time prevents applying nursing theories.	16.61	7.972	.818	.792
Nursing theories are too abstract for practical use.	16.61	8.073	.789	.798
Lack of training affects the application of theories.	16.62	9.453	.418	.867
There is insufficient institutional support for theory-based practice.	16.63	9.212	.472	.858
Lack of resources is a barrier to applying nursing theories.	16.62	8.983	.543	.844

Reliability Statistics

Cronbach's Alpha
.852

Reliability analysis demonstrated satisfactory internal consistency for all study instruments, with Cronbach's alpha values ranging from 0.682 to 0.852. Pearson correlation analysis further revealed significant relationships among nurses' knowledge, implementation of nursing theories, and perceived barriers, indicating that knowledge and organizational factors play important roles in influencing theory-based nursing practice

4.3 Knowledge and Understanding of Nursing Theories

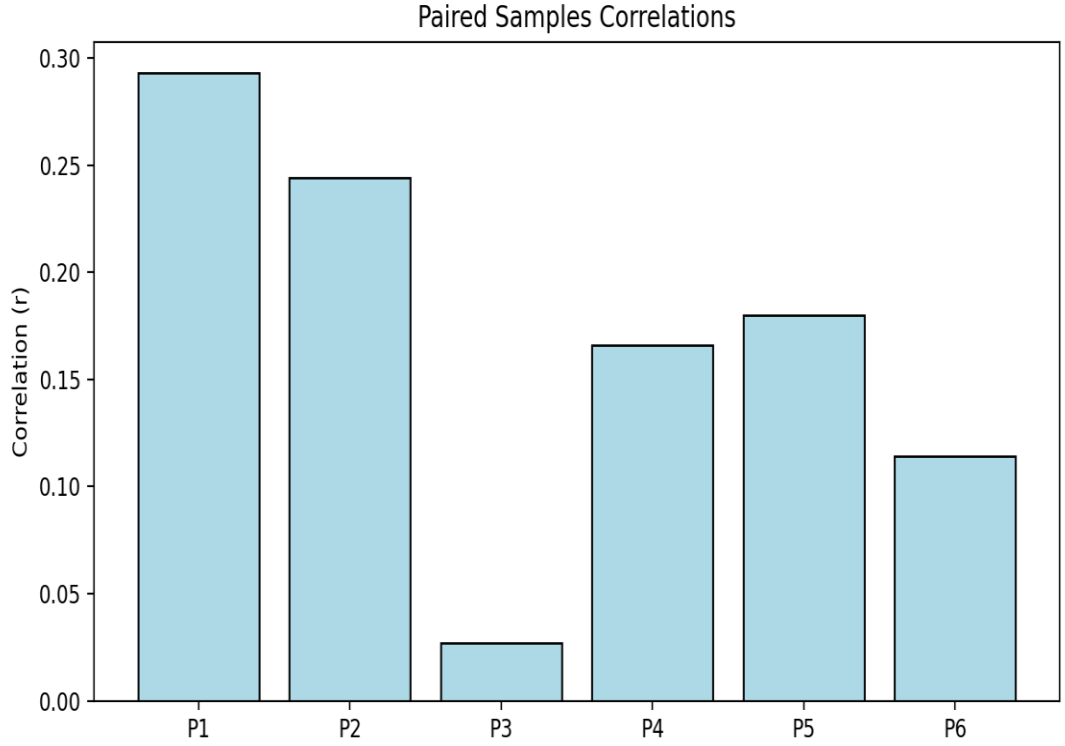


Overall, participants demonstrated a moderate level of knowledge regarding nursing theories. The highest mean score was observed for receiving formal education regarding nursing

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theories during professional training, whereas access to theory-related educational resources received the lowest mean score. These findings indicate that although participants were exposed to nursing theories during their education, opportunities for continuing theoretical learning were limited.



Comparison of actual and expected nursing practice demonstrated a clear theory–practice gap. For most practice statements, expected implementation scores were higher than actual practice scores, suggesting that nurses recognized the importance of nursing theories but were unable to consistently apply them in routine clinical care. Paired-samples analysis indicated statistically significant differences for selected practice items, particularly regarding the use of nursing theories in guiding clinical decisions and their applicability in current healthcare settings.

Table 4.4 Perceived Barriers to Implementation

Descriptive Statistics					
Statements	**N**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Heavy workload limits the use of nursing theories.	218	1	4	2.47	1.104
Nursing theories are too abstract for practical use.	218	1	4	2.56	1.135
Lack of time prevents applying nursing theories.	218	1	4	2.52	1.100
Lack of training affects the application of theories.	218	1	4	2.44	1.140

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There is insufficient institutional support for theory-based practice.	218	1	4	2.47	1.104
Lack of resources is a barrier to applying nursing theories.	218	1	4	2.50	1.091
Valid N (listwise)	218				

Regarding perceived barriers, participants identified heavy workload, lack of time, insufficient training, inadequate institutional support, limited access to educational resources, and the abstract nature of nursing theories as the principal factors limiting implementation. Descriptive statistics indicated that these barriers were consistently reported across participants.

