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Advanced Competencies in Perioperative Nursing: Critical Analysis and Pathways to Enhancement

Advanced Competencies in Perioperative Nursing: Critical Analysis and Pathways to Enhancement

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Summary

Objective: To critically analyze the role of advanced competencies in perioperative nursing and to reflect on possible ways to enhance their value in the Portuguese context.

Methodology: This is a theoretical reflection study, based on a narrative review of national and international scientific literature, with a special focus on clinical, organizational, and governance practices in healthcare involving the practice of nursing in the operating room.

Results: The literature highlights the positive impact of perioperative nurses with advanced skills on the efficiency of surgical workflows, patient safety, and resource optimization. However, significant gaps persist in the institutional recognition and formal valuation of this professional profile, particularly in Portugal.

Conclusion: Valuing advanced competencies in perioperative nursing requires an integrated approach that includes normative recognition, access to specialized training, integration into decision-making processes, and investment in shared clinical governance.

Keywords: perioperative nursing, advanced skills, operating room, clinical governance, professional development.

Abstract

Objective: To critically analyze the role of advanced competencies in perioperative nursing and to reflect on possible pathways for their recognition and enhancement in the Portuguese healthcare context.

Methodology: Theoretical reflection based on a narrative review of national and international scientific literature, with a particular focus on clinical, organizational and governance practices involving nursing roles within the operating theatre. **Results:** The literature highlights the positive impact of perioperative nurses with advanced competencies on surgical flow efficiency, patient safety, and resource optimization. However, major institutional gaps persist regarding the formal recognition and valorization of this professional profile, particularly in Portugal. **Conclusion:** The enhancement of advanced perioperative nursing competencies requires an integrated approach that includes normative recognition, access to specialized training, involvement in decision-making processes, and investment in shared clinical governance.

Keywords: perioperative nursing. advanced competencies. operating room. clinical governance. professional recognition.

Introduction

Perioperative nursing occupies a strategic position in the provision of care.

surgical health. With the increasing technical complexity of interventions, the pressure on the

Surgical times and the growing need for safety and efficiency, the demands on the

Professionals in this context have become progressively more qualified (Barbosa et al., 2022).

However, despite the sophistication of the environment and the critical nature of the decisions made, the

Formal recognition of advanced skills remains limited in many institutions.

This panorama takes on particular relevance in a context where the valuation of...

healthcare professionals as a condition for the sustainability of the National Health Service.



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(Ministry of Health, 2022). The operating room is one of the spaces where tensions are evident between Clinical responsibility and institutional recognition. Experienced and well-trained nurses. specialized professionals take on highly complex roles daily, including planning of procedures, ensuring patient safety, managing medical devices and coordinating multidisciplinary teams. This article presents a critical analysis of advanced skills in perioperative nursing and identifies ways for its effective valuation in the context Portuguese, in light of the best available evidence.

Development

Nursing practice in the perioperative setting requires an integrated approach. rigorous clinical assessment, informed decision-making, process coordination and governance Clinical practice. The complexity of surgical interventions, combined with technological advancements and pressure. Constant focus on resources necessitates the appreciation of professionals capable of articulating knowledge. scientific, technical expertise, and strategic thinking (Cummings et al., 2018; Silva and Ribeiro, 2021). In the operating room, practice is not limited to direct assistance. It includes critical planning functions. and preparation, management of material and human resources, traceability of devices and prevention of adverse events. The absence of these skills can compromise patient safety and the clinical results (Barbosa et al., 2022; Elshami et al., 2023). In Portugal, despite the publication, by the Order of Nurses, of the Quality Standards for Specialized Care for People in Perioperative Situation (2017), the absence of clear regulations that formally recognize the Advanced competence is reflected in limited institutional recognition. Scales persist. undifferentiated skills even after specialized training, impacting motivation and retention. of the quality of care (Mendes, 2020; Santos et al., 2022). International evidence highlights the The role of nurses with advanced skills in process optimization. Arakelian and collaborators (2021) observed improvements in the use of surgical time in a Swedish hospital, Reduced waste and increased team satisfaction when these professionals take on leadership roles. operational. Convergently, Schmid and colleagues (2020) documented a decrease in operational errors. assembly of materials and significant annual savings after logistics reorganization projects. Led by nursing staff. In addition to technical skills, perioperative nurses They possess tacit knowledge about operational flows and institutional microcultures, frequently absent from formal management tools. This knowledge is crucial for forecasting Needs, adaptation of protocols, and early detection of failures in the logistics chain. Yours Increased value can lead to gains in efficiency and safety, impacting healthcare indicators. and economic (Nascimento et al., 2019; Ministry of Health, 2022). The integration of these professionals Clinical governance structures and strategic decision-making should include access to operational data.



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participation in technical committees, protected time for continuous improvement and involvement in Defining internal quality and safety policies. Contexts where nurses are Co-producers of clinical policy tend to show greater adherence to best practices and a better response to critical events (Elden et al., 2020; WHO, 2016). The adoption of competency-based management models This constitutes a key strategy. The mapping, validation, and formal recognition of competencies. advanced technologies allow for aligning professional profiles with healthcare requirements, assigning responsibilities based on technical-scientific merit and reinforcing internal equity (Oliveira et al., (2021). This model promotes talent retention and a more efficient distribution of resources. This is relevant given the shortage of professionals and the aging of teams. Finally, the appreciation... Perioperative nursing should be understood as part of a strategy to improve the quality of care. healthcare system. Investment in specialized skills is associated with gains in health. Waste reduction, enhanced surgical safety, and financial sustainability. Organizations Those who adopt models that value clinical skills show greater resilience and lower risk. Turnover and better results in quality audits (OECD, 2022). It is important to articulate Clinical practice and research. The active participation of nurses in research projects. Applied clinical audits and protocol development reinforce evidence-based practice. and the continuous updating of services (Silva and Ribeiro, 2021; Ministry of Health, 2022). A The evolution of perioperative nursing in Portugal depends on the combination of policies. Consistent institutional frameworks, skilled clinical leadership, and the validation of practices that demonstrate value of care. The evidence gathered suggests that the absence of recognition does not correspond to absence of impact, therefore the strategic integration of these professionals into the processes of Clinical governance and organizational innovation is an institutional policy priority.

