

Exploring interdisciplinary nursing care models: A Qualitative Clinical Study

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ABSTRACT

Introduction: The increasing complexity in healthcare systems demands integrated, collaborative approaches to patient care. Interdisciplinary nursing care models have been promoted to enhance care coordination, patient safety, and quality outcomes. However, limited qualitative evidence exists regarding how these models are understood, implemented, and experienced by nurses in clinical practice. This study aimed to explore interdisciplinary nursing care models from nurses' perspectives, focusing on roles, communication processes, facilitators, barriers, and perceived impacts on patient care and professional development.

Methods: A qualitative clinical study was conducted in selected clinical units of a tertiary healthcare facility. Purposive sampling was used to recruit registered nurses with at least one year of clinical experience and active involvement in interdisciplinary care. Data were collected through semi-structured, in-depth interviews and analyzed using thematic analysis. Trustworthiness was ensured through member checking, audit trails, and reflexive practices.

Results: Seven major themes emerged: understanding of interdisciplinary nursing care, nurses' roles and responsibilities, communication and collaboration, facilitators of interdisciplinary care, barriers to interdisciplinary care, impact on patient care outcomes, and professional development and learning. Effective communication and collaboration were identified as the most critical elements supporting interdisciplinary care. Nurses played central roles as care coordinators, contributing to improved care quality, patient safety, and patient-centered outcomes. Organizational support and mutual respect facilitated collaboration, while hierarchical structures, role ambiguity, and workload constraints were identified as key barriers.

Conclusion: Interdisciplinary nursing care models are strongly influenced by communication quality, recognition of nurses' professional roles, and organizational support. Despite existing barriers, effective interdisciplinary collaboration enhances patient outcomes and supports continuous professional development. Strengthening structured interprofessional communication and supportive organizational policies is essential for sustainable interdisciplinary nursing practice.

Keywords: Communication; Organizational Policy; Patient Care Nurse's Role; Quality of Health Care.



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INTRODUCTION

Healthcare systems worldwide are facing increasing complexity due to demographic transitions, the rising prevalence of chronic diseases, multimorbidity, and growing demands for patient-centered care [1]. These challenges require healthcare services that are not only clinically effective but also coordinated across multiple professional disciplines [2]. Within this context, nursing plays a central role in ensuring continuity of care, patient safety, and the integration of clinical and psychosocial interventions [3]. However, fragmented care delivery and limited interprofessional coordination remain persistent problems in many healthcare settings, negatively affecting care quality and patient outcomes [4].

Interdisciplinary nursing care models have emerged as a strategic approach to address these challenges by promoting collaboration among nurses, physicians, pharmacists, therapists, and other health professionals [5]. Such models emphasize shared decision-making, mutual respect among disciplines, and integrated care planning to meet complex patient needs. Evidence suggests that interdisciplinary approaches can improve clinical outcomes, enhance patient satisfaction, reduce medical errors, and optimize resource utilization [6]. Despite these benefits, the implementation of interdisciplinary nursing care remains inconsistent, and its practical application often varies widely across clinical contexts [7].

A significant problem in current healthcare practice is the lack of a clear understanding of how nurses experience, interpret, and enact interdisciplinary nursing care models in real clinical settings [8]. Many healthcare institutions adopt interdisciplinary frameworks at the policy level; however, operational barriers such as professional hierarchies, communication gaps, role ambiguity, and organizational constraints frequently limit effective collaboration [9]. As a result, nurses may struggle to fully integrate interdisciplinary principles into daily practice, leading to suboptimal care coordination [10].

From a research perspective, existing studies on interdisciplinary nursing care are predominantly quantitative, focusing on measurable outcomes such as length of hospital stay, readmission rates, or patient satisfaction scores. While these studies provide valuable evidence of effectiveness, they often fail to capture the contextual, relational, and experiential dimensions of interdisciplinary care [11]. There is a notable gap in qualitative research exploring nurses' perspectives, perceptions, and lived experiences in applying interdisciplinary care models in clinical environments. This gap limits a comprehensive understanding of the processes and meanings underlying interdisciplinary collaboration in nursing practice [12].

Furthermore, many previous studies examine interdisciplinary care from a general healthcare perspective, without sufficiently highlighting the specific contributions and challenges faced by nurses, who serve as key coordinators of patient care [13]. Given nurses' continuous presence at the bedside and their pivotal role in interprofessional communication, their insights are essential for developing practical, sustainable, and context-sensitive interdisciplinary care models. The limited exploration of nursing-centered perspectives represents a critical gap in the literature.

