

# World Journal of Advanced Research and Reviews

eISSN: 2581-9615 CODEN (USA): WJARAI Cross Ref DOI: 10.30574/wjarr Journal homepage: https://wjarr.com/



(REVIEW ARTICLE)



# Perioperative nursing: The importance of soft skills and organization in the operating room: A narrative review

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World Journal of Advanced Research and Reviews, 2025, 25(03), 1068-1072

Publication history: Received on 04 February 2025; revised on 12 March 20215 accepted on 14 March 2025

Article DOI: https://doi.org/10.30574/wjarr.2025.25.3.0818

#### **Abstract**

**Introduction:** Soft skills such as communication and emotional intelligence are essential for perioperative nurses during surgical procedures.

**Purpose:** To identify the important role of soft skills and the organization of scrub nurses in the operating room.

**Methodology:** This narrative review was based on a bibliographic search of reviews and research studies drawn from international databases. The language other than English and Greek was the exclusion criterion for the articles.

**Results:** This literature review emphasizes the importance of soft skills in enhancing patient safety and promoting collaboration among surgical team members. Effective communication reduces errors during surgery, while emotional intelligence helps manage stress and provide psychological support to patients. Continued education in non-technical skills fosters nurses' professional development and improves the surgical department's functioning.

**Conclusion:** Integrating educational programs for developing soft skills in perioperative nursing is essential for enhancing the quality of care and patient safety. Improving communication and emotional intelligence fosters a collaborative and efficient professional environment. It is advised that educational programs and ongoing professional development for nurses be established to ensure the effective functioning of the surgical department and the provision of high-quality care

**Keywords:** Perioperative Nursing; Soft Skills; Communication in the Operating Room; Emotional Intelligence; Organization and Coordination

### 1. Introduction

Perioperative nursing is a specialized branch of nursing that focuses on the care of patients before, during, and after surgery. The effectiveness of nurses in this setting depends not only on their technical knowledge but also on a range of critical interpersonal skills, referred to as "soft skills." These include communication skills, emotional intelligence, organization, and teamwork. The combination of technical and soft skills is essential for maintaining the smooth operation of the surgical environment and ensuring patient safety [1]. While technical skills, such as operating specialized equipment and performing specific procedures, are undeniably important, soft skills are becoming increasingly vital in today's surgical settings. Skills like effective communication, empathy, emotional intelligence, teamwork, and leadership are crucial for addressing the challenges of the operating room, enhancing the quality of care, and promoting patient safety [2]

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Communication is central to perioperative nursing, facilitating the smooth exchange of information and preventing errors. In the demanding operating room environment, clear and accurate information transfer is vital; even the slightest misinterpretation can have serious consequences for the patient [3]. Nurses play a crucial role in informing patients about the procedures to follow and maintaining continuous communication with other surgical team members, including anesthesiologists and surgeons. Effective communication ensures that all actions required for the operation are well coordinated, considering the patient's needs [4-5]. Furthermore, communication within the surgical team involves technical instructions and the management of emotions and concerns that may arise from both team members and patients. Nurses are encouraged to develop active listening skills and recognize when support or guidance is needed in challenging situations. This form of communication helps strengthen trust among healthcare professionals, reducing the margin for error and ensuring the smooth functioning of the surgical environment [5-6].

Proper hand hygiene in the operating room prevents infections and protects patients. Surgeons and other staff must adhere to strict cleaning and disinfection procedures before and during surgery. The use of antiseptics is crucial for eliminating pathogenic microorganisms. Hand cleaning includes washing with soap, water, and disinfectants, followed by drying with sterile materials. Additionally, gloves must be applied correctly and changed as needed. Staff training and strict compliance with these protocols reduce infections and enhance the quality of care [7].

## 2. Methodology

The methodology followed was based on the bibliographic search of reviews and research studies drawn from the international databases Medline, Pubmed, and Google Scholar. The keywords used were perioperative nursing, soft skills, communication in the operating room, emotional intelligence, and organization coordination. The exclusion criterion of the articles was the language other than English and Greek.

## 3. The Role of Soft Skills in Perioperative Nursing

According to international research, developing soft skills is vital for enhancing communication, teamwork, and leadership within the surgical environment. Nurses with strong communication skills can ensure accurate information transfer between surgical team members and patients, helping everyone fully understand the patient's needs and the necessary procedures [2]. One of the key soft skills in perioperative nursing is Emotional Intelligence (EI). This term refers to an individual's ability to recognize, understand, and manage their emotions and those of others. In the demanding and often stressful atmosphere of the operating room, emotional intelligence plays a crucial role by supporting patients and strengthening the cohesion of the surgical team. Research indicates that nurses with high emotional intelligence are more effective at managing work stress, maintaining composure in challenging situations, and enhancing teamwork [1].