5. DISCUSSION

This study examined nurses' knowledge regarding nursing theories, the implementation of nursing theories in clinical practice, the theory–practice gap, and perceived barriers to implementation among registered nurses working in tertiary care hospitals. The findings revealed that although nurses demonstrated a moderate level of knowledge regarding nursing theories, their implementation in clinical practice remained limited. Furthermore, heavy workload, lack of time, inadequate training, limited institutional support, insufficient resources, and the perceived abstract nature of nursing theories were identified as the primary barriers to theory-based nursing practice.

.A major finding of this study was the presence of a clear theory–practice gap. Expected practice scores were generally higher than actual practice scores, indicating that nurses believed nursing theories should play a greater role in patient care than was currently observed in their workplaces. This finding is consistent with previous studies demonstrating that nurses value theory-based practice but encounter multiple challenges when attempting to integrate theoretical frameworks into routine clinical care (Younas & Quennell, 2019; McCrae et al., 2021). The persistence of the theory–practice gap suggests that organizational culture and workplace demands often take precedence over theoretical approaches during clinical decision-making.

The present study also identified several important barriers to implementing nursing theories. Heavy workload and lack of time were among the most frequently reported barriers. Increasing patient acuity, staff shortages, and high documentation demands often limit nurses' opportunities to apply theoretical frameworks while delivering timely patient care. Similar observations have been reported internationally, where excessive workload has consistently been recognized as one of the strongest predictors of reduced evidence-based nursing practice (Mursi et al., 2020; Wei et al., 2022).

Another important barrier identified in this study was insufficient training regarding the practical application of nursing theories. Although participants had received theoretical education during their nursing programs, many believed that additional workshops, continuing professional development, and practical training were necessary to improve implementation. Previous studies have similarly concluded that continuing education enhances nurses' confidence and competency in applying theoretical knowledge within clinical environments (Alligood, 2023; Younas & Quennell, 2019).

Limited institutional support and inadequate educational resources also emerged as significant barriers. Participants indicated that healthcare organizations provided insufficient guidance, educational materials, and administrative encouragement for theory-based practice. These findings support previous research demonstrating that organizational leadership plays a critical role in promoting evidence-based nursing practice through mentorship, supportive policies, and resource allocation (Melnyk & Fineout-Overholt,

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2023). Without adequate institutional commitment, the successful integration of nursing theories into routine practice remains challenging.

Correlation analysis further demonstrated significant relationships among knowledge, nursing practice, and perceived barriers. Nurses with greater theoretical knowledge generally demonstrated more positive attitudes toward implementing nursing theories, whereas higher levels of perceived barriers were associated with lower implementation of theory-based practice. These findings suggest that improving nurses' theoretical competence while simultaneously reducing organizational barriers may substantially strengthen the integration of nursing theories into clinical care. Similar relationships have been reported by Dang et al. (2022), who emphasized that successful implementation of evidence-based nursing requires both individual competency and organizational readiness.

Overall, the findings highlight the need for comprehensive interventions targeting nursing education, continuing professional development, leadership support, and organizational policy. Strengthening these areas may help bridge the theory–practice gap, enhance evidence-based nursing practice, improve professional nursing identity, and ultimately contribute to better patient outcomes.

5.7 Implications for Nursing Practice

The findings of this study have important implications for nursing practice, education, administration, and healthcare policy. The identified barriers, including heavy workload, lack of time, inadequate training, limited institutional support, and insufficient resources, indicate the need to strengthen the implementation of nursing theories in clinical settings.

Clinical nursing practice: Nurses should be encouraged to integrate nursing theories into patient assessment, care planning, and evidence-based practice to improve patient outcomes (Alligood, 2022).

Nursing education: Nursing curricula should emphasize the practical application of nursing theories through clinical training, simulation, and case-based learning (Butts & Rich, 2022).

Nursing administration: Nurse Managers should provide supportive leadership, adequate staffing, mentorship, and educational resources to facilitate theory-based practice (ICN, 2021).

Policy development: Healthcare organizations should develop policies that promote theory-based nursing practice through continuous education, adequate staffing, and organizational support (ICN, 2021; WHO, 2021).

5.8 Strengths and Limitations

Strengths

The study included 218 registered nurses from different clinical departments and used a reliable, structured questionnaire. It examined nurses' knowledge, practice, and perceived barriers, providing a comprehensive understanding of nursing theory implementation.

Limitations

The cross-sectional design limits causal interpretation, and self-reported responses may introduce bias. The study was conducted in selected hospitals, limiting the generalizability of the findings.

5.9 Recommendations

- ✓ Strengthen the integration of nursing theories into clinical education.
- ✓ Conduct regular continuing education and training programs.
- ✓ Encourage nurses to apply nursing theories in routine patient care.
- ✓ Promote mentorship and evidence-based practice.
- ✓ Improve staffing levels and organizational support.
- ✓ Provide educational resources and regular in-service training.
- ✓ Conduct larger multicenter studies.
- ✓ Use longitudinal and mixed-methods research.
- Evaluate educational interventions to improve theory implementation.

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5.10 Conclusion

The study found that nurses had a moderate level of knowledge regarding nursing theories; however, their implementation in clinical practice was limited, demonstrating a clear theory–practice gap. Heavy workload, lack of time, inadequate training, limited institutional support, insufficient resources, and the abstract nature of nursing theories were identified as the major barriers. Strengthening nursing education, continuing professional development, organizational support, and healthcare policies can improve the implementation of nursing theories, promote evidence-based nursing practice, and ultimately enhance the quality of patient care.

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