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Registered Nurses' Perceptions of Patient Safety in Critical Care Units

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This is to certify that the doctoral dissertation by

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and that any and all revisions required by
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2025

Abstract

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by

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MBA, Florida Atlantic University, 2020

MSN, FNP, Purdue Global University, 2018

BSN, Kaplan University, 2009

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Patient safety is a cornerstone of effective healthcare delivery, particularly in critical care units (CCUs) where patients are at heightened risk of complications due to their complex medical conditions. The purpose of this study, guided by Watson's theory of human caring, was to explore RNs' perceptions of patient safety in CCUs. Data on eight RNs working in CCUs were collected through semi-structured interviews, allowing for an in-depth exploration of nurses' perspectives. Data were collected through semi-structured interviews, allowing for an in-depth exploration of nurses' perspectives. Using Saldana's method of thematic analysis, three overarching themes emerged: patient safety, resource allocation, and communication and team dynamics. Key findings were that communication breakdowns and nurse fatigue are major contributors to patient safety incidents in CCUs. Future studies should include healthcare professionals beyond RNs, such as physicians, technicians, and administrators, to provide a more comprehensive understanding of patient safety. Actionable recommendations for enhancing patient safety, including improving communication strategies, addressing nurse fatigue through structured interventions, fostering a culture of safety, implementing evidence-based practices, providing continuous education and training, and leveraging technology to reduce errors. These findings can potentially drive positive social change by informing healthcare policies and practices to improve patient safety and outcomes in CCUs. By addressing multifaceted challenges in this study, healthcare organizations can create safer and more resilient critical care environments prioritizing patient and provider wellbeing.

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Dedication

I dedicate this dissertation to my family for their love, support, and encouragement. To my brother Josias, for inspiring me to chase my dreams. To my parents, Marguerite Herzulia, and my late father, Reverend Pastor Prosper Hyacinthe, for their unwavering support. To my sister, Nephtalie, for listening, empowering me, and being my confidante. To my sister Vasthie, thank you for reminding me that everything is possible. To Pastor John Wesley and John Beerly, thank you for being my supportive brothers. To my nephews and nieces, thank you for being the future of our family, especially Delphine and Jahmahr; you are my heart. Willa, my lovely papillon. Finally, I dedicate this dissertation to the Lord God Almighty for His love, guidance, and constant presence in my life. ***Jeremiah 29:11***.

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Chapter 1: Introduction to the Study

Safety culture is a widely recognized concept in healthcare settings that emphasizes the importance of preventing adverse events and promoting quality of care. As a healthcare professional, my concern for patients led me to search literature on registered nurses' (RNs) perceptions of patient safety in critical care units (CCUs). RNs play a crucial role in patient safety, as they are direct caregivers who interact with patients daily (Abdelaliem et al.,2022). I conducted a comprehensive literature search to investigate RNs' perceptions of patient safety in hospitals and attitudes toward and experiences with patient safety. There is a lack of research that systematically analyzes and summarizes RNs' perceptions of safety culture while differences in their perceptions. I explored the perceptions of RNs in CCUs pertaining to patient safety. This chapter includes the study's background, problem statement, purpose, research question, theoretical framework, and nature of the study.

Background

As frontline healthcare providers, RNs play a pivotal role in ensuring patient safety. Abdelaliem et al. (2022) stated RNs hold diverse perceptions regarding dimensions of safety culture. Some perceive strong safety cultures, while others see room for improvement. Factors such as years of experience, educational level, and work environment influence RNs' perceptions of safety culture (Sultan, 2022). Patient safety is paramount in healthcare settings, especially in CCUs where patients are particularly vulnerable. To ensure optimal care for critically-ill patients, it is essential to understand perceptions of RNs regarding patient safety in these specialized units. Through this

research, I aim to explore perceptions of RNs regarding patient safety in CCUs, as this will provide valuable insights regarding this important issue. By highlighting key factors influencing patient safety in these units, this research will further underscore the crucial role of RNs in patient safety.

Problem Statement

Patient safety is a crucial aspect of healthcare delivery, especially in CCUs, where patients are highly vulnerable to complications. CCUs provide the highest level of care to critically-ill patients. Patient safety is essential due to high acuity levels and limited resources. One of the key causes of patient safety incidents is communication breakdowns; when multiple healthcare professionals are involved in patient care, miscommunication can lead to misinterpretation of orders, delays in treatment, and adverse events (Institute for Healthcare Improvement [IHI], 2024). This can further lead to inadequate care, patient harm, and death. Another contributing factor to patient safety incidents in intensive care units is fatigue. Healthcare professionals working in these units often work long hours, leading to decreased alertness and making errors more likely. Fatigue can also lead to burnout, compromising patient safety (IHI, 2024). Furthermore, the impact of patient safety incidents in intensive care units is severe and long-lasting. Patients can experience additional complications, prolonged stays in the CCU, and permanent disability (Stayt et al., 2022).

Perspectives of critical care RNs regarding patient safety in hospital settings have not been explored and analyzed, despite many patients being critically ill. Length of stay and number of available beds may also influence perceptions of patient safety among

RNs for patients during hospital visits (Abdelaliem & Alsenany, 2022). According to Karaca and Durna (2019), significant gaps in patient safety in CCUs can have negative consequences on patients' wellbeing and outcomes. Identified gaps include poor communication among healthcare providers, absence of standard operating procedures, and inadequate education and training (IHI, 2024). Healthcare facilities can improve patient safety in CCUs by addressing these issues and implementing appropriate interventions.

Purpose of the Study

The purpose of this descriptive qualitative study was to explore RNs' perceptions of patient safety in CCUs. The concept of interest was RNs' perceptions of patient safety in CCUs, which were explored through interviews.

Research Question

What are RNs' perceptions of patient safety in CCUs?

Theoretical Framework for the Study

The theoretical framework that grounded this study was Watson's theory of human caring, which describes the foundation of nursing and enables therapeutic healing processes and relationships beyond time and technical aspects of nursing, such as procedures, treatments, tasks, and technology. According to Watson (1979), caring is a process that involves 10 carative factors, which later evolve into 10 caritas processes: showing love and kindness to oneself and others, being genuinely present to enable faith, hope, and inner subjective life, developing one's spiritual practices, creating trusting relationships, showing empathy and forgiveness, using different ways of knowing,

engaging in teaching and learning experiences, creating a caring and healing environment, valuing humanity, and embracing the unknowns and miracles in life (Watson, 1979). These 10 caritas processes were the foundation for developing my qualitative research study to explore RNs' perceptions of patient safety in CCUs. I employed a qualitative methodology. Using a phenomenological design, I prioritized patient safety, which is a critical concern in healthcare environments. By exploring lived experiences and insights of these healthcare professionals, I sought to address factors that influenced their views on patient safety, thereby contributing to a better understanding of challenges and considerations within clinical practice. CCUs are where prompt and effective treatments are required to ensure positive outcomes for patients. It is essential to understand RNs' perceptions to better understand the issues in CCUs.

Watson's human caring theory is a comprehensive and patient-centered framework that emphasizes the importance of holistic care in healthcare environments (Watson, 1979). This theory involves not only treating physical ailments but also addressing their emotional, social, and spiritual needs, fostering deeper connections between healthcare providers and patients. By integrating principles of this theory into their daily practice, healthcare professionals can adeptly navigate complexities and challenges that are often encountered in clinical settings, ultimately enhancing patient safety and wellbeing.

To effectively apply Watson's human caring theory in high-stress areas such as critical care, it is essential to establish a clear framework to serve as a guide for healthcare professionals, outlining necessary actions and interventions to ensure patients

receive compassionate and individualized care while also promoting supportive and healing environments (Kandula, 2019). This framework consists of five key concepts. The foundation of the framework is the concept of caring. Healthcare professionals must recognize each patient has unique needs, values, and aspirations. By actively listening and demonstrating empathy, they can create safe spaces for patients to express their concerns and fears. Recognizing and acknowledging patients' suffering is fundamental to Watson's human caring theory. Healthcare professionals should strive to understand their patients' physical and emotional experiences to provide comfort and support during challenging times. Creating caring environments is also crucial for patient safety. Healthcare professionals should foster supportive and inclusive environments where patients feel respected, valued, and capable of advocating for their care. This promotes open lines of communication for healthcare professionals to identify potential safety concerns and address them promptly. Building strong and caring relationships between healthcare professionals and patients is essential for patient safety. Healthcare professionals should establish trust, open communication, and mutual respect with their patients in order for them to participate actively in their care. The framework emphasizes the importance of evidence-based practice that is translated into compassionate care.

Healthcare professionals must engage in ongoing evaluations of their practices, ensuring they remain aligned with the most current research and established best practices. This commitment to continuous improvement is essential for placing patient safety at the forefront of care (Kandula, 2019). Given intricate dynamics of healthcare environments, a robust and comprehensive framework is necessary to safeguard patient

wellbeing. Watson's human caring theory is a valuable patient-centered framework that emphasizes the importance of empathy, compassion, and deep human connections in the caregiving process (Gonzalo, 2023). By integrating this theory into clinical practice, healthcare providers can effectively address complexities associated with critical care settings, fostering environments that enhance patient safety. Additionally, collaboration among healthcare team members, dedication to lifelong learning, proactive patient education, and rigorous quality assurance measures are all vital for pursuit of exceptional care. By implementing these strategies, healthcare professionals can work diligently to achieve positive outcomes for patients and their families, ultimately creating supportive and healing healthcare experiences (Pajnkihar et al., 2017).

Nature of the Study

The research design was descriptive phenomenology, which was specifically chosen to address perceptions of critical care RNs regarding patient safety. By using a phenomenological approach, I conducted open-ended interviews for participants to openly express their thoughts, feelings, and experiences related to this topic. This method allowed for rich and detailed narratives involving complexities of their perspectives and experiences in critical care environments. Open-ended questions are flexible in terms of exploring different aspects of topics while maintaining structure to guide interviews (Creswell & Poth, 2018). Before each interview, participants were reminded of the study's purpose and assured their confidentiality would be maintained because their names were deidentified. I assigned each participant a unique identifier that was used

throughout the study to ensure confidentiality. Beforehand, each participant consented to have interviews audio-recorded and signed informed consent forms.

All participants were recruited through Facebook and LinkedIn and flyers targeting RNs in CCUs. I determined when saturation had been reached by interviewing a sample size of eight to10 critical care RNs. Interviews lasted between 30 minutes and 1 hour. Saturation is the point at which collecting more data or conducting further analysis does not provide any new information for research. Saturation indicates enough data have been gathered to comprehend patterns and themes and make sound conclusions (Creswell & Poth, 2018). Data for this study were gathered through a series of semi-structured interviews, which were recorded using Zoom and RecMyCalls to ensure accurate documentation of participants' responses. In addition to these interviews, journaling played a significant role in terms of capturing insights and reflections throughout the research process. Organization and analysis of collected data were facilitated by Delve, which helped to streamline the process. To further support manual data collection and organization, Microsoft Word and Excel were used for compiling and managing information systematically. Digital recordings were securely stored on a password-protected laptop. All participants were required to be 18 or older, RNs, and working in CCUs within hospital settings. No participants could be hospital administration or executive personnel.

I conducted a thorough exploration regarding perceptions of RNs of patient safety within CCUs. This involved a detailed and manual analysis of qualitative data from interviews, where I engaged deeply with experiences and insights shared by participants.

After carefully reviewing interview transcripts, I compiled a comprehensive list of key ideas, identifiable codes, and overarching themes that emerged in response to my primary research question. Additionally, I developed follow-up probing questions that were tailored to address narratives shared by participants, leading to a richer understanding of their perspectives on patient safety.

Definitions

In this study, I used the following terms:

Critical Care Units (CCUs): Specialized hospital wards that provide advanced medical care and monitoring for patients with life-threatening conditions. These units play a vital role in saving the lives of patients who are in critical need of specialized treatment and require constant monitoring (IHI, 2024).

Patient Safety: Measures and protocols that are aimed at preventing medical errors and minimizing their negative impacts on patients' wellbeing (WHO, 2023).

Safety Culture: Shared sets of values, attitudes, and actions involving safety that are demonstrated across all levels of organizations (Azyabi et al., 2021).

Zero Harm: Strategic approach to workplace health and safety that involves eliminating risks and hazards that could harm people or environments (Wilson et al., 2022).

Assumptions

In the context of this study, I assumed participants openly and honestly expressed their perceptions regarding patient safety during the interview process. I assumed they were professionals who prioritized patient safety and understood the importance of

providing accurate and honest feedback. While RNs are expected to be honest during interviews, there may be instances where they withhold information or express reservations about sharing certain details. This could be due to fear of retaliation or concerns about confidentiality. To mitigate these limitations, I used various strategies to encourage honesty. These strategies included establishing trust and rapport, ensuring confidentiality, and providing safe environments for participants to share their experiences.

Scope and Delimitations

Patient safety is a fundamental aspect of healthcare delivery. Ensuring safe patient environments is paramount, particularly in CCUs. I examined RNs' perceptions regarding patient safety in these specialized units. By focusing on these experiences, valuable insights were gained regarding their concerns, challenges, and recommendations for enhancing patient safety. I addressed perceptions and attitudes of RNs working in CCUs. Specifically, I focused on exploring their perceptions regarding patient safety, including perceived risks, challenges, and strategies to mitigate these risks. Participants addressed concerns, challenges, and recommendations for enhancing patient safety. While limitations exist, research provided valuable insights regarding the complex issue of patient safety in the critical care setting.

Limitations

As the Director of Patient Safety and Risk Management, my main responsibility was ensuring patients receive safe care. Although I understand issues related to patient safety in healthcare, I have not personally cared for a patient in almost 10 years. I needed

to ensure there were no personal biases due to prior knowledge. Other healthcare professionals, such as physicians, technicians, and administrators, may have unique views on patient safety, which were not explored within this study. I conducted interviews with RNs. I aimed to obtain their perceptions regarding patient safety in CCUs. Issues were addressed throughout the study process to ensure reliability and validity of research findings.

Conducting a comprehensive study involving RNs required significant time. RNs are already busy with demanding tasks of their roles in CCUs, making it challenging to allocate sufficient time for participation in the study. RNs' hesitation to openly express their perceptions regarding patient safety due to fear of retribution or negative impacts on their work environment was addressed. Confidentiality measures were implemented to safeguard participants' anonymity and build trust.

Ensuring reliability and validity of my research findings was a top priority. I meticulously evaluated and refined my methodology and design to guarantee my measures were both reliable and valid. To achieve reliability, I employed rigorous data analysis techniques, ensuring consistency and precision throughout the process. In terms of validity, I incorporated peer debriefing to gain valuable feedback and conducted thorough ongoing reviews of my findings to maintain accuracy and credibility. I was culturally sensitive and knowledgeable about specific contexts of each CCU to ensure relevance of study findings. Cultural safety is a critical concept in the healthcare industry that involves emphasizing the importance of providing respectful and inclusive care to individuals from diverse backgrounds, and to achieve this, embracing cultural humility

involves self-reflection (Smith et al. 2021). Ethical considerations were addressed throughout the study such as informed consent and protection of participants' rights. I ensured participants were fully informed of the purpose of the study, their rights, and potential risks and benefits of participation. Findings were challenging to interpret; therefore, I employed thematic analysis to synthesize data and meaningfully identify key themes and patterns. It was difficult to find RNs in CCUs who were willing to participate in the study.