Understanding and responding to patients' emotions is a key aspect of emotional intelligence. For instance, when patients feel fearful or anxious before a procedure, empathetic nurses can provide appropriate emotional support, helping to foster a climate of safety and calm. Simultaneously, emotional intelligence enables nurses to navigate the challenges of a demanding work environment, maintaining their focus and mitigating the negative effects of the stress that often exists in the operating room [5]. Furthermore, emotional intelligence significantly influences the dynamics of the surgical team. Nurses who develop these skills are more open to communication, recognize when a colleague needs assistance, and help sustain a collaborative atmosphere. These abilities are essential for preventing conflicts and ensuring the smooth and safe execution of surgical procedures [6]. The importance of emotional intelligence in perioperative nursing has been corroborated by numerous studies, showing that it greatly aids in understanding patient needs, managing the stress inherent in the surgical environment, and enhancing team efficiency [3].

#### 4. Organization and Coordination in the Operating Room

Effective organization is a crucial prerequisite for the success of perioperative nursing. Proper management of responsibilities and logical distribution of tasks help avoid errors and ensure that all stages of the surgical procedure are conducted safely and accurately. The smooth operation of the operating room, adequate preparation of the area, and ensuring the availability of necessary resources contribute to reducing operation time and enhancing patient care. Several studies emphasize the importance of nurse preparation, collaboration with the surgical team, and clear distribution of tasks as key factors for the seamless functioning of the surgical department. Systematic organization and coordination in the operating room are directly linked to patient safety, procedural effectiveness, and cohesive teamwork. Since surgical procedures are complex and demand immediate responses in high-pressure situations, clear

protocols and efficient workflow management are vital to prevent errors that could lead to undesirable complications [3,4].

Preparation of the operating room begins before the surgery by ensuring that all necessary materials and equipment are in excellent condition and readily available. This involves everything from correctly positioning instruments to ensuring the prompt delivery of vital medications. Additionally, clearly defining roles among team members helps prevent overlapping responsibilities, reduces the risk of confusion, and facilitates the smooth execution of the procedure. The preparation by nurses is also vital for patient safety and the efficiency of surgical operations. Nurses perform tasks such as inspecting instruments and supplies, preparing patients, and communicating with the team to confirm that every required step is performed correctly [8-10].

Additionally, coordination and collaboration among surgical team members are vital for the smooth execution of the operation. Working together, nurses, surgeons, anesthesiologists, and other healthcare professionals facilitate effective information exchange, timely management of potential complications, and seamless procedure conduct. Effective communication extends beyond the preoperative stage; it is upheld throughout the operation, ensuring each team member understands their role and can promptly address the needs of the case. Clearly defined responsibilities are essential for minimizing errors and protecting the patient. When each team member has specific roles, the procedure is conducted more efficiently, reducing delays and ensuring completion in the shortest time possible. Furthermore, the close collaboration of nurses with the rest of the team enhances patient support, improving the overall patient experience and elevating the quality of care [8-10].

Proper organization and effective coordination in the surgical environment enhance efficiency and improve patient safety. Appropriate management of available resources, careful preparation, and impeccable cooperation among team members are essential in preventing medical errors that could lead to serious complications during or after surgery. Nurses, as vital surgical team members, play a crucial role in fostering an organized and safe environment, overseeing the preparation of the area, ensuring the correct execution of procedures, and facilitating harmonious teamwork among all members [10-12].

Simultaneously, implementing best practices for organization and coordination enhances time management and ensures that surgical procedures are completed as effectively as possible. Proper preparation and ongoing procedure monitoring lower the risk of complications, such as infections, bleeding, or respiratory issues, leading to better postoperative outcomes and ensuring a high standard of care for patients [2].

Vaccination is an essential component of the organization in a surgical suite. Vaccinating both nursing staff and patients in the operating room is crucial for preventing infections and safeguarding the health of everyone involved. For patients with AIDS, this protection is even more vital due to their compromised immune systems. Vaccinations against diseases like hepatitis B and influenza can diminish the risk of infection transmission and potential complications during surgical procedures. Ensuring that healthcare personnel receive proper training on the importance of vaccination and adhere to strict hygiene protocols is vital for patient safety and the smooth execution of procedures. Furthermore, strict adherence to personal hygiene and the use of protective equipment are fundamental aspects of any surgical procedure. Vaccination plays a significant role in reducing infections and enhancing the quality of care, particularly for patients with weakened immune systems [7,13].

