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The performance of the nurse in the specialty of plastic surgery: experience report  
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## EXPERIENCE REPORT

### The performance of the nurse in the specialty of plastic surgery: experience report

### A atuação do enfermeiro na especialidade de cirurgia plástica: relato de experiência

### La actuación de la enfermera en la especialidad de cirugía plástica: relato de experiencia

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#### ABSTRACT

**Objective:** To report the experience of a nursing student in a surgical center specializing in plastic surgery. **Methodology:** Descriptive study, of the experience report type, carried out by observing the work of nurses in the Dermatology and Plastic Surgery Sector, Surgical Center and Inpatient Unit of a private hospital in Juiz de Fora, Minas Gerais, between September 2021 to January 2022. **Results:** The experience provided an immersion in the sector's care and operational practices. The intern followed stages of the surgical process, from reception and pre-operative assessment to post-operative care. As well as, he assisted in management activities, material control, among others. Developed interpersonal and technical skills, highlighting the importance of collaborative work in patient safety. **Conclusion:** The internship was fundamental for professional development, highlighting the crucial role of nurses in perioperative care and the need for continuous training in the area of plastic surgery.

#### DESCRIPTORS:

Perioperative Nursing; Plastic Surgery; Plastic Surgery Procedures; Nursing Care.

#### RESUMO

**Objetivo:** Relatar a experiência do acadêmico de enfermagem em centro cirúrgico especializado em cirurgias plásticas. **Metodologia:** Estudo descritivo, do tipo relato de experiência, realizado por meio da observação da atuação de enfermeiras no Setor de Dermatologia e Cirurgia Plástica, Centro Cirúrgico e Unidade de Internação de um hospital privado de Juiz de Fora, Minas Gerais, entre setembro de 2021 a janeiro de 2022. **Resultados:** A experiência proporcionou uma imersão nas práticas assistenciais

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e operacionais do setor. O estagiário acompanhou etapas do processo cirúrgico, desde a recepção e avaliação pré-operatória até os cuidados pós-operatórios. Bem como, auxiliou em atividades gerenciais, de controle de materiais, entre outras. Desenvolveu habilidades interpessoais e técnicas, ressaltando a importância do trabalho colaborativo na segurança do paciente. **Conclusão:** O estágio foi fundamental para o desenvolvimento profissional, evidenciando o papel crucial do enfermeiro na assistência perioperatória e a necessidade de formação contínua na área de cirurgia plástica.

**DESCRIPTORIOS:**

Enfermagem Perioperatória; Cirurgia plástica; Procedimentos de Cirurgia Plástica; Cuidados de enfermagem.

**RESUMEN**

**Objetivo:** Relatar la experiencia de una estudiante de enfermería en un centro quirúrgico especializado en cirugía plástica. **Metodología:** Estudio descriptivo, del tipo relato de experiencia, realizado mediante la observación del trabajo de enfermeros del Sector de Dermatología y Cirugía Plástica, Centro Quirúrgico y Unidad de Internación de un hospital privado de Juiz de Fora, Minas Gerais, entre septiembre de 2021 y enero de 2022. **Resultados:** La experiencia proporcionó una inmersión en las prácticas asistenciales y operativas del sector. El interno siguió las etapas del proceso quirúrgico, desde la recepción y valoración preoperatoria hasta los cuidados postoperatorios. Así como también colaboró en actividades de gestión, control de materiales, entre otras. Desarrollé habilidades interpersonales y técnicas, destacando la importancia del trabajo colaborativo en la seguridad del paciente. **Conclusión:** La pasantía fue fundamental para el desarrollo profesional, destacando el papel crucial del enfermero en los cuidados perioperatorios y la necesidad de formación continua en el área de la cirugía plástica.

**DESCRIPTORIOS:**

Enfermería Perioperatoria; Cirugía Plástica; Procedimientos de Cirugía Plástica; Cuidado de Enfermera.

## INTRODUCTION

The Brazilian Society of Plastic Surgery (SBCP) recognizes that plastic surgeries can be either aesthetic or reconstructive. Aesthetic plastic surgeries (APS) aim to reshape normal bodily structures to enhance the patient's self-esteem and appearance. On the other hand, reconstructive plastic surgeries (RPS) aim to repair abnormal bodily structures, restoring tissue function <sup>(1)</sup>.