Significance

Adherence to safety standards is crucial in CCUs to prevent harm, improve safety, and avoid mistakes that could compromise patient health. As safety culture improves, readmission rates, hospital stays, and safety issues should decrease (Almutairi et al., 2022). Findings and themes of the study will be shared with leadership to assist in further research and developing nursing programs and practices that could improve the healthcare system by providing details that could reduce tendencies of the system to lead to harm. Obtaining clinical staff input may guide clinical practice and decrease patient harm within hospital systems. Further, research findings may contribute to patient safety by guiding how healthcare systems can improve their processes to deliver safer patient care despite complex processes which affects positive social change.

Summary

RNs are integral to establishing and maintaining safety standards in CCUs, as they are primary caregivers who interact directly with patients on a daily basis. Their role extends beyond providing care to actively influencing safety cultures within healthcare

environments. Understanding perceptions of RNs regarding patient safety is crucial for healthcare organizations, as it enables them to address specific needs and concerns of these frontline workers, ultimately leading to improved patient safety outcomes. Despite the critical importance of RN perspectives, there remains a significant gap in research concerning systematic analysis and synthesis of their views regarding patient safety. This gap is particularly evident in studies that aim to explore disparities involving RNs' perceptions, which can vary based on factors such as experience, training, and specific challenges of different critical care settings.

By offering a comprehensive review of RNs' perceptions of patient safety, I aim to fill a gap in literature. I aim to provide a deeper understanding of how RNs view aspects of patient safety, including challenges they faced and strategies they believed were most effective in terms of mitigating risks. This is essential for identifying how safety culture in healthcare settings can be improved. Chapter 2 includes information about relevant literature that supports and enriches this discussion. I provide a broader context for understanding roles of RNs in patient safety and highlight key findings that can inform future research and practice. By synthesizing existing knowledge and identifying areas for further exploration, I contribute to ongoing efforts to enhance safety culture in healthcare settings and improve patient outcomes.

Chapter 2: Literature Review

Introduction

The problem at hand is the increased risk of adverse events to patient safety during healthcare delivery and its impact on the critical care units (CCUs), where patients are highly vulnerable to complications. The research problem is lack of knowledge regarding RNs' perceptions of patient safety in CCUs. The purpose of this descriptive qualitative study was to explore RNs' perceptions of patient safety in CCUs. The chapter begins with an exploration of the key theoretical frameworks that underpin the study, including Watson's theory of human caring (1979). I will discuss the evolution of these theories, their application in various contexts, and its relevance to my research question.

I will highlight my literature search strategy, followed by a literature review related to key variables and concepts. Following this, I will review empirical studies that have investigated similar phenomena, focusing on their methodologies, results, and implications. This review will help to situate the research within the broader academic discourse and justify the need for further investigation. Additionally, I will examine the methodological approaches employed in previous studies, assessing their strengths and limitations. This analysis will inform the design of my own research, ensuring that I adopt the most appropriate and rigorous methods. Finally, I will identify the gaps and limitations in the existing literature, which my study aims to address. By doing so, I will demonstrate the significance of my research and its potential contribution to the nursing field.

Literature Search Strategy

Following established guidelines, a systematic literature review was conducted to address a knowledge gap. A comprehensive search strategy was employed using the following databases: CINAHL Plus with Full Text, ProQuest Central, PubMed, Semantic Scholar, and SAGE Journals. I used the following search terms: *safety*, *patient safety*, *safety culture*, *safety science*, *safer*, *safer care*, *surgical intensive care unit safety*, *patient safety culture*, *healthcare providers*, *healthcare services*, *perception*, *zero harm*, *healthcare quality*, *hospital management*, *psychosocial factors*, *quality improvement*, *education*, *scoping review*, *theory in quality*, *falls*, *harm*, *injury*, *psychological safety*, *critical care unit*, and *registered nurses*. All sources were published studies focused on RNs' perceptions of patient safety in CCUs.

Literature Review Related to Key Variables and/or Concepts

RN Delivery of Care

Improving healthcare quality in disaster zones has become a significant priority in terms of global health policies (El-Khani et al., 2019). Identifying patient safety practices of emergency medical teams (EMTs) in disaster zones is crucial to identify areas of improvement.

Themes related to patient safety issues included limb injury, followed by issues related to medical records involving as accuracy and accessibility (El-Khani et al., 2019). Additionally, surgical decision-making and medicine safety were prominent themes. Protocol compliance was another significant theme (El-Khani et al., 2019).

Wei et al. (2021) identified three main themes involving RNs' experiences with voluntary error reporting (VER), which were beliefs, behavior, and sentiments towards VER, as well as perceptions of enabling and inhibiting factors of VER. According to Wei et al, RNs' experiences with VER were unsatisfactory. This requires attention to improve nursing management and strengthen institutional efforts to recognize, appreciate, and use RNs' contributions to VER. RNs can play a crucial role in enhancing patient health by reporting events they believe could harm patients.

Tavares et al. (2021) revealed RNs perform certain activities differently when caring for elderly patients, but these activities are not considered additional tasks according to the Nursing Activities Score, which does not accurately reflect time spent caring for elderly patients.

Lopez Cardenas et al. (2022) revealed nursing staff in two ICUs in a high-complexity hospital emphasized professionalism, commitment to high-quality care, patient safety, and maintaining patient dignity. They described their care provision as deeply emotional, focusing on creating supportive and comforting environments, fostering trust, and providing emotional support.

Factors contributing to CCU workload include high patient acuity, complex medical conditions, and time constraints, which negatively impacted care provision (Lopez Cardenas et al., 2022). Staff felt unable to meet all patients' needs due to time and resource constraints, reflecting challenges they faced.

A challenge for healthcare professionals is to find ways to seamlessly integrate theory into practice. Interprofessional human caring refers to RNs expressing loving

kindness towards patients, each other, and themselves while maintaining faith in teamwork (Wei & Watson, 2019). It involves valuing intersubjective interactions and building trust among team members, cultivating heart-centered caring relationships, acknowledging and processing both positive and negative feelings nonjudgmentally, applying all ways of knowing during caring, encouraging reciprocal teaching and learning, developing caring and healing environments collaboratively, respecting the human dignity of patients and themselves, and being open-minded regarding unknowns and believing in miracles. Findings included strong commitment to providing compassionate and patient-centered care. Teamwork and effective communication are important in terms of promoting interprofessional human caring.

Safety Culture

Harton and Skemp (2022) conducted research to investigate the experiences of medical-surgical nurse leaders regarding safety culture in a Midwest community hospital. The article uses a qualitative descriptive approach to gather data through semi-structured interviews, document reviews, and observations. The qualitative research design employed by Harton and Skemp allows for an in-depth exploration of the experiences and perceptions of medical-surgical nurse leaders regarding safety culture. By conducting semi-structured interviews, researchers can gain a deeper understanding of the participants' thoughts, feelings, and beliefs regarding safety culture. This method allows for open-ended questions and encourages participants to share their thoughts freely. The research findings revealed several crucial themes for ensuring patient safety and improving the quality of care. These themes included ensuring that registered nurses take

steps to protect patients, having appropriate nursing interventions in place, encouraging registered nurses to speak up or escalate when they feel uneasy about a situation, providing necessary tools to registered nurses to deliver safe care, prioritizing patient safety within the organization, and promoting professional growth and learning among registered nurses. Considering the importance of patient safety and quality care, it is imperative for nurse leaders to give significant attention to fostering a culture of safety within their leadership practices. This emphasis on safety culture not only enhances the overall patient care experience but also serves to mitigate potential risks and hazards in healthcare settings (Harton & Skemp, 2022). I integrated these fundamental themes into my dissertation, utilizing the findings of this research to underscore and reinforce the focus of my qualitative study.

Salem et al. (2019) conducted an exploratory cross-sectional review in two intensive care units (ICUs) at the University Hospital from October to December 2018. The authors aimed to assess the safety culture among the nursing staff in these ICUs. Specifically, sixty registered nurses were interviewed using the Hospital Survey on Patient Safety Culture (HSOPSC), a widely used tool to assess safety culture in healthcare settings. The findings of this study provided valuable insights into the patient safety dimensions in pediatric and adult ICUs. While most respondents were satisfied with the quality of care, room for improvement was identified in the "Frequency of events reported" dimension. Additionally, the finding that pediatric ICUs demonstrate a higher level of non-punitive response to error suggests that healthcare professionals in those units prioritize a culture of learning and growth. One key aspect that made the

article relevant to my research was its emphasis on the importance of understanding healthcare professionals' perspectives. By conducting interviews with critical registered nurses, the article recognizes that patient safety is not just a technical issue but a complex and multifaceted concern. As the primary caregivers in ICUs, registered nurses uniquely understand the patient's needs and potential safety threats.

Smith et al. (2021) conducted an extensive literature search on cultural safety in the context of indigenous kidney healthcare. Cultural Safety prioritizes the safety and well-being of indigenous care recipients within the healthcare system. The authors shed light on the concept's relevance and impact within Indigenous communities by examining a wide range of literature on cultural safety. The findings revealed several key themes. The authors found evidence of relationality, engagement, and healthcare self-determination among healthcare providers. Additionally, they identified systemic issues, barriers, and challenges in accessing healthcare services. Furthermore, the article highlighted the importance of addressing the legacies of colonialism within healthcare settings. These themes offered valuable insights into the complex nature of healthcare disparities and highlight the need for comprehensive strategies to address these disparities (Smith et al., 2021). The article is relevant to my study because I appreciated how they conducted a thematic analysis of issues that require solutions. Once I had the statements of the critical care registered nurses from the interviews, I grouped and categorized those statements into themes that needed actionable items during my study.

Patient Safety

Kim and Seomum (2023) addressed the persistent issue of patient safety in nursing research. They analyzed 6072 abstracts of published articles for keywords and conducted focus groups to reflect nursing perspectives. The article aimed to explore the knowledge structure of patient safety and provide new perspectives and theoretical clarifications. Based on Kim's typology, which includes four domains, the article offered direction for future research. Overall, this article sheds light on patient safety in nursing and provides valuable insights for future research. The article found that avoiding medication errors and preventing pressure ulcers or falls is still a crucial topic in patient safety nursing research. The risk assessment included gathering data on patient characteristics and environmental factors surrounding the patient and nursing practice. Registered Nurses with informatics competency carried out nursing practice for risk management, which involved reporting, communication, and knowledge-based practices. To implement the systems approach as a patient safety strategy, further research on using and developing information systems is necessary (Kim & Seomun, 2023). This article supports my study by emphasizing the necessity for additional research to bridge these gaps, particularly in understanding how nursing perspectives and informatics competencies can be integrated to improve patient safety outcomes.

Ensuring patient safety has been a major concern for the past two decades, as Mihdawi et al. (2020) noted. Several studies and international organizations have recognized the critical role of registered nurses and their work environment in promoting patient safety. The authors used a quantitative design, which is a safety survey around the

employees' perceptions regarding safety in the organization; the authors investigated the relationship between patient safety practices and the nursing work environment. The article involved 570 registered nurses from both public and private hospitals. The Hospital Survey of Patient Safety Culture (HSPSC) measured perceived patient safety, specifically the Overall Perceptions of Patient Safety subscale. The nursing work environment was also assessed using the Nursing Work Index (PES-NWI) (Mihdawi et al., 2020). The authors offer factual evidence on the working conditions of registered nurses and how they relate to the perceived safety culture of patients. To enhance the quality of patient care, certain aspects of the nursing work environment need to be improved, such as sufficient staffing and resources, registered nurses' involvement and career advancement opportunities, and effective communication methods (Mihdawi et al., 2020). The article provided valuable insight for my dissertation, although the author's design differs from mine because I will be interviewing my participants. Seeing how their work environment affects their perceptions could be new themes that may emerge during the research. I will use a qualitative descriptive design to explore patient safety in the CCU which is different than the quantitative study described above.

Stayt et al. (2022), the experiences of registered nurses working in intensive care regarding patient safety were examined. The study, based on constructivism, involved qualitative interviews that were semi-structured and audio-recorded. Two main themes emerged from the interviews. The first theme, 'On a war footing', refers to situations where registered nurses face unprecedented challenges and must take measures to ensure their safety. The second theme, 'Doing the best we can'—Safe Delivery of Care,

describes the impact of the actions taken on short and long-term patient safety, including the organization of care, missed and suboptimal care, and communication. According to Stayt's (2022) article, registered nurses have reported an increase in patient safety risks due to the dilution of the skill mix and fragmentation of care. The registered nurses showed a profound comprehension of the long-term and holistic impacts of these factors on patient safety and recovery from critical illness. During my study, I utilized coding as one of my analysis approaches, making it a valuable resource. Additionally, according to Stayt's study in 2022, the findings should be taken into consideration by intensive care leaders and managers for future nursing workforce modeling and patient safety strategies.

Summary and Conclusions

This chapter included a detailed systematic literature review that provided significant insights regarding perceptions of RNs involving patient safety in CCUs. The review emphasized the critical importance of understanding these perceptions, as they play a pivotal role in shaping efforts to promote patient safety and improve quality of care in these high-acuity settings. RNs, as frontline caregivers, possess unique insights regarding dynamics of patient safety, and their perceptions often reflect the complex interplay of clinical, organizational, and interpersonal factors that influence safety outcomes. Findings highlighted the necessity of integrating theoretical frameworks into nursing practice. Watson’s theory of human caring was used to emphasize relational and holistic aspects of care, providing a robust framework for addressing multifaceted factors that shape RNs’ perceptions. By applying this theory, healthcare organizations can create environments that prioritize empathy, compassion, and a commitment to patient-centered

care, ultimately fostering cultures of safety in CCUs. This approach not only supports RNs in their professional roles but also enhances overall safety climate, benefiting both patients and healthcare providers.

The chapter further underscored the need for continued research to explore RNs' perceptions of patient safety and measurable patient outcomes. Understanding this is essential for developing targeted interventions that address gaps in safety practices and improve clinical outcomes. Additionally, the review involved identification and implementation of strategies to strengthen patient safety in critical care environments, which are inherently complex and fraught with challenges involving high patient acuity, rapid decision-making demands, and potential for errors. Chapter 3 includes a detailed discussion of the research methodology to investigate RNs' perceptions of patient safety in CCUs. This methodology was used for generating evidence-based insights that can inform future practices, policies, and educational initiatives that are aimed at optimizing patient safety in these critical healthcare settings.

Chapter 3: Research Method

The purpose of this qualitative descriptive study is to explore RNs' perceptions of patient safety in CCUs. Chapter 3 includes information about the purpose of this research, methodology, issues of trustworthiness, ethical procedures, research design and rationale, and my role as the researcher.

