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## **The Impact of Continuing Professional Education on Nurses' Ability to Manage Emergency, Psychiatric, and Elderly Care Needs**

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### **Abstract**

Continuing Professional Education (CPE) has become a fundamental requirement in contemporary nursing practice as healthcare systems face rapid scientific advancement, increasing patient complexity, and growing demands for high-quality and safe care. Nurses are expected to manage diverse and challenging care needs, particularly in emergency situations, psychiatric settings, and elderly care, where advanced clinical competence, sound judgment, and professional adaptability are essential. This study aims to examine the impact of Continuing Professional Education on nurses' ability to effectively manage these critical areas of care. Using a descriptive-analytical approach, the study explores how participation in ongoing professional education programs influences nurses' knowledge, skills, confidence, and overall clinical performance. The findings suggest that CPE significantly enhances nurses' preparedness for emergency care, improves therapeutic communication and crisis management in psychiatric nursing, and strengthens person-centered and holistic approaches in elderly care. Continuous education is also associated with improved decision-making, reduced clinical errors, and greater adherence to evidence-based practices. Moreover, the study highlights that needs-based, practice-oriented, and well-supported CPE programs contribute positively to nursing care quality and patient safety. In conclusion, Continuing Professional Education plays a crucial role in strengthening professional competence, supporting lifelong learning, and improving care outcomes. Investing in effective CPE initiatives is therefore essential for sustaining high standards of nursing practice and enhancing the overall effectiveness of healthcare systems.

**Keyword:** Continuing Professional Education, Nursing Competence, Emergency Care, Psychiatric Nursing, Elderly Care.

## 1. Introduction

Continuing Professional Education (CPE) has become a fundamental component of modern healthcare systems, particularly in nursing practice, where rapid scientific advances, evolving patient needs, and increasing clinical complexity demand constant updating of knowledge and skills. Nurses are at the forefront of patient care and play a pivotal role in ensuring safety, quality, and continuity of care across diverse clinical settings. As healthcare environments grow more dynamic and unpredictable, the ability of nurses to respond effectively to emergency situations, manage psychiatric conditions, and provide comprehensive care for the elderly has emerged as a critical professional requirement. (Hogston, 1995)

Emergency care settings require nurses to make rapid clinical decisions, perform timely interventions, and manage high levels of stress while maintaining patient safety. Similarly, psychiatric nursing involves complex interpersonal skills, emotional regulation, ethical sensitivity, and specialized knowledge to address mental health crises, behavioral challenges, and stigma-related barriers to care. In the context of elderly care, nurses must be equipped to manage chronic illnesses, multimorbidity, cognitive decline, and age-related functional limitations, while also responding to the psychosocial needs of aging populations. These domains demand not only foundational nursing education but also continuous learning opportunities tailored to real-world clinical challenges. (Vázquez-Calatayud et al., 2021)

Continuing Professional Education provides a structured mechanism for enhancing nurses' competencies by bridging the gap between theoretical knowledge and clinical practice. Through workshops, in-service training, simulation-based learning, and evidence-based educational programs, CPE aims to strengthen clinical judgment, technical proficiency, communication skills, and professional confidence. Research suggests that nurses who actively engage in ongoing education demonstrate improved clinical performance, greater adaptability to complex care situations, and enhanced patient outcomes. However, the effectiveness of CPE programs largely depends on their relevance, quality, and alignment with nurses' actual practice needs. (Hogston, 1995)

Despite the recognized importance of continuing education, disparities remain in access to high-quality professional development opportunities, particularly in specialized areas such as emergency response, psychiatric care, and geriatric nursing. Inadequate or outdated training may limit nurses' ability to manage critical incidents, respond appropriately to mental health emergencies, or deliver person-centered care to elderly patients. Therefore, systematic examination of the impact of CPE on nurses' capabilities in these domains is essential to inform educational policy, curriculum design, and workforce development strategies. (Wood, 1998)

This study seeks to explore the impact of Continuing Professional Education on nurses' ability to effectively manage emergency, psychiatric, and elderly care needs. By examining how ongoing educational initiatives contribute to professional competence and clinical readiness, the study

aims to highlight the role of CPE as a key driver of quality improvement in nursing practice and patient care.