The novelty of this study lies in its qualitative, evidence-based exploration of interdisciplinary nursing care models within real clinical settings. By employing a qualitative clinical approach, this study seeks to generate in-depth insights into how nurses understand, implement, and experience interdisciplinary care. Unlike outcome-focused quantitative studies, this research emphasizes the processes, interactions, and contextual factors that shape interdisciplinary nursing practice. It also integrates evidence-based principles by examining how clinical guidelines, professional standards, and experiential knowledge inform interdisciplinary collaboration. By addressing existing gaps in the literature, this study contributes novel insights into the practical dynamics of interdisciplinary nursing care models. The findings are expected to inform the development of more effective, nurse-centered interdisciplinary frameworks, support organizational strategies to enhance collaboration, and ultimately improve the quality and safety of patient care. By deepening understanding of nurses' experiences, this study offers valuable implications for clinical practice, education, and health policy in increasingly complex healthcare systems.

MATERIALS AND METHODS

Study Design

This study employed a qualitative clinical research design to explore interdisciplinary nursing care models as experienced and implemented in clinical practice. A qualitative approach was selected to obtain an in-depth understanding of nurses' perspectives, interactions, and experiences in interdisciplinary care settings, enabling exploration of contextual and process-oriented aspects that quantitative methods cannot adequately capture.

Study Setting and Participants

The study was conducted in selected clinical units of a tertiary healthcare facility, including medical, surgical, and outpatient departments, where interdisciplinary collaboration is routinely practiced. Participants were registered nurses with at least 1 year of clinical experience and actively involved in interdisciplinary patient care. Purposive sampling was used to recruit participants who were considered information-rich and capable of providing relevant insights into interdisciplinary nursing care models.

Data Collection

Data were collected through semi-structured, in-depth interviews conducted between [month and year]. An interview guide was developed based on existing literature and evidence-based nursing frameworks, focusing on nurses' experiences with interdisciplinary collaboration, perceived roles, communication processes, barriers and facilitators, and the impact of interdisciplinary care on patient outcomes. Each interview lasted approximately 45–60 minutes and was audio-recorded with participants' informed consent. Field notes were taken to capture non-verbal cues and contextual observations.

Data Analysis

Data analysis followed a thematic analysis approach. Audio recordings were transcribed verbatim, and transcripts were reviewed multiple times to ensure accuracy and familiarity with the data. Initial codes were generated inductively, reflecting key concepts emerging from the participants' narratives. Codes were then grouped into categories and overarching themes that reflected patterns in interdisciplinary nursing care models. To enhance rigor, coding was conducted independently by two researchers, with discrepancies resolved through discussion and consensus.

Trustworthiness

The trustworthiness of the study was ensured through credibility, dependability, confirmability, and transferability. Credibility was enhanced through member checking and prolonged engagement with the data. Dependability was addressed by maintaining an audit trail of methodological decisions. Confirmability was supported through reflexive journaling, and transferability was facilitated by providing rich descriptions of the study context and participants.

Ethical Considerations

Ethical approval was obtained from the institutional ethics review board prior to data collection. All participants provided written informed consent and were assured of confidentiality, anonymity, and the voluntary nature of participation. The study was conducted in accordance with ethical principles for research involving human subjects.

RESULTS

This section presents the findings of the qualitative analysis derived from in-depth interviews with participating nurses. The results are organized into key themes and subthemes that emerged from the data, reflecting nurses' experiences, perceptions, and interpretations of interdisciplinary nursing care models in clinical practice. These themes illustrate how multidisciplinary collaboration is implemented,

the roles nurses assume, and the contextual factors that influence the effectiveness of interdisciplinary care.

Table 1. Themes and subthemes of interdisciplinary nursing care models

Theme	Subthemes	Description
Understanding of Interdisciplinary Nursing Care	Perception of interdisciplinary care Shared goals in patient care	Nurses' understanding of interdisciplinary concepts and collaborative practice Alignment of care objectives among different health professionals
Roles and Responsibilities of Nurses	Care coordination role Professional autonomy	Nurses as coordinators and connectors among interdisciplinary team members Nurses' ability to contribute clinical judgment within the team
Communication and Collaboration	Interprofessional communication Team decision-making	Effectiveness of communication among nurses, physicians, and other professionals Collaborative processes in clinical decision-making
Facilitators of Interdisciplinary Care	Organizational support Mutual respect among disciplines	Leadership, policies, and institutional culture supporting collaboration Professional respect and trust within the healthcare team
Barriers to Interdisciplinary Nursing Care	Role ambiguity Hierarchical structures Workload and time constraints	Unclear boundaries and overlapping responsibilities Power imbalance affecting nurses' participation Limited time is hindering effective collaboration.
Impact on Patient Care Outcomes	Quality and safety of care Patient-centered care	Perceived improvements in patient safety and care quality Enhanced patient involvement and holistic care delivery
Professional Development and Learning	Interdisciplinary learning Clinical competence enhancement	Knowledge exchange across disciplines Improved skills and confidence through collaboration

The qualitative analysis revealed several interrelated themes that describe nurses' experiences with interdisciplinary nursing care models in clinical settings. These themes reflect how nurses understand interdisciplinary care, enact their professional roles, engage in collaboration, and perceive the impact of interdisciplinary practice on patient outcomes.