Research Design and Rationale

I employed a descriptive phenomenological approach, emphasizing exploring and understanding individual lived experiences to address the central research question: What are (RNs' perceptions of patient safety in CCUs? This methodology enabled a thorough examination of participants' perceptions and emotions in order to address their experiences related to the phenomenon under investigation. The four key principles of descriptive phenomenology are epoche, intentionality, lived experience, and universal essence/eidetic structures (Husserl, 1983).

Epoche involves suspending or bracketing preconceived notions and natural attitudes to perceive phenomena as they truly are (Husserl, 1983). By eliminating biases and assumptions, researchers aim to address the essence of experiences without distortion. Intentionality refers to the characteristic of consciousness that is directed toward objects or experiences, thereby giving them meaning (Husserl, 1983). It highlights the dynamic interplay between subjects and objects of consciousness. Lived experience involves individual direct and subjective experience involving phenomena (Husserl, 1983). Descriptive analysis involves describing meanings that are embedded in

experiences, texts, actions, and expressions to reveal underlying structures and significance. It is a process of uncovering meanings within individual consciousness.

Eidetic structures are recurring and essential features of a phenomenon that are identified through descriptive analysis (Husserl, 1983). This emphasizes discovering invariant structures that define essence of experiences. Husserl's phenomenological framework was used for a rigorous foundation focusing on eidetic reduction to elucidate essential characteristics of lived experiences.

Methodological Approach

During data collection, researchers gather first-person accounts of experiences through interviews or other qualitative methods such as field notes focusing on lived realities involving phenomena. This ensures data reflects participants' authentic experiences. During descriptive analysis, collected data are carefully analyzed to identify recurring patterns and themes that reveal essential structures of experiences. This process involves detailed examinations of data to extract meaningful insights. Reduction involves eliminating extraneous details and focusing on core and invariant aspects of experiences. This ensures analysis remains centered on the most significant elements of the phenomenon. Findings are presented clearly and concisely, describing universal features or essences of the phenomenon. This ensures results are accessible and meaningful to the audience. By adhering to these principles and methodological steps, descriptive phenomenology is suitable for exploring and understanding complexities of human experiences. This involves the continuous process of examining the significance of everyday lived experiences. In my research, I used descriptive analysis to explore how

RNs perceived patient safety within CCUs. I aimed to gain a profound understanding of complexities involved in their experiences, ultimately contributing to more nuanced perspectives on patient safety in healthcare settings. I conducted open-ended interviews for participants to share their thoughts, feelings, and experiences. These open-ended questions were flexibility in terms of exploring various aspects of the topic while maintaining a structured interview framework.

Descriptive phenomenology was chosen to focus on understanding individuals via their own perspectives. This approach emphasizes subjective experiences of individuals, ensuring their perceptions and lived realities are central to research. Watson's THC underscores the importance of human connection and empathy, which are integral to nursing practice. By using descriptive phenomenology, I sought to explore and describe patient experiences in a way that respected their unique viewpoints, fostering a deeper understanding of their needs and emotions. This ensured research not only captured the essence of patient experiences but also informed nursing practices that prioritize genuine human caring and holistic patient wellbeing. This will lead to future interventions to assist in higher-quality and safer patient care.

Role of the Researcher

My role as the researcher was both multifaceted and integral to the entire research process. I served as the facilitator of understanding, determining meaningful insights from raw data. This involved immersing myself in participant experiences, contexts, and narratives to construct a rich and comprehensive understanding of the subject matter. I was the primary data collector, and I gathered information through in-depth interviews

and field notes. This process required not only technical skills involving data collection but also a deep commitment to ethical practices, active listening, and fostering trust with participants to ensure authenticity and depth of data. My ability to build rapport and trust with participants significantly influenced quality and depth of data. As I analyzed data to uncover patterns, themes, and meanings, I used coding techniques to organize and synthesize findings. As the ethical guardian, I was required to uphold ethical standards by respecting participants' confidentiality, ensuring informed consent, and avoiding bias during data collection and analysis. Lastly, as a reflective practitioner, I regularly reflected on my positionality to ensure my personal experiences and beliefs did not shape the research process and findings. In addition to addressing potential biases, I ensured rigor and credibility.

In the context of this study, I focused on examining the perceptions of patient safety among registered nurses who work in critical care units. My role in qualitative research extends beyond simply gathering data. One of the primary objectives is to gain insight into the thoughts and feelings of study participants. This task can be challenging, as it involves asking people to discuss and reflect on experiences that are often deeply personal and sensitive. Participants may hesitate to share their innermost thoughts and feelings, as it may dredge emotions or bring back painful memories. To mitigate any potential influence from my personal experiences and professional role, I conducted interviews with staff members whom I had not previously collaborated with. This allowed me the opportunity to gain a fresh perspective on patient safety within different organizations. Given my background as a critical care nurse and my current position as a

patient safety director, I am mindful of the potential for bias. Ensuring that I have no prior personal or professional connections with the interview participants and that there is no supervisory or instructional power dynamic at play is crucial to maintaining the integrity of the research.

Methodology

Participant Selection Logic

The target population for the interviews consisted of 8 critical care registered nurses (RN) who were at least 18 years old and had a minimum of one year of experience working in the critical care units. I employed purposive sampling to select participants who were most relevant to the study's purpose. The purposive sampling strategy was designed to select participants with a comprehensive grasp of patient safety practices within their unit.

I established precise research objectives and clearly defined the criteria that potential participants must meet before being recruited (Creswell & Poth, 2018). To implement my descriptive phenomenological research design, I employed a combination of recruitment methods, including Facebook and LinkedIn, as well as emailing nurses in my personal network with targeted flyers aimed at registered nurses (RNs) working in critical care units (Appendix A—Recruitment Flyer). In my research, I conducted a series of semi-structured interviews with a carefully selected sample of eight critical care nurses. This choice was strategically made to ensure a rich depth of insight into their experiences and perspectives. The process continued until I reached a point known as data saturation, which occurred after interviewing the eighth participant. Data saturation

is a critical concept in qualitative research, signifying the moment when additional data collection or further analysis no longer yields new insights or themes. Essentially, it indicates that the body of information collected sufficiently captures the underlying patterns and issues pertinent to the study.

Achieving data saturation is vital for the integrity of my research findings. It confirms that the data set is robust enough to encompass the essential insights and themes relevant to the exploration of critical care nursing. Therefore, the saturation point not only solidifies the soundness of the conclusions drawn from the research but also enhances the reliability and validity of the overall findings. This aspect is crucial for establishing a comprehensive understanding of the phenomena being studied, as emphasized by Creswell and Poth (2018). Participants were selected intentionally rather than randomly selected. This method is also referred to as selective sampling (Saldana, 2021).

The key characteristics of purposive sampling included intentional selection, where participants were chosen based on specific criteria or characteristics that aligned with the research objectives. The types of purposive sampling I utilized were heterogeneous sampling, which selects participants with diverse characteristics to gain a broad perspective, and critical case sampling, which chooses cases that were critical to understanding the phenomenon or achieving the research goals (Saldana, 2021).

Instrumentation

Before each interview, participants were reminded of the study's purpose and assured that their confidentiality would be maintained, as their names would be de-

identified (Creswell & Poth, 2018). I assigned each participant a unique identifier, which will be used throughout the study to ensure confidentiality. Prior to the interview, each participant consented to have it recorded and signed an informed consent form. These criteria included factors such as demographics, experiences, expertise, and perspectives that align with the research topic. More specific criteria led to more focused and relevant insights, which utilized experiences as a criterion to better understand the different perceptions of patient safety among critical care registered nurses.

A semi-structured interview process was employed for this dissertation, allowing for a flexible yet consistent approach to data collection. Participants in this study underwent recorded interviews, during which the main research question, as outlined in Appendix B - Interview Guide, was asked. This guide also included probing questions designed to delve deeper into the interviewee's responses, ensuring a comprehensive understanding of their experiences. The interviews, lasting between 30 minutes to one hour, were conducted remotely and audio-recorded using either Zoom or the RecMyCalls App. To manage the extensive data collected from these interviews, I utilized Delve, a professional software program specifically designed for qualitative data organization. This software facilitated the systematic categorization and analysis of the interview transcripts. Additionally, Microsoft Word and Excel were employed as data collection instruments to ensure that the data was accurately and systematically recorded. I used Microsoft Word to reflect on the data and jot down (field notes during the analysis and review process). This reflective practice was crucial in identifying patterns and themes

within the data, ultimately contributing to a richer and more nuanced understanding of the participants' experiences

All digital recordings of the interviews were securely stored on a password-protected laptop, adhering to stringent confidentiality and security protocols as recommended by Creswell & Creswell (2018). These measures were essential to protect the privacy of the participants and maintain the integrity of the research data. My approach to this research design was to conduct a thorough and detailed investigation into the experiences of critical care registered nurses. Hammersley and Atkinson (1995) highlight the central role of the researcher in qualitative research as the primary instrument for collecting, analyzing, and interpreting data. Unlike quantitative research, which uses standardized tools like surveys or experiments to gather and analyze data objectively, qualitative research is inherently subjective and shaped by the researcher's unique skills, experiences, and perspectives.

Data Analysis Plan

Saldana’s qualitative coding method was used to analyze the data. This approach involved organizing and interpreting both textual and visual data (Saldana, 2021). During the initial coding cycle, Elemental Coding was employed, focusing on the foundational aspects of the data. This included using descriptive codes to capture basic information and in-vivo codes that directly reflect the language used by participants. In the subsequent cycle, the initial codes were refined and synthesized through Focused Coding. This step involved developing categories or concepts pertinent to the research question. Finally, overarching themes were identified in the data, encapsulating the essence of the

information within a broader context. One of the fundamental criteria for inclusion in the analysis was the presence of themes that helped address the research question at hand (Saldana, 2021). The interview transcripts served as the primary source of information for this study; by carefully reviewing the transcripts, they were compared to the original recordings to gain a comprehensive understanding of the gathered information.

In step two, descriptive details about the observed patterns were provided by categorizing the data into themes within the Excel document. Sub-codes were also used to expand on the major ideas using extended phrases or sentences (Saldana, 2021). In the thematic analysis process, the interview transcripts were thoroughly reviewed to fully understand the information obtained. Patterns, themes, or interesting elements within the data were observed. After reviewing the transcripts, different aspects within the data were identified. These elements were used to create a list of codes, sub-codes, and themes. The aspects that captured the essence and relevance of the study were carefully selected. Microsoft Word and Excel were used to create the list, and then the interviews were manually coded. Additionally, Delve was used as an organizing tool to further understand the themes and codes obtained (Pyo, 2023). These themes represented the key themes that emerged from the data, and it was ensured that the themes generated were distinct and comprehensive, allowing for comprehensive data analysis.

In step three, after generating the initial themes, a process of reflection was engaged in to refine them. Microsoft Word was used for this process by jotting down some findings during the analysis process and reflecting on them. The interview process was reflected upon, recalling the moments when the eight nurses were interviewed

individually, most of them over the phone and the calls were audio-recorded, and the others were via Zoom and audio recorded as well. This occurred during Winter of 2024. Once the themes had been refined, they were formulated. This involved naming the themes and confirming they were related to the research question; it was established that the chosen themes provided a comprehensive understanding of the perceptions of Registered nurses regarding patient safety in the critical care unit.

In step four, writing and rewriting were engaged in to deepen the understanding of registered nurses' perceptions of patient safety in critical care units. The essence of the phenomenon was reviewed and expressed, ensuring that the codes and themes discovered truly reflected the interviews of the eight nurses. In step five, it was ensured that a connection was maintained to the lived experience that the eight nurses shared throughout the research process. The Word document and Excel Spreadsheet were reviewed to ensure that key points from the notes were not omitted. The research remained grounded in the participants' perspectives. Rigorous analysis techniques were employed to ensure the integrity and reliability of the data. It was ensured that the statements shared by the interviewees were depicted in the findings. Although themes were used, the overarching findings should reflect their input. The key focus was on the research question. Lastly, step six involved ensuring the overall design of the study. A holistic view was proven by examining each interview keyword against those from other interviews; quotes were included in separate tables (see Tables 4-6). The tables highlighted the quotes from the three main themes that were deciphered from the data analysis (Saldana, 2021).

Issues of Trustworthiness

Qualitative research plays a pivotal role in gaining a nuanced understanding of complex healthcare phenomena of patient safety. To confirm the trustworthiness of qualitative studies, Lincoln and Guba (1985) established four essential criteria: credibility (internal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity).

Credibility (Lincoln and Guba, 1985) was achieved through rigorous triangulation of data sources, ensuring a comprehensive and accurate representation of the study findings. Triangulation involved the integration of multiple perspectives and methods to validate the data and enhance the trustworthiness of the research. For this study, data was collected from in-depth interviews and field notes .with eight registered nurses (RNs) specializing in patient safety within critical care units. Each nurse was interviewed separately using an audio-recording device to capture detailed insights. To further guarantee accuracy, the transcripts of these interviews were reviewed with the participants. This process, known as member checking, allowed the nurses to confirm the accuracy of their statements and provide additional feedback. Additionally, participants were emailed copies of their transcripts, inviting them to review and offer further input, which strengthened the reliability of the data. In addition to participant validation, peer debriefing was employed to enhance the study's validity. This involved consulting a classmate with no vested interest in the project. The peer debriefing process included a thorough review of the interview transcripts, methodology, and findings. Such

collaboration is widely recognized as a technique for bolstering credibility in qualitative research (Lincoln & Guba, 19885, Delve, 2022).

Triangulation in this study also extended to the use of multiple data points within the interviews. By analyzing recurring themes and cross-referencing responses across participants, a more nuanced understanding of patient safety in critical care units was achieved. For example, if several nurses highlighted similar challenges, such as staffing shortages or communication breakdowns, these patterns were noted as significant findings. Conversely, any outlier perspectives were carefully examined to ensure they were not overlooked or dismissed without justification. This multi-faceted approach to triangulation not only enhanced the credibility of the study but also provided a robust framework for ensuring the validity and reliability of the findings. By combining participant validation, peer review, and thematic analysis, the research process upheld high standards of rigor and trustworthiness.

Dependability was addressed by acknowledging the dynamic and unstable nature of the natural context. The unstable nature of the natural context in qualitative research highlights the dynamic and ever-changing nature of real-world settings. These settings are not static; they evolve over time, which poses challenges for maintaining a consistent or stable context during data collection and analysis. Qualitative research, particularly in naturalistic settings, seeks to explore and understand complex phenomena as they occur in real-life environments. This requires as a researcher that I was flexible and responsive to the shifting conditions and circumstances that may arise during the research process. As noted by Lincoln and Guba (1985), acknowledging and adapting to these changes is

necessary for capturing the nuanced and evolving nature of the phenomena being studied. I implemented transparent methods, including systematic recording, organizing, and disclosing analysis techniques in sufficient detail for others to evaluate the process.

