



Quality of care in the operating room: management actions and strategies for safe practices

Calidad de atención en el quirófano: acciones de gestión y estrategias para prácticas seguras

Qualidade do cuidado em centro cirúrgico: ações e estratégias gerenciais para práticas seguras

Renata Fontes da Silva Mesquita¹

ORCID: 0000-0001-6880-6412

Ronilson Gonçalves Rocha²

ORCID: 0000-0003-4097-8786

Cristiano Bertolossi Marta^{2*}

ORCID: 0000-0002-0635-7970

Rhayana Vitória da Rosa Silva²

ORCID: 0000-0001-8878-3668

Joyce Martins Arimatea Branco

Tavares²

ORCID: 0000-0002-7014-4654

Priscilla Valladares Broca³

ORCID: 0000-0003-3392-910X

Eric Rosa Pereira¹

ORCID: 0000-0003-0202-6653

Vithoria Paes Machado²

ORCID: 0000-0003-3345-3367

Marcio Tadeu Ribeiro Francisco⁴

ORCID: 0000-0003-1362-7809

¹Fundação Técnico-Educacional Souza Marques. Rio de Janeiro, Brazil.

²Universidade do Estado do Rio de Janeiro. Rio de Janeiro, Brazil.

³Universidade Federal do Rio de Janeiro. Rio de Janeiro, Brazil.

⁴Universidade Veiga de Almeida. Rio de Janeiro, Brazil.

*Corresponding author: E-mail: cristianobertol2014@gmail.com

Abstract

The aim was to identify which directions are related to the quality of care and patient safety in the operating room. As for the method, it is an integrative review study in which bibliographic research was carried out to obtain information and approach the theme defined for the study, encouraging discussions related to research and allowing the acquisition of relevant knowledge in the field of quality of care in the operating room. The results found are correlated with the search and analysis of evidence on quality control in the surgical center, as well as the role of nurses in this environment, since their actions are fundamental for good surgical practice in all its stages. It was concluded that there are guidelines aimed at the quality of care and patient safety, even if some are still incipient and little discussed, allowing to reinforce the importance of nurse's managerial actions to increase the quality of processes from planned, organized actions and based on scientific evidence, reinforcing its responsibility in promoting best practices in surgical health care units.

Descriptors: Surgery Department, Hospital; Nursing; Quality Assurance, Health Care; Patient Care Management; Nursing Care.

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Resumén

El objetivo fue identificar qué direcciones están dirigidas a la calidad de la atención y la seguridad del paciente en el quirófano. En cuanto al método, se trata de un estudio de revisión integradora en el que se realizó una investigación bibliográfica para obtener información y abordar la temática definida para el estudio, incentivando discusiones relacionadas con la investigación y permitiendo la adquisición de conocimientos relevantes en el campo de la calidad de la atención en el quirófano. Los resultados encontrados se correlacionan con la búsqueda y análisis de evidencias sobre el control de calidad en el centro quirúrgico, así como el papel de los enfermeros en este ambiente, ya que su actuación es fundamental para la buena práctica quirúrgica en todas sus etapas. Se concluyó que existen directrices dirigidas a la calidad de la atención y seguridad del paciente, aunque algunas aún son incipientes y poco discutidas, lo que permite reforzar la importancia de las acciones gerenciales de enfermería para aumentar la calidad de los procesos a partir de acciones planificadas, organizadas y fundamentadas en la evidencia científica, reforzando su responsabilidad en la promoción de buenas prácticas en las unidades asistenciales quirúrgicas.

Descriptor: Servicio de Cirugía en Hospital; Enfermería; Garantía de la Calidad de Atención de Salud; Manejo de Atención al Paciente; Atención de Enfermería.

Resumo

Objetivou-se identificar quais direcionamentos estão voltados para a qualidade do cuidado e segurança do paciente em centro cirúrgico. Quanto ao método, trata-se de um estudo de revisão integrativa em que foi realizada pesquisa bibliográfica para obtenção de informações e aproximação com o tema definido para o estudo, fomentando as discussões relacionadas a investigação e permitindo a obtenção de conhecimentos relevantes no âmbito da qualidade do cuidado em centro cirúrgico. Os resultados encontrados correlacionam-se com a busca e análise de evidências sobre o controle de qualidade no centro cirúrgico, bem como o papel do enfermeiro nesse ambiente, uma vez que as suas ações são fundamentais para a boa prática cirúrgica em todas as suas etapas. Concluiu-se que existem direcionamentos voltados para a qualidade do cuidado e segurança do paciente, mesmo que alguns sejam ainda incipientes e pouco discutidos, permitindo reforçar a importância das ações gerenciais do enfermeiro para o aumento da qualidade dos processos a partir de ações planejadas, organizadas e pautadas em evidências científicas, reforçando a sua responsabilidade na promoção de melhores práticas em unidades cirúrgicas de atenção à saúde.

