

Concept Analysis: Clinical Decision Making

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ABSTRACT

Background: Clinical decision-making is a fundamental aspect of nursing practice, involving data collection, analysis, and the application of evidence-based knowledge to ensure optimal patient outcomes. It is a complex and dynamic process that requires nurses to integrate clinical expertise, intuition, and critical thinking in fast-paced healthcare settings. Effective decision-making enhances patient safety, improves care quality, and supports positive health outcomes in diverse clinical environments.

Aims: The purpose of this study is to analyze the concept of clinical decision-making in nursing by determining its defining attributes, antecedents, and consequences. Moreover, clarifying its significance in nursing practice, education, and patient care.

Design: This study employs the Walker & Avant concept analysis model to examine the concept of clinical decision-making in nursing.

Review Methods: The analysis followed the step-by-step concept analysis approach outlined by Walker & Avant, which involves selecting a concept, determining its defining attributes, identifying antecedents and consequences, and examining model, borderline, and contrary cases.

Results: Key attributes of clinical decision-making in nursing, including intuition, critical thinking, clinical judgment, evidence-based knowledge, experience, and clinical reasoning. Model, borderline, and contrary cases illustrate the varying degrees to which these attributes influence patient care outcomes. Effective clinical decision-making enhances patient safety, optimizes treatment outcomes, and improves communication, emphasizing its critical role in nursing practice.

Conclusion: Effective clinical decision-making is essential for ensuring patient safety, optimizing treatment outcomes, and enhancing healthcare efficiency. By integrating critical thinking, evidence-based knowledge, and clinical experience, nurses can make informed decisions that improve patient care and reduce healthcare costs. Strengthening clinical judgment through education and experience is crucial for advancing nursing practice and achieving better patient outcomes.

Keywords: Clinical decision-making, nursing practice, critical thinking, evidence-based practice, clinical judgment, patient outcomes, patient safety, healthcare efficiency, clinical reasoning, nursing education.

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INTRODUCTION

Clinical decision making is a crucial process in providing outstanding nursing care (Payne, 2015), involving data gathering, processing, and assessment to make evidence-based decisions (Tiffen et al., 2014). It is a continuous and evolving aspect of nurses' practice that directly affects patient outcomes (Krishnan, 2018). The effectiveness of nurses' decisions is crucial for the best outcomes in acute-care nursing practice environments (Nibbelink & Carrington, 2019).

Decision-making is a complex and challenging process that nurses can effectively perform by combining intuition, contextual information, and scientific evidence-based knowledge (Krishnan, 2018). This approach is crucial for improving patient-care outcomes. Nurses' core functions in clinical settings are characterized by sound clinical judgment, which leads to effective decision making (Krishnan, 2018). Nurses make numerous clinical decisions daily, which require careful consideration as they impact patient outcomes. They must multitask and make critical decisions while providing care in a complex clinical practice setting (Manetti, 2019).

While providing nursing care, nurses engage in clinical decision making by assessing the patient's status, understanding the underlying pathophysiology, assessing potential risks, and considering other pertinent factors to arrive at well-informed judgments (Price et al., 2017). Therefore, Clinical decision-making refers to the process by which medical professionals use their clinical knowledge and skills to decide on patient care. To formulate a diagnosis, find suitable treatment options, and make appropriate patient care decisions. The goal of clinical decision-making is to optimize patient outcomes while balancing the benefits and risks of different treatment options.

LITERATURE REVIEW

Clinical decision-making has been extensively studied as a crucial component of nursing practice. It encompasses data gathering, assessment, and evidence-based judgment to ensure optimal patient outcomes (Tiffen et al., 2014; Krishnan, 2018). Stressing its importance, Haider (2021) states that decision-making is a normal psychological and physical reaction to complex clinical demands. Research shows that the concept is often interlinked with critical thinking, intuition, and evidence-based practice. Manetti (2019) and Johansen & O'Brien (2016) have emphasized the interchangeable use of terms like clinical judgment, problem-solving, and critical thinking with clinical decision-making in nursing literature. Nibbelink & Carrington (2019) observed that the effectiveness of nurses' decisions significantly impacts care in acute settings.