Transferability, as defined by Lincoln & Guba (1985), is the extent to which findings from one context or study can be applied or are relevant to another setting or group. This is a critical concept in qualitative research, where findings are inherently context-dependent, and generalization is not the objective. Instead, I aimed to provide a "thick description" of their findings, offering enough detail about the context, processes, and conditions to allow others to evaluate the applicability of these findings to their own settings. In the context of transferring findings from CCU to another unit in the hospital—such as applying strategies to reduce patient falls, transferability requires a detailed understanding of the CCU's unique characteristics and how these influenced the outcomes. This ensures that other units can make informed decisions about whether and how to implement similar strategies. See Appendix D- Thick description examples.

Confirmability was established through identifying recurring themes, trends, or causal relationships by contrasting data elements (Saldana, 2021). A confirmability audit was conducted to verify the consistency of findings, interpretations, and recommendations. This involved cross-checking data to ensure that findings were supported by evidence and transparently addressing potential biases. Participants and advisors reviewed transcripts, notes, charts, and coding frameworks to validate the themes identified. By adhering to these criteria, the research process upheld rigorous

standards of trustworthiness, ensuring the validity and reliability of the findings while fostering confidence in their applicability to healthcare settings.

Ethical Procedures

According to Creswell and Poth (2018), ethical procedures in qualitative research encompass maintaining confidentiality, obtaining informed consent, demonstrating respect, conducting appropriate data collection and analysis, being transparent, and safeguarding participant identities. These procedures are crucial for ensuring the ethical conduct of qualitative research. Prior to the interview, I informed the participants and obtained their consent to record the interview, which was expected to last between 30 and 60 minutes. To maintain anonymity of my data analysis, participants were assigned pseudonyms (Simon, 2011), enabling them to express their experiences authentically while preserving confidentiality. This approach also accounted for potential changes in participants' circumstances or external factors that might influence research outcomes.

Ethical procedures are critical in qualitative research to ensure the integrity of the study and the well-being of participants (Saldana, 2021). Core Ethical Guidelines include:

I treated all participants with dignity and respect throughout the research process. I obtained informed consent and ensured their confidentiality.

I avoided manipulating or omitting data, even when specific findings seemed problematic. I engaged with the data thoroughly and transparently.

I maintained intellectual honesty in my analysis, avoiding bias or cherry-picking evidence to support preconceived conclusions.

I consider any ethical dilemmas or personal biases that may arise during the study. Reflexivity helped me uphold ethical rigor.

I exercise caution and empathetic support, especially in sensitive fieldwork scenarios. This approach involves prioritizing the safety and well-being of all participants while ensuring ethical research practices. It includes a thorough assessment of potential risks, the implementation of measures to mitigate these risks, and a clear understanding of the potential benefits of the study. Additionally, the recruitment process is carefully managed to ensure inclusivity, transparency, and respect for participants' autonomy. This method not only fosters trust but also enhances the validity and reliability of the data collected, contributing to the broader goal of advancing knowledge in a responsible and ethical manner. As required by the Institutional Review Board (IRB), I gained the IRB approval (#11-05-24-0453476).

I used Word documents as my journal to take field notes, aiding in the effective organization of data (Saldana, 2021). I used Microsoft Word and Excel to organize the data, created and stored interview questions in a password-encrypted laptop, transcribed the interview recordings, and entered and analyzed the data. The journal will play a pivotal role in the study by functioning as a structured tool for reflecting on experiences, data, and research methodologies. It will serve as a platform for documenting not only thoughts and feelings but also detailed observations and insights. This comprehensive approach will enhance the depth of data collection and provide a richer context for analysis, ensuring a more thorough understanding of the research processes and findings. The Interview and RecMyCalls App, specifically designed for this purpose, can also be

used to record interviews, and the digital recordings of the interviews, including the archived data, were securely stored on a password-protected laptop. Furthermore, my primary responsibility was to safeguard participants and their data, which involved establishing clear mechanisms to protect the confidentiality of participants throughout the research process. All participants were assigned pseudonyms. I am the only one who has access to the data and the password of the device. The data will be destroyed after seven years.

Summary

In Chapter 3, I presented a comprehensive examination of qualitative research methodologies, with a focus on the study's purpose, which was to explore perceptions of RNs regarding patient safety in CCUs using a descriptive phenomenology approach. This methodology was chosen for its emphasis on understanding lived experiences of individuals.

As the researcher, my responsibilities involved facilitation of the research process, data collection, interpretation of findings, and acting as an ethical guardian. A reflective approach was maintained to ensure personal biases did not influence the study. The target population was critical care RNs who were 18 or older with a minimum of 1 year of experience in CCUs. This ensured participants possessed relevant and substantial experience involving managing patient safety challenges in critical care settings. Data collection was conducted through semi-structured interviews, a method which involves using predetermined questions with flexibility to explore emergent themes during participant responses. These interviews were recorded and transcribed verbatim,

preserving richness and authenticity of participants' narratives. This facilitated a deep qualitative analysis of their lived experiences. To uphold rigor of the study, strategies were implemented to ensure credibility, transferability, dependability, and confirmability, which were key criteria for establishing trustworthiness in qualitative research. Triangulation was employed to cross-reference data from various sources, enhancing validity of findings. Thick descriptions were used to provide detailed contextual information, enabling readers to assess applicability of results to other settings. A confirmability audit was used to document the research process, ensuring transparency and objectivity.

Ethical considerations were integral to the study. Confidentiality was maintained by anonymizing participant data, and informed consent was obtained to ensure voluntary participation. Respect for participants' autonomy and dignity was prioritized, and data collection and analysis involved adhering to ethical guidelines. Transparency during the research process was maintained, and safeguards were implemented to protect participant identities. As the researcher, I completed the Collaborative Institutional Training Initiative program course on ethical research practices and obtained IRB approval, ensuring compliance with established ethical standards. Chapter 4 includes study findings involving valuable insights regarding lived experiences of RNs in CCUs and their perceptions of patient safety, contributing to broader understanding of healthcare quality in critical care environments.

Chapter 4: Results

The purpose of this study was to explore RNs' perceptions of patient safety in CCUs. The research question was" What are RNs' perceptions of patient safety in CCUs? In this chapter, I outline the research environment, describe demographics of participants, explain methods of data collection and analysis, provide evidence of study reliability, and present findings and a summary. Kakeman et al. (2021) stated robust cultures of patient safety within healthcare organizations involve shared values, beliefs, and norms among both management and staff regarding safety practices. This is crucial for ensuring all members of organizations prioritize patient safety during their daily operations. RNs are pivotal to patient safety, as they are frontline caregivers who interact with patients on a daily basis, providing direct care and monitoring patient conditions closely.

Setting

Patient safety is a vital component of healthcare delivery, particularly in ICUs where patients are highly susceptible to complications (Agency for Healthcare Research and Quality, 2019). For this study, I conducted interviews during a 4-week period over the phone. These interviews were audio-recorded and then transcribed for analysis. There were no identifiable personal or organizational factors that could have influenced participants' experiences during the study. I could not see participants, nor could they see me. Their setting was not identifiable to me. Absence of influence in this study was a result of the methodology, which involved prioritizing participant confidentiality and neutrality. Participants were recruited from a variety of nonidentifiable healthcare facilities, ensuring no single institution could exert undue influence over their responses.

Additionally, to prevent any potential biases associated with organizational affiliation, data regarding participants' employers and places of practice were deliberately not collected. This approach was implemented to preserve the study's integrity and ensure experiences of critical care nurses were captured in an unbiased manner that was free from external pressures. Recruitment was carried out through social media, and all participants had to be RNs, at least 18, and working in critical care settings. No information was gathered about their place of residence or specific place of work.

Demographics

Demographic details of participants were meticulously recorded, including age, gender, and length of experience in CCUs (see Table 1). The cohort consisted of eight nurses, with four between the age range of 41 to 50, representing half the group. Additionally, one was between 20 and 30, two were between 31 and 40, and one was between 51 and 60. Six participants were female, accounting for 75% of the sample size, while two (25%) were male. Regarding professional experience, five participants accumulated 10 to 20 years of specialized experience in critical care nursing. Two had 5 to 9 years of experience, and one had 21 to 30 years of experience.

Table 1

Participant Demographics

Characteristics	Total	%
Age (years)		
20-30	1	12.5
31-40	2	25
41-50	4	50
51-60	1	12.5
Gender		
Male	2	25

Female	6	75
Years of Experience		
5-9	2	25
10-20	5	62.5
21-30	1	12.5

Data Collection

The qualitative data collection process involves gathering in-depth, detailed, and context-specific information to explore individual experiences, perspectives, and interactions. This method prioritizes depth over breadth, capturing nuances and complexities of human behaviors and perceptions (Saldana, 2021).

Recruitment Process

The recruitment process for this study began with a social media post which attracted initial interest from 10 individuals. Following this, 15 formal invitation emails were sent, including five to individuals in my work network asking them to share the invitation with their own nursing networks (see Appendix C). This multi-pronged recruitment strategy established a diverse pool of potential participants. Ultimately, eight participants agreed to take part in the study. After being fully informed about the research purpose and significance, they provided written informed consent. Data saturation was achieved with the eighth participant, ensuring findings were comprehensive and robust.

Confidentiality and Anonymity

To protect participants' identities, strict confidentiality and anonymity protocols were followed throughout the study. Each participant was assigned a pseudonym (P1 through P8), ensuring their responses could not be traced back to them. This step is

critical in qualitative research to build trust and encouraging honest and open sharing of experiences.

Attribute Coding

Given the diverse locations and backgrounds of participants, attribute coding was employed as a qualitative data management tool. Attribute coding involves categorizing and organizing data based on participant characteristics such as demographics and location. This method is particularly useful for studies with multiple participants or varied data sources such as interview transcripts, field notes, journals, artifacts. By assigning addresses to data, researchers can easily locate and contextualize information during analysis (Mason, 1994).

Data Collection Methods

Two primary types of data were collected. Demographic information included basic details about participants, including age, gender, and professional background. In addition, semi-structured interviews were designed to explore participants' perceptions of patient safety in CCUs. Open-ended questions were used for participants to share their thoughts and experiences freely, providing rich qualitative insights.

Interviews were conducted via an audio recording platform to ensure accuracy. Additional field notes were taken in real time using Microsoft Word to capture nonverbal cues, contextual details, and points that might not have been fully captured in recordings. These audio recordings were later transcribed using RecMyCalls and integrated into the data analysis process. I played back recordings, and transcripts from RecMyCalls were downloaded and verified by me.

Semi-Structured Interviews

Semi-structured interviews are widely regarded as an effective method in qualitative research, particularly for exploring complex topics like nurses' experiences and perspectives on patient safety. This format balances the flexibility of open-ended questions with the focus of a predefined interview guide, enabling researchers to delve deeply into participants' thoughts while maintaining consistency across interviews. As Wei et al. (2021) note, this approach is particularly valuable for uncovering the factors influencing attitudes and behaviors in professional settings.

Adherence to Research Design

The data collection process strictly followed the procedures outlined in Chapter 3 of the research design. No unexpected challenges or deviations occurred, and the count of eight participants remained consistent throughout. This rigorous adherence to the planned methodology ensured the reliability and validity of the data collected.

Data Analysis

The data analysis process began with a comprehensive and in-depth manual review of the eight interview transcripts. I jotted down some direct participant quotes and keywords from the transcript into Microsoft Excel. Each transcript was subjected to a meticulous reading process, during which key concepts and themes articulated by participants were identified and extracted. This initial step was crucial in capturing the essence of the participants' responses and ensuring that no significant information was overlooked. To further enrich the analysis, these insights were supplemented with detailed journaling during the data collection phase. These field notes in my journal

provided additional context and a nuanced understanding of the information, enhancing the overall depth and quality of the analysis. These transcripts were systematically imported into the Delve tool (Delve, 2022), a sophisticated software designed to streamline the organization and management of qualitative data. This tool ensured a structured and efficient approach to the analysis, facilitating the extraction of meaningful insights from the data.

Following this preparatory phase, the analysis progressed to the initial coding phase. In this stage, the data was categorized into meaningful phrases and words based on participants' responses. This step was pivotal in uncovering recurring themes and patterns within the dataset, laying the groundwork for a deeper understanding of the issues at hand. The coding process involved systematically identifying and labeling significant elements of the data, ensuring that each piece of information was appropriately categorized. The codes generated during this phase were then systematically organized by frequency, providing a structured overview of the most significant issues (refer to Table 2). This organization by frequency allowed for a clear identification of the most prevalent and pressing concerns within the dataset.

The analysis identified a diverse range of critical issues, each with its own frequency of occurrence (See Table 2). These included 'lack of safety protocols' with a frequency of 3, 'fall risk' with a frequency of 7, challenges in 'teamwork' with a frequency of 11, 'medication errors' with a frequency of 15, insufficient 'staff training' with a frequency of 7, the importance of 'regular reviews' with a frequency of 3, 'inadequate resources and support' with a frequency of 10, 'communication' barriers with a frequency

of 18, and limited 'patient engagement' with a frequency of 17. Among these, the top three codes with the highest frequencies were 'communication' (18), 'patient engagement' (17), and 'medication errors' (15). These codes underscore the complex and interconnected challenges encountered in the study's context. They highlight the multifaceted nature of the issues impacting the study's focus area, emphasizing the need for a comprehensive approach to address these challenges. Collectively, these codes form a robust foundation for further analysis and interpretation. They provide a detailed and nuanced understanding of the key issues, enabling a deeper exploration of the multifaceted challenges impacting the study's focus area. This comprehensive approach to data analysis ensures that the findings are both thorough and actionable, paving the way for informed decision-making and effective interventions.

Table 2

Codes and Respective Frequencies

Codes	Frequency
Lack of Safety Protocols	3
Fall Risk	7
Teamwork	11
Medication Errors	15
Staff Training	7
Regular Reviews	3
Inadequate Resources & Support	10
Communication	18
Patient Engagement	17

In the next step of the data analysis process, seven distinct subcodes were extracted from the nine initial codes. This process involved a meticulous examination of the data to identify more specific themes within the broader categories. Each subcode was

carefully categorized based on its relevance to the initial codes, ensuring a structured and logical progression from general themes to more detailed insights.

The subcode 'Safety Risk' emerged from two initial codes: 'Medication Error' and 'Fall Risk.' This indicates that safety risks were identified in the context of both medication errors and fall incidents, highlighting areas where patient safety might be compromised. Similarly, the subcode 'Preventive Measure' was derived from the codes 'Lack of Safety Protocol' and 'Inadequate Resources and Support.' This suggests that preventive measures are necessary to address gaps in safety protocols and to provide adequate resources and support to ensure patient safety. Further analysis identified three additional subcodes: 'Education and Training' emerged from 'Staff Training,' indicating that education and training are crucial components of staff development. 'Staffing Levels' was derived from 'Regular Reviews,' pointing to the need for regular evaluations to ensure appropriate staffing levels. 'Empowerment' was identified from 'Patient Engagement,' emphasizing the importance of empowering patients to participate actively in their care. Additionally, the code 'Teamwork' led to the subcode 'Effective Teamwork,' highlighting the significance of collaboration and coordination among healthcare team members. The code 'Communication' resulted in the subcode 'Information Sharing,' underscoring the need for effective communication and the exchange of information among healthcare providers.