Descritores: Centro Cirúrgico Hospitalar; Enfermagem; Garantia da Qualidade dos Cuidados de Saúde; Administração dos Cuidados ao Paciente; Cuidados de Enfermagem.

Introduction

Ensuring the provision of safe care to surgical patients has been a challenge for health professionals worldwide, especially for nurses, given the permanence and continuity of care for these professionals throughout the intraoperative period and even in the postoperative period, until hospital discharge.

This study sought to verify, through an integrative review of the current literature, what has been presented as a guideline for quality control and promotion of best nursing practices in health care units that include surgical center units.

Surgical assistance presents itself as indispensable in the health care of the population around the world, envisioning the recovery of the patient's health when the diseases are already installed and the clinical treatment alternatives no longer have the desired effects for their complete recovery and better quality of life.

The performance of nursing professionals in surgical units has been increasingly seen as necessary and indispensable, not only for its specificities in this type of care, but for the increasing volume of procedures and for the maintenance of the quality of care, since safety for the surgical patient needs to be prioritized.

On the other hand, some common issues in these units also pose risks to the health and safety of professionals working in them, given the excessive volume of tasks, overloads, the deficit in the number of professionals, the large volume of bureaucratic activities and the need to continuous updates, required for a know-how committed to the quality of the actions of these professionals.

It is important to emphasize that patient safety is part of a broader concept and is closely related to the quality of health care, so knowing and promoting strategic actions aimed at increasing the safety of surgical patients should be part of everyday life day of nurses in these units, adequately meeting the needs of patients.

With a view to a better understanding of the guidelines aimed at quality in the surgical center, the guiding questions were defined as how do nurses' actions contribute to increasing the quality and safety of care provided to surgical patients? Are there management actions and strategies that direct nurses to promote best practices in the operating room?

The objective was to identify which directions are aimed at the quality of care and patient safety in the operating room.



The justification for the development of the study lies in the fact that nursing care in the operating room must be increasingly committed to patient safety and to increasing the quality of care provided, always based on scientific evidence for best practices within these units.

The study is relevant because it allows health professionals interested in this topic to be updated, as well as specialists and the undergraduates themselves, who can obtain more up-to-date information about the current scenario with regard to directions for increasing the quality of nursing care in these scenarios.

In addition to highlighting what the recent reading presents in relation to the proposed theme, the study may contribute to the increase of information and understanding of the directions aimed at nurses who work in surgical units. These directions may present correlations with process improvement, with care planning and with decision-making, encouraging the search for strategies to prevent adverse events for quality control in the surgical center.