Understanding of Interdisciplinary Nursing Care

Participants demonstrated a general understanding of interdisciplinary nursing care as a collaborative approach involving multiple health professionals working toward shared patient-centered goals. Nurses described interdisciplinary care as a process that requires continuous communication, mutual respect, and coordination among team members. Shared goals in patient care were viewed as essential to ensuring consistency and continuity of care, particularly for patients with complex and chronic conditions.

Roles and Responsibilities of Nurses

Nurses identified themselves as central coordinators within interdisciplinary teams. They reported actively facilitating communication between physicians, pharmacists, and other healthcare professionals to ensure timely and appropriate care delivery. Professional autonomy emerged as a significant subtheme, with participants emphasizing the importance of having their clinical assessments and recommendations acknowledged during interdisciplinary discussions.

Communication and Collaboration

Effective interprofessional communication was perceived as a key factor influencing the success of interdisciplinary nursing care. Participants highlighted regular team meetings, informal bedside discussions, and structured communication tools as facilitators of collaboration. Team decision-making processes were described as more effective when nurses were actively involved and when contributions from all disciplines were equally valued.

Facilitators of Interdisciplinary Care

Organizational support played a crucial role in enabling interdisciplinary collaboration. Nurses emphasized the importance of supportive leadership, clear institutional policies, and a collaborative workplace culture. Mutual respect and trust among disciplines were also identified as essential elements that foster open communication and shared responsibility in patient care.

Barriers to Interdisciplinary Nursing Care

Despite recognizing the benefits of interdisciplinary care, participants reported several challenges. Role ambiguity and hierarchical structures often limited nurses' participation in decision-making processes. Additionally, heavy workloads and time constraints were cited as practical barriers that hindered consistent and effective interdisciplinary collaboration.

Impact on Patient Care Outcomes

Nurses perceived interdisciplinary nursing care models as contributing positively to the quality and safety of patient care. Participants reported improved care coordination, reduced errors, and more holistic, patient-centered approaches. Enhanced patient engagement and satisfaction were also noted as outcomes of effective interdisciplinary collaboration.

Professional Development and Learning

Interdisciplinary practice was described as an important learning opportunity for nurses. Participants reported gaining new knowledge and skills through collaboration with other professionals, which enhanced their clinical competence and confidence. This continuous learning process was viewed as beneficial for both professional development and the sustainability of interdisciplinary nursing care models.

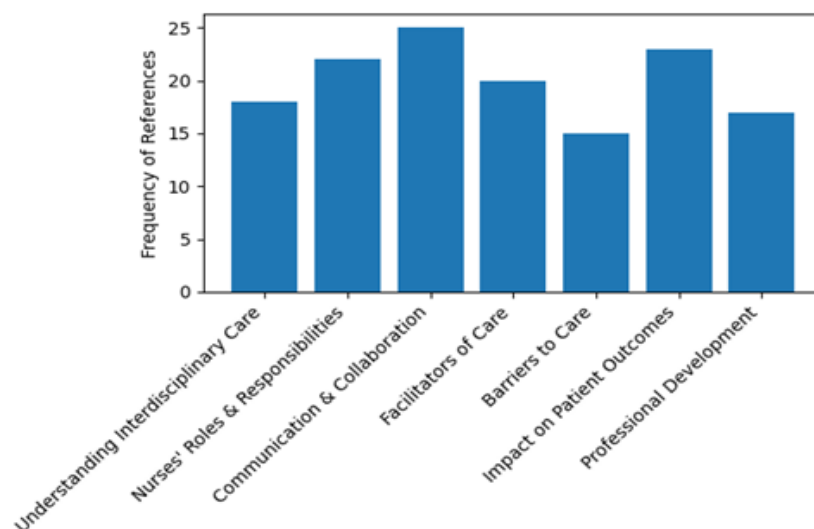


Figure 1. Thematic analysis summary of interdisciplinary nursing care

The bar chart visualization illustrates the relative prominence of themes emerging from the thematic analysis of nurses' interviews on interdisciplinary nursing care models. Among the identified themes, Communication and Collaboration showed the highest frequency of references, indicating that effective interprofessional communication is perceived as the most critical component of successful