To provide a more precise understanding of the interview findings, these codes and subcodes were deciphered and organized into themes. This organization helps to structure the data and facilitates a deeper interpretation of the findings. The subcodes

'safety risk' and 'preventive measure' were grouped under the theme 'Patient Safety,' which focuses on identifying and mitigating risks to ensure the safety and well-being of patients. The subcodes 'training and education,' 'staffing levels,' and 'empowerment' were categorized under the theme 'Resource Allocation.' This theme addresses the need for adequate resources, including well-trained staff and sufficient staffing levels, to provide high-quality patient care. Lastly, the subcodes 'effective teamwork' and 'information sharing' were grouped under the theme 'Communication and Team Dynamics,' which emphasizes the importance of teamwork and effective communication in healthcare settings. These three overarching themes—'Patient Safety,' 'Communication and Team Dynamics,' and 'Resource Allocation'—were illustrated in Figure 1. This structured approach highlights the key insights from the data and facilitates a clearer interpretation of the findings, providing a comprehensive understanding of the factors that influence patient care and healthcare outcomes.

Figure 1

Patient Safety Codes, Subcodes, and Themes

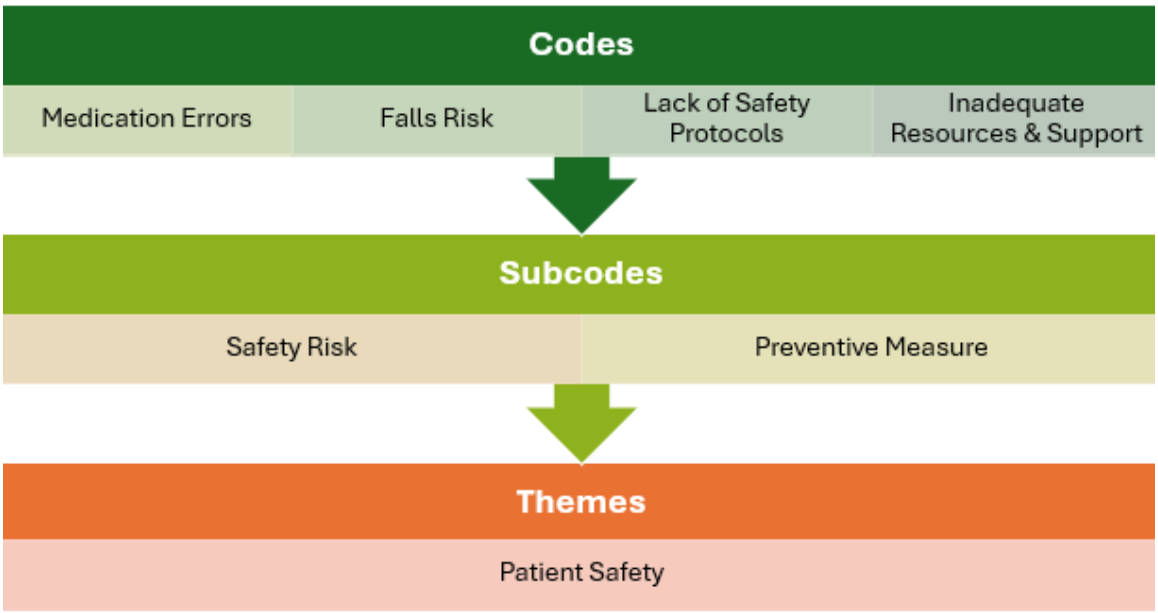


Figure 2

Communication & Team Dynamics Codes, Subcodes, and Themes

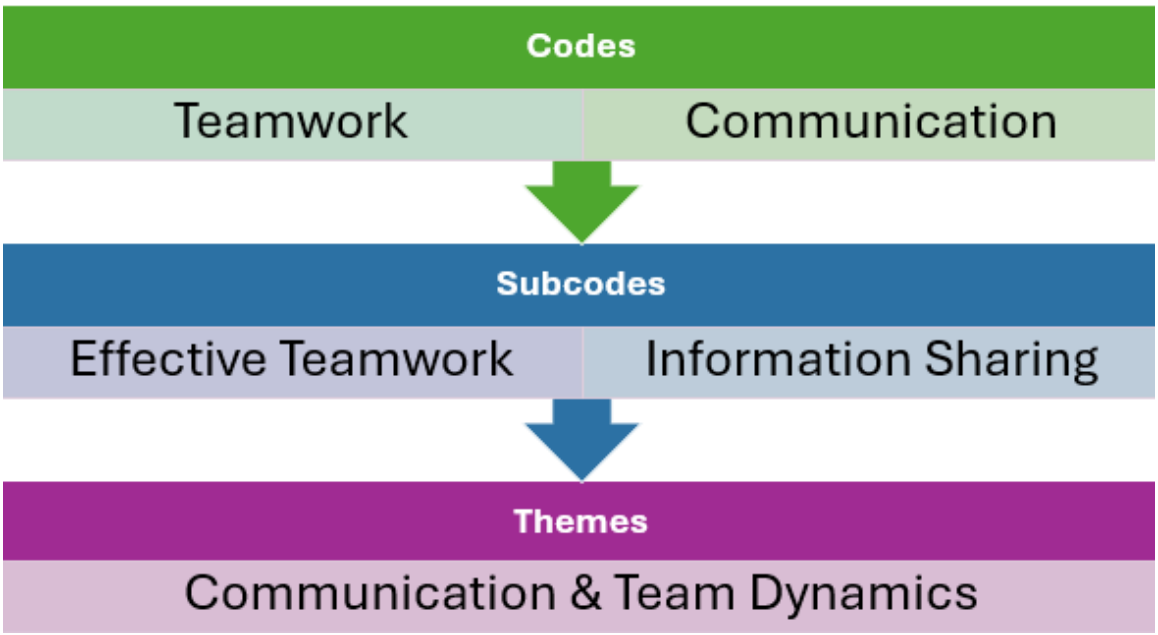
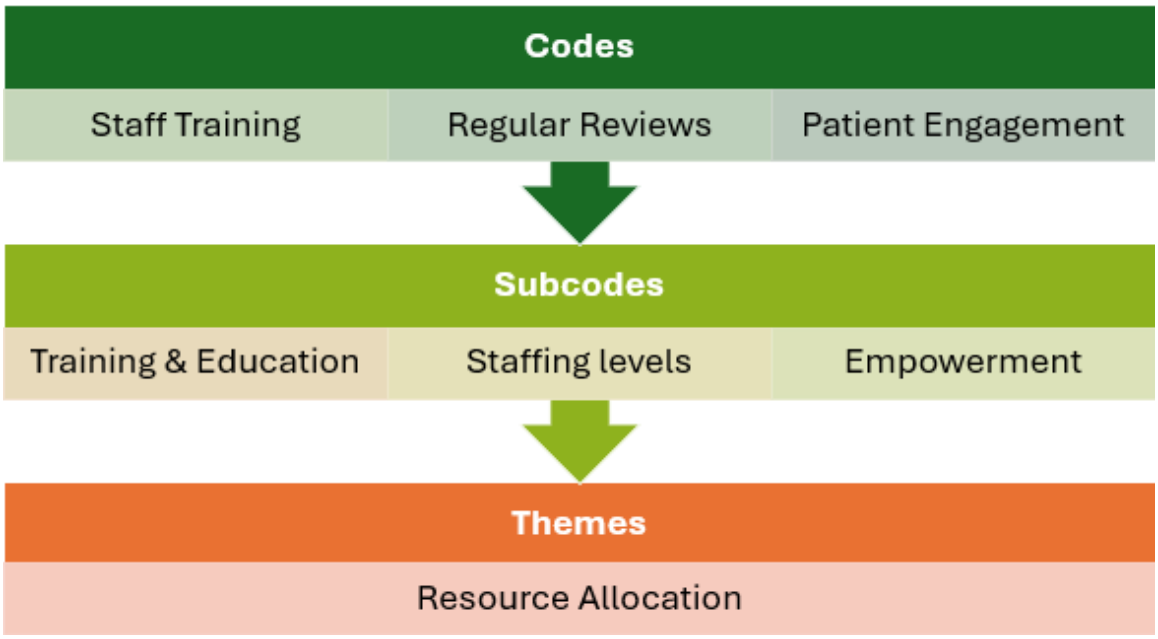


Figure 3

Resource Allocation Codes, Subcodes, and Themes



Evidence of Trustworthiness

Qualitative research relies on well-established strategies to demonstrate trustworthiness, as outlined in Chapter 3 and originally defined by Lincoln and Guba (1985). These strategies are grounded in four essential criteria: credibility (internal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity). Each criterion is meticulously addressed to ensure the rigor and reliability of the research findings.

Credibility

Credibility focuses on ensuring the findings accurately represent the research participants' experiences and realities. This study achieved credibility through rigorous triangulation of data sources. Data were collected from in-depth interviews with eight

registered nurses (RNs) specializing in patient safety within critical care units. The use of multiple data points from these interviews allowed for a comprehensive understanding of the topic.

To further enhance credibility, I conducted member checking. Each interview was audio-recorded, transcribed verbatim, and reviewed with participants to confirm the accuracy of the transcripts. Participants were also provided with copies of their transcripts, enabling them to provide additional feedback or clarify their responses. This iterative process ensured that the data faithfully captured their perspectives.

Additionally, peer debriefing was employed as an external validation method. A classmate with no vested interest in the project reviewed the transcripts, methodology, and findings. This collaborative review process, recognized as a robust method for enhancing qualitative research credibility (Delve, 2022), provided an external check on the researcher's interpretations and conclusions.

Transferability

Transferability refers to the extent to which research findings can be applied to other contexts or groups. To ensure transferability, the study provided a "thick description" (Lincoln & Guba, 1985) of the research context, participants, and processes. This detailed account included information about the participants' roles, the setting of the critical care units, and the procedures followed during data collection.

By offering this level of detail, the findings enable readers to assess whether the findings are applicable to their own contexts, thus supporting the external validity of the research.

Dependability

Dependability addresses the consistency and transparency of the research process, ensuring that the findings are reliable and replicable. This study recognized the dynamic nature of the research context and implemented systematic methods for recording and organizing data. Detailed documentation of the research process, including data collection and analysis techniques, was maintained to allow external evaluation.

Confirmability

Confirmability ensures that findings are based on the data rather than the researcher's biases or interpretations. This study identifies recurring themes, trends, or causal relationships by systematically contrasting data elements (Saldana, 2021). This methodical approach minimized subjective interpretations and ensured that findings were grounded in the data.

A confirmability audit was conducted to verify the consistency of findings, interpretations, and recommendations. This involved cross-checking data to ensure transparency and evidence-based conclusions. Participants and advisors reviewed transcripts, notes, charts, and coding frameworks to validate the identified themes, providing an additional layer of objectivity and rigor (Lincoln & Guba, 1985).

Results

The subsequent text is an effort to describe the essence of the study's participants' perception of patient safety in the CCU. Each participant had a story to tell. Thematic analysis was employed within the following subcodes: (1) safety risk, (2) preventive measures, (3) effective teamwork, (4) information sharing, (5) training and education, (6)

staffing levels, and (7) empowerment. These subcodes were not arbitrarily chosen but were derived from the data itself, reflecting key aspects of the participants' narratives. For instance, "safety risk" encompassed any identified hazards or concerns related to patient care, while "preventive measures" focused on strategies to mitigate these risks. "Effective teamwork" and "information sharing" highlighted the collaborative efforts and communication practices among healthcare professionals. "Training and education" addressed the need for ongoing professional development, and "staffing levels" examined the adequacy of personnel to meet patient care demands. Lastly, "empowerment" captured the participants' sense of agency and ability to influence positive outcomes in their work environment. These subcodes supported the thematic analysis of the three main themes illustrated in Figures 1-3. The themes are rooted in the codes from direct responses of the participants and are aligned with the research question, as shown in Table 3. This alignment ensures that the research findings are directly tied to the study's objectives and provide meaningful insights into the research problem.

It is important to note that theming the data is not an expedient method of qualitative analysis and is as intensive as coding and requires comparable reflection on participant meanings and outcomes. The process of theming involves several stages, starting with the initial coding of data. This coding process involves breaking down the data into manageable units, such as phrases or sentences, and assigning codes that represent the content or meaning of these units. Once coding is complete, I cluster the codes according to commonality, grouping similar codes together to form subcodes. These subcodes are then refined into themes, which are constructed through careful

interpretation of the data. This process required me to engage deeply with the data, considering not only what participants said but also how and why they expressed certain ideas. Themes do not mysteriously or magically emerge, as some writers state in their reports; themes are researchers' constructions and interpretations (Saldana, 2021). This means that themes are not inherent in the data but are shaped by the researcher's analytical framework, theoretical perspective, and understanding of the research context. Therefore, the process of theming is both rigorous and creative, demanding a balance between systematic analysis and interpretive insight.

Table 3

Research Question and Themes

Research Question	Themes
What are the RNs' perceptions of patient safety in critical care units?	Patient Safety Communication & Team Dynamics Resource Allocation

The research question guiding this qualitative study is: "What are the RNs' perceptions of patient safety in the critical care unit?" The study aimed to delve deeply into the nuanced perspectives of registered nurses (RNs) regarding patient safety in this high-stakes environment. By employing a rigorous thematic data analysis approach, the research derived codes, subcodes, and overarching themes from in-depth interviews and qualitative data. Through these themes, the study provides a comprehensive understanding of how RNs perceive and navigate the complexities of patient safety in critical care units. It underscores the need for systemic support, effective communication,

and adequate resources to empower nurses in their efforts to deliver safe, high-quality care.

Three primary themes emerged from analysis:

This theme encapsulated the various challenges and potential hazards that nurses perceive as threats to patient well-being in the critical care unit. Key issues included staffing shortages, which can lead to overworked nurses and increased likelihood of errors; equipment failures, which can disrupt critical monitoring and life-sustaining interventions; and communication breakdowns, which can result in misunderstandings or delays in care. These factors collectively highlight the multifaceted nature of patient safety concerns in critical care settings.

This theme focused on the collaborative processes and information-sharing practices among healthcare teams. Effective communication is crucial for ensuring that patient care is seamless and that all team members are aligned in their roles and responsibilities. The nurses highlighted the importance of clear, timely communication, mutual respect, and trust within teams to foster a culture of safety and minimize errors. Challenges such as hierarchical barriers or lack of standardized communication protocols were also noted as areas requiring improvement.

The third theme revolved around the preventive measures and strategies that nurses employ to enhance patient safety. This included adherence to established protocols for monitoring patients, such as regular assessments and use of checklists; commitment to best practices in care delivery; and participation in ongoing education and training

programs. These proactive measures reflect the nurses' dedication to mitigating risks related to patient care and improving outcomes in a resource-constrained environment.

Theme 1: Patient Safety

El-Khani (2019) highlighted a critical relationship between nurses' perceptions of patient safety culture (PSC) and the occurrence of adverse events (AEs). Nurses with lower perceptions of PSC were found to have higher perceptions of AEs, indicating a direct correlation between PSC and safety outcomes. This underscores the importance of fostering a strong PSC within healthcare settings to mitigate risks and enhance patient safety. The research identified two significant subcodes—'safety risk' and 'preventive measures'—that contributed to the overarching theme of 'patient safety.' These subcodes emphasize the necessity of recognizing potential safety risks and implementing effective preventive strategies. By addressing these areas, healthcare organizations can significantly reduce the likelihood of AEs and improve the overall perception of PSC among nursing teams.