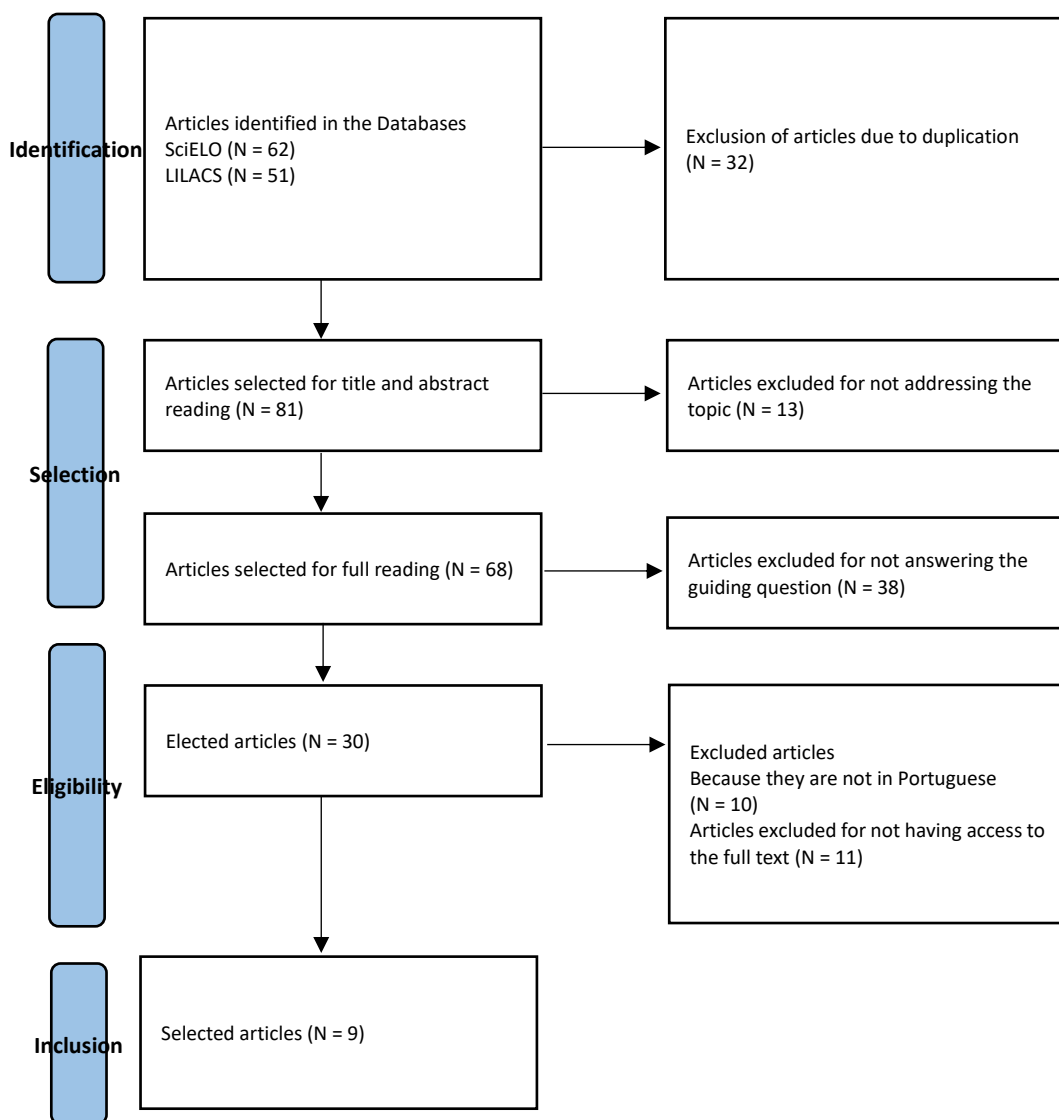
Methodology

This is an integrative review study in which bibliographic research was carried out to obtain information and approach the theme defined for the research, encouraging discussions related to investigation and allowing the acquisition of relevant knowledge in the scope of the quality of care in a center surgical.

Bibliographic research is understood to be the review of the literature on the main theories that guide scientific work. This review is what is called a bibliographic survey or bibliographic review, which can be carried out from the use of books, dissertations, theses, articles and other sources that present critical and reflective knowledge about the proposed topic to be discussed.

Searches were carried out in the electronic libraries of Latin American and Caribbean Health Science Literature (LILACS), Scientific Electronic Library Online (SciELO), and Database on Nursing (BDENF). Data were collected using the Health Sciences Descriptors (DeCS), Surgical Center; Quality control; Nurse's role.

Figure 1. Flowchart of collection and selection of articles. Rio de Janeiro, RJ, Brazil, 2021



As pointed out in studies, the integrative review is the evaluation of important research that provides subsidies for certain attitudes to be taken to promote improvements in clinical practice. For the present study, 6 steps were followed, which were identified by Identification of the theme and selection of the hypothesis; Sampling; Study Categorization; Evaluation of Selected Studies; Interpretation of Results and Presentation of the Review.

The first step consisted of identifying the theme, as well as establishing the research question to define these criteria, to prepare the integrative review. Thus, following the steps for this type of study, based on the definition of the theme “the quality of care in the surgical center”, we sought to answer the guiding questions: 1- how do nurses' actions contribute to increasing quality and safety of care provided to surgical patients? Are there management actions and strategies that direct nurses to promote best practices in the operating room?

In the second stage, a search was carried out in the literature of the publications that were part of the study. The collection took place in September and October 2021. To search for the articles, a search was carried out on the Database Portal of the Virtual Health Library (BVS), which is composed of bibliographic databases such as Latin American Literature and the Caribbean in Health Sciences (LILACS), Scientific Electronic Library Online (SciELO). The searches were carried out by crossing the following Health Sciences Descriptors (DeCS): Surgical center; Quality control; Nurse's role.

