

# The Role of Perioperative Nursing in Global Health

*Papel da enfermagem perioperatória na saúde global*

*Papel de la enfermería perioperatoria en la salud global*

Cassiane Santana Lemos<sup>1</sup> 

Every year, millions of surgical procedures are performed worldwide, accompanied by the continuous advancement of interventional technologies and care practices, which contribute to shorter surgical recovery times and improved health outcomes. However, access to safe and high-quality surgery remains unequal across continents due to deficiencies or weaknesses in national health systems, limitations or shortages of supplies and equipment, an inadequate or uneven distribution of surgeons, anesthesiologists, and nurses, as well as the impact of wars and civil conflicts in various regions.

In May 2015, the World Health Organization (WHO), through Resolution WHA68.15, proposed strengthening essential surgical, emergency, and anesthesia care as a component of universal health coverage<sup>1</sup>. That same year, a group of surgical experts from various continents established the Lancet Commission on Global Surgery, which defined six indicators for regional monitoring of universal access to surgery. These indicators include population access time to emergency surgeries; the density of specialist surgeons, anesthesiologists, and obstetricians per 100,000 inhabitants; the monitoring of surgical volume and mortality rates, and measures to protect the population from excessive financial burdens or impoverishment related to surgical care<sup>2</sup>.

Despite progress in these indicators in recent years, monitoring by countries still exhibits weaknesses or fails to fully reflect universal surgical coverage. A 2023 analysis by the World Bank revealed that, of the 216 countries classified by income level, only 123 (56.9%) reported the number of surgeries performed<sup>3</sup>. This lack of data complicates the monitoring of surgical procedures, the development of improvement strategies, and the allocation of financial and human resources across different regions.

In terms of the density of the surgical workforce, Brazil has a rate of 55.5 professionals per 100,000 inhabitants, including surgeons, anesthesiologists, and obstetricians, which exceeds the rate of 20 professionals recommended by the Lancet Commission<sup>4</sup>. However, a more detailed analysis of this indicator highlights the unequal distribution of professionals across the country, which limits the population's access to adequate surgical services that meet local demands. Additionally, this disparity contributes to overburdened healthcare systems and long waiting lists in large urban centers, particularly in the Southeast and South regions.

Furthermore, it is important to note that no indicator currently measures the workforce of nursing professionals in the surgical setting, a gap that may also limit access to surgical services.

Nursing plays a crucial role in the composition of the multidisciplinary team in the operating room, with varying practices worldwide, whether through direct involvement in the surgical procedure or indirect support by providing equipment and materials for the surgical and anesthesia teams. Consequently, there is an increasing need to enhance the qualifications of professionals working in this field, from undergraduate training to advanced development through specialization courses and certification programs.

<sup>1</sup>Universidade Estadual Paulista Júlio de Mesquita Filho, School of Medicine of Botucatu, Department of Nursing – Botucatu (SP), Brazil.

Corresponding author: cassiane.lemos@unesp.br

Received: 03/06/2025, Approved: 03/07/2025

<https://doi.org/10.5327/Z1414-4425202431051>



This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 license.

The WHO highlights a growing shortage of human resources in the nursing sector, which may be further exacerbated in the surgical field. This shortage is influenced, among other factors, by the limited or insufficient coverage of perioperative care in undergraduate nursing programs<sup>5</sup>. Additionally, the lack of recognition of nursing leadership in the management of surgical care by healthcare services, coupled with the reduced number of professionals, diminishes the significant role of nurses within the surgical team and restricts effective care management.

To strengthen health systems and reduce mortality, disability, and morbidity rates associated with limited access to surgical services, it is essential to invest in the training of competent nursing professionals. These professionals should be equipped not only with the best scientific knowledge but also with an understanding of their role in advocating for and delivering safe, high-quality care as part of the multidisciplinary team. Individually and collectively, nurses should provide care that is aligned with the actual needs of the population, thereby contributing to the reduction of inequities and ensuring equitable access to healthcare for all.

## REFERENCES

1. Price R, Makasa E, Hollands M. World Health Assembly Resolution WHA68.15: "Strengthening Emergency and Essential Surgical Care and Anesthesia as a Component of Universal Health Coverage"—Addressing the Public Health Gaps Arising from Lack of Safe, Affordable and Accessible Surgical and Anesthetic Services. *World J Surg.* 2015;39(9):2115-25. <https://doi.org/10.1007/s00268-015-3153-y>
2. Meara JG, Leather AJ, Hagander L, Alkire BC, Alonso N, Ameh EA, et al. Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development. *Int J Obstet Anesth.* 2016;25:75-8. <https://doi.org/10.1016/j.ijoa.2015.09.006>
3. Davis GL, Suzuki E, Rose J. Where are essential surgeries being performed and monitored? A global update on volume reporting [Internet]. World Bank Group, 2024 [accessed on Mar 5, 2025]. Available at: <https://blogs.worldbank.org/en/opendata/where-are-essential-surgeries-being-performed-and-monitored--a-g>
4. World Bank Group. Data Bank World development indicators [Internet]. World Bank Group [accessed on Mar 5, 2025]. Available at: <https://databank.worldbank.org/source/world-development-indicators/>
5. World Health Organization (WHO). Health workforce: Nursing and midwifery personnel. The Global Health Observatory [Internet]. WHO [accessed on Mar 5, 2025]. Available at: [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/midwifery-personnel-\(number\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/midwifery-personnel-(number))