Several studies agree on the defining attributes of clinical decision-making, such as clinical reasoning, judgment, experience, and intuition (Miller & Hill, 2018; Tiffen et al., 2014). These skills allow nurses to assess patient conditions dynamically and make informed decisions that lead to improved patient safety and healthcare efficiency (Krishnan, 2018). According to Schiller (2018), concept analysis using the Walker & Avant model reveals the antecedents and consequences of clinical decision-making. Antecedents include education, situational awareness, and past experience (Cappelletti et al., 2014), while consequences involve improved patient outcomes, reduced errors, and cost-effective care (Johansen & O'Brien, 2016). This literature highlights the need for structured educational interventions to strengthen nurses' decision-making capabilities and enhance care quality across healthcare systems (Nibbelink & Brewer, 2018).

Background Theory

The theoretical underpinning of clinical decision-making in nursing is grounded in the Walker and Avant (1986) model of concept analysis. This model emphasizes systematic exploration of a concept by identifying its defining attributes, model and contrary cases, antecedents, and consequences.

Clinical decision-making is influenced by established theories of critical thinking, clinical judgment, and evidence-based practice. These elements are fundamental in helping nurses navigate complex clinical environments and respond effectively to varying patient needs.

Previous Studies

Numerous recent studies have investigated clinical decision-making in nursing. Johansen & O'Brien (2016) explored how education impacts clinical reasoning and critical thinking. Krishnan (2018) showed that experienced nurses utilize pattern recognition to make faster and more accurate decisions. Manetti (2019) emphasized the importance of intuition, especially in high-pressure environments, while Nibbelink & Carrington (2019) demonstrated how decision-making affects patient safety and care quality.

Additionally, studies by Cappelletti et al. (2014) and Nibbelink & Brewer (2018) illustrated how previous clinical exposure helps nurses develop better judgment. These findings establish a consensus on the value of education, experience, and evidence-based practice in effective clinical decision-making, although the specific interplay between these elements remains an area for further investigation.

Conceptual Framework

The conceptual framework of clinical decision-making in nursing integrates intuition, clinical judgment, evidence-based knowledge, experience, and clinical reasoning as core components. It begins with data collection and situation assessment, followed by analysis, intervention selection, and evaluation. The process is cyclical and dynamic, informed by feedback and patient response. Nurses act as active decision-makers who continuously adjust care based on changing conditions. The framework emphasizes that antecedents such as education and situational awareness lead to informed decisions, which result in positive consequences like enhanced safety, better patient outcomes, and cost-efficiency in care.

METHODOLOGY

Data

This paper utilizes qualitative data derived from a comprehensive review of existing literature on clinical decision-making and judgment in nursing practice. The selected literature includes peer-reviewed journal articles recent published, focusing on theoretical perspectives, concept analyses, and integrative reviews. These data sources were selected due to their alignment with the objective of examining conceptual clarity, influential factors, and theoretical foundations in clinical decision-making within nursing contexts (Johansen & O'Brien, 2016; Haider, 2021; Nibbelink & Brewer, 2018). The sources are credible, peer-reviewed, and directly relevant to the themes under study.

Model Development

The model for this study is grounded in the theoretical frameworks developed by Walker and Avant (1986) for concept analysis, and further refined by Tiffen, Corbridge, and Slimmer (2014), who proposed a contiguous framework for enhancing clinical decision-making. The proposed model synthesizes key components such as critical thinking, situational awareness, intuition, and evidence-

based judgment to conceptualize decision-making processes in nursing practice. Modifications to the original models were made by integrating contextual variables such as clinical experience (Krishnan, 2018) and organizational factors (Nibbelink & Carrington, 2019), which influence decision outcomes. No hypotheses were formulated, as the aim of the study is conceptual clarification rather than hypothesis testing.

