

# Nurses' perceived challenges in managing perioperative care: a qualitative study

*Percepção de enfermeiros acerca dos desafios à gestão do cuidado perioperatório: um estudo qualitativo*

*Percepción de los enfermeros sobre los desafíos en la gestión del cuidado perioperatorio: un estudio cualitativo*

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**ABSTRACT: Objective:** To know the nurses' perceived challenges in managing perioperative care. **Method:** Exploratory qualitative study based on the Convergent Care Research methodological framework. The non-probabilistic sample consisted of eight nurses responsible for managing perioperative care. **Results:** The most frequent words in the interview *corpus* were identified and distributed in three thematic categories to be discussed, namely: lack of material resources; lack of human resources; and nursing care. **Conclusions:** The lack of human and material resources was considered the main obstacle to perioperative care management. Continuing education proved to be a strong ally for optimizing the nursing care provided.

**Keywords:** Surgicenters. Perioperative nursing. Nursing care. Patient care planning.

**RESUMO: Objetivo:** Conhecer a percepção de enfermeiros sobre os desafios à gestão do cuidado perioperatório. **Método:** Estudo exploratório com abordagem qualitativa, a partir do referencial metodológico da Pesquisa Convergente-Assistencial. Amostra não probabilística, constituída de oito enfermeiros responsáveis pela gestão do cuidado perioperatório. **Resultados:** Identificaram-se as palavras de maior frequência no *corpus* das entrevistas, elencadas três categorias temáticas a serem discutidas, a saber: insuficiência de recursos materiais; insuficiência de recursos humanos; e assistência de Enfermagem. **Conclusão:** A carência de recursos humanos e materiais foi considerada o principal obstáculo à gestão do cuidado perioperatório. A educação continuada se mostrou como forte aliada para otimização do cuidado de Enfermagem prestado.

**Palavras-chave:** Centros cirúrgicos. Enfermagem perioperatória. Cuidados de enfermagem. Planejamento de assistência ao paciente.

**RESUMEN: Objetivo:** Conocer la percepción de los enfermeros sobre los desafíos en la gestión del cuidado perioperatorio. **Método:** Estudio exploratorio con abordaje cualitativo, basado en el marco metodológico de la Investigación Convergente en Atención. Muestra no probabilística, constituida por ocho enfermeros responsables de la gestión del cuidado perioperatorio. **Resultados:** Se identificaron las palabras más frecuentes en el corpus de las entrevistas, enumerando tres categorías temáticas a ser discutidas, a saber: recursos materiales insuficientes; recursos humanos insuficientes; y cuidados de enfermería. **Conclusión:** La falta de recursos humanos y materiales fue considerada el principal obstáculo para la gestión del cuidado perioperatorio. La educación continua demostró ser un fuerte aliado para optimizar los cuidados de enfermería prestados.

**Palabras clave:** Centros quirúrgicos. Enfermería perioperatoria. Atención de enfermería. Planificación de atención al paciente.

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## INTRODUCTION

## METHOD

Surgical suite (SS) units are considered high-risk environments due to records of adverse events associated with the complexity of the care provided, multidisciplinary interaction, pressure on the staff, and stress<sup>1,2</sup>. Perioperative nursing is systematic and requires integrated and essential actions, either in the care context or in unit management, demanding a dynamic posture that can be adapted to the most diverse situations<sup>3</sup>.

The perioperative nurse must have automatic memory recall of surgical science, actions intuitively guided by experience and diversity of thought, as well as physical and mental endurance. In addition, they should continually acquire clinical, anatomical, and physiological knowledge to provide care and prevent possible complications<sup>4</sup>.

In this scenario, professionals working in administrative areas tend to believe that their activity supports the care activity, while care professionals underestimate the managerial activity — assuming this service only has a bureaucratic nature. However, this division compromises patient care and provokes conflicts in the nursing activity<sup>3</sup>.

In the perioperative nursing care routine, the professional faces several challenges in management and care. An observational study categorized three main challenges in perioperative care management: material management, nursing team management, and work coordination of the multidisciplinary team<sup>5</sup>. Assunção et al.<sup>6</sup> report that unit management and patient care are part of the nurse's professional practice and that this conceptual division should exist only in theory — in practice, they should be associated. Another study identifies as challenges the reality of working in a stressful environment with limited material resources, human resources, and time<sup>7</sup>.

Thus, the literature discusses the obstacles faced by nurses when managing primary care and urgent and emergency care, as well as the difficulties experienced in SS units. The nurse's role includes managing the surgical unit, a task that consists of predicting, providing, and maintaining resources — either human or material<sup>5</sup>. Therefore, this study is justified by the need to highlight the challenges faced in the management routine, especially because the professional is exposed to situations that tend to interfere with the care provided to the patient.

## OBJECTIVE

To know the nurses' perceived challenges in managing perioperative care.

This is an exploratory qualitative study based on the Convergent Care Research (CCR) methodological framework, which connects with the health care practice, converging care, research, and the participation of subjects combined with knowledge construction<sup>8</sup>.