As early as the 6th century, in what is now India, nasal reconstruction using skin flaps from the forehead region was described in texts attributed to Sushruta, the founder of Traditional Indian Medicine <sup>(2)</sup>. Plastic surgery saw a resurgence during World War I, with Sir Harold Gillies, who recognized the need for innovative solutions to restore the health of soldiers by relocating tissues and using grafts and flaps <sup>(3)</sup>.

The growing advancement of studies in the field of Aesthetic and Reconstructive Medicine has facilitated the use of new operative technologies, the development of new surgical techniques, and the introduction of new pharmaceutical agents. As a result, plastic surgeries began to be performed on a larger scale and at a faster pace. This progress is directly linked to the increase in life expectancy worldwide, as the pursuit of health and well-being and the desire to slow down the signs of aging have

led to an increase in demand for aesthetic procedures <sup>(4)</sup>. Consequently, there is an increasing need to ensure the quality of care provided to patients and their safety throughout this process <sup>(5)</sup>.

In the Surgical Center (SC), the nurse is responsible for overseeing the surgical environment and preparing the operating room, ensuring it is equipped with all necessary instruments for safe surgical procedures. The nurse also manages sterile materials, provides direct and indirect care to the patient through data collection and nursing diagnoses, and develops the Nursing Care Plan. Additionally, the nurse supervises the continuity of care provided by the team. Therefore, the nurse is responsible for executing the Perioperative Nursing Care System (SAEP), as well as providing direct assistance during surgeries. The nurse also plays a crucial management role, training and developing the team, implementing standard safety protocols in the sector, organizing monthly work schedules and assignments, and ensuring proper staffing for the operating rooms. The nurse also oversees the verification and control of supplies and materials needed for the anesthetic-surgical procedures and evaluates and monitors the recovery of the patient post-surgery, among other responsibilities <sup>(6, 7)</sup>.

The nurse's role is crucial for the proper conduct of surgeries and the smooth operation of the structures in which they take place. However, the nurse's role in plastic surgery is not widely explored or discussed. Therefore, this article makes an important contribution by supporting the practice of professionals interested in working in this area.

## **OBJECTIVE**

To report the experience of a nursing student in a surgical center specialized in plastic surgeries.

## **METHODOLOGY**

This is a descriptive study, in the form of an experience report, conducted through the observation of nurses' roles in the Dermatology and Plastic Surgery Department, the Surgical Center, and the Inpatient Unit of a private hospital in Juiz de Fora, Minas Gerais, between September 2021 and January 2022. The aim was to identify the activities carried out by these professionals in the context of plastic surgeries. For the theoretical foundation of this study, the following databases were used as research sources: Latin American and Caribbean Literature in Health Sciences (LILACS), PubMed, and the Scientific Electronic Library Online (SciELO). As it is a descriptive study based on an experience report methodology, approval from the Research Ethics Committee (CEP) was not required.

## **RESULTS**

The contact with the Dermatology and Plastic Surgery Department occurred through a selection process for a position in the hospital's staff, with a vacancy designated for a nursing student for

extracurricular internship. The selection process included a curriculum analysis and an interview with the Surgical Center (SC) Director and the nursing coordinator. After the selection results were announced, the student proceeded to the Human Resources (HR) department for document submission and signing of a Term of Responsibility and Commitment. The extracurricular internship required a weekly workload of 12 hours, with the intern able to choose the shift that best fit their routine. The internship took place three times a week, with four hours per day.

On the first day, the intern was introduced to the departments for orientation and met the three nurses who would be responsible for them. They were introduced to the nursing technicians, and the hospital's workflow and routines were explained, including the tasks that would be performed. The intern was also trained in the use of some of the hospital's technological resources and materials. The intern was supervised on alternate days by the responsible staff and daily by the nurses. Supervision was direct and continuous, with weekly reports on the activities performed, as well as feedback on those activities. At the end of the internship period, the student was evaluated regarding the technical and scientific quality of the work carried out. The development of soft skills, such as communication, conflict management, emotional intelligence, and aptitude for nursing procedures and daily managerial and clinical practices, were highlighted.