Method

This paper employs Walker and Avant's Concept Analysis Method (1986), a widely recognized and systematic approach to clarify and define nursing concepts. This method was chosen for its rigor in identifying defining attributes, antecedents, consequences, and empirical referents of a concept. Unlike empirical quantitative approaches, this method allows for deep theoretical exploration, suitable for abstract concepts like clinical judgment and decision-making. Other methods, such as grounded theory or statistical modeling, were not used as they are more appropriate for data-driven discovery or hypothesis testing, which is not the purpose of this study. The use of Walker and Avant's framework is supported by its application in several recent concept analyses in nursing literature (Schiller, 2018; Johansen & O'Brien, 2016).

Data Analysis

As the study is qualitative in nature, no numerical data were collected or statistically analyzed. Instead, thematic synthesis and comparative analysis were employed to extract recurring attributes, patterns, and differences across the literature. Manual coding and thematic analysis were performed based on key phrases and definitions derived from the reviewed sources. NVivo or other qualitative analysis software was not used due to the limited and focused nature of the dataset. The conceptual clarity and model development were validated by triangulating findings across multiple sources, including integrative reviews (Nibbelink & Brewer, 2018), theoretical papers (Manetti, 2019), and concept analyses (Haider, 2021; Schiller, 2018). This method ensures the reliability and depth of theoretical interpretation.

DATA ANALYSIS AND RESULTS

Results

The analysis revealed that clinical decision-making in nursing is a multifaceted process influenced by both internal and external factors. Thematic synthesis of literature identified four recurring core attributes: critical thinking, clinical experience, intuition, and evidence-based reasoning. These attributes were consistently emphasized across concept analyses (Haider, 2021; Schiller, 2018) and integrative reviews (Nibbelink & Brewer, 2018).

Robustness Test

To test the robustness of these conceptual findings, a cross-comparison of at least three distinct methodological approaches (concept analysis, integrative review, theoretical framework) was performed. Despite differences in research design, all sources pointed to consistent defining characteristics and outcomes related to effective decision-making.

Additionally, a reverse analysis was conducted using Walker and Avant's framework to test if the removal of any one attribute (e.g., intuition) significantly altered the conceptual integrity. It was found that while intuition enhances decision-making, critical thinking and contextual understanding were more foundational to the concept.

Analysis

The study offers a critical synthesis of current theoretical and conceptual work in the domain of nursing decision-making. Unlike earlier models that emphasized intuition alone, this study shows the interdependent relationship between clinical experience and analytical reasoning. A significant novelty lies in the integration of organizational and environmental factors (e.g., time pressure, team support) which are not traditionally highlighted in isolated theoretical models.

The findings align with Manetti (2019), who proposed a clinical judgment model emphasizing contextual decision-making, yet extend beyond by incorporating the impact of education and reflective practice. The synthesized model also accounts for real-world constraints such as workload and nurse-patient ratios, demonstrating its applicability in clinical settings.

In comparison to past studies, this work provides a broader, more integrated view of decision-making and offers a scaffold for both practice improvement and educational curriculum design.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study explored the concept of clinical decision-making in nursing through a comprehensive synthesis of existing theoretical, empirical, and conceptual frameworks. The analysis clarified that decision-making in nursing is not a singular act but a process influenced by various cognitive, experiential, and contextual factors. Critical thinking and clinical experience emerged as foundational attributes, while intuition and evidence-based practice provided supportive layers in complex and time-sensitive environments. The findings underscore the need for integrated approaches to support nurses in making sound clinical judgments, particularly in high-stakes or resource-limited settings.

Recommendation

Moving forward, future studies could focus on empirical testing of the proposed conceptual model across various clinical settings to evaluate its validity and adaptability. Incorporating simulations, observational studies, and practitioner feedback can help refine the model further, leading to better training programs and improved patient outcomes. Development of digital decision-support tools aligned with these attributes could also be a promising area for technological innovation in nursing practice.

DATA AVAILABILITY

This statement should describe how readers can access the data supporting the conclusions of the study and clearly outline the reasons why unavailable data cannot be released.

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