Data collection and analysis resulted from the CCR implementation, comprising the phases of conception, instrumentation, screening, analysis, and interpretation. The conception phase involved choosing the area of interest of this study and elaborating the theoretical framework. We then formulated the guiding question: “What are the nurses' perceived challenges faced in perioperative care management?”

In the instrumentation phase, we chose the research scenario, the participants, and the data collection method, that is, the methodological procedures. Thus, the target group comprised nurses responsible for managing perioperative care in the SS unit of a regional hospital in the Federal District of Brazil — a non-probabilistic sample consisting of seven nurses identified by the Portuguese word for ‘nurses’: *enfermeiros* (E). We included professionals working in perioperative care management — unit supervisors — with at least 12 months of experience due to their deeper knowledge of working conditions and situations arising from their significant contact with the investigated scenario. Those who worked in rotating shifts, nursing residents, and individuals who were absent during data collection due to legal leave of absence were excluded. A collection instrument was elaborated with three subjective questions:

- Based on your professional experience supervising the SS unit, what are the main obstacles faced in the process of managing perioperative care? Discuss.
- Among these management obstacles, which one would be the main challenge to overcome? Discuss.
- What measures can be taken to optimize perioperative care in the unit? Discuss.

The next phase — screening — included the data collection procedures. Thus, the interviews were conducted individually between August 29, 2022, and September 19, 2022, in a private environment to ensure the anonymity of the participants. They were audio-recorded and had a mean duration of 15 minutes.

The next phases — data analysis and interpretation — involved the grasping method, in which transcripts of the interviews were systematized, cataloged, and submitted to



## Lack of human resources

The lack of human resources was another major obstacle to perioperative care management, and some interviewees cited the overload of other professionals as the main consequence.

*Sometimes only one nurse can't provide quality care for the patient in the perioperative period because they are responsible both for the admission, the intraoperative care in the rooms, and the postoperative period, not to mention the management care of the shifts [...]* (E5)

*The main issue today is actually the staff size because when we talk about staff, it's not just the nursing staff, it's also the anesthesia staff, right? Because currently, we work in four to five rooms here in the suite, but sometimes we only have anesthesiologists to open one room, maybe two. So, this leads to a great decrease in rotation [...]* (E7)

*The most difficult thing is dealing with human resources because sometimes we can't do as many surgeries due to the lack of professionals, either the anesthesiologist or the nursing team is incomplete.* (E6)

Some participants stated that occasionally this shortage of professionals can be alleviated with the help of residents and nursing students, providing a temporary solution.

*[...] we often don't have enough human resources, the staff frequently relies on residents to fill the gap; a nursing technician on sick leave is a huge problem, and then the patient often ends up without a surgical technologist [...]* (E1)

*There are a lot of surgeries here, now speaking for the nursing team, they [the surgeries] happen with the support of residents, interns; they help a lot! Volunteer... we have a volunteer who often saves surgical instrumentation due to the high absenteeism, many sick leaves.* (E6)

## Nursing care

This third and final topic was correlated to the third question asked to the participants, "What measures can be taken to optimize perioperative care?"

*[...] it's something that is above our management level, especially when it comes to hiring staff, you know? Here we lack staff, technical staff to open the room [...]* (E7)

*[...] they could accept more schools with surgical technologist students, who would improve this human resource issue. What often saves us are the nursing residents and medical interns, who don't know how to work as well as surgical technologists.* (E1)

In this scenario, regarding the lack of human resources, the participants mentioned the hiring of professionals and the assistance of students as possible solutions to the problem. To optimize perioperative care in the unit, another subject addressed was continuing education — training, in addition to the elaboration and implementation of Standard Operating Procedures (SOPs):

*[...] it's something that is not up to us. Currently, our biggest problem is really that, the material resources and the lack of human resources [...]* (E4)

*To optimize care, today we already have the SOPs, they have been implemented, and our team is very focused on care, from when the doors open to when the patient leaves. Currently, we have implemented safe surgery, so we have the forms filled out in the system, thus, we're already in this process [...]* (E7)

*I believe that we should have strong training on SOPs. SOPs have been recently released [...] and the idea is to train the team on this protocol so that we can do a uniform and standard job to try to provide excellence in care. [...]* (E8)

## DISCUSSION

The availability of material resources is crucial for unit operation and quality surgical care. Proper distribution of materials and equipment favors the provision of care, improves productivity, and reduces costs<sup>10</sup>. Therefore, *the Hiring Guidelines of the Federal District Health Department*<sup>11</sup> describe that the process of regularly acquiring material resources for the Brazilian public health system (*Sistema Único de Saúde*

— SUS) involves several steps until the conclusion. This process involves bids, following the electronic auction model, which takes, on average, 6 to 12 months to complete and can still fail for lack of proposals or suppliers stipulating prices over those estimated by the administration, among other factors. We emphasize that resource management in public services is a complex activity.

A study<sup>12</sup> reveals that the lack of material resources favors the suspension of surgeries, and such cancellations can harm the patient's health, delay the surgical scheduling, increase financial and operational costs, extend the length of stay, and lead to higher risks of hospital infection. In addition, planning the number of material resources used in SS units is essential.