### **1-1 Background of the Topic**

Contemporary healthcare systems are increasingly challenged by complex and multifaceted care demands, including the growing incidence of medical emergencies, the rising burden of mental health disorders, and the rapid aging of populations. Nurses play a central role in addressing these challenges, as they are directly involved in continuous patient care, clinical decision-making, and patient safety across diverse healthcare settings. However, the knowledge and skills acquired during initial nursing education may become insufficient over time due to scientific advances, changing care standards, and emerging health needs. (Vázquez-Calatayud et al., 2021)

Continuing Professional Education (CPE) has therefore gained prominence as a key strategy for maintaining and enhancing nurses' professional competence. Ongoing educational programs enable nurses to update clinical knowledge, strengthen practical skills, and develop confidence in managing high-risk situations. In emergency care, CPE helps nurses improve rapid assessment and response abilities; in psychiatric care, it supports the development of effective communication and crisis management skills; and in elderly care, it enhances understanding of age-related conditions and person-centered care approaches. (Hogston, 1995)

Despite widespread recognition of its importance, the implementation and quality of Continuing Professional Education programs vary considerably across healthcare settings. Some programs may lack relevance to real clinical challenges or fail to address specialized care needs. This background highlights the necessity of examining the impact of CPE on nurses' ability to manage emergency, psychiatric, and elderly care needs, providing a foundation for improving nursing education and healthcare quality. (Wood, 1998)

### **1-2 Problem Statement**

Healthcare systems increasingly rely on nurses to manage complex and high-risk care situations, particularly in emergency settings, psychiatric services, and elderly care units. These areas require advanced clinical judgment, rapid decision-making, effective communication, and specialized knowledge. However, many nurses enter professional practice with limited preparation for the evolving demands of these fields, and the knowledge gained during initial education may become outdated as clinical guidelines, technologies, and patient needs change. (Vázquez-Calatayud et al., 2021)

Although Continuing Professional Education (CPE) is widely recognized as a critical mechanism for enhancing nurses' competencies, its practical impact on nurses' ability to manage emergency, psychiatric, and geriatric care needs remains insufficiently examined. In many healthcare settings, continuing education programs are inconsistently implemented, overly theoretical, or not aligned with nurses' real clinical challenges. As a result, nurses may experience gaps in confidence, skills, and clinical readiness, which can negatively influence the quality of care, patient safety, and health outcomes. (Hogston, 1995)

Furthermore, limited empirical evidence exists regarding how participation in CPE translates into improved clinical performance across different specialized care domains. Without clear understanding of this relationship, healthcare organizations may struggle to design effective educational interventions and allocate resources efficiently. Therefore, the central problem addressed in this study is the lack of comprehensive evidence on the effectiveness of Continuing Professional Education in strengthening nurses' capacity to manage emergency situations, psychiatric conditions, and the complex care needs of elderly patients.

### **1.3 Significance of the Study**

This study is significant as it addresses a critical need within contemporary healthcare systems to strengthen nurses' professional competence in managing emergency, psychiatric, and elderly care needs. By examining the impact of Continuing Professional Education (CPE) on nurses' clinical abilities, the study contributes valuable evidence on how ongoing learning influences nursing performance and patient care quality. Understanding this relationship is essential in a healthcare context characterized by rapid change, increasing patient complexity, and heightened expectations for safe and effective care. (Vázquez-Calatayud et al., 2021)

The findings of this study can inform nursing educators and curriculum planners by identifying key areas where continuing education most effectively enhances clinical skills and decision-making. For healthcare administrators and policymakers, the study offers insights that can guide the design, implementation, and evaluation of targeted CPE programs aligned with real clinical demands. Improved alignment between educational initiatives and practice needs may lead to more efficient use of educational resources and stronger workforce preparedness. (Hogston, 1995)

Moreover, this study holds practical significance for nurses themselves, as it highlights the value of lifelong learning in improving professional confidence, adaptability, and career development. Ultimately, by supporting evidence-based continuing education, the study has the potential to contribute to improved patient safety, higher quality of care, and better health outcomes in emergency, psychiatric, and geriatric care settings.

### **1.4 Purpose of the Study**

The primary purpose of this study is to investigate the impact of Continuing Professional Education (CPE) on nurses' ability to manage emergency, psychiatric, and elderly care needs effectively within contemporary healthcare settings. Given the increasing complexity of patient conditions and the expanding scope of nursing responsibilities, this study aims to examine how ongoing professional education contributes to the development and maintenance of essential clinical competencies among nurses.