In order to exhaust all search possibilities, each descriptor of a group was combined with the descriptor of the other group, making the combination of all descriptors, two and two, among themselves, using descriptors, individually or associated with the Boolean operator “AND”.

After the initial search, inclusion and exclusion criteria were applied. For this, the following inclusion criteria were defined articles in Portuguese, published between 2011 and 2021 and that were available in their entirety. The exclusion criteria of the articles were incomplete articles and that did not correspond to the objective studied. Figure 1 illustrates the article selection process.

Thus, after searching and considering the inclusion and exclusion criteria, nine articles were included in the review.

In the next step, what information would be extracted from the chosen studies were defined. Thus, a specific instrument was used that guided the collection of relevant data from the studies, such as: objective, methodology used, characterization of the articles, results and conclusion of the study.

The objective of this step was to organize the key information, thus forming a database and categorizing the studies.

In the fourth stage of the study, the analysis of the studies included in the review research was performed. These studies were carefully evaluated after reading and recording the authors' ideas, and then categorizing the studies¹.

The fifth stage consists of the interpretation of the results, that is, the discussion of the research findings. Here, the theoretical findings between the different studies were compared.

Finally, a synthesis of all content was carried out, being written in a clear way and defining all the procedures used, so that the reader understands the process of elaborating the review research.

Results and Discussion

The articles selected for interpretive reading that integrated the scope of studies of this review totaled 09, based on meeting the inclusion and exclusion criteria. For a better understanding of the results and the discussion, a division into two stages was carried out, described as Presentation of the results from the characterization of the articles based on the following criteria for the application of the instrument of production and data collection: article title, year in which was published, name of authors, objective, method used and results found. Presentation of the knowledge that emerged from the results found by the authors of the analyzed articles. In Chart 1 below, the year of publication, title and objective of the reviewed articles were described.

Chart 1. Presentation of articles according to year, title and objective. Rio de Janeiro, RJ, Brazil, 2021

Year	Title	Objective
2016	Centro cirúrgico: desafios e estratégias do enfermeiro nas atividades gerenciais	To analyze the challenges and strategies of nurses in managerial activities in the operating room.
2018	Qualidade de vida no trabalho da equipe de enfermagem do centro cirúrgico	To evaluate the quality of work life of the surgical center nursing team.
2018	Boas práticas para segurança do paciente em centro cirúrgico: recomendações de enfermeiros	To describe nurses' recommendations for good patient safety practices in the operating room.
2019	Checklist de cirurgia segura: conhecimento e utilização do instrumento na perspectiva dos técnicos de enfermagem	To understand the knowledge and practices of nursing technicians on the application of the safe surgery checklist in a teaching hospital.
2019	Lista de verificação de segurança cirúrgica: benefícios, facilitadores e barreiras na perspectiva da enfermagem	To identify the benefits, facilitators and barriers in the implementation of the surgical safety checklist, according to the report of nurses who worked in the surgical center of hospitals.



2020	Percepções dos profissionais de enfermagem na aplicação do checklist de cirurgia segura	To know the perceptions of nursing professionals about the application of the safe surgery checklist.
2020	Indicadores de qualidade em centro cirúrgico especializado em dermatologia	Identify and characterize the most frequent quality indicators used in a public Surgical Center specialized in dermatology.
2020	Trabalho da enfermagem no centro cirúrgico e os riscos psicossociais relacionados aos modos de gestão	To evaluate the management modes in the work of the nursing team in the surgical center of a university hospital.
2021	Processo gerencial em centro cirúrgico sob a ótica de enfermeiros	To describe the management process performed by nurses in a surgical center.

According to the information transcribed to Chart 1, it is observed that in relation to the objectives and results of the articles, according to the inclusion and exclusion criteria, they aimed to analyze the quality process in surgical centers and the role of nurses in this environment. .

Thus, based on the titles and objectives and for a better discussion of the results of the articles found, it was

decided to group them into categories based on the titles and objectives of the publications.

As can be seen in Chart 1, among the nine articles selected for analysis, one was published in 2016, two in 2018, two in 2019, three in 2020 and one in 2021.

Chart 2 presents the articles, according to their methodology and results.