The activities developed by the student during the study period included: receiving patients in the Dermatology and Plastic Surgery Department and directing them to the Surgical Center (SC), following the preoperative nursing visits and marking of intervention areas with the responsible plastic surgeon, direct observation of plastic surgeries in the CC, performing urinary catheterization (UC) under supervision during surgeries that required the procedure, applying the Safe Surgery Protocol during surgeries, circulating in the operating room, assisting in the setup and breakdown of operating rooms (OR), checking and verifying materials in the OR, responding to material replacement requests during surgery, assisting in patient positioning and monitoring vital signs during anesthetic-surgical procedures. The intern also followed the creation of the surgical map considering the specifics of each procedure, assisted with the transport of the patient to the Post-Anesthesia Care Unit (PACU), and provided care during the patient's stay there. Additionally, the intern accompanied nursing interventions and postoperative care in the Inpatient Unit (IU), providing guidance to patients and their family members.

As the hospital had a specific department for plastic surgery and dermatological procedures, outpatient and minor procedures (without the need for hospitalization) were performed in this department. More complex procedures were directed to the SC and IU. The SC consisted of three operating rooms, a Material and Sterilization Center (CME), and a PACU. The IU had a nursing station and 24-hour inpatient rooms, as well as a Day Hospital. These physical structures were located close to each other and shared the same hallway.

The nursing team consisted of three nurses and twelve nursing technicians. The nursing professionals were allocated as follows: one nurse and two nursing technicians in the Dermatology and Plastic Surgery Department, and two nurses and ten nursing technicians in the SC and IU.

The SC where the observed surgeries took place had a monthly average of 120 plastic surgeries performed. Attached to the operating rooms were the PACU and the CME. The PACU had two mobile beds, equipped with monitors, ventilation materials, airway management tools, an emergency cart, and other necessary equipment. The CME had a space and machinery for reprocessing surgical instruments, other health products, and storage.

The main plastic surgeries performed in the hospital included body contouring, facial procedures, and some minimally invasive procedures: reduction and augmentation mammoplasty, abdominoplasty, liposuction with or without autologous fat grafting, blepharoplasty, deep plane facelift (also called ritleidoplasty), rhinoplasty, otoplasty, excision of skin tumors, and removal of small lipomas, sebaceous cysts, and epidermoid cysts. Chemosurgery procedures, such as phenol peeling, were also performed in a surgical environment. Additionally, the department carried out procedures involving CO2 fractional laser, botulinum toxin (Botox) injection, collagen biostimulators, and hair MMP.

Technological resources were employed for some procedures, such as the use of Vibrofit®, Doyen valve with autoclavable optical fiber, Colorado® microdissection needles, Argoplasma®, and pneumatic compression boots. These boots are intraoperative devices used to prevent unwanted clots and adverse events (AEs), such as deep vein thrombosis (DVT), applied to the patient by nurses or nursing technicians. When the technological resources were not specific to the medical professional, they were kept by the nurses in a private storage room, separate from the general arsenal and monitored due to their high cost.

Surgery scheduling was done by the nursing team of the IU upon request from the surgical team and transmitted to the SC via the institutional computerized system. The nurse in the SC was responsible for creating the surgical map. The arrangement of materials in the OR was done in advance, according to the procedure to be performed and the pre-requested materials during the surgery scheduling. Only SC professionals had access to the surgical inventory. Nursing technicians would enter the inventory area, retrieve materials, and send them to the operating rooms, registering their exit and verifying them according to routine service protocols.

The admission of patients into the SC was carried out by the sector nurse, assisted by nursing technicians. The preoperative nursing visit was conducted to collect data regarding the patient's current and previous health status, medication use, and required exams. The nurse also recorded the patient's entry into the internal system, checked the fasting period, and ensured the proper preparation for surgery. It was during this time that the surgeon marked the intervention areas. Based on the gathered information,

the nurse planned the perioperative nursing care and implemented it for each patient admitted. Finally, the nurse evaluated the care provided through a postoperative visit in the immediate postoperative period (POI) in the IU.

In the intraoperative period, with assistance from the team, the nurse applied the Safe Surgery Protocol, monitoring vital signs before anesthesia induction: cardiac monitoring electrocardiogram (ECG), pulse oximetry, and non-invasive blood pressure (NIBP). The nurse then assisted or performed venipuncture for a peripheral intravenous line with the anesthesiologist, positioned the patient for anesthesia, and assisted with the intubation process. For surgeries requiring a UC, the procedure was exclusively performed by the nurse after patient anesthesia induction. The nurse also conducted an emergency cart check at the start of the day, and after opening or replacing supplies, performed a "map check" with the nursing technicians and assigned them to support the operating rooms.