Specifically, the study seeks to assess the influence of Continuing Professional Education on nurses' clinical knowledge, practical skills, decision-making capacity, and professional confidence in high-demand care areas. In emergency care, the study explores how CPE enhances nurses' preparedness for rapid assessment and timely intervention. In psychiatric care, it examines the role of CPE in improving nurses' communication skills, emotional competence, and ability to manage mental health crises.

Additionally, the study aims to provide empirical evidence that can guide nursing educators, healthcare administrators, and policymakers in designing and implementing effective Continuing Professional Education programs. By identifying the relationship between CPE and nurses' clinical performance, the study intends to contribute to improving educational practices, strengthening nursing workforce capacity, and ultimately enhancing the quality and safety of patient care across diverse healthcare contexts.

## **2. Body of paper**

Continuing Professional Education (CPE) is a key component in maintaining and improving nurses' professional competence in modern healthcare systems. As patient needs become more complex due to increasing emergencies, mental health challenges, and population aging, nurses must continuously update their knowledge and clinical skills. CPE provides structured learning opportunities that help nurses integrate new evidence, clinical guidelines, and best practices into daily care. (Wood, 1998)

In emergency settings, continuing education enhances nurses' ability to perform rapid assessments, make timely decisions, and implement appropriate interventions under pressure. In psychiatric care, CPE supports the development of effective communication, crisis management, and ethical care approaches for patients with mental health needs. Similarly, in elderly care, ongoing education improves nurses' understanding of age-related conditions, chronic disease management, and person-centered care. (Yu et al., 2022)

Overall, Continuing Professional Education strengthens nurses' clinical performance and confidence across emergency, psychiatric, and elderly care settings, contributing to improved patient safety, higher quality care, and better health outcomes.

### **2.1 Research Method**

This study adopts a descriptive–analytical research design to examine the impact of Continuing Professional Education on nurses' ability to manage emergency, psychiatric, and elderly care needs. The descriptive approach is used to identify the current status of nurses' participation in continuing education programs, while the analytical component explores the relationship between continuing professional education and nurses' clinical competence across the targeted care domains.

The study population consists of registered nurses working in clinical settings that involve emergency care, psychiatric services, and elderly care units. A sample of participants is selected using an appropriate sampling method to ensure representation of different clinical experiences and educational backgrounds. Data are collected through a structured questionnaire designed to assess nurses' participation in Continuing Professional Education programs and their perceived competence in managing emergency, psychiatric, and geriatric care situations.

The data analysis is conducted using statistical methods suitable for descriptive and inferential analysis. Descriptive statistics are used to summarize demographic characteristics and key study variables, while inferential statistics examine the relationship between continuing professional education and nurses' care management abilities. Ethical considerations, including informed

consent and confidentiality of participants' information, are strictly observed throughout the research process.

## **2.2 Literature Review**

The importance of Continuing Professional Education (CPE) in nursing has been widely emphasized in the literature as a key factor in maintaining clinical competence and improving patient care outcomes. Numerous studies have highlighted that ongoing education enables nurses to keep pace with rapid advancements in medical knowledge, healthcare technologies, and evidence-based practice. Researchers consistently report a positive relationship between participation in CPE programs and improvements in nurses' knowledge, clinical skills, and professional confidence. (Pakkonen et al., 2021)

In the context of emergency nursing, previous research indicates that continuing education significantly enhances nurses' preparedness for critical situations. Studies focusing on simulation-based and skills-focused training demonstrate improvements in rapid assessment, clinical decision-making, and adherence to emergency care protocols. These findings suggest that regular professional education plays an essential role in reducing clinical errors and improving patient safety in high-pressure environments. (Yu et al., 2022)

Literature related to psychiatric nursing also underscores the value of CPE in strengthening nurses' ability to manage mental health conditions. Research shows that targeted training programs improve nurses' communication skills, crisis intervention abilities, and attitudes toward patients with mental illness. Continuing education has been associated with reduced stigma, increased empathy, and more effective therapeutic relationships, all of which contribute to higher quality psychiatric care. (Shiri et al., 2023)

Similarly, studies in geriatric nursing highlight that Continuing Professional Education enhances nurses' understanding of aging-related health issues, chronic disease management, and person-centered care approaches. The literature suggests that nurses who engage in ongoing education are better equipped to address the complex physical, psychological, and social needs of elderly patients. Overall, existing research supports the positive impact of CPE on nursing practice, while also indicating the need for further studies that examine its combined effects across emergency, psychiatric, and elderly care settings.