interdisciplinary nursing care. Nurses consistently emphasized communication as the foundation for shared decision-making, coordination, and continuity of patient care. The themes Impact on Patient Outcomes and Nurses' Roles and Responsibilities also demonstrated high frequencies, highlighting nurses' central role as care coordinators and key contributors to patient safety and quality of care. These findings suggest that interdisciplinary nursing care models are strongly associated with improved clinical outcomes when nurses are actively involved, and their professional contributions are recognized.

Moderate frequencies were observed in Facilitators of Interdisciplinary Care and Understanding of Interdisciplinary Care, reflecting the importance of organizational support, leadership, and shared conceptual understanding in enabling effective collaboration. These themes indicate that institutional structures and professional awareness play a significant role in shaping interdisciplinary practice. In contrast, Barriers to Interdisciplinary Care had the lowest frequency but remained a critical theme. Issues such as hierarchical structures, role ambiguity, and workload constraints were identified as factors that can limit optimal collaboration if not adequately addressed. Finally, Professional Development emerged as an important outcome of interdisciplinary practice, demonstrating that collaboration contributes to continuous learning and enhanced clinical competence among nurses. Overall, the thematic distribution reinforces the conclusion that interdisciplinary nursing care models are primarily driven by communication quality, nursing leadership, and collaborative practice. At the same time, organizational and structural factors determine their sustainability and effectiveness in clinical settings.

DISCUSSION

This qualitative clinical study explored interdisciplinary nursing care models from nurses' perspectives, revealing key themes related to understanding interdisciplinary care, professional roles, communication, facilitators and barriers, patient outcomes, and professional development. The findings provide important insights into how interdisciplinary nursing care is enacted in daily clinical practice and highlight the central role of nurses in coordinating and sustaining collaborative healthcare delivery.

One of the most prominent findings of this study is the critical importance of communication and collaboration within interdisciplinary teams. Nurses consistently identified effective interprofessional communication as the foundation of successful interdisciplinary care [14]. This finding aligns with the existing literature, which emphasizes communication as a determinant of care quality, patient safety, and team effectiveness. Regular interdisciplinary meetings, informal clinical discussions, and structured communication tools were perceived as facilitating shared understanding and coordinated decision-making [15]. The high frequency of this theme suggests that interdisciplinary nursing care models cannot operate optimally without intentional, structured communication mechanisms. The findings also underscore nurses' roles and responsibilities as central to interdisciplinary care delivery. Participants described themselves as care coordinators who bridge communication among physicians, pharmacists, and other healthcare professionals [16]. This reinforces the concept of nurses as key integrators within healthcare systems, given their continuous patient contact and holistic perspective on care. The emphasis on professional autonomy further indicates that nurses value recognition of their clinical judgment within interdisciplinary decision-making processes. When nurses' contributions are acknowledged, interdisciplinary collaboration becomes more balanced and effective. Conversely, limited autonomy may reduce nurses' engagement and negatively affect care coordination [17].

Another significant finding relates to nurses' understanding of interdisciplinary nursing care. Participants generally perceived interdisciplinary care as a shared, patient-centered approach that requires mutual respect and alignment of goals across disciplines [18]. This shared understanding is essential for effective collaboration, as inconsistent perceptions of interdisciplinary roles can lead to fragmented care. The findings suggest that while nurses conceptually support interdisciplinary care, variations in its interpretation and implementation still exist across clinical contexts [19]. This highlights the need for clearer institutional frameworks and shared definitions to ensure consistent interdisciplinary practice. Facilitators of interdisciplinary nursing care identified in this study primarily involved organizational support and professional relationships [20]. Supportive leadership, collaborative organizational culture, and clear policies were perceived as enabling factors. These findings are consistent with prior studies indicating that interdisciplinary care is more sustainable in environments

where leadership actively promotes teamwork and shared responsibility [21]. Mutual respect and trust among disciplines were also critical facilitators, reinforcing the relational nature of interdisciplinary collaboration. Without trust, communication becomes superficial, and collaboration may remain symbolic rather than functional [22].