After the surgical procedures were completed, patients were transferred to the PACU, accompanied by a nursing technician or SC nurse, along with the anesthesiologist. The team was responsible for assessing the patient's airway permeability, level of consciousness, responsiveness, ability to communicate, IV infusions, drains, body temperature, presence of injuries, quality of dressings, pain levels, and other needs, intervening in any emergency situation. A modified scale with scores was applied to evaluate the patient. Discharge from the PACU was signed by the anesthesiologist, the SC nurse, and the nursing technician present in the PACU. Once discharged from the PACU, the patient was transferred to the IU.

In the IU, the patient was reassessed and monitored until hospital discharge by the unit nurse. If nursing interventions were needed, such as wound care, maintaining drains and catheters, or managing postoperative pain to treat and prevent complications, these were carried out by the nurse and their team. After discharge, signed by the responsible plastic surgeon and IU nurse, the patient was instructed on postoperative care for home management and discharged from the hospital.

At follow-up, the patient was directed back to the Dermatology and Plastic Surgery Department for monitoring of surgical results. Initially, patients were received by the nurse and nursing technicians, who registered the relevant information in the electronic medical record and directed them either to consultations or to procedures in the department or SC. They were then returned to their original department.

## **DISCUSSION**

The discussion regarding the nurse's role in the Surgical Center (SC), particularly in plastic surgeries, is of great importance due to the complexity and dynamics of this environment. The nurse's role, as established by Law No. 7.498/86 and COFEN Resolution No. 543/2017, goes beyond traditional

duties, incorporating specialized practices aimed at optimizing patient care and safety.

Managing a Surgical Center involves multiple aspects, from the efficient coordination of human, financial, and material resources to staffing the nursing team and monitoring risk indicators. Implementing surgical maps that organize the flow of procedures and optimize available resources is necessary as a core practice for an efficient Surgical Center, ensuring that both surgical and patient demands are met while minimizing risks and promoting high-quality care <sup>(6, 7)</sup>.

The analysis of risk indicators (such as surgical infection rates, postoperative complications, and hospital length of stay) allows for the identification of areas in need of improvement and supports the implementation of the Safe Surgery Protocol. This protocol aims to reduce adverse events (AEs) and is essential for ensuring patient safety. It must be rigorously followed by the entire surgical team <sup>(8)</sup>.

From a clinical care perspective, the nurse's role in the Surgical Center encompasses several responsibilities, ranging from patient preparation for surgery to postoperative care, all coordinated through a series of actions. The Perioperative Nursing Care System (SAEP) is an essential tool that enables structured care planning and execution, ensuring the collection of relevant data for nursing diagnoses and the development of personalized nursing care plans. It also ensures the quality of nursing care provided and contributes significantly to the continuity of care <sup>(5)</sup>.

The nurse in the Surgical Center, particularly in the Post-Anesthesia Care Unit (PACU), plays a crucial role in preventing complications. This is done by using tools to monitor patients, checking vital signs, and using clinical judgment to make decisions and intervene promptly in any circumstance. In this way, the nurse promotes a safe surgical environment <sup>(6,7)</sup>.

It is important to note that there is no clear definition of the nurse's responsibilities in the specialty of Plastic Surgery. The care provided is based on actions already carried out by these professionals within the scope of perioperative nursing activities. Additionally, there are some technical-scientific qualifications related to non-invasive technologies that support the work process for those interested in this field, such as the implementation of Low-Intensity Laser Therapy (LBI) <sup>(9)</sup>.

The agility and efficiency of the multidisciplinary surgical team are determining factors for the success of procedures. Collaboration between nurses, doctors, and other healthcare professionals is essential, as it defines the outcomes of the procedures performed and the quality of perioperative care. The coordination and communication between team members are crucial to minimize risks and optimize surgical results, as evidenced by the care provided to patients undergoing plastic surgery during the period of the supervised extracurricular internship.

## **Study Limitations**

As limitations, the study points to the duration of stay in the departments, as some of the surgeries

observed exceeded the intern's daily hours at the institution. This limited the intern's ability to continue following certain cases due to regulations on the maximum hours for supervised extracurricular internships. Additionally, there is a scarcity of studies on nursing care for patients undergoing plastic surgery in the available databases, which created a barrier for guiding researchers in developing a theoretical framework.

### **Contributions to the Nursing Area, Health or Public Policy**

The study contributed to the nursing field by encouraging reflection on the role of the nurse in Plastic Surgery and promoting the need for new studies on this topic, given the limited number of publications available. Furthermore, the experience of the extracurricular internship was seen as positive, as it provided the nursing student with valuable insights and improved their skills as a future nurse.

### **CONCLUSION**

The study provided an opportunity to report the experience gained by a nursing intern during an extracurricular internship, with participation in the routine of the Dermatology and Plastic Surgery Department, Surgical Center (SC), and Inpatient Unit (UI), focusing on the care provided to patients undergoing plastic surgery procedures. In addition, it was possible to observe the importance of the nurses' role in this specialty, considering that the actions performed by them are essential for ensuring that surgical procedures are carried out properly and safely. It also allowed the intern to get closer to the reality of nursing practice in this field and develop the necessary skills and competencies.

The activities carried out by nurses directly involved in plastic surgeries mainly consist of perioperative care and the management of material, technological, and human resources. Care is provided in a systematic manner, aligned with the needs of each patient and procedure. It is noteworthy that nursing practice in the specialty of plastic surgery is relatively new and underexplored, as it is based on tasks and actions that are already routinely performed by nurses but still require continuous improvement and development in this area.

### **REFERENCES**

1. Coelho FD, Carvalho PHB, Paes ST, Ferreira MEC. Esthetic plastic surgery and (in) satisfaction index: a current view. *Revista Brasileira de Cirurgia Plástica (RBCP)* [Internet]. 2017 [acesso em 2024 mai 14];32(1):135-40. Disponível em: <https://www.scielo.br/j/rbcp/a/p6c6nnwCgpzKdhRbWhctZ7G/?lang=pt>
2. Bath K, Aggarwal S, Sharma V. Sushruta: Father of plastic surgery in Benares. *Journal of Medical Biography* [Internet]. 2016 [acesso em 2024 mai 14];27(1):2-3. Disponível em: <https://doi.org/10.1177/0967772016643463>

3. Thomas R, Fries A, Hodgkinson D. Plastic Surgery Pioneers of the Central Powers in the Great War. *Craniomaxillofacial Trauma & Reconstruction* [Internet]. 2019 [acesso em 2024 mai 14];12(1):1-7. Disponível em: <https://doi.org/10.1055/s-0038-1660443>
4. Albuquerque LV, Resende NC, Monteiro GQM, Durão MA. Non-surgical facelift with polydioxanone threads: literature review. *Odontol Clín-Cient* [Internet]. 2021 [acesso em 2024 mai 14];20(1):39-45. Disponível em: <https://docs.bvsalud.org/biblioref/2022/05/1367835/f25c96743e8b2c12580cec61675c169c.pdf>
5. Jost MT, Viegas K, Caregnato RCA. Sistematização da assistência de enfermagem perioperatória na segurança do paciente: revisão integrativa. *Revista SOBECC* [Internet]. 2018 [acesso em 2024 mai 14];23(4):218-25. Disponível em: <https://doi.org/10.5327/Z1414-4425201800040009>
6. Leal LA, Henriques SH, Castro FFS, Soares MI, Bragança C, Silva BR. Construção de matriz de competências individuais do enfermeiro em unidades cirúrgicas. *Rev Bras Enferm* [Internet]. 2020 [acesso em 2024 mai 14];73:e20190584. Disponível em: <https://doi.org/10.1590/0034-7167-2019-0584>
7. Mathenge C. The importance of the perioperative nurse. *Community Eye Health* [Internet]. 2020 [acesso em 2024 mai 18];33(110):44-45. Disponível em: <https://pmc.ncbi.nlm.nih.gov/articles/PMC8115701/>
8. Cardoso RB, Fassarella CS, Silva CPR, Luna AA. Segurança do paciente na assistência de enfermagem perioperatória e as taxonomias de enfermagem. *Rev Enf UERJ* [Internet]. 2021 [acesso em 2024 mai 18];29:e62528. Disponível em: <https://www.e-publicacoes.uerj.br/index.php/enfermagemuerj/article/view/62528>
9. Baracho CP, Ferreira JB. Use of Therapeutic Laser in Healing of Skin Wounds: An Integrative Review. *Rev Psi* [Internet]. 2020 [acesso em 2024 mai 18];14(53):732-8. Disponível em: <https://doi.org/10.14295/online.v14i53.2820>

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