Conclusion

The emphasis on advanced skills in perioperative nursing constitutes a imperative for the quality of care and the sustainability of surgical services. The literature This demonstrates that professionals with technical autonomy and recognition of clinical leadership... They contribute to patient safety, resource optimization, and organizational innovation. Investment in formal development pathways, clear criteria for appointment to positions. Effective accountability and inclusion in decision-making structures translates into measurable gains in Efficiency and safety. The institutional legitimization of this differentiated practice protects patients, It strengthens teams and consolidates more predictable, resilient, and patient-centered health services. valuable results.



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References

ARAKELIAN, E.; GUSTAFSSON, M.; NYSTRÖM, M. *Operating room nurses' contribution to perioperative patient safety: a literature review.* Journal of Perioperative Practice, vol. 31, no. 12, p.

293-300, 2021. Available at: <https://doi.org/10.1177/1750458921997944>

BARBOSA, MH; SANTOS, SR; SILVA, RS et al. *Effectiveness of perioperative nursing interventions: an integrative literature review.* Revista Brasileira de Enfermagem, v. 75, n. 3, e20210067, 2022. Available at:

<https://doi.org/10.1590/0034-7167-2021-0067>.

CUMMINGS, GG; LEE, S.; MACGREGOR, T. et al. *Factors contributing to nursing leadership: a systematic review.* Journal of Health Services Research & Policy, vol. 23, no. 1, p. 66-75, 2018. Available at: <https://doi.org/10.1177/1355819617725839>.

ELDEN, H.; LINDQVIST, M.; OLOFSSON, P. *Perioperative nurses' experiences of teamwork and patient safety: a Swedish qualitative study.* BMC Nursing, vol. 19, no. 1, 62, 2020. Available at: <https://doi.org/10.1186/s12912-020-00447-w>.

ELSHAMI, W.; AL SHAMSI, M.; IBRAHIM, NA et al. *Competency framework for perioperative nurses: an international perspective.* Nursing Reports, vol. 13, no. 2, p. 378-390, 2023.

Available at: <https://doi.org/10.3390/nursrep13020037>.

MENDES, FM. *The role of the perioperative nurse in resource management and surgical safety: an integrative review.* Health & Science, v. 9, n. 2, p. 155-164, 2020. Available at: <https://revistasaudeciencia.org/artigo/mendes2020>.

MINISTRY OF HEALTH (PT). *Annual Report on Access to Healthcare.* Lisbon: ACSS, 2022. Available at: <https://www.acss.min-saude.pt>.

NASCIMENTO, KC; SILVA, MJ; PEREIRA, AC et al. *Nursing in the surgical center: perceptions on materials management and patient safety.* Revista de Enfermagem da UFPE, v. 13, n. 1, p. 132-138, 2019. Available at: <https://doi.org/10.5205/1981-8963-v13i1a237979p132-138-2019>.

OECD – Organisation for Economic Co-operation and Development. *Health at a Glance 2022: OECD Indicators.* Paris: OECD Publishing, 2022.

Available at: <https://doi.org/10.1787/4dd50c09-en>.

OLIVEIRA, AC; BATISTA, KM; LIMA, FS. *Competency-based assessment in perioperative nursing: challenges and potential.* Revista Enfermagem em Foco, v. 12, n. 6, p. 980-986, 2021. Available at: <https://doi.org/10.21675/2357-707X.2021.v12.n6.4934>.

Portuguese Nursing Association (Portugal). *Quality Standards for Specialized Care for People in the Perioperative Period.* Lisbon: OE, 2017. Available at: <https://www.ordemenfermeiros.pt>.

SANTOS, JM; GOMES, MR; FERREIRA, TC. *Dynamics of valorization and invisibility of nursing in the operating room.* Portuguese Journal of Mental Health Nursing, no. 28, p.

80-87, 2022. Available at: <https://doi.org/10.19131/rpesm.2022.28.80>.

SCHMID, RA; HIRSCHMANN, MT; WINKLER, T. et al. *Enhancing operating room efficiency through surgeon-led instrumentation standardization.* Journal of Surgical Research, vol. 245,



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pp. 181-187, 2020. Available at: <https://doi.org/10.1016/j.jss.2019.07.030>

SILVA, CL; RIBEIRO, MC *Competence and recognition: the challenge of perioperative nursing.*

Portuguese Journal of Rehabilitation Nursing, v. 4, n. 2, p. 23-30, 2021.

Available at: <https://doi.org/10.33194/rper.2021.v4.n2.6212>

WHO – WORLD HEALTH ORGANIZATION. *Global guidelines for the prevention of surgical site infections.* Geneva: WHO, 2016. Available at: [https://](https://www.who.int/publications/i/item/9789241549882)

www.who.int/publications/i/item/9789241549882