To achieve this, the study recommended regular training and educational programs focused on enhancing nurses' understanding of PSC and AEs. Such initiatives can empower nurses with the knowledge and skills needed to identify risks and take proactive measures to prevent adverse outcomes. Additionally, fostering a supportive work environment that encourages open communication about safety concerns was identified as a key factor in improving PSC perceptions and reducing AEs. By addressing safety risks and promoting preventive measures, healthcare organizations can create a safer environment for both patients and healthcare providers.

Safety Risk

Assessing patient safety culture (PSC) is a vital process for gaining a comprehensive understanding of patient safety issues, guiding targeted improvement actions, and optimizing both the quality of care and patient safety outcomes (Tlili et al., 2022). By systematically evaluating PSC, healthcare organizations can identify latent safety risks, enhance staff awareness, and foster a culture of accountability and continuous improvement. Participants (P) in the study provided detailed insights into specific safety risks they encountered. Participants, P3 and P4 highlighted 'medication errors such as the risk associated with incorrect medication administration' and emphasized the 'importance of accurate medication identification and verification.' These statements reflect the multifaceted challenges in medication safety, including prescription errors, mislabeling, and lapses during administration. Such errors can result in severe patient harm, including adverse drug reactions and treatment failures. To address these risks, healthcare institutions must prioritize robust medication management systems, including barcode scanning, automated dispensing cabinets, and comprehensive staff training programs focused on error prevention strategies.

Additionally, participants, P1, P2, P5, and P6 identified 'patient falls as a critical concern,' noting the 'high prevalence of such incidents' and 'emphasizing the need for assessment and monitoring strategies to identify individuals at risk' (e.g., fall risk). Falls in healthcare settings are a significant contributor to patient morbidity and mortality, often resulting from a combination of intrinsic factors (e.g., age, mobility limitations, and chronic conditions) and extrinsic factors (e.g., environmental hazards and inadequate

supervision). Participants stressed the importance of implementing fall prevention protocols, such as regular risk assessments using validated tools like the Morse Fall Scale, environmental modifications to reduce hazards, and patient education to promote safety awareness.

These findings highlight the necessity of integrating PSC assessments into organizational quality improvement frameworks. By addressing the concerns raised by participants—such as medication safety and fall prevention—healthcare providers can create safer environments, reduce adverse events, and ultimately improve patient outcomes. Educational programs and interdisciplinary collaboration are essential components of this process, ensuring that all staff members are equipped with the knowledge and skills needed to mitigate risks effectively.

Preventive Measures

Prevention strategies were integral to reducing the likelihood of adverse events (AE) in critical care units, as emphasized by participants, P4 and P6-8. P6 highlighted the critical role of regular fall risk assessments and continuous monitoring of at-risk patients, stating, "Regular assessments to identify fall risks are essential for preventing falls and ensuring the safety of patients in critical care settings." P8 further elaborated on this by suggesting that implementing preventive measures, such as "using bed rails and alarm systems for patients at risk of falling," could significantly decrease the number of falls and enhance patient safety outcomes. They added, "These measures not only reduce the likelihood of falls but also provide peace of mind for both patients and healthcare providers."

Regarding medication safety procedures, P4 stressed the necessity of establishing clear and comprehensive protocols for medication identification and verification, noting, "Accurately identifying medications before administration is crucial to preventing errors and ensuring patient safety." They further explained, "Without clear protocols, there is a higher risk of misidentification, which can lead to serious adverse events." Additionally, P7 underscored the importance of "implementing systems to prevent medication errors and ensuring effective communication regarding medication orders," stating, "Effective communication and systematic checks at every stage of the medication process are paramount for maintaining medication safety and avoiding adverse events." They also mentioned, "A well-communicated and organized system can drastically reduce the chances of errors and improve overall patient care.

Table 4

Safety Risks and Preventive Measures

Participants	Safety Risks	Preventive Measures
P1	“Patient falls are a critical concern.”	
P2	“There’s a high prevalence of patient falls.” “Patient Falls were a huge concern.”	
P3	“Medication errors such as the risk associated with incorrect medication administration”	
P4	“The importance of accurate medication identification and verification” “medication that was ordered for somebody else”	“Accurately identifying medications”
P5	“Emphasizing the need for fall risk assessment; and monitoring strategies to identify individuals at risk.”	
P6		"Regular assessments to identify fall risks"
P7		"Implementing systems to prevent medication errors and ensuring effective communication regarding medication orders"
P8		"using bed rails and alarm systems for patients at risk of falling"

Theme 2: Communication and Team Dynamics

The theme of communication and team dynamics emerged from two significant subcodes: effective teamwork and information sharing. These elements are integral to the functioning of healthcare systems, where the exchange of accurate and timely information between patients, families, and healthcare providers is essential for delivering safe and high-quality care. Effective communication ensures that patient needs are thoroughly understood, diagnoses are precise, and treatments are appropriately tailored to individual circumstances. Team dynamics in a hospital setting encompass the psychological interactions and collaborative behaviors among healthcare professionals. These dynamics include how team members communicate, coordinate, and collaborate to

achieve shared patient care goals. Positive team dynamics are hallmarked by trust, clearly defined roles, open communication, and a collective sense of responsibility. Such dynamics foster an environment where healthcare providers can work cohesively, reducing the likelihood of errors and enhancing both patient outcomes and staff satisfaction. Conversely, poor team dynamics—marked by misunderstandings, unclear responsibilities, or lack of trust—can lead to medical errors, inefficiencies, and compromised care quality.

P2, P4, P5, and P6 provided detailed commentary on the critical nature of these themes. For instance, P2 remarked, "In my experience, poor communication is often the root cause of avoidable mistakes. When we communicate clearly, we not only prevent errors but also build trust with patients and their families." P4 emphasized the importance of role clarity: "Knowing who is responsible for what and being able to rely on your teammates makes all the difference. It allows us to focus on delivering the best possible care instead of wasting time figuring out who's doing what." P5 highlighted the emotional and relational aspects of teamwork: "Trust is everything. When you trust your colleagues, you can share concerns or ask for help without fear of judgment. That openness improves not just patient care but also our own well-being." Similarly, P6 stressed the role of information sharing: "I've seen cases where a lack of information sharing led to delays in treatment. It's frustrating because those situations are entirely preventable with better communication systems and habits." These insights, as summarized in Table 5, illustrate the profound impact of communication and team dynamics on healthcare delivery. Effective teamwork and information sharing are not just

abstract concepts but practical necessities that directly influence patient safety, treatment quality, and overall healthcare outcomes.

Effective Teamwork

P5 provided comprehensive insights into the dynamics of effective teamwork, emphasizing the critical need for collaboration among healthcare professionals to deliver holistic and integrated care. They explained, 'Collaboration is not just about working together; it's about understanding and leveraging each other's strengths to provide care that no single professional can achieve alone.' This collaboration, as P5 emphasized, was pivotal for achieving what they termed 'great teamwork.' They further elaborated, 'Great teamwork means that every voice is heard, every perspective is valued, and everyone is focused on the shared goal of improving patient outcomes.'

Building on this foundation, P6 expanded on the concept by highlighting the role of interdisciplinary communication in bolstering patient safety. They stated, 'Interdisciplinary communication is the glue that holds teamwork together. It's about more than just exchanging information; it's about creating a shared mental model where everyone understands their role and how it fits into the bigger picture.' They stressed that true teamwork transcends individual disciplines, fostering an environment where diverse expertise converges to enhance overall patient outcomes. P6 added, 'When we communicate effectively across disciplines, we reduce errors, improve efficiency, and ultimately provide safer, higher-quality care. It's about creating a culture where everyone feels empowered to speak up and contribute to the best possible patient care.'

Information Sharing

P2 and P4 both underscored the pivotal role of information sharing in healthcare settings, emphasizing its importance in ensuring patient safety and maintaining high standards of care. Their direct quotes (see Table 5) provide specific insights into how communication gaps and lack of regular updates can impact healthcare outcomes. P4 highlighted the necessity of "addressing communication gaps that could result in errors, such as miscommunication regarding medications." They elaborated that such gaps often arise during transitions of care or when multiple team members are involved in patient management. P4 stressed that clear and accurate communication is not just a procedural requirement but a critical safeguard against errors that could lead to adverse events, including medication errors, delayed treatments, or misdiagnoses. They further suggested that implementing structured communication protocols, such as standardized handoff procedures or checklists, could significantly reduce these risks.

Similarly, P2 emphasized the value of "regular updates and briefings among staff." They argued that ongoing discussions about patient safety foster a proactive approach to care, ensuring that all team members remain informed about critical developments and concerns. P2 noted that these updates are particularly important in dynamic healthcare environments, where rapid changes in patient conditions or treatment plans can occur. By promoting consistent communication, they suggested, healthcare teams can enhance coordination, reduce the likelihood of errors, and improve overall patient outcomes. Together, the perspectives of P2 and P4 illustrate the multifaceted nature of information sharing in healthcare. Their insights highlight the need for both

reactive measures, such as addressing communication gaps, and proactive strategies, like regular briefings, to ensure a cohesive and error-resistant care environment.

Table 5

Effective Teamwork and Information Sharing

Participants	Effective Teamwork	Information Sharing
P2		"regular updates and briefings among staff"
P4		"addressing communication gaps that could result in errors, such as miscommunication regarding medications"
P5	"great teamwork." “true teamwork transcends individual disciplines”	
P6	“interdisciplinary communication”, “fostering an environment where diverse expertise converges”	

Theme 3: Resource Allocation

Resource allocation in critical care units is a complex and dynamic process that involves the strategic distribution of limited healthcare resources, such as medical supplies, staff, equipment, and bed capacity, across various departments and patients. This process is essential for ensuring efficient and effective patient care by addressing factors like urgency, clinical need, and resource availability. It requires meticulous planning and coordination to maximize the quality of care while maintaining cost efficiency. The overarching goal is to ensure that the right resources are allocated to the right patients at the right time, thereby optimizing patient outcomes and system performance. Participants in this study, including P1, P2, P4, P5, P7, and P8, provided in-depth insights into the intricacies of resource allocation, particularly focusing on staffing levels, empowerment, and training and education. These elements were identified as

critical to achieving successful resource management in high-pressure healthcare environments. P1 emphasized the foundational role of adequate staffing, stating, "Without sufficient staff, even the most well-thought-out resource allocation plans are bound to fail." This highlights the necessity of having enough healthcare professionals to meet patient demands effectively. P5 added, "During peak times, staffing becomes the linchpin of resource allocation. If we don't have enough hands on deck, patient care suffers immediately." Empowering staff to make real-time decisions was another key theme. P2 explained, "Empowered staff can adapt quickly to changing circumstances, ensuring that resources are utilized where they are most needed without delays." This sentiment was echoed by P4, who noted, "When staff feel empowered, they are more proactive and confident in their decision-making, which directly impacts patient care quality." Participants also underscored the importance of continuous training and education. P4 stated, "Ongoing education ensures that staff are equipped with the latest knowledge and skills, which is crucial in a field where technology and best practices evolve rapidly." P7 added, "Training programs that simulate resource-limited scenarios prepare staff for real-world challenges, making them more effective in their roles." Interdisciplinary collaboration was identified as a cornerstone of effective resource allocation. P5 remarked, "Resource allocation isn't just a task for one department—it requires input from all teams, from nursing to administration, to create a cohesive strategy." P8 further elaborated, "Leadership plays a vital role in fostering collaboration. Strong leaders ensure that all voices are heard and that decisions are made with the bigger picture in mind." Leadership was frequently mentioned as a critical factor in successful

resource allocation. P8 summarized this by saying, "A good leader not only coordinates resources but also inspires confidence among staff, ensuring that everyone works towards the same goal."

These detailed discussions, as summarized in Table 6, illustrate the multifaceted nature of resource allocation in critical care units. The participants' quotes provide a nuanced understanding of the challenges and strategies involved, emphasizing the importance of a well-prepared, empowered, and collaborative workforce in achieving optimal outcomes. This comprehensive approach ensures that resource allocation is not only efficient but also equitable and patient-centered.

Training and Education

P4 and P5 provided comprehensive insights into the indispensable role of training and education in achieving optimal healthcare delivery. Participant, P4 emphasized the "significance of continuous training for staff to mitigate risks," stating that "sufficient experience and training are not merely desirable but absolutely critical for ensuring patient safety, reducing preventable errors, and maintaining the highest standards of care." They elaborated that continuous education allows healthcare professionals to remain proficient in evolving medical practices, adapt to technological advancements, and confidently navigate the complexities of clinical environments.

P5 further expanded on this by "stressing the provision of resources that enhance staff competencies in patient safety," explaining that "effective training programs must be robust, well-structured, and adequately supported by institutional resources." They highlighted the need for a multifaceted approach that includes hands-on simulation

training, interdisciplinary collaboration, and continuous professional development opportunities. Both participants agreed that investing in comprehensive training and education is essential for fostering a culture of safety, improving clinical outcomes, and equipping healthcare professionals with the skills and knowledge necessary to meet the challenges of modern healthcare delivery.

Staffing Levels

P7 and P8 provided a detailed analysis of the challenges associated with staffing levels in healthcare environments, emphasizing the profound impact on patient care and safety. Participant, P7 highlighted the risks posed by inadequate staffing, stating, "Inadequate staffing negatively impacts patient care and safety due to insufficient resources." This statement underscores how insufficient staffing can lead to delays in care delivery, increased errors, and reduced ability to respond to patient needs promptly. It also points to the broader implications for patient safety, such as compromised monitoring and oversight, which are essential for preventing adverse events. Participant, P8 further elaborated on the necessity of adequate staffing, explaining, "There is a critical need for an adequate number of personnel to effectively monitor and support patients." This perspective highlights the importance of having sufficient staff to ensure continuous patient monitoring, timely interventions, and comprehensive support. Adequate staffing enables healthcare providers to deliver personalized care, address complex patient needs, and maintain high standards of safety and quality. These insights from P7 and P8 reveal the multifaceted nature of staffing challenges. Insufficient staffing not only jeopardizes patient outcomes but also places undue pressure on existing staff, leading to burnout,

decreased job satisfaction, and higher turnover rates. Their observations serve as a critical reminder of the need for healthcare organizations to prioritize adequate staffing as a cornerstone of effective and safe patient care.

Empowerment

Empowerment emerged as a pivotal concept for both P1 and P2, who underscored its multifaceted significance in healthcare settings. P1 articulated that "employees should feel empowered to encourage patients to be proactive about their safety and care," emphasizing that empowerment is not merely a desirable trait but an essential one for fostering patient engagement. This perspective positions empowerment as a mechanism through which healthcare providers can inspire patients to take an active role in their own health journey, thereby enhancing overall safety and care quality. Participant, P1 further reinforced this idea by repeatedly describing empowerment as a "critical component in patient interactions," suggesting that it forms the backbone of effective and meaningful exchanges between providers and patients.