## **3. Proposed Key Sections for the Article: An Overview**

This This section outlines the overall structure of the article and explains how each part contributes to a comprehensive understanding of the research topic. The article is organized to present the background and significance of Continuing Professional Education in nursing, followed by a focused discussion of its role in enhancing nurses' competencies in emergency, psychiatric, and elderly care settings. A clear structural framework helps guide readers through the progression from problem identification to analysis and interpretation. (Pakkonen et al., 2021)

The proposed sections are designed to ensure logical coherence and academic rigor. Beginning with the introduction and literature review, the article establishes a theoretical and empirical foundation for the study. This is followed by the research methodology, which explains the approach used to examine the impact of continuing education. The final sections synthesize the findings, discuss their implications for nursing practice and education, and offer conclusions and recommendations for future research and professional development initiatives. (Shiri et al., 2023)

### **3.1 Conceptual Foundations of Continuing Professional Education for Nurses**

Continuing Professional Education (CPE) for nurses is grounded in the principle of lifelong learning, which emphasizes the continuous development of professional knowledge, skills, and attitudes throughout a nurse's career. Unlike initial nursing education, which focuses on foundational competencies, CPE is designed to respond to ongoing changes in healthcare systems, advances in medical science, and evolving patient care needs. Conceptually, CPE is viewed as a dynamic and intentional process that enables nurses to maintain professional competence, ensure safe practice, and adapt effectively to complex clinical environments. (Shiri et al., 2023)

From a theoretical perspective, CPE is closely linked to adult learning theories, particularly self-directed learning and experiential learning. These approaches recognize nurses as active learners who bring prior experience into the learning process and seek education that is relevant to their clinical practice. Continuing education programs that align with these principles emphasize problem-based learning, reflective practice, and real-world application of knowledge. Such frameworks support meaningful learning experiences that enhance clinical reasoning and promote sustained professional growth among nurses. (Kurtović, 2024)

Another key conceptual foundation of CPE is competency-based education, which focuses on measurable outcomes in clinical performance rather than solely on knowledge acquisition. In nursing, this approach ensures that continuing education directly contributes to improved patient care, clinical decision-making, and professional accountability. By aligning educational content with identified practice gaps, CPE supports the development of specialized competencies required in high-demand areas such as emergency care, psychiatric nursing, and elderly care. (Shiri et al., 2023)

Furthermore, CPE is conceptually connected to quality improvement and patient safety frameworks within healthcare organizations. Ongoing professional education is recognized as a critical mechanism for reducing clinical errors, promoting evidence-based practice, and enhancing interdisciplinary collaboration. For nurses, engagement in continuing education reinforces professional identity, ethical responsibility, and commitment to high standards of care. Collectively, these conceptual foundations position Continuing Professional Education as an essential and strategic component of nursing practice and healthcare quality improvement.

### **3.2 Professional Competence of Nurses in Contemporary Healthcare Systems**

Professional competence is a core concept in nursing practice and a critical requirement within contemporary healthcare systems characterized by rapid change and increasing complexity. Nurses are expected to demonstrate not only sound clinical knowledge and technical skills, but also critical thinking, effective communication, ethical judgment, and the ability to adapt to

diverse and unpredictable care situations. As frontline healthcare providers, nurses' professional competence directly influences patient safety, quality of care, and overall health system performance. (King, 2021)

In modern healthcare environments, professional competence extends beyond routine clinical tasks to include decision-making in high-risk situations, collaboration within multidisciplinary teams, and responsiveness to technological and organizational changes. Nurses must be able to integrate evidence-based knowledge with practical experience while managing time pressures, workload demands, and emotional challenges. Competence therefore represents a dynamic and evolving construct that must be continuously developed and reinforced throughout a nurse's professional life. (Kurtović, 2024)

Contemporary healthcare systems also place increased emphasis on patient-centered and holistic care, requiring nurses to address not only physical health needs but also psychological, social, and cultural factors. This is particularly relevant in areas such as emergency care, psychiatric services, and elderly care, where patient needs are complex and often interconnected. Professional competence in these settings involves the ability to assess patient conditions comprehensively, communicate effectively with patients and families, and apply ethical and culturally sensitive approaches to care. (King, 2021)

Moreover, professional competence is closely linked to accountability and professional standards within nursing practice. Healthcare organizations and regulatory bodies increasingly require nurses to demonstrate ongoing competence as a condition for safe practice and professional credibility. In this context, maintaining and enhancing professional competence is not a one-time achievement but a continuous process. Understanding professional competence within contemporary healthcare systems highlights the essential role of structured professional development and sets the foundation for examining how Continuing Professional Education supports nurses in meeting these growing professional demands.