#### 5. The Relationship Between Leadership and Soft Skills in Perioperative Nursing

Effective leadership in perioperative nursing relies significantly on soft skills. Surgical leaders must possess excellent communication abilities and high emotional intelligence to manage team dynamics, make swift and sound decisions, and uphold high staff morale. Emotional intelligence is crucial in enhancing patient safety, enabling leaders to manage stress and sustain team organization and focus. Leadership in perioperative nursing is vital for the smooth and safe functioning of the surgical department. The success of a surgical procedure is not solely dependent on the staff's technical skills but also on the interpersonal abilities of the leaders, such as effective communication, emotional intelligence, decision-making, and fostering team morale. Leaders equipped with these skills can successfully guide their teams, respond swiftly to stressful situations, and ensure patient safety [1,10-12].

Communication is a vital skill for leadership in perioperative nursing. An effective leader must convey clear and accurate information to ensure a smooth flow of procedures. Strong communication fosters cooperation and trust among team members, helping to prevent potential errors or delays. Additionally, communicating with patients and their families is equally critical, as a leader must calmly and confidently provide information about the procedure and address any concerns they may have. Effective communication extends beyond merely exchanging information; it also encompasses

the ability to actively listen. A leadership style that encourages ongoing communication among team members enhances collaboration and enables faster problem resolution. Leaders with strong communication skills are better equipped to guide their teams effectively and mitigate potential risks before escalating issues [14-16]

Emotional intelligence is essential for leadership in perioperative nursing, enabling leaders to recognize and manage the emotions of both colleagues and patients. In a surgical environment, where stress and pressure are high, emotional intelligence allows leaders to stay composed, make quick and accurate decisions, and remain effective under strenuous conditions. Understanding the emotions of team members fosters a positive work environment and enhances morale. Building trust and skillfully managing potential conflicts ensures team cohesion and performance. Furthermore, high emotional intelligence equips leaders to navigate the uncertainty and changes that frequently arise in the surgical setting, promoting team stability and organization [14-16].

Decision-making ability is another essential component of leadership in perioperative nursing. A leader must quickly and accurately decide under pressure, ensuring the best course of action for the team and patients. Swift assessment of the situation, understanding the patient's needs, and making informed decisions are crucial elements for the success of the surgical procedure. The connection between leadership and emotional intelligence directly impacts patient safety. Leaders capable of managing their emotional responses and maintaining their team's focus help prevent errors and ensure compliance with established procedures. A leader's ability to strengthen the team's emotional resilience can reduce anxiety and improve attention during critical moments of the surgical process [14-16].

# 6. The Importance of Education in Developing Soft Skills

Nurse education plays a vital role in developing soft skills, which are essential for enhancing collaboration and the quality of patient care. Research has demonstrated that nurses trained in soft skills experience increased job satisfaction, better cooperation with colleagues, and improved patient care outcomes. When individuals can manage their emotions and recognize their team's needs, it fosters a supportive and collaborative environment, which is crucial in the surgical setting [17]. Strengthening soft skills is vital in ensuring quality care and patient safety, particularly in surgical nursing, where situations are complex and demand immediate, coordinated responses from the entire healthcare team. Training in this area helps develop critical skills, such as emotional intelligence, crisis management, decision-making under pressure, and effective collaboration among team members. Integrating modern technologies into nursing education has proven highly effective in enhancing soft skills, especially with virtual reality. Studies have shown that virtual reality technology improves nurses' performance in high-stress situations, such as surgical procedures, while providing a safe environment for practical training [17-18].

Virtual reality simulation technologies enable nurses to train in complex and demanding conditions without jeopardizing patient safety. This method enhances their communication and collaboration skills while also helping them develop the capacity to manage critical situations calmly and effectively, such as cardiac surgeries and pancreaticoduodenectomy (Whipple). The use of virtual reality in educational programs has proven especially beneficial for improving collaboration and communication among medical team members, allowing them to strategize and make decisions even in high-stress circumstances [18-20].

## 7. Conclusion

Skills like effective communication and emotional intelligence are crucial pillars for the effective functioning of perioperative nursing. The seamless flow of information among team members promotes smooth collaboration, while managing emotions helps nurses handle stress, provide psychological support to patients, and contribute to a harmonious working environment. These skills are essential for enhancing the quality of care and ensuring patient safety, playing a significant role in the success of surgical procedures. The organization and development of soft skills are integral components of perioperative nursing as they influence the efficiency and effectiveness of the surgical field. Through proper education and ongoing professional development, nurses gain the knowledge and skills necessary to navigate the challenges that arise in the surgical setting. The systematic enhancement of these skills fosters a high level of care, improves communication and collaboration among healthcare professionals, and further emphasizes the critical role of nurses in the successful outcomes of surgical procedures.

## Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

#### References

- [1] Rhodes E, Foran P. Leading with emotional intelligence in perioperative nursing: An integrative review. Journal of Perioperative Nursing. 2022 Dec 1;35(4):e18-23
- [2] Skråmm SH, Smith Jacobsen IL, Hanssen I. Communication as a non-technical skill in the operating room: A qualitative study. Nursing open. 2021 Jul;8(4):1822-8
- [3] Kwon SJ, Chang SO, Park BH. Novice Perioperative Nurses' Perceptions of Nursing Competence and Strategies Used to Enhance Competence: A Phenomenographic Study. AORN journal. 2025 Mar;121(3):186-97
- [4] Okoli CC, Nwanna-Nzewunwa OC, Buchanan S. Training and Assessment of Nontechnical Skills in Cardiothoracic Surgery: Current Literature Review. Journal of Surgical Education. 2025 May 1;82(5):103480
- [5] Sirevåg I, Tjoflåt I, Hansen BS. Expanding the non-technical skills vocabulary of operating room nurses: a qualitative study. BMC nursing. 2023 Sep 19;22(1):323
- [6] Hanssen I, Smith Jacobsen IL, Skråmm SH. Non-technical skills in operating room nursing: Ethical aspects. Nursing ethics. 2020 Aug;27(5):1364-72
- [7] Alefragkis D, Alikari V, Kelesi M. The importance of hand hygiene in health care settings Dimitrios Alefragkis. International Journal of Midwifery and Nursing Practice. 2019;2(1):102-105
- [8] Farmer DL. Soft skills matter. JAMA surgery. 2015 Mar 1;150(3):207
- [9] Moss J, Xiao Y. Improving operating room coordination: communication pattern assessment. JONA: The Journal of Nursing Administration. 2004 Feb 1;34(2):93-100
- [10] Sonneborn O, Cardwell R. Advancing perioperative nursing education and surgical skills acquisition: A comprehensive approach acquisition. Journal of Perioperative Nursing. 2024 Jun;37(2):e33-7
- [11] Pasarakonda S, Grote G, Schmutz JB, Bogdanovic J, Guggenheim M, Manser T. A strategic core role perspective on team coordination: benefits of centralized leadership for managing task complexity in the operating room. Human factors. 2021 Aug;63(5):910-25
- [12] Sexton JB, Makary MA, Tersigni AR, Pryor D, Hendrich A, Thomas EJ, Holzmueller CG, Knight AP, Wu Y, Pronovost PJ. Teamwork in the operating room: frontline perspectives among hospitals and operating room personnel. Anesthesiology. 2006 Nov 1;105(5):877-84
- [13] Ouzounakis P, Frantzana A, Iliadis C, Mihalache A, Alefragkis D, Kourkouta L. HIV infection and vaccinations. World Journal of Advanced Research and Reviews. 2023 Mar 30;17(3):101-6
- [14] Beydler KW. The role of emotional intelligence in perioperative nursing and leadership: developing skills for improved performance. AORN journal. 2017 Oct 1;106(4):317-23
- [15] Whiteside D. Perioperative nurse leaders and professionalism. AORN journal. 2016 Aug 1;104(2):133-44
- [16] Beydler KW. The role of emotional intelligence in perioperative nursing and leadership: developing skills for improved performance. AORN journal. 2017 Oct 1;106(4):317-23
- [17] Wakefield E, Rogers T. Emotional intelligence education for perioperative nurses. Journal of Perioperative Nursing. 2024 Dec;37(4):e49-53
- [18] Kim HY. Development and Usability Assessment of Virtual Reality-and Haptic Technology-Based Educational Content for Perioperative Nursing Education. InHealthcare 2024 Sep 29 (Vol. 12, No. 19, p. 1947). MDPI.
- [19] Alefragkis D, Tousoulis D, Toutouzas K, Kyritsi E, Papageorgiou D, Polikandrioti M. Quality of life in patients with coronary heart disease before and six months after coronary artery bypass grafting (CABG). Nosileftiki. 2024 Jul 1;63(3)
- [20] Karim SA, Abdulla KS, Abdulkarim QH, Rahim FH. The outcomes and complications of pancreaticoduodenectomy (Whipple procedure): Cross sectional study. International Journal of Surgery. 2018 Apr 1;52:383-7