Chart 2. Presentation of articles according to methodology and results. Rio de Janeiro, RJ, Brazil, 2021

Research method and type	Results and Conclusion
Exploratory, descriptive study with a qualitative approach.	The main challenges pointed out: deficiency of material resources, communication noise, adequacy of staff resizing and relationships with the multidisciplinary team. It was considered that the managerial activities involve the promotion of dialogic moments to articulate the different processes existing in the CC, in order to produce subsidies to increase safety and quality in the services provided.
Descriptive, cross-sectional study with a quantitative approach.	Most participants (62.9%) had a lower impact on quality of life at work, however family income and academic education were quite significant. Although work in the operating room has a low impact on quality of life, the psychological domain has a considerable impact, noting that the concern for workers' health and the appreciation of the nursing team still need to advance.
Quantitative qualitative research, descriptive and exploratory.	Eight recommendations were obtained: (1) Involvement of the multidisciplinary team and the institution's managers; (2) Establishment of a patient safety culture; (3) Use of the safe surgery checklist; (4) Improved interpersonal communication; (5) Expansion of the nurse's role; (6) Adequate availability of physical, material and human resources; (7) Individual search for professional updating; and, (8) Development of continuing education actions.
Qualitative research.	From the statements of nursing technicians, three categories emerged "Safe surgery in the conception of nursing technicians", "Error prevention in the operating room as a synonym for patient identification and attention to clinical parameters" and "Understanding the use of the safe surgery checklist" theoretical-practical dissonances". The nursing technicians demonstrated that they did not have clear and theoretically grounded knowledge about the aspects involving surgical safety, they did not recognize the instrument as a tool for the prevention/reduction of errors commonly occurring in the operating room, and they did not know how to use it properly.
Cross-sectional study.	The implementation of the checklist brought benefits to the patient, surgical team and hospitals. Regarding facilitators, the results showed a statistically significant difference between the groups in the items offer of education (p=0.006) and acceptance by surgeons (p=0.029). And, in the barriers, for the lack of administrative support (p=0.006) and managers (p=0.041), absence of the patient safety center (p=0.005), abruptly introduced list (p=0.001) and lack of education (p<0.001). The evidence generated made it possible to identify the benefits, facilitators and barriers in implementing the checklist in the national context.
Qualitative exploratory study.	Part of nursing professionals do not have knowledge about issues involving surgical safety. Those who are familiar with the safe surgery checklist find it difficult to apply or do not recognize the instrument as a tool for preventing or reducing errors. Implementing a tool involves raising awareness among professionals so that they recognize the importance of using it. Involvement is necessary from the conception of the tool, as well as the offer of continuous training (AU).
Cross-sectional study.	Of the 595 elective surgeries, outpatients (87.9%), dermatological (81.3%), in male patients (52.6%), with a mean age of 54.9 years, stood out. The five most frequent indicators were suspended surgeries (17.6%); incomplete nursing records (14%); absenteeism (6.5%); surgical site infection in clean surgeries (2.7%) and work accidents (2.2%). The identification and characterization of quality indicators provided visibility to local processes, enabling decision-making and the improvement of services provided (AU).
Cross-sectional, descriptive, quantitative and analytical study.	The Collectivist style was classified as "Predominant" by 46.2% (72) of the workers. The Normative and Achiever styles were rated as "Moderate Presence" by 53.2% (84) and 50.3% (77), respectively. The Individualist style was evaluated as "Uncharacteristic" by 60.6% (94) of the sample. The presence of collectivist management meets the characteristics of nursing work, which is patient care, planned and carried out together and in line with the multidisciplinary team in the search for comprehensive care.



<p>Descriptive and exploratory study, with a qualitative approach.</p>	<p>The similarity analysis demonstrates the role of the nursing team in the surgical center and its direct relationship with patient care, while the nurse's role is characterized by predominantly managerial actions related to the organization of work. Through inductive thematic analysis, three categories related to the management process in the operating room were listed: people management, material resource management and care management. The findings indicated that the managerial process in the operating room, according to the nurses, involves the need to improve skills, as well as knowledge of managerial tools for managing people, managing material resources and managing care.</p>
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Regarding the methods and types of studies, described in Table 2, it was found that the research was classified as: descriptive, exploratory, qualitative, quantitative, qualitative, analytical, cross-sectional study.

The results found are correlated with the search and analysis of evidence on quality control in the operating room, as well as the role of nurses in this environment. According to studies, the managerial functions of nurses in the surgical center require, in a very specific way, that they adopt agility in their decision-making, that they have certain technical-scientific knowledge, that they maintain organization and planning of tasks, the ability to develop teamwork, be flexible and propose effective communication with the entire multidisciplinary team².