### **3-3 Educational Needs of Nurses in Emergency Care Settings**

Emergency care settings represent one of the most demanding and complex areas of nursing practice, where nurses are required to provide rapid, accurate, and effective care under high levels of pressure. Patients admitted to emergency units often present with life-threatening conditions, unstable vital signs, or acute trauma that require immediate assessment and intervention. These conditions create specific and ongoing educational needs for nurses that cannot be fully addressed through initial nursing education alone. (Purvis, 2025)

One of the primary educational needs of emergency nurses is the continuous updating of clinical knowledge related to emergency protocols, advanced life support, trauma care, and disaster management. As clinical guidelines and technologies evolve, nurses must remain informed about the latest evidence-based practices to ensure safe and effective patient care. Regular training in rapid patient assessment, prioritization, and clinical

decision-making is essential for maintaining readiness in unpredictable emergency situations. (King, 2021)

In addition to technical skills, emergency nurses require ongoing education in non-technical competencies such as communication, teamwork, and stress management. Effective collaboration with physicians, paramedics, and other healthcare professionals is crucial in emergency settings, where coordinated action directly affects patient outcomes. Educational programs that include simulation-based learning and scenario-driven exercises help nurses develop these competencies and improve performance in real-world emergencies. (Wright et al., 2025)

Furthermore, emergency nurses frequently encounter ethical challenges, emotional stress, and exposure to critical incidents. Educational support in areas such as ethical decision-making, psychological resilience, and coping strategies is therefore an important component of continuing professional education. Addressing these educational needs through structured and relevant training programs enables nurses to enhance their clinical competence, maintain professional well-being, and deliver high-quality care in emergency care settings.

### **3-4 Outcomes of Continuing Professional Education in Nursing Care Quality**

Continuing Professional Education (CPE) has a significant and measurable impact on the quality of nursing care across various healthcare settings. As nursing practice becomes increasingly complex, ongoing education serves as a key mechanism for ensuring that nurses maintain up-to-date knowledge, refine clinical skills, and apply evidence-based practices in patient care. The outcomes of effective CPE extend beyond individual professional development and directly influence patient safety, care effectiveness, and overall healthcare quality. (Purvis, 2025)

One of the most important outcomes of CPE is the improvement of clinical competence and decision-making among nurses. Through structured educational programs, nurses enhance their ability to assess patient conditions accurately, identify risks, and implement appropriate interventions. This is particularly evident in high-risk areas such as emergency and psychiatric care, where timely and informed clinical decisions are essential. Improved competence reduces the likelihood of clinical errors and contributes to more consistent adherence to professional standards and care protocols. (Shiri et al., 2023)

CPE also positively affects nurses' communication skills, professional confidence, and interdisciplinary collaboration. Ongoing education supports the development of effective patient–nurse interactions and teamwork within healthcare teams, which are essential components of high-quality care. In addition, nurses who engage in continuous learning are more likely to adopt patient-centered approaches, demonstrate ethical sensitivity, and

respond appropriately to diverse patient needs, including those of vulnerable populations such as the elderly. (Wright et al., 2025)

At an organizational level, the outcomes of Continuing Professional Education include enhanced quality assurance, improved patient satisfaction, and better health outcomes. Healthcare institutions that invest in ongoing education for nurses often experience increased workforce competence, reduced staff turnover, and stronger safety cultures. Overall, the outcomes of CPE highlight its critical role in improving nursing care quality and underscore the importance of sustained educational investment in modern healthcare systems.

### **3-5 Proposed Strategies for Enhancing Continuing Professional Education for Nurses**

#### **□ Needs-Based Program Design**

Continuing Professional Education programs should be designed based on systematic assessment of nurses' actual clinical needs. Identifying gaps in knowledge and skills, particularly in emergency, psychiatric, and elderly care, ensures that educational content is relevant, practical, and directly applicable to daily nursing practice.

#### **□ Integration of Practice-Oriented and Simulation-Based Training**

Incorporating simulation, case studies, and scenario-based learning into CPE programs can significantly enhance clinical competence. These methods allow nurses to practice decision-making, technical skills, and teamwork in safe environments, thereby improving readiness for real clinical situations.

#### **□ Flexible and Accessible Learning Opportunities**

Providing flexible learning formats such as online courses, blended learning, and modular programs increases nurses' participation in continuing education. Flexible scheduling helps overcome barriers related to workload, shift work, and staffing shortages, making lifelong learning more achievable.