Despite the recognized benefits, nurses also reported several barriers to effective interdisciplinary nursing care. Hierarchical structures within healthcare organizations were frequently mentioned as limiting nurses' participation in decision-making [23]. This reflects longstanding power dynamics in healthcare, where medical dominance can marginalize nursing perspectives. Role ambiguity further complicated collaboration, as unclear boundaries led to overlapping responsibilities or exclusion from certain clinical decisions. Additionally, workload and time constraints were practical barriers that reduced opportunities for meaningful interdisciplinary interaction [24]. These findings highlight that interdisciplinary care is not solely a professional issue but also an organizational and structural challenge. The perceived impact of interdisciplinary nursing care on patient outcomes emerged as a strong theme in this study. Nurses reported improvements in care quality, patient safety, and patient-centeredness when interdisciplinary collaboration functioned effectively. Enhanced care coordination was believed to reduce errors, improve continuity of care, and address patients' holistic needs. These perceptions align with quantitative evidence demonstrating positive associations between interdisciplinary care and clinical outcomes. However, the qualitative insights provided by this study add depth by illustrating how and why these improvements occur from the nurses' perspectives [25].

Professional development and learning were also identified as important outcomes of interdisciplinary nursing care models. Nurses described interdisciplinary collaboration as a valuable learning process that enhanced their clinical competence, confidence, and understanding of other professional roles [26]. This finding supports the notion that interdisciplinary practice contributes not only to patient outcomes but also to workforce development [27]. Continuous learning through collaboration may improve job satisfaction and support the retention of nursing staff, particularly in the context of global nursing shortages [28]. The thematic distribution, as illustrated in the bar chart visualization, further reinforces the dominance of communication and collaboration as core elements of interdisciplinary nursing care [29]. The relatively lower frequency of barrier-related themes does not diminish their importance; rather, it suggests that while challenges exist, nurses tend to focus more on enabling factors and outcomes. This may reflect a pragmatic orientation toward improving practice despite structural limitations. Nevertheless, addressing identified barriers remains essential for the long-term sustainability of interdisciplinary care models [30].

The novelty of this study lies in its qualitative, nurse-centered exploration of interdisciplinary nursing care models in real clinical settings. Unlike outcome-focused quantitative studies, this research provides rich, contextualized insights into nurses' lived experiences, highlighting the processes and interactions that shape interdisciplinary practice. By foregrounding nurses' voices, the study contributes to a more comprehensive understanding of interdisciplinary care. It underscores the need to involve nurses actively in the design and evaluation of collaborative care models. Several implications arise from these findings. For clinical practice, healthcare organizations should prioritize structured communication strategies, clarify interdisciplinary roles, and foster inclusive decision-making processes. Leadership development and organizational policies that promote mutual respect among disciplines are critical. For education, incorporating interdisciplinary training into nursing curricula may strengthen collaborative competencies early in professional development. From a policy perspective, addressing hierarchical structures and workload issues may enhance the effectiveness of interdisciplinary care implementation.

This study has some limitations. As a qualitative study conducted in a specific clinical context, the findings may not be generalizable to all healthcare settings. However, the rich descriptions provided support transferability to similar contexts. Future research could build on these findings by integrating mixed-methods approaches or exploring interdisciplinary nursing care models from the perspectives of other healthcare professionals and patients. This study demonstrates that interdisciplinary nursing care models are strongly influenced by communication quality, nurses' professional roles, and organizational support. While barriers such as hierarchy and workload persist, effective interdisciplinary collaboration contributes significantly to improved patient outcomes and professional development. These findings

support the continued advancement of interdisciplinary nursing care as a critical strategy for addressing the complexity of modern healthcare systems.

CONCLUSIONS

This qualitative study demonstrates that interdisciplinary nursing care models play a crucial role in enhancing the quality, safety, and patient-centeredness of clinical care. Effective communication and collaboration emerged as the core elements supporting successful interdisciplinary practice, with nurses functioning as key coordinators within healthcare teams. Organizational support, mutual respect among disciplines, and recognition of nurses' professional roles further strengthened the implementation of interdisciplinary care. Although barriers such as hierarchical structures, role ambiguity, and workload constraints persist, interdisciplinary nursing care models contribute positively to patient outcomes and professional development when effectively supported.

Healthcare organizations should strengthen structured interprofessional communication and clarify interdisciplinary roles to support effective collaboration. Leadership and institutional policies should promote inclusive decision-making and reduce hierarchical barriers. Nursing education programs are encouraged to integrate interdisciplinary competencies to enhance collaborative practice. Future research should explore interdisciplinary nursing care models using mixed-methods approaches and include perspectives from other healthcare professionals and patients to broaden understanding and applicability.

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Authors' contributions

All authors contributed significantly to the development and completion of this research study.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this research. No financial, professional, or personal relationships have influenced the outcomes or interpretations presented in this study.

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