Given this scenario, inadequate, malfunctioning material resources and surgical instruments, as well as those showing loss of integrity and safety, pose risks and can cause undesirable incidents for the patient and/or the surgical team. Adequate material resources are among the elements required for patient safety during procedures. Instrument deterioration could be avoided by investing in device maintenance throughout their service life<sup>13</sup>.

However, the lack of these products can cause conflicts between the team, trigger a higher level of stress for professionals, as well as result in improper and unsafe care for the surgical patient<sup>14</sup>. Recommended measures to improve the work process involve the promotion of interaction among members of the multidisciplinary team, maintenance of working conditions — including infrastructure —, and investment in occupational health. Health services should adopt these measures to mitigate the stress of professionals working in surgical units<sup>14</sup>.

Regarding SS human resources, its distribution crisis in the Brazilian health sector has been dragging on for a long time, with several strategic public policies developed in an attempt to overcome this obstacle, such as the Rondon Project, the Pro-Residency, and the More Doctors Program<sup>15</sup>. Overwork overstimulates the professional, who suffers from this situation, as the demands exceed their capacity to process and fulfill them — a circumstance that can harm the worker's physical and mental health<sup>14</sup>.

Another issue that impacts the service is the absenteeism of professionals, which may be associated with the worker's individual conditions and with organizational aspects. Among the factors associated, we highlight the reality experienced by nursing professionals, who are constantly subjected to various occupational risks; the — at times, precarious — working conditions; and psychological and physical illnesses, closely related to the individual's absence in the workplace<sup>16</sup>.

Nevertheless, providing safe nursing care based on effective staff management — sufficient staff distribution — is crucial. The limited number of professionals interferes with the quality of work and, consequently, with patient safety. The distribution of professionals can prevent conflicting situations and mitigate work destabilization with respect to labor rights<sup>17</sup>. We underline that the shortage of human resources in surgical units is closely related to the suspension of surgical procedures<sup>18</sup>.

A qualitative study<sup>19</sup> listed the conditions that lead to absenteeism of nursing professionals: communication as a tool to develop teamwork, manage conflicts, and reduce absenteeism; a career plan and salary that encourages the work practice; type of employment relationship, in which public service stability negatively affects the reduction of absenteeism; influence of the physical structure, material resources, and equipment on the provision of quality care. We emphasize that such categories may emerge as conditions that contribute to increase or decrease absenteeism — either voluntary (for particular reasons) or involuntary (when the worker is unable to be present).

Concerning nursing care, specifically with respect to the adequacy of human and material resources, the participants did not offer many suggestions for improvement, declaring that this acquisition aspect was beyond their competencies — and under the high management of the Federal District Health Department<sup>11</sup>.

SS units are considered high-risk environments because they have high records of adverse events<sup>2</sup>. In this regard, in 2013, the Ministry of Health, under Ordinance No. 1,377, implemented the surgical safety checklist to enforce the global initiative of the World Health Organization (WHO) establishing the basic items for the checklist to be used in surgical procedures — “Safe Surgeries Save Lives”<sup>20</sup>.

The relevance of adopting strategies to optimize the unit is indisputable, including care related to the provision and prediction of essential resources to favor the performance of the surgery and, consequently, contribute to patient safety. Hospitals that invest in hiring and maintaining human and material resources have better results, such as low mortality rate and reduced cost, associated with the crucial aspect of patient safety culture<sup>18</sup>.

Among the proposals to improve nursing care, the participants mentioned the positive role of continuing education — training, in addition to the elaboration and implementation of SOPs. Thus, investing in the training of surgical professionals is necessary, as they add to the quality of the service provided — fundamental to the provision of quality and safe care<sup>18</sup>.

In general, the nurses' adherence to continuing education programs is low due to the numerous activities they must perform and the staff deficit. We highlight that the involvement of professionals in such programs should be systematic to optimize the teams according to the health facility<sup>21</sup>.

However, continuing education is regarded as a set of practices focused on transforming hegemonic models of education and health care, a process in which the individual can acquire knowledge to reach their professional potential and personal improvement based on the institutional and social reality<sup>21</sup>.

## CONCLUSIONS

Health professionals face difficulties when managing perioperative care, and this scenario is not far from that experienced by nurses working in the SS unit of a Federal District public service. The main obstacle reported was the lack of human and material resources.

Few suggestions were made to improve the supply of human and material resources, since the professionals

recognized their limitations in managing care in the sector, which depends on centralized decision-making processes undertaken by the high management of the public service.

The professionals considered improvement proposals relevant to optimize perioperative care, regarding the safety of the surgical patient and continuing education as strong allies in the process of enhancing perioperative care — implemented in the sector with the use of the SOP concept.

## CONFLICT OF INTERESTS

The authors declare no conflicts of interest.

## AUTHORS' CONTRIBUTION

BSM: Conceptualization, Data curation, Investigation, Writing – original draft, Writing – review & editing, Software. MMC: Project administration, Formal analysis, Methodology, Writing — original draft, Writing – review & editing, Supervision. JRAAG: Formal analysis, Writing – original draft, Writing – review & editing, Validation.

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