#### **□ Linking Continuing Education to Professional Development and Career Advancement**

Aligning CPE participation with professional recognition, promotion, or competency evaluation can motivate nurses to engage actively in ongoing education. When continuing education is clearly connected to career growth, nurses are more likely to view it as a meaningful professional investment.

#### □ **Strengthening Organizational Support and Leadership Involvement**

Healthcare organizations should actively support continuing professional education by allocating resources, providing protected learning time, and encouraging a culture of continuous improvement. Leadership involvement reinforces the value of education and promotes sustained engagement among nursing staff.

#### □ **Continuous Evaluation and Quality Improvement of CPE Programs**

Regular evaluation of continuing education programs is essential to ensure their effectiveness. Collecting feedback from nurses and monitoring practice outcomes helps refine educational content and methods, ensuring that CPE programs remain responsive to evolving healthcare demands and contribute to improved nursing care quality.

### **4- Conclusion**

Continuing Professional Education plays a vital role in strengthening nursing practice within contemporary healthcare systems that are increasingly complex and demanding. This study highlights that ongoing education is not merely a supplementary activity but a fundamental component of professional nursing competence. As nurses are expected to manage diverse care needs in emergency, psychiatric, and elderly care settings, continuous learning becomes essential for maintaining clinical readiness, ensuring patient safety, and delivering high-quality care.

The findings emphasize that Continuing Professional Education contributes significantly to enhancing nurses' clinical knowledge, practical skills, and decision-making abilities. Through structured and relevant educational programs, nurses are better prepared to respond effectively to emergency situations, manage mental health challenges with confidence and compassion, and provide holistic and person-centered care to elderly patients. These improvements in professional competence directly translate into better patient outcomes and higher standards of care.

Moreover, the study underscores the importance of aligning Continuing Professional Education with nurses' actual practice needs and organizational goals. Educational strategies that are flexible, practice-oriented, and supported by healthcare leadership are more likely to result in meaningful and sustained improvements in nursing performance. Investing in ongoing professional development also promotes nurses' professional confidence, job satisfaction, and long-term commitment to the profession.

In conclusion, Continuing Professional Education is a critical driver of nursing care quality and healthcare system effectiveness. Strengthening and prioritizing continuing education initiatives for nurses can support workforce development, enhance patient safety, and contribute to the overall improvement of healthcare services. Future efforts should focus on expanding access to high-quality CPE programs and systematically evaluating their impact on nursing practice and patient care outcomes.

## Reference

1. Hogston, R. (1995). Nurses' perceptions of the impact of continuing professional education on the quality of nursing care. *Journal of Advanced Nursing*, 22(3), 586–593.
2. Vázquez-Calatayud, M., Errasti-Ibarrondo, B., & Choperena, A. (2021). Nurses' continuing professional development: A systematic literature review. *Nurse Education in Practice*, 50, 102963.
3. Wood, I. (1998). The effects of continuing professional education on the clinical practice of nurses: A review of the literature. *International Journal of Nursing Studies*, 35(3), 125–131.
4. Yu, X., Huang, Y., & Liu, Y. (2022). Nurses' perceptions of continuing professional development: A qualitative study. *BMC Nursing*, 21(1), 162.
5. Pakkonen, M., Stolt, M., Charalambous, A., & Suhonen, R. (2021). Continuing education interventions about person-centered care targeted for nurses in older people long-term care: A systematic review. *BMC Nursing*, 20, 85.
6. Shiri, R., El-Metwally, A., Sallinen, M., Pöyry, M., Härmä, M., & Toppinen-Tanner, S. (2023). The role of continuing professional training or development in maintaining current employment: A systematic review. *Healthcare*, 11(21), 2900.
7. Kurtović, B. (2024). Understanding nurses' perspectives on continuous professional development.
8. King, R. (2021). Factors that optimise the impact of continuing professional development on nursing and inter-professional practice. *Journal of Nursing Management*.
9. Purvis, J. K. (2025). Influences shaping nurses' continuing professional education choices and learning pathways: An exploratory case study. *Canadian Journal of Nursing Research*, 57(3), 352–363.
10. Wright, M., Kvist, T., Mikkonen, S., & Jokiniemi, K. (2025). Outcome evaluation of a clinical nurse specialist continuing education pilot program: An intervention study with three repeated measures. *BMC Nursing*, 24, 1323.