In the operating room environment, the work performed by the nursing team is collective and specialized, where each one of those involved has a peculiar role. In this unit, the practice of care is directed towards the objectivity of the actions performed, where the intervention, in most cases, is of a technical nature, where the purpose is the recovery of the patient³.

Furthermore, when it comes to the operating room focused on safety care and care quality in the transoperative phase, the managerial activities of nursing have been very relevant, since it remains active in all periods of this phase, which is understood as being essential for the patient's recovery⁴.

Regarding safe surgical procedures, it is possible to state that they are the methods adopted with the objective of reducing adverse events, that is, complications and mortality rates related to surgery, which occur in the transoperative period, before, during or after from surgery⁵.

An instrument that has contributed to increasing quality in the operating room is the Surgical Safety Checklist (LCSC), created by the World Health Organization (WHO), which originated in the Safe Surgery Saves Lives Program. According to the studies, this List is based on bases that guide patient care in the operating room, which is the prevention of adverse events, infections; safety in anesthetic procedures, progress in the development of team actions, and measurement of care through the use of process indicators and the results of surgical care⁶.

Regarding the quality indicators in the operating room, studies indicate that these are used to understand the procedures and evaluate the transformations that happen in this environment, leaving them quantifiable, so that they can receive an evaluation, and with that, be able to understand the process of performing the tasks and analyzing whether the objectives are being achieved, as well as planning improvements in the assistance provided during the surgical procedures⁷.

The nurse plays an important role in the surgical center when it comes to the entire process of carrying out the procedures, and he has the managerial responsibility to act in line with the multidisciplinary team, providing quality and safety care to the patient⁸.

It is necessary that the nurse working in the surgical center is constantly updated, through the improvement of techniques and the realization of training aimed at this area in order to adapt to the technological and scientific changes that are developed and evolve every day. In favor of surgical procedures that can alleviate the patient's situation, as well as the updating of checklist procedures, aiming at better care monitoring and patient recovery.

From this synthesis of the articles researched, referring to quality control in the surgical center, it can be pointed out that the quality indicators that are most frequently observed in this environment during the use of the checklist are able to provide more visibility to the care process for the patient and also managerial development by the nurse in this work unit, pointing out data that until then may be little known or still unknown by the multidisciplinary team.

It was possible to identify that the nursing professional is an essential component of the multidisciplinary team that performs the work in the surgical center, since the functions they perform are essential so that the surgical procedures can be carried out properly, in ideal situations of asepsis, techniques and monitoring by all professionals who perform care and surgical procedures.

Final Considerations

The fear in relation to safety aspects in care aimed at patients in the surgical center is becoming one of the most debated topics in the health field, considering ways to achieve and develop, through scientific studies, the generation evidence for best practices in these environments.

The quality control of the surgical space permeates patient safety, transforming itself into a complex model, with decisive and precise actions by the multiprofessional team in carrying out safe and appropriate procedures, according to the patient's needs.

In this sense, nurses working in this environment aim to achieve acceptable levels with regard to meeting quality standards, thus generating indicators that are able to demonstrate the need or not for improvements for greater effectiveness in the care provided by nursing.

It was observed that patient safety in the surgical center has required everyone's attention, because when errors occur during procedures and care, the negative repercussions have a strong impact on the patient and their



families, on health professionals working in this scenario and together with to institutions.

The interpretation of the articles allowed us to find elements that point to the error as one of the most frequent indicators, reinforcing the need to improve processes to circumvent the current reality within these units.

In this way, it is necessary to organize, plan and implement management strategies necessary to prevent the occurrence of damage to the health of the surgical patient, since these damages can permanently compromise the health conditions of these patients, indicating, therefore, the need for important changes to circumvent this serious problem in surgical patient care settings.

In view of the aspects presented in this study, it can be reaffirmed that it is the nurse's duty to apply their knowledge with a view to improving management

processes, acting as a leader and being proactive for more assertive and effective decision-making.

These characteristics also include assuming responsibilities and the requirement to use the checklist for safe surgery at all times of the procedure. Adverse events can be avoided as changes are made in the management process and in the organization of work, of the place and especially in the greater involvement of the multidisciplinary team.

Within the objective proposed in this study, it was possible to identify directions aimed at the quality of care and patient safety, even if still incipient and little discussed, allowing to reinforce the importance of managerial actions of nurses to increase the quality of processes from planned actions, organized and based on scientific evidence, reinforcing its responsibility in promoting best practices in surgical health care units.

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