P2, in contrast, expanded on the concept by focusing on the educational and communicative dimensions of empowerment. They stated that employees should feel empowered to "provide education to patients about their risks and how to communicate their needs," highlighting the role of healthcare providers as educators who equip patients with the knowledge necessary to make informed decisions. P2 also emphasized the importance of "encouraging patients to speak up for their safety and getting to know them well to significantly reduce the risk of errors," framing empowerment as a tool for reducing preventable harm. This approach underscores the idea that empowered patients

are not only better informed but also more likely to advocate for their own safety, creating a collaborative environment where errors are less likely to occur. Together, the insights from P1 and P2 reveal that empowerment in healthcare is a multidimensional construct. It involves not only the confidence and authority of providers to guide and educate but also the active involvement of patients in their care processes. By integrating these perspectives, the discussion highlights how empowerment can serve as a bridge between providers and patients, fostering a culture of safety, communication, and shared responsibility. This holistic understanding of empowerment aligns with broader efforts to improve patient outcomes and reduce healthcare errors through proactive and informed engagement.

Table 6

Training and Education and Staffing, and Empowerment

Participants	Training & Education	Staffing levels	Empowerment
P1			"employees should feel empowered to encourage patients to be proactive about their safety and care". "critical component in patient interactions".
P2			"provide education to patients about their risks and how to communicate their needs", "encouraging patients to speak up for their safety and getting to know them well to significantly reduce the risk of errors".
P4	"significance of continuous training for staff to mitigate risks", "sufficient experience and training"		
P5	"stressing the provision of resources that enhance staff competencies in patient safety."		
P7		"inadequate staffing negatively impacting patient care and safety due to insufficient resources"	
P8		"critical need for an adequate number of personnel to effectively monitor and support patients".	

Summary

The primary aim of my qualitative study was to address perceptions held by RNs regarding patient safety within CCUs. By employing coding and thematic analysis techniques, seven distinct subcodes emerged from data: safety risk, preventive measures, effective teamwork, information sharing, staffing levels, empowerment, and training and education. From these subcodes, I was able to identify three overarching themes: patient safety, resource allocation, and communication and team dynamics. To address the central research question, I found RNs perceived a critical need for organizations to cultivate cultures that prioritize teamwork and promote open lines of communication among interdisciplinary teams. This is essential in terms of ensuring patient safety remains a top priority in critical care settings.

Regular briefings and meetings were highlighted as essential for ensuring all staff members remain informed about existing safety risks. Proactive communications are crucial for preventing potential errors and fostering safer patient environments. Furthermore, I determined there was an emphasis on the importance of educating both patients and their families regarding safety risks in critical care settings. By empowering patients to understand these risks, they are encouraged to take active roles in their own safety. I also found alerting healthcare staff to patients' needs can enhance safety and care in CCUs. This underscores the interconnected nature of communication, patient empowerment, and overall safety outcomes in critical care environments.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of my qualitative study was to explore RNs' perceptions of patient safety in CCUs. I used a qualitative design grounded in the descriptive phenomenology approach, which was particularly suited for exploring lived experiences of individuals. Descriptive phenomenology emphasizes understanding nuanced meanings that individuals attach to their experiences, making it an ideal approach for this topic.

Qualitative research involves exploring and understanding intricacies of human experiences, behaviors, and social phenomena (Saldana, 2021). Qualitative research is not merely about collecting data but also about interpreting and making sense of them (Saldana, 2021). This involves employing methods such as coding, thematic analysis, and narrative inquiry to generate detailed descriptions, identify patterns, and develop theories or action plans that contribute to a deeper understanding of the subject matter.

In this study, three dominant themes emerged from data: patient safety, communication and team dynamics, and resource allocation. These themes were used to provide a comprehensive framework for understanding the multifaceted nature of patient safety in CCUs.

Participants emphasized the critical importance of maintaining safe environments for patients in CCUs. Safety not only involves the absence of harm but also proactive approaches to anticipating and mitigating risks. Participants highlighted the need for vigilance, adherence to protocols, and continuous monitoring to prevent adverse events such as medication errors, infections, and complications arising from delayed interventions.

Effective communication emerged as a cornerstone of patient safety. Participants underscored the importance of clear, timely, and respectful communications among team members to ensure coordinated care. Team dynamics involving mutual respect, trust, and collaboration, were identified as pivotal in terms of influencing the ability to address complex patient needs efficiently. Challenges such as hierarchical barriers and miscommunication were noted as significant barriers to optimal care delivery.

Allocation of resources, including staff, equipment, and support services, was identified as a critical determinant of patient safety. Participants expressed concerns about the impact of understaffing and inadequate resources on their ability to provide high-quality care. They emphasized the need for adequate staffing to ensure they could devote sufficient time and attention to each patient, as well as access up-to-date equipment and technologies to support safe and effective care delivery.

Findings of this study underscore the need for targeted educational initiatives to enhance patient safety in CCUs. Training programs should focus on improving communication skills, fostering collaborative team dynamics, and equipping nurses with tools to advocate for optimal resource allocation. Additionally, ongoing professional development opportunities should be provided to ensure nurses remain adept at identifying and mitigating risks in real time.

Interpretation of the Findings

This study revealed several key findings. These are aligned with existing literature, which identified communication breakdowns (Karaca & Durna, 2019) and fatigue (IHI, 2024) as critical factors affecting patient safety. Participants had diverse

perceptions regarding safety culture among RNs, which were influenced by factors like experience, education, and work environment.

Descriptive phenomenology emphasizes exploring subjective experiences of individuals within their specific contexts (Husserl, 1983). For RNs in CCUs, this involves addressing their daily interactions, challenges, and observations related to patient safety (Kakeman et al., 2021). I addressed how RNs perceived factors influencing safety, including communication breakdowns, fatigue, and organizational culture.

Through descriptive phenomenology, my study revealed how RNs perceived safety culture in CCUs. Communication breakdowns are not isolated events but are part of larger systemic issues influenced by organizational practices and interpersonal dynamics (Gonzalo, 2023). Descriptive phenomenology also facilitates application of theoretical frameworks like Watson's theory of human caring (Watson,1979). By analyzing RNs' experiences using this theory, I highlighted the importance of creating supportive environments that foster trust, respect, and open communication.

Through in-depth interviews and reflective analysis, descriptive phenomenology was used to address nuanced perceptions of RNs regarding patient safety. This aligned with my goal of understanding the multifaceted nature of safety in CCUs.

The methodology was helpful for identifying recurring themes such as the impact of fatigue, importance of effective communication, and role of supportive safety cultures. These themes were used to directly address the research question via RNs' perceptions.

By describing experiences of participants within the context of their work environments, descriptive phenomenology ensured findings were grounded in real-world

conditions. This was crucial for developing targeted interventions to improve patient safety.

Watson's theory (1979) enriched the study in terms of aligning with lived experiences of RNs. Watson's focus on empathy and human connection complemented my study findings on the need for open communication and mutual respect in CCUs.

Descriptive phenomenology provides a robust methodological foundation for answering the research question by offering a deep understanding of RNs' perceptions of patient safety in CCUs. By combining this approach with Watson's theory of Human Caring, the study not only addresses the immediate concerns of communication and fatigue but also proposes holistic strategies for fostering a safer and more compassionate healthcare environment.

Limitations of the Study

The study's limitations stem from several factors that could influence the findings of this study. First, as the Director of Patient Safety and Risk Management, my extensive background in the field may introduce personal bias, potentially shaping how data is interpreted, and findings are presented. Objectivity, as emphasized by Creswell and Creswell (2018), is a cornerstone of rigorous qualitative research. To address this, I adhered to Lincoln and Guba's (1985) four criteria of trustworthiness: credibility (internal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity). These measures were implemented to ensure methodological rigor and mitigate potential biases.

Another limitation is the study's exclusive focus on registered nurses (RNs), excluding other healthcare professionals such as physicians, technicians, and administrators. These groups might have provided additional, valuable perspectives on patient safety, potentially enriching the study's findings. This narrow scope could limit the comprehensiveness of the insights gained. Furthermore, the demanding nature of RNs' roles may have impacted the study's data collection process. Comprehensive interviews with RNs, who often face significant time constraints and workload pressures, could have resulted in reduced response rates or incomplete data. This limitation highlights the challenge of balancing thorough data collection with the practical realities of participants' professional responsibilities. Cultural sensitivity and relevance were critical considerations in the study. Ensuring that findings were applicable across different critical care units required careful contextual analysis. However, the unique dynamics of each unit may limit the broader applicability of the study's conclusions.

Finally, ethical considerations, such as obtaining informed consent and protecting participants' rights, were paramount. While these measures upheld the integrity of the research, they also presented challenges. For instance, fully informing RNs about the study's purpose, their rights, and potential risks sometimes led to non-participation, which could have affected the representativeness of the sample. These limitations underscore the importance of interpreting the study's findings within the context of its scope and constraints, recognizing the potential for bias and the challenges inherent in qualitative research.

Recommendations

The study's exclusive focus on registered nurses (RNs) presents a limitation. As noted by Tavares et al. (2021), the workload of critical care nurses impacts the care provided to elderly patients, suggesting that the perspectives of other healthcare professionals, such as physicians and technicians, could provide a more holistic understanding of patient safety. The demanding nature of RNs' roles, as highlighted by Lopez Cardenas et al. (2022), may have also limited the depth and completeness of the data collected, as time constraints and workload pressures could have influenced participation and response quality.

Cultural sensitivity and the unique dynamics of each critical care unit further complicate the transferability of the findings. While the study's focus on contextual analysis is commendable, the distinct characteristics of different units may limit the applicability of the conclusions to other settings. This limitation underscores the need for future research to adopt a comparative approach across multiple institutions and cultural contexts.

Future studies should include healthcare professionals beyond RNs, such as physicians, technicians, and administrators, to provide a more comprehensive understanding of patient safety. This aligns with the findings of Lopez Cardenas et al. (2022), who emphasized the importance of nurse-patient interactions and interdisciplinary collaboration in improving care outcomes.

Conducting longitudinal research to track changes in patient safety perceptions over time would provide deeper insights into the impact of interventions and policy

changes. This approach could also help identify trends and long-term challenges in patient safety.

Expanding the research to include multiple known hospitals and cultural contexts would enhance the transferability of the findings. Comparative analyses could reveal how different institutional policies and cultural dynamics influence patient safety perceptions and outcomes.

Given the increasing role of technology in healthcare, future research could explore the impact of technological tools, such as electronic health records (EHRs) and automated communication systems, on patient safety and nursing practice. This would build on the recommendations for enhanced communication protocols identified in the current study.

Research evaluating the effectiveness of specific policy interventions, such as standardized communication tools (e.g., SBAR) and team-building workshops, would provide actionable insights for healthcare administrators. This aligns with the study's recommendations for improving communication and fostering a supportive safety culture.

The study's findings and literature review led to the following detailed recommendations. Enhanced communication protocols include implementing SBAR across all critical care units to standardize information exchange and improve clarity, as well as investing in digital tools to facilitate real-time communication and reduce the risk of miscommunication. Team-building interventions involve organizing interdisciplinary workshops to foster trust, collaboration, and mutual understanding, along with providing

conflict resolution training to address interpersonal challenges and improve team dynamics.

Resource optimization focuses on conducting regular staffing audits to assess levels and workload distribution, ensuring adequate support for safe and effective care, and investing in state-of-the-art equipment to reduce physical and mental strain on healthcare providers. Cultural sensitivity and training encompass implementing programs to enhance cultural competence among healthcare professionals and developing tailored strategies for each critical care unit based on their unique dynamics and challenges.

To support a safety culture, healthcare leaders should receive training to foster a culture of safety that emphasizes empathy, compassion, and open communication. Additionally, establishing anonymous feedback mechanisms will encourage nurses and other healthcare professionals to report safety concerns without fear of retaliation.

By addressing these areas, healthcare institutions can create a safer and more supportive environment for both patients and healthcare providers in critical care settings. These recommendations, grounded in the study's findings and the broader literature, offer a roadmap for improving patient safety and enhancing the quality of care in CCUs (See Appendix F).

Implications

This research provides a comprehensive framework for understanding and improving patient safety in critical care settings, emphasizing the theoretical, practical, and societal implications of its findings. Grounded in Watson's (1979) theory of Human Caring, the study underscores the significance of empathy, compassion, and human

connection in fostering a supportive healthcare environment. This theoretical foundation highlights the interplay between caring relationships and patient safety, offering a holistic perspective that extends beyond clinical outcomes to include the emotional and psychological well-being of both patients and healthcare providers.

Impact for Positive Social Change

Enhancing patient safety directly benefits patients by reducing medical errors, preventing complications, and improving overall health outcomes. Registered nurses (RNs) who perceive a strong safety culture are more likely to adopt practices that prioritize patient well-being, leading to quicker recoveries and better patient experiences. For example, improved communication and reduced fatigue among RNs can prevent errors such as medication mishaps or misdiagnoses, ultimately safeguarding patient lives.

Families of patients in critical care units often experience heightened stress and anxiety. A safer healthcare environment can alleviate these concerns by minimizing adverse events and ensuring transparent communication. Families are more likely to trust healthcare providers when they observe a commitment to safety, fostering a collaborative relationship between healthcare teams and patients' loved ones.

Healthcare organizations that prioritize safety cultures can achieve significant operational and financial benefits. Reduced adverse events lead to lower costs associated with medical errors and malpractice claims. Additionally, fostering a supportive environment enhances staff morale and job satisfaction, reducing burnout and turnover rates among RNs. This, in turn, creates a more stable workforce, improves team dynamics, and contributes to a positive organizational reputation.

At a macro level, the findings advocate for policies that enforce safety protocols, continuous professional education, and transparent reporting of adverse events. Implementing such policies can lead to a healthier population, reduced healthcare costs, and increased public trust in healthcare systems. For instance, mandating fatigue management programs for RNs can directly address a critical factor influencing patient safety.

Theoretical Implications

Watson's theory of human caring is a foundational framework in nursing and healthcare, emphasizing the importance of holistic, compassionate care. The study empirically validates the relevance of Watson's theory in critical care settings by aligning research themes with Watson's Ten Caritas of Caring (Table 7). This alignment demonstrates how theoretical principles translate into practical applications, enhancing patient care and team dynamics. See Appendix E- Watson’s 10 Caritas Alignment.

Key Insights:

Patient Safety: Caritas like creating a healing environment, valuing humanity, and showing love and kindness are directly tied to ensuring patient safety, highlighting the critical role of compassionate care in high-stakes settings.

Empathy, trust, and spiritual practices enhance team collaboration, demonstrating the interconnectedness of caring theory and effective communication.

Teaching, spiritual development, and genuine presence guide the efficient and ethical use of resources, ensuring sustainability in care delivery.

This detailed alignment underscores the practical utility of Watson's theory in critical care, bridging theoretical constructs with real-world applications to improve both patient outcomes and caregiver experiences.

