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AS DIFICULDADES PERCECIONADAS PELOS ENFERMEIROS NA PREPARAÇÃO DO CLIENTE CIRÚRGICO: UM ESTUDO QUALITATIVO

NURSES' PERCEIVED DIFFICULTIES IN PREOPERATIVE PATIENT PREPARATION: A QUALITATIVE STUDY

DIFICULTADES PERCIBIDAS POR LAS ENFERMERAS EN LA PREPARACIÓN DE CLIENTES QUIRÚRGICOS: UN ESTUDIO CUALITATIVO

Marco Gonçalves<sup>1,2,3</sup>  <https://orcid.org/0000-0001-7342-8145>

Maria Aurora Pereira<sup>4</sup>  <https://orcid.org/0000-0002-1710-1663>

Natália Machado<sup>3</sup>  <https://orcid.org/0000-0002-0818-0777>

<sup>1</sup> Universidade do Porto, Instituto de Ciências Biomédicas Abel Salazar (ICBAS), Porto, Portugal

<sup>2</sup> UICISA: E - Unidade de Investigação em Ciências da Saúde: Enfermagem, Coimbra, Portugal

<sup>3</sup> Escola Superior de Enfermagem do Porto, Porto, Portugal

<sup>4</sup> Instituto Politécnico de Viana do Castelo, Viana do Castelo, Portugal

Marco Gonçalves - marcogoncalves@esenfc.pt | Maria Aurora Pereira – aurorapereira@ess.ipvcc.pt | Natália Machado - natalia@esenf.pt



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**Corresponding Author**

*Marco Gonçalves*

Rua da Laranjeira. N.º 13. Machada  
3105-286 – Pelariga - Portugal  
marcogoncalves@esenfc.pt

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## RESUMO

**Introdução:** O papel do enfermeiro no pré-operatório passa por identificar as necessidades dos clientes e os fatores de risco relacionados com todo o período perioperatório. Esta preparação pré-operatória nem sempre é um processo linear e reveste-se de alguns desafios que é importante explorar para dar relevo à intervenção autónoma do enfermeiro neste período.

**Objetivo:** Conhecer as dificuldades percebidas pelos enfermeiros na preparação pré-operatória de clientes submetidos a cirurgia geral programada.

**Métodos:** Foi realizado um estudo exploratório, de abordagem qualitativa. Para a recolha de dados foram realizadas 23 entrevistas semiestruturadas a enfermeiros que exercem a sua atividade em bloco operatório ou serviços de cirurgia geral há mais de 5 anos. Os dados foram analisados pela técnica de análise de conteúdo de Bardin.

**Resultados:** Da análise de conteúdo emergiram três unidades temáticas: dificuldades sentidas, contributos da consulta de enfermagem pré-operatória e aspetos a atender na organização da consulta. As dificuldades referidas pelos enfermeiros centraram-se na preparação do cliente cirúrgico e nas condições para essa preparação.

**Conclusão:** A identificação da perceção dos enfermeiros acerca da preparação pré-operatória que é efetuada atualmente aos clientes submetidos a cirurgia geral programada permitiu conhecer as dificuldades sentidas por estes. A preparação pré-operatória deverá ser estruturada e ter em conta várias dimensões como a física, a emocional, o conhecimento e os aspetos logísticos. Estes resultados contribuirão para a melhoria dos cuidados de enfermagem prestados durante o período perioperatório.

**Palavras-chave:** enfermagem; cuidados pré-operatórios; cirurgia geral; pesquisa qualitativa

## ABSTRACT

**Introduction:** The role of the nurse in the preoperative period involves identifying the client's needs and the risk factors related to the entire perioperative period. This preoperative preparation is not always a straightforward process and has some challenges that are important to explore in order to highlight the autonomous intervention of nurses during this period.

**Objective:** To explore the difficulties perceived by nurses in the preoperative preparation of clients undergoing scheduled general surgery.

**Methods:** An exploratory, qualitative study was carried out. To collect data, 23 semi-structured interviews were carried out with nurses who had been working in operating theatres or general surgery departments for more than 5 years. The data was analyzed using Bardin's content analysis technique.

**Results:** Three thematic units emerged from the content analysis: difficulties experienced, contributions of the preoperative nursing consultation, and aspects to be taken into account when organizing the consultation. The difficulties mentioned by the nurses centered on the preparation of the surgical client and the conditions for this preparation.

**Conclusion:** Identifying nurses' perceptions of the preoperative preparation that is currently carried out for clients undergoing scheduled general surgery made it possible to find out about the difficulties they experience. Preoperative preparation should be structured and take into account various dimensions such as physical, emotional, knowledge and logistical aspects. These results will contribute to improving the nursing care provided during the perioperative period.

**Keywords:** nursing; preoperative care; general surgery; qualitative research

## RESUMEN

**Introducción:** El papel de la enfermera en el periodo preoperatorio implica identificar las necesidades del cliente y los factores de riesgo relacionados con todo el periodo perioperatorio. Esta preparación preoperatoria no siempre es un proceso sencillo y presenta algunos retos que es importante explorar para enfatizar la intervención autónoma de las enfermeras durante este periodo.

**Objetivo:** Conocer las dificultades percibidas por los enfermeros en la preparación preoperatoria de los clientes sometidos a cirugía general programada.

**Métodos:** Se realizó un estudio exploratorio y cualitativo. Para recoger los datos, se realizaron 23 entrevistas semiestruturadas a enfermeras que llevaban más de 5 años trabajando en quirófanos o departamentos de cirugía general. Los datos se analizaron mediante la técnica de análisis de contenido de Bardin.

**Resultados:** Del análisis de contenido surgieron tres unidades temáticas: dificultades experimentadas, aportaciones de la consulta de enfermería preoperatoria y aspectos a tener en cuenta en la organización de la consulta. Las dificultades mencionadas por las enfermeras se centraron en la preparación del cliente quirúrgico y en las condiciones de esta preparación.

**Conclusión:** Identificar las percepciones de los enfermeros sobre la preparación preoperatoria que se realiza actualmente a los clientes sometidos a cirugía general programada permitió conocer las dificultades que experimentan. La preparación preoperatoria debe ser estructurada y tener en cuenta varias dimensiones, como los aspectos físicos, emocionales, de conocimiento y logísticos. Estos resultados contribuirán a mejorar los cuidados de enfermería prestados durante el periodo perioperatorio.

**Palabras Clave:** enfermería; cuidados preoperatorios; cirugía general; investigación cualitativa

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## INTRODUCTION

The Portuguese nursing regulator (*Ordem dos Enfermeiros*) has defined specific competencies for Specialist Nurses in Medical-Surgical Nursing in the area of perioperative nursing care. These competencies include identifying the needs of patients and their families and developing an intervention plan based on those needs (Regulamento n.º 429/2018).

According to the Portuguese Association of Perioperative Nurses (*Associação dos Enfermeiros de Sala de Operações Portuguesas*, 2012), nursing care begins in the preoperative period and should focus on providing psychological preparation and emotional support to the patient. The nurse should possess relational and human skills to ensure a positive nurse-patient relationship.

Patients admitted on the day of surgery are often anxious and have limited time to process information. Insufficient preoperative information can cause greater psychological distress for patients (Brown et al., 2018).

Therefore, preoperative patient education is essential to improving the surgical experience. Longo et al. (2023) conducted a systematic literature review and found that providing preoperative information to patients reduced postoperative pain, preoperative anxiety, and length of stay. Patients also experienced improvements in sleep, therapeutic adherence, knowledge, and expectations.

Mendes et al. (2020) found that well-informed patients tend to have a better understanding of their role in the recovery process and are more likely to collaborate in postoperative care. This collaboration can lead to improved outcomes and a smoother surgical process.

Perioperative nurses require a well-organized work structure that allows sufficient time for preoperative patient preparation and promotes reflective practice (Işık et al., 2020). Identifying how nurses currently carry out preoperative preparation can help identify gaps and challenges, enabling the development of an intervention that enhances the quality of nursing care.

This study was conducted to identify the difficulties experienced by nurses when preparing patients for elective general surgery.

## 1. THEORETICAL BACKGROUND

The preoperative phase begins with the decision to have surgery and ends when the patient is transferred to the operating table. Nursing interventions during this period may include preoperative assessment, ensuring that preoperative tests have been done or are scheduled and providing structured and relevant information about perioperative nursing care (Hinkle & Cheever, 2020).

The preoperative evaluation of surgical patients is essential for addressing their physical, psychological, spiritual, and social needs, as well as those of their families or significant persons. The information gathered during this evaluation is critical for planning perioperative care. Psychological preparation should be included in preoperative preparation, in addition to physical preparation, as emotional and psychosocial imbalances can cause anxiety. To promote individualized care, it is important to holistically and specifically assess the person (Gonçalves et al., 2017).

Before surgery, nurses should provide patients and their families with tailored information about nursing care. According to Ferreira et al. (2022), this information should be simple and reassuring, while also involving the patients in the process to improve communication, increase patient satisfaction, and reduce preoperative anxiety.

Preoperative education and counseling have been associated with decreased postoperative complication rates and anxiety levels. Shorter hospital stays and more outