

## **SURGICAL NURSING CARE IN THE OPERATING ROOM: AN INTEGRATIVE REVIEW**

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### **ABSTRACT**

**Objective:** to identify the state-of-the-art developed about surgical Nursing care in the operating room.

**Method:** an integrative review with search and selection of primary studies conducted in April and May 2022 in four major data sources in the health field, namely: LILACS, SciELO, BDENF and PubMed, from 2018 to 2022. The sample consisted of 13 studies, 8 selected from a universe of 293 articles and 5 obtained through the manual search.

**Results:** three categories were generated: Associating surgical care with care, people and material resources management for patient safety; Surgical care and ethical sensitivity in the search for patients' well-being; and Operating room nurses' manifestation and omission experiences and surgical care.

**Conclusions:** surgical Nursing care in the operating room is varied and is manifested through meeting the administrative demands, ethical sensitivity, body temperature maintenance, preservation of individuality and meeting all the needs in the intraoperative period when patients are more vulnerable, including being duly informed as a way to provide safe surgical care. On the other hand, nurses acknowledge the need to change their world view and direct surgical care towards a more human, social and cultural perspective.

**DESCRIPTORS:** Nursing. Operating Room Nursing. Nursing Care. Nursing Role. Nurses.

**HOW CITED:** Martínez MFMH, Vargas MAO, Falcón GCS, Santos DG. Surgical nursing care in the operating room: an integrative review. *Texto Contexto Enferm* [Internet]. 2023 [cited YEAR MONTH DAY]; 32:e20220292. Available from: <https://doi.org/10.1590/1980-265X-TCE-2022-0292en>

## CUIDADO CIRÚRGICO DE ENFERMAGEM EM SALAS DE CIRURGIA: UMA REVISÃO INTEGRATIVA

### RESUMO

**Objetivo:** identificar o estado da arte que foi desenvolvido sobre os cuidados cirúrgicos do enfermeiro da sala de cirurgia.

**Método:** revisão integrativa com pesquisa e seleção de estudos primários realizada entre abril e maio de 2022 em quatro fontes de dados destacadas no campo da saúde: LILACS, SciELO, BDENF e PubMed de 2018 a 2022. A amostra consistiu-se de 13 estudos, 8 selecionados de um total de 293 artigos e 5 pesquisados manualmente.

**Resultados:** foram geradas três categorias: associação do cuidado cirúrgico com a gestão dos cuidados, pessoas e recursos materiais para a segurança do paciente; cuidado cirúrgico e sensibilidade ética na busca do bem-estar do paciente e as experiências de manifestação e omissão do enfermeiro da sala de cirurgia e o cuidado cirúrgico.

**Conclusões:** o cuidado cirúrgico na sala de cirurgia é variado e se manifesta através da atenção às exigências administrativas, sensibilidade ética, manutenção da temperatura corporal, preservação da individualidade e atenção a todas as necessidades no ambiente intra-operatório onde o paciente é mais vulnerável, incluindo o dever de estar informado como um meio de proporcionar um cuidado cirúrgico seguro. Por outro lado, reconhece a necessidade de mudar sua cosmovisão e direcionar os cuidados cirúrgicos para uma perspectiva mais humana, social e cultural.

**DESCRITORES:** Enfermagem. Enfermagem em Sala de Cirurgia. Cuidados de Enfermagem. Papel do Enfermeiro. Enfermeiros.

## CUIDADO QUIRÚRGICO DE ENFERMERÍA DE SALA DE OPERACIONES: UNA REVISIÓN INTEGRATIVA

### RESUMEN

**Objetivo:** identificar el estado de arte que se ha desarrollado sobre el cuidado quirúrgico de la enfermera de sala de operaciones.

**Método:** revisión integrativa con indagación y selección de estudios primarios efectuada en abril y mayo de 2022 en cuatro fuentes de datos destacadas en el campo de la salud: Lilacs, SciELO, BDENF y PubMed de 2018 a 2022. La muestra se conformó por 13 estudios, 8 seleccionados de un universo de 293 artículos y 5 de búsqueda manual.

**Resultados:** se generaron tres categorías: asociando cuidado quirúrgico con gestión de cuidado, de personas y de recursos materiales para la seguridad del paciente; el cuidado quirúrgico y la sensibilidad ética en la búsqueda de bienestar para el paciente y las experiencias de manifestación y omisión del enfermero de quirófano y el cuidado quirúrgico.

**Conclusiones:** el cuidado quirúrgico en la enfermera de sala de operaciones es variado y se manifiesta a través de la atención a las demandas administrativas, la sensibilidad ética, el mantenimiento de la temperatura corporal, conservación de la individualidad y atención a todas las necesidades en el intraoperatorio donde el paciente es más vulnerable, incluyendo el estar informada como una forma de brindar un cuidado quirúrgico seguro. Por otro lado, reconoce la necesidad de cambiar su visión de mundo y dirigir el cuidado quirúrgico hacia una mirada más humana, social y cultural.

**DESCRIPTORES:** Enfermería. enfermería de quirófano. cuidado de enfermeira. rol de la enfermera. Enfermeras.

## INTRODUCTION

As the epistemological object of the Nursing discipline, care means a loving, amiable, friendly and protective relationship with the patients. In a broader sense, it is seen as a new paradigm, where care is the hand that caresses and welcomes<sup>1</sup>. In this sense, care becomes the essence of Nursing, contributing through transpersonal and intersubjective encounters to enhance and protect human beings, which shall find in it a meaning for the disease, sorrow, suffering and life<sup>2</sup>.

In the context of a surgical service, considered as a complex hospital unit of restricted access and with exclusive norms and routines that require duly certified professionals to meet the various needs of the clients in the operating room given the high technological density and development<sup>3</sup>, the surgical care provided by operating room nurses acquires a particular meaning given the current competencies inherent to the specialty and to the modern world demands, where health environments are increasingly more technological, leading to the risk of deviating the surgical Nursing care focus towards technology and instrumentation practices. With this reality as a starting point, surgical care is not an isolated action but is immersed in certain social and institutional contexts and in relationship networks that attribute meaning to it<sup>4</sup>.

The scientific evidence about surgical Nursing care in the operating room is limited, with its exploration almost becoming a challenge. Thus, this search found a study that approached the Nursing care experiences of recently-graduated nurses in an operating room, where one of the findings was that they ensured patient safety by establishing one-on-one contact, protecting the patients' well-being, working as a team and focusing on each patient as a person<sup>5</sup>. Other studies are focused on exploring surgical Nursing care associated with the surgical team and, from the perspective of operating room nurses, conclude that the prerequisites for safe Nursing care during the intraoperative period and teamwork depend on the dialogical encounter established by the team members in the preoperative period<sup>6</sup>.

The aforementioned reflects the need to stay in the direction of discerning the reason to be of the profession from the point of view of those that provide it, considering that, to the present day, it has been a little understood concept in its essence and in the surgical area. This gap is even more accentuated as it is daily associated with knowledge about the surgical technique to enable proper instrumentation, being up-to-date in how to handle high-complexity technological devices and watching for patient safety in the operating room, among others which, although they are indicators that contribute to providing good quality care, do not allow seeing our essence, the one that differentiates us from other disciplines.

Hence the importance of recognizing operating room nurses as valuable professionals that provide care to surgical patients, with competencies in line with scientific and technological advances and with the demands of current society, where their leading role within the surgical team and their direct relationship with patient care are also reflected in the management process<sup>7</sup>.

Studying the topic is a reason for operating room nurses to reflect on the meaning they attribute to the care they provide to surgical patients, rescue their professional performance and imbuing a new perspective to their role as those in charge of providing surgical care. With the purpose of contributing to the Nursing professionals working in the surgical area, the objective of this study is to identify the state-of-the-art developed about surgical Nursing care in the operating room.

## METHOD

This is an integrative review, considered as a relevant method in the health field that, by searching diverse evidence on a given theme, gathers and synthesizes results in an orderly manner, in addition to identifying knowledge gaps that may guide the development of future research studies. Likewise, integrative reviews contribute critical knowledge that allows health professionals to define behaviors and make decisions<sup>8</sup>.

For being an integrative review of a systematic and rigorous process, its development is based on the research methodological rigor principles, thus following these steps: 1) Elaboration of the research question; 2) Search and selection of primary studies; 3) Data extraction from the studies; 4) Critical evaluation of the primary studies included in the review; 5) Synthesis of the review results; and 6) Presentation of the method<sup>9</sup>.

In the first stage, the topic to be developed on surgical care was defined and delimited with the following research question: Which is the state-of-the-art developed about surgical Nursing care in the operating room? In order to formulate the review guiding question, the PICO strategy was used: P) Problem, Patient, Population - Which will the group of interest be; I) Intervention, Exposure or Topic of Interest - Which intervention or topic will be studied?; C) Comparison - Will the intervention be compared in any way?; O) Outcome - Which will the effect of the intervention be?; with an additional T) or S) for Time or Study Type - Will there be any restriction regarding the publication period of the studies or the research design type? The objective is to find the best scientific evidence available in a precise and fast way<sup>10</sup>. The following was considered in this study: P (Operating room nurses), I (Surgical care), C (Does not apply), and O (Surgical Nursing care).

The second stage consisted in defining the inclusion and exclusion criteria for the studies. The following inclusion criteria were defined: research studies published between 2018 and 2022 as full-text articles and indexed in the databases selected. The following materials were excluded from this review: editorials, letters, opinion articles, review articles, comments, essays, duplicate publications, theses, bulletins, books, and materials published in languages other than English, Spanish and Portuguese.

The search was conducted in April and May 2022 in the following data sources: SciELO (Scientific Electronic Library Online) Medline, PubMed (Medical Literature Analysis and Retrieval System Online/ Database), LILACS (*Literatura Latino-Americana en Ciencias de la Salud*) and BDENF (*Base de Datos de Enfermería*) in English, Spanish and Portuguese, containing the following descriptors: Descriptors in Health Sciences (*Descritores en Ciencias de la Salud*, DeCS), from the Virtual Health Library, and Medical Subject Headings (MeSH), were associated with the OR and AND Boolean operators to distinguish and associate them, respectively: *Operating Room Nursing* AND *Nursing Care* in English; *Enfermagem de Centro Cirúrgico* AND *Cuidados de Enfermagem* in Portuguese; and *Enfermería de quirófano* AND *Cuidado de enfermería* in Spanish. When identifying controlled descriptors in the databases selected to conduct the review, relevant synonyms for the terms of interest were also found, such as the following: *Enfermagem de Centro Cirúrgico* OR *Papel do Profissional de Enfermagem*; *Cuidado de enfermería* OR *Cuidados de Enfermagem* (Chart 1). A total of 293 articles were found, with 57 remaining after applying the filters, of which 8 met the inclusion criteria. In addition, 5 articles that also met the aforementioned inclusion criteria were found in the manual search.

**Chart 1 – Search strategy by database. Lima, Peru, 2023.**

Database	Search strategy	Studies found	Limits/Filters
SCIELO	<i>Enfermagem de Centro Cirúrgico</i> OR <i>Papel do Profissional de Enfermagem</i> AND <i>Cuidado de enfermária</i> OR <i>Cuidados de Enfermagem</i>	84	16
BDEF	( <i>enfermería de quirófano</i> ) AND ( <i>cuidado de enfermária</i> )	56	18
LILACS	( <i>Enfermagem de Centro Cirúrgico</i> ) AND ( <i>Cuidados de Enfermagem</i> )	70	14
PUBMED/MEDLINE	“ <i>Operating Room Nursing</i> ”[Mesh] AND “ <i>Nursing Care</i> ”[Mesh]	83	9

The third stage consisted in defining the information to be extracted from the articles selected. In order to organize the information, a chart (Chart 2) was prepared in Microsoft Word, where the data were typed and grouped according to the following contents: title, author(s), locus, year of publication, study objective, methodology and main result.

**Chart 2 – Description of the studies. Lima, Peru, 2023.**

Studies	Author(s), locus and year	Study objective	Methodology	Main result
1	Gutierrez LS <i>et al</i> <sup>12</sup> Brazil/2018	To describe the Nursing recommendations for good patient safety practices in the operating room.	Quantitative, descriptive and exploratory research	Highlights: Establishing the patient safety culture and the Safe Surgery Checklist, which nurse can use as care management strategies for patient safety in the surgical center.
2	Dutra CKR, Salles BG, Guirardello EB <sup>13</sup> Brazil/2019	To evaluate the frequency and reasons for missed Nursing care and to verify if the reasons for the omission differ across the professional categories.	Quantitative and cross-sectional study	The main reasons attributed for care omissions were inadequate professional staffing, urgency situations with patients during the work shift, and unavailability of medications, materials or equipment when required.
3	Oliveira Souza, É, Gonçalves, N, Alvarez AG <sup>14</sup> Brazil/2019	To describe Nursing care to maintain body temperature during the intraoperative period.	Descriptive and cross-sectional study	The main Nursing care measures applied in all patients during the intraoperative period were infusion of a heated intravenous solution and use of a cotton surgical field.
4	Sandelin A, Kalman S, Gustafsson BÅ <sup>6</sup> Sweden/2019	To describe the experience of operating room nurses about the previous conditions for safe intraoperative Nursing care and teamwork.	Qualitative and descriptive	Operating room nurses struggle to obtain proper information about the care to be provided to the patients, the surgical intervention and the equipment to be well-prepared for intraoperative Nursing care.

Chart 2 – Cont.

Studies	Author(s), locus and year	Study objective	Methodology	Main result
5	Barboza BC, Sousa CALSC, Morais LAS <sup>15</sup> Brazil/2020	To understand the perceptions of the multidisciplinary team professionals about care humanization in the operating room.	A qualitative approach, with descriptive purposes.	They considered that humanized care was perceived as seeking the patients' well-being, maintaining an empathic relationship towards others with a comprehensive care approach.
6	Mert Boğa S, Aydin Sayilan A, Kersu Ö, Baydemir C <sup>16</sup> Turkey/2020	To determine the relationship between operating room care behaviors and their ethical sensitivity.	Quantitative, cross-sectional and descriptive-correlational	The nurses' perception levels about care quality were high and their ethical sensitivity levels were moderate. The nurses' ethical sensitivity improved along with their care quality perception and, as their time working in the clinic increased, their ethical sensitivity in the Benefit provision, Holistic approach and Guidance subscales was also increased.
7	Erikson J, Lindgren BM, Lindahl E <sup>5</sup> Sweden/2020	To explore the Nursing care experiences of recently-trained surgical nurses in an operating room.	Qualitative research	Operating room nurses experienced threats to safe Nursing when they lacked time for the patients, as well as for their own recovery, in addition to lacking feedback to improve the assistance provided. They watched for the patients' safety when establishing one-on-one contact, protecting the patients' well-being and working in teams for the patients' best interest.
8	Martins KN <i>et al</i> <sup>7</sup> Brazil/2021	To describe the management process performed by nurses in the operating room.	A descriptive and exploratory study, with a qualitative approach	The similarity analysis shows the Nursing team role in the surgical center and its direct relationship with patient care, whereas nurses' role is characterized by predominantly managerial actions related to work organization. Three categories were listed: people management, material resources management and care management.
9	Matzenbacher LPS <i>et al</i> <sup>17</sup> Brazil/2021	To describe the experience underwent by nurses in an outpatient surgical center during the care phases for patients subjected to eye surgeries.	Descriptive study, of the experience report type	The checklist promote the culture safety for eye surgery patients in a solid way in the care process, with participation of all the team members: nurses, surgeon and anesthesiologist.

Chart 2 – Cont.

Studies	Author(s), locus and year	Study objective	Methodology	Main result
10	Santo DMNE <i>et al</i> <sup>18</sup> Brazil/2021	To describe the care provided by the Nursing team to patients subjected to extracorporeal lithotripsy.	Experience report	Nursing care includes all of the patients' needs, respecting their individualities and paying attention to possible complications, providing good quality care during the patients' time in the operating room, from preparation to the anesthetic recovery room.
11	Gemelli R <i>et al</i> <sup>19</sup> Brazil/2021	To understand operating room nurses' perception about the care provided to the patients during the transoperative period in a hospital from western Santa Catarina.	Qualitative study, delimited by ethnographic study assumptions	It highlights the work overload to which the Nursing team is exposed as the main factor restricting nurses' work with the patients in care provision.
12	Bastami M, Imani B, Koosha M <sup>20</sup> Iran/2022	To explain the experiences underwent by operating room nurses about the care provided to patients subjected to laparotomy surgeries.	Qualitative and phenomenological study	The main topics included a positive view about patient care, preservation of the patients' physical safety, and considering the patients' vulnerability in the operating room.
13	Batista Sá Moraes R <i>et al</i> <sup>21</sup> Brazil/2022	To analyze how the Nursing team working in the Surgical Center of a public hospital experiences humanization in the work environment.	Quantitative, descriptive, cross-sectional and exploratory study	A total of 39 (67.2%) of the professionals considered that their work environment is humanized, welcoming the user (49 [84.5%]), and 44 (75-9%) stated that the users are understood. In the communicative aspect, 31 (53.4%) considered that there may have been dialog with the users, 31 (53.4%) indicate that no information is conveyed during the perioperative period and that they have difficulties providing humanized care; however, 43 (74.1%) consider that the team is willing to improve humanized care and the entire sample shows predisposition to implement these changes.

The fourth stage comprised a careful evaluation of the articles and took place during elaboration and analysis of the charts. A critical evaluation of the studies that met the inclusion criteria was performed, and the methodological aspects and convergence and/or divergence of the results were observed in the different studies, which allowed elaborating the categories.

The fifth stage consisted in discussing the main results, making a comparison with the already existing theoretical knowledge and the identification of conclusions resulting from the integrative review. The need to conduct more research studies was also identified, when detecting certain gaps in the studies included. In the sixth and last stage, a synthesis was prepared with the main results evidences from the analysis of the articles included, which will be later on presented.

It was not necessary to submit the current study for approval by any Research Ethics Committee because it is an integrative literature review and public domain sources have been used to conduct it; however, rigor in ethical care was considered when performing the search, analysis, discussion and presentation of the results.

## RESULTS

### Characterization of the studies

Figure 1 shows the flowchart describing the path to select the articles, based on the PRISMA model<sup>11</sup>.



**Figure 1** – Flowchart corresponding to the scientific literature review, 2018-2022.  
Source: Adaptation from PRISMA, 2009

## Evaluation of the studies

Of all 13 articles that comprised this integrative review, most of the studies were published in 2021 (n=4) and 2020 (n=3), followed by 2019 (n=3), (n=2) so far in 2022 (year when the review was conducted) and (n=1) in 2018, which allowed for a broad time frame.

Regarding the type of research, 7 studies resorted to qualitative research (53.85%), among which one with a phenomenological approach and another one ethnographic stand out; in turn, 6 papers were quantitative research studies (46.15%), where the cross-sectional approach prevails, which allowed evidencing experiences, perceptions and descriptions of surgical Nursing care from a comprehensive perspective.

Regarding the study loci, 71.42% correspond to Latin America (Brazil) and 14.29% were conducted in Europe (Sweden), with this latter percentage also for the studies carried out in the Middle East (Iran, Turkey) (Chart 2).

## DISCUSSION

Analyzing the articles allowed identifying three categories. The category called “Associating surgical care with care, people and material resources management for patient safety” (studies 1, 8 and 9 in Chart 2) reveals the operating room nurses’ role in care management, intertwined with people and material resources management, where patient safety gains relevance as a surgical care management strategy.

It is thus shown in the study<sup>7</sup> that identified the representations of nurses working in the surgical center, where Nursing care management is concentrated on administrative tasks whereas the care activities are predominantly performed by the other Nursing team members. They identified planning, communication and indicators as managerial tools for surgical care management, highlighting the safe surgery protocol as a best indicator reference.

This result is associated with the studies<sup>12,17</sup> that considered establishing a patient safety culture with participation of all the surgical team members (nurse, surgeon and anesthesiologist) and resorting to the Safe Surgery Checklist as care management strategies in the surgical center. Other contrasted studies<sup>22-23</sup> reflected non-consolidation in using the Safe Surgery Checklist by the surgical team, considered a challenge to promote patient safety in the surgical sector.

In the topic of people management in the operating room, the development of competencies for this managerial activity stood out. Material resources management was addressed as one of the obstacles to achieve good care quality in the surgical center, both due to old devices and to lack of inputs, which caused surgery postponements or rescheduling. The study<sup>24</sup> opposes the findings, as it considers human and material resources management as indirect assistance provided by surgical center nurses in the care component for the anesthetic-surgical procedure to progress properly and safely, in addition to ensuring preservation and better quality of life for the patients. However, the research<sup>22</sup> highlights the nurses’ skill in the anticipated organization of the materials to avoid omissions that may impair the surgical process.

The evidence found and the contrasted findings reflect the importance of nurses’ role as surgical care managers, where, given the complexity inherent to the area, they assume mostly managerial tasks that are indispensable to contribute to safety and good quality care for surgical patients and to proper functioning of the service; however, in this path, it is indispensable not to neglect the essence of the profession.

Referring to another research study<sup>25</sup>, it reveals that nurses’ approach in administrative tasks in their operating room routine hinders and diverts the attention on care to solving problems in relation to devices and materials for the surgeries to be performed without interruptions in the surgical center.

This leads to reflect about the articulation among the operating room administrative demands and the attention on surgical care, currently quite associated with the biomedical model, which in this case invisibilizes the challenge of solving issues related to the operability of technological devices and targeted at the challenge of fostering changes in the surgical care routines that go beyond the well-being need of the individuals undergoing the surgical experience.

The second category, called “Surgical care and ethical sensitivity in the search for patients’ well-being” (studies 5 and 6 in Chart 2), fosters the discussion about developing ethical sensitivity in nurses as a component for surgical care that is ethically in line with the competencies required by the profession, where surgical care quality is directed towards seeking the patients’ well-being.

In one of the studies<sup>15</sup>, the interviewees stated perceiving humanized care as seeking the patients’ well-being, supported on an empathetic relationship from the holistic care perspective, describing the characteristics involving the complex act of providing humanized care. In this case, humanizing means loving what a person does, based on ethical and moral principles and prioritizing human life, always seeking the well-being of those who need attention and care.

This finding is articulated with the study<sup>16</sup> that sought to determine the relationship between surgical nurses’ care behaviors and their ethical sensitivity, where it was found that their perception levels about care quality was high, whereas their ethical sensitivity levels were moderate. In addition, the nurses’ ethical sensitivity improved along with their care quality perception and, as their time working in the current clinic increased, their ethical sensitivity in the Benefit provision, Holistic approach and Guidance subscales was also increased.

These results are similar to those found in another research study<sup>26</sup>, which sought to analyze the clients’ perception about Nursing care in the surgical center and concluded that the Nursing team developed good quality care based on humanization and care integrality principles, although it seems to be necessary that these professionals adapt to the clients’ sociocultural aspects.

The aforementioned evidence leads us to assert that surgical care imbued with ethical sensitivity strengthens its quality, which would reflect in humanized surgical care that generates subjective well-being in the patients. However, if analyzed from the patients’ perspective, there is an urgent need for operating room nurses to articulate in their knowledge repositories the socio-anthropological theories that allow them to provide culturally competent care, according to the surgical patients’ world views and that also strengthen nurses’ surgical care experience.

The third category, called “Operating room nurses’ manifestation and omission experiences and surgical care” (studies 3,11,10,12,4,2, 7 and 13 in Chart 2) reveals nurses’ experiences about surgical care and how they perceive and manifest it in their everyday performance within the surgical area; however, it is in this very routine that they also find certain situations that are attributed more importance and generate distancing or its omission.

Regarding the experiences about how nurses manifest surgical care, some studies<sup>14,18,20</sup> revealed that the main Nursing care measures applied in all the patients during the intraoperative period were infusing a heated intravenous solution to prevent hypothermia and contributing to patient safety in the anesthetic-surgical procedure. In patients subjected to extracorporeal lithotripsy, they included all of the patients’ needs, respect for their individualities and paying attention to possible complications, thus providing good quality care while the patients were in the operating room. In patients subjected to laparotomy, they also included topics such as positive view of the care provided, preserving physical integrity, and considering the patients’ vulnerability in the operating room. This is similar to the research study<sup>27</sup> in which one of its results shows that, in 70% of the nurses, the Nursing care quality in terms of surgical patients’ comprehensive safety was good.

Other studies<sup>6,19</sup> found that operating room nurses struggled to obtain proper information about patient care, the surgical intervention and the equipment to be well-prepared for intraoperative

Nursing care; in addition, they considered that the care provided by nurses in a surgical center is the result of joint knowledge about machine handling, pathophysiology, semiology, fundamental elements and care subjectivity.

This finding is similar to what was discovered in the research study<sup>28</sup> where it is concluded that operating room Nursing professionals are the connection between technology and the care quality provided to the users. It is also similar to the survey<sup>29</sup> that emphasized the need for nurses to always seek new knowledge and continuous training, with the objective of qualifying the assistance provided and sharing their knowledge with the work team, in person-centered perspective.

This is due to the complexity inherent to the area where nurses need to maintain their knowledge repositories according to scientific and technological advances that may allow them to confer added value to surgical care, suggesting the need to constantly acquire knowledge due to the remarkable demand for differentiated care in the surgical center. In this sense, they tend to distance from direct patient care, with supply of materials and devices for the unit and technical care prevailing<sup>19</sup>.

Thus, it is in this routine that certain situations invisibilizing surgical care occur, such as its omission. This was found in the study<sup>13</sup> where the main reasons attributed for care omissions were the professionals' incorrect assessment, urgency situations with the patients during the work shift, and unavailability of medications, materials or devices when required.

Articulated with lack of time, the aforementioned exerts impacts on the operating room nurses' experience and can be seen in the study<sup>5</sup> where operating room nurses experienced threats to safe Nursing when they lacked time for the patients; however, they watched for their safety by establishing one-on-one contact, protecting their well-being and putting themselves in the patients' place.

These findings reflect the reasons why operating room nurses distance from, or otherwise omits, surgical patient care. It highlights the work overload to which the Nursing team is exposed as the main factor restricting nurses' work with the patients in care provision<sup>19</sup>.

Despite these situations, the professionals recognize their limitations and are willing to implement changes. This was found in the study<sup>21</sup> where most of the professionals (39 [67.2%]) considered that their work environment is humanized, welcoming the users (49 [84.5%]), and 44 (75.9%) stated that the users are understood. In the communicative aspect, 31 (53.4%) considered that there may have been dialog with the users, 31 (53.4%) indicate that no information is conveyed during the perioperative period and that they have difficulties to provide humanized care; however, 43 (74.1%) consider that the tam is willing to improve humanized care, as well as the entire sample.

The limitation of the current research is the low number of eligible primary studies found in the integrative review, reason why it was necessary to also resort to a manual search to expand the sample universe.

## CONCLUSIONS

This integrative review allowed systematizing and preparing a synthesis about the state-of-the-art developed about the surgical care provided by operating room nurses in different countries. Therefore, it was possible to appreciate the complexity inherent to surgical care from a comprehensive perspective, which allowed evidencing surgical Nursing care experiences, perceptions and descriptions.

The studies addressed highlight the association between surgical care and the administrative demands of the operating room, as it is an area marked by high technological operability; also highlighting with this the nurses' role as surgical care managers by contributing to safety and care quality of surgical patients and to proper functioning of the service; however, it becomes indispensable not to neglect the essence of the profession. Another aspect addressed is surgical care with ethical sensitivity to strengthen its quality, reflecting in humanized surgical care that generates well-being in the patients.

In the operating room nurses' experience, surgical care is varied and they manifest it as follows: when providing comfort and physical safety by maintaining body temperature; by preserving individuality and paying attention to all needs during the intraoperative period, when the patients are more vulnerable; and through the information they acquire to be prepared and provide safe surgical care. On the other hand, certain situations occur such as work overload, which oftentimes reduces the time to convey information to the patients, who arrives at the operating room with doubts and fears; in addition to a delicate aspect which operating nurses consider as limiting: the surgical patients' sociocultural condition. However, they also recognize the need to change their world views and direct surgical care towards a more human, social and cultural perspective.

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## NOTES

### ORIGIN OF THE ARTICLE

This article is a product of the “Writing of scientific articles” academic discipline and was presented in 2022 at the Graduate Program of *Universidad Nacional Mayor de San Marcos*.

### CONTRIBUTION OF AUTHORITY

Study design: Martínez MFMH.

Data collection: Martínez MFMH.

Data analysis and interpretation: Martínez MFMH.

Discussion of the results: Martínez MFMH.

Writing/Critical review of the content: Martínez MFMH, Vargas MAO, Falcón GCS, Santos DG.

Review and approval of the final version: Martínez MFMH, Vargas MAO, Falcón GCS, Santos DG.

### CONFLICT OF INTEREST

There is no conflict of interest.

### EDITORS

Associated Editors: Flavia Giron Camerini, Maria Lígia dos Reis Bellaguarda.

Editor-in-chief: Elisiane Lorenzini

### HISTORICAL

Received: November 30, 2022.

Approved: March 30, 2023.

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