Table 7

Watson's 10 Caritas and Themes

Ten Caritas	Themes
Showing love and kindness to oneself and others	Patient Safety
Being genuinely present to enable faith, hope, and inner subjective life	Communication & Team Dynamics
Developing one's spiritual practices	Resource Allocation
Creating trusting relationships	Communication & Team Dynamics
Showing empathy and forgiveness	Communication & Team Dynamics
Using different ways of knowing	Communication & Team Dynamics
Engaging in teaching and learning experiences	Resource Allocation
Creating a caring and healing environment	Patient Safety
Valuing humanity	Patient Safety
Embracing the unknowns and miracles in life	Patient Safety

It demonstrates how a caring-based framework can enhance patient safety by addressing communication breakdowns, fatigue, and other systemic challenges. The findings also expand the theoretical understanding of how diverse RN perceptions—shaped by experience, education, and workplace culture—influence safety outcomes. This insight underscores the need for context-specific strategies tailored to the unique challenges faced by different nurse groups.

Descriptive Phenomenology and Positive Social Change

Incorporating descriptive phenomenology into this framework deepens the understanding of lived experiences within critical care settings. This approach emphasizes the interpretation of human experiences, shedding light on how RNs perceive and navigate safety challenges. By analyzing these experiences, healthcare organizations can foster a culture of safety that not only prioritizes patient care but also supports the well-being of healthcare providers. At the organizational level, fostering a culture of safety within critical care units can lead to numerous benefits (Abdelaliem et al., 2022). These impacts highlight the importance of addressing patient safety at multiple levels to achieve positive social change (Creswell & Creswell, 2018).

By addressing patient safety at multiple levels and incorporating theoretical insights into practical recommendations, the research provides a robust framework for achieving positive social change in healthcare. These efforts not only enhance patient outcomes but also contribute to a more resilient and compassionate healthcare system.

Conclusion

The study, a qualitative descriptive phenomenological investigation, explored registered nurses' perceptions of patient safety within critical care units. Through thematic analysis of participant interviews, three central themes emerged: patient safety, resource allocation, and communication and team dynamics. These findings underscore the multifaceted nature of patient safety and highlight the critical role of healthcare professionals, particularly nurses, in fostering a culture of safety.

Key recommendations from the study include embedding patient safety into the core of healthcare practices through standardized protocols, evidence-based practices, and continuous education. Effective communication, such as implementing the SBAR (Situation, Background, Assessment, Recommendation) protocol, was identified as essential for preventing errors and improving treatment outcomes. Addressing healthcare professional fatigue through adequate rest policies, mental health support, and workload management was also emphasized to reduce errors and enhance alertness.

The study advocates for fostering a supportive safety culture where healthcare professionals feel empowered to report concerns without fear of retribution. This involves leadership commitment, regular training, and open communication. Leveraging technology, such as electronic health records and clinical decision support systems, was highlighted as a tool to enhance real-time access to patient information and mitigate safety risks.

The research findings suggest that improving patient safety requires a comprehensive, multi-pronged approach. By enhancing communication, addressing fatigue, and creating a supportive safety culture, healthcare organizations can improve patient outcomes, reduce adverse events, and promote positive social change. The study's insights provide actionable strategies that can be adapted across various healthcare settings, reinforcing the critical role of registered nurses in driving patient safety initiatives.

Enhancing patient safety in critical care units requires a holistic approach that integrates effective communication, fatigue management, a supportive safety culture,

evidence-based practices, and technology. Registered nurses play a pivotal role in shaping and sustaining this culture, ultimately contributing to improved patient outcomes and positive social change in healthcare delivery.

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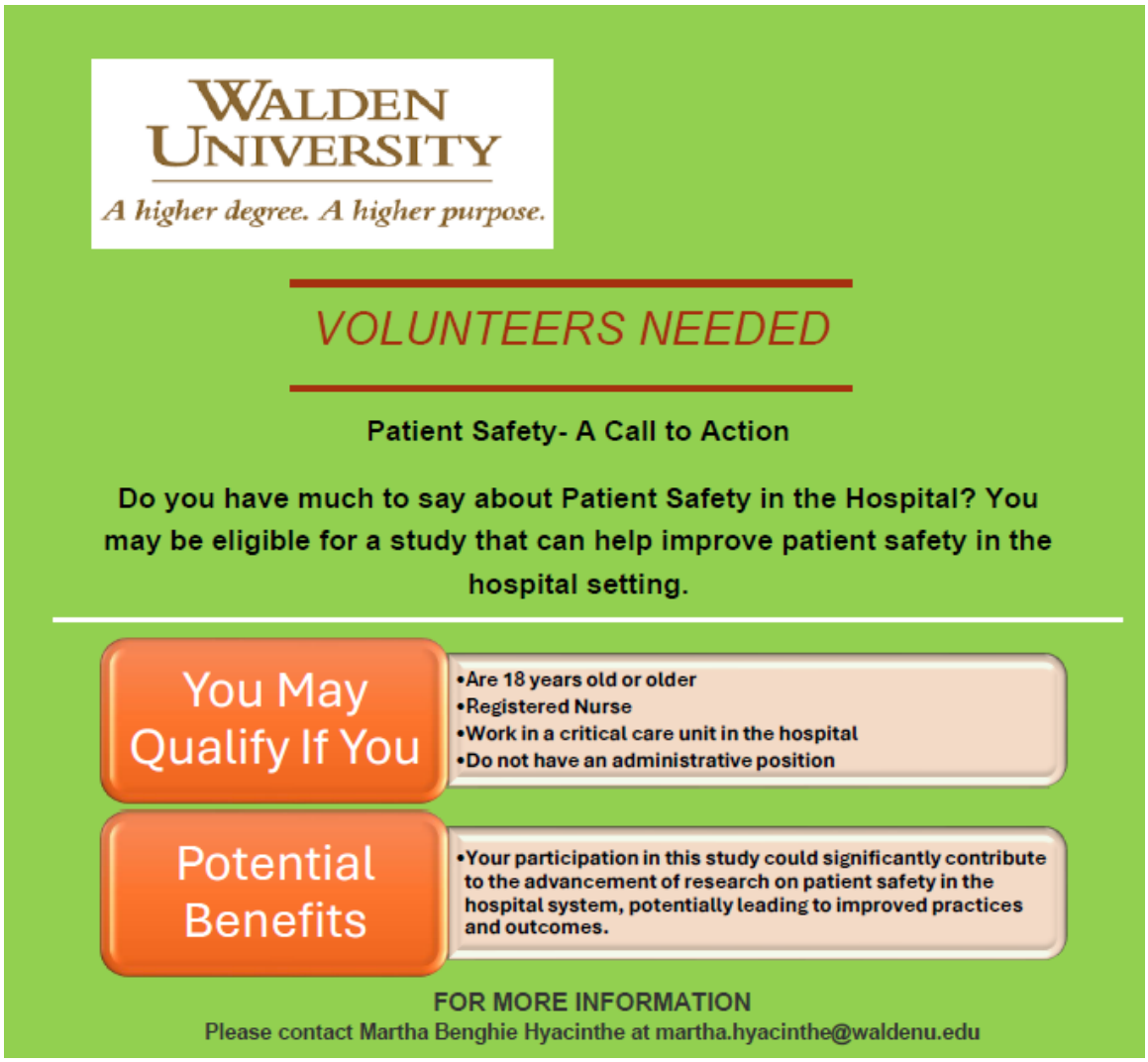
Appendix A: Recruitment Flyer



Appendix B: Interview Guide

1. Please share a bit about yourself.
2. Which department do you work in?
3. What is your role as a critical care nurse?

The main research question is:

What are the Registered Nurses' perceptions of patient safety in critical care units?

Possible probing questions based on their responses:

1. You said xxxx about safety; tell me more about that.
2. Tell me, what do you perceive as some of the issues……. (only if they share this)
3. (Only if they share their story about….) You said xxx about how the xxx could be improved……tell me more about that……
4. As you shared about how xxx could be improved, tell me more…xxx
5. Final question when finished. Is there anything else you would like to share with me?

Conclusion:

Thank you for taking the time to talk with me and share your valuable insights and perspectives on patient safety within critical care units.

Appendix C: Invitation Email

Subject: Invitation to Participate in a Qualitative Research Study

Dear [Recipient's Name],

I hope this message finds you thriving and in good health. My name is [Name Redacted], and I am pursuing a Ph.D. at Walden University, specializing in qualitative research methodologies. As I navigate through my program, I am dedicated to honing my skills in conducting qualitative research interviews, essential to understanding the nuanced experiences of professionals in the field.

I am reaching out with a specific request for your involvement as a participant in my research study. I am seeking registered nurses who work in critical care units—like yourself—willing to share their insights and experiences. The critical care environment is complex and demanding, and your perspective would provide invaluable input to my research, which aims to explore the registered nurses' perception of patient safety in critical care units.

Participating in this study involves a couple of straightforward steps. Initially, you will need to review and complete the Informed Consent statement that I have attached to this email. This document provides essential information regarding the study's objectives, details about the interview process, and an assurance of your rights and the confidentiality of the data collected.

The interview will be conducted via phone at a time that best suits your schedule. I anticipate that the conversation will take approximately 90 minutes and will be recorded to ensure accuracy and thoroughness in capturing your responses. I am fully aware of the

demands placed on your time in the critical care setting, so I aim to be flexible and accommodating in scheduling our discussion.

If you are interested and available to participate, please let me know before the end of October 2024. Your contributions would significantly enrich my research and offer profound insights into the critical care nursing profession.

Should you have any questions or require further information before making your decision, please feel free to contact me directly via phone at (phone number redacted) or email at (email address redacted).

Thank you for considering this opportunity to participate in research that illuminates the essential role of nurses in critical care. Your expertise and experiences are invaluable, and I genuinely appreciate your time and interest.

Warmest regards,

[Name Redacted]

[Contact Information Redacted]

[Academic Program]

Walden University

Appendix D: Thick Description Examples Related to Falls

Thick Description

Thick description involves providing a comprehensive account of the context in which findings occur, enabling a deeper understanding of the factors influencing outcomes. This approach is essential for assessing the transferability of interventions to other settings.

1. Patient Demographics: Describe the characteristics of the patient population, such as age, mobility issues, or sedation levels, which may influence the intervention's effectiveness.
2. Staffing Models: Detail the staffing structure, including nurse-to-patient ratios or the presence of specialized staff trained in specific interventions.
3. Care Protocols: Specify the interventions implemented, such as bed alarms, non-slip socks, or hourly rounding, and their impact on outcomes.

Example: "The CCU implemented a fall prevention program featuring hourly nurse rounding, bed alarms for high-risk patients, and staff education on fall risk identification. Over six months, falls decreased by 40%."

Relevance to Other Units

Thick description aids other units in evaluating the applicability of an intervention by comparing their context to the original setting.

- Medical-Surgical Units: Lower nurse-to-patient ratios and higher patient turnover may necessitate adjustments, such as reduced rounding frequency.

- Rehabilitation Units: Frequent patient ambulation may require integrating supervised mobility programs into fall prevention strategies.

Example: "The medical-surgical unit adopted bed alarms and adjusted rounding frequency to match staffing levels, achieving a 20% reduction in falls over three months."

Identifying Barriers and Facilitators

Highlighting factors that facilitated or hindered success helps anticipate challenges and adapt interventions effectively.

- Facilitators: Strong leadership, resource availability, and staff training.
- Barriers: High patient acuity, limited resources, or physical unit layouts that increase fall risks.

Example: "The CCU's success was supported by bed alarms and strong leadership. In contrast, the rehabilitation unit faced funding limitations but compensated by enhancing staff education on fall risks."

Appendix E: Watson’s 10 Caritas Alignment

Detailed Alignment of Watson's Ten Caritas with Research Themes:

1. Showing love and kindness to oneself and others
    - Theme: Patient Safety
    - Explanation: Demonstrating love and kindness fosters a supportive environment where patient safety is prioritized. Caregivers who embody these values are more likely to ensure that safety protocols are followed with diligence and compassion.
2. Being genuinely present to enable faith, hope, and inner subjective life
    - Theme: Communication & Team Dynamics
    - Explanation: Genuine presence enhances communication by building trust and understanding among team members. This dynamic supports a collaborative environment where patients and caregivers alike can maintain hope and emotional well-being.
3. Developing one's spiritual practices
    - Theme: Resource Allocation
    - Explanation: Spiritual practices contribute to caregivers' resilience and ability to manage resources effectively. A spiritually grounded approach ensures that care decisions are thoughtful and sustainable.
4. Creating trusting relationships
    - Theme: Communication & Team Dynamics

- Explanation: Trust is the cornerstone of effective communication and teamwork. Building trust among healthcare providers enhances collaboration, leading to better patient outcomes.

5. Showing empathy and forgiveness
    - Theme: Communication & Team Dynamics
    - Explanation: Empathy and forgiveness foster understanding and reduce conflict within teams. This approach creates a harmonious environment where caregivers can focus on delivering high-quality care.
6. Using different ways of knowing
    - Theme: Communication & Team Dynamics
    - Explanation: Integrating diverse knowledge systems, such as empirical, ethical, and personal insights, enriches team discussions and decision-making processes.
7. Engaging in teaching and learning experiences
    - Theme: Resource Allocation
    - Explanation: Continuous education ensures that caregivers are equipped with the latest knowledge and skills. This investment in learning optimizes resource use by improving care efficiency and effectiveness.
8. Creating a caring and healing environment
    - Theme: Patient Safety

- Explanation: A healing environment directly impacts patient safety by reducing stress and promoting recovery. Such environments are intentionally designed to support both physical and emotional well-being.

9. Valuing humanity
    - Theme: Patient Safety
    - Explanation: Recognizing the inherent worth of every individual ensures that care is patient-centered and respectful. This value aligns with safety practices that prioritize dignity and personalized care.
10. Embracing the unknowns and miracles in life
    - Theme: Patient Safety
    - Explanation: Acknowledging life's uncertainties encourages flexibility and adaptability in care delivery. This mindset helps caregivers navigate unexpected challenges while maintaining safety standards.

Appendix F: Recommendation for Practice

Recommendations for Practice

Communication Improvements:

- Implement structured communication protocols, such as SBAR (Situation, Background, Assessment, Recommendation), to reduce misunderstandings.
- Provide training on active listening and conflict resolution to enhance interpersonal dynamics among healthcare teams.

Fatigue Management:

- Develop fatigue mitigation strategies, including adequate staffing, regular breaks, and wellness programs.
- Encourage a culture where RNs feel empowered to report fatigue without fear of reprisal.

Supportive Safety Culture:

- Foster an environment where RNs feel valued and supported through regular feedback, recognition, and professional development opportunities.
- Establish interdisciplinary teams to collaboratively address safety challenges and implement evidence-based practices.

Tailored Strategies for Nurse Groups:

- Offer mentorship programs for less experienced RNs to build confidence and competence.
- Provide advanced training for experienced RNs to address complex safety issues in critical care settings.

Policy Advocacy:

- Advocate for regulations mandating continuous education on patient safety and fatigue management.
- Promote the integration of Watson's theory of Human Caring into healthcare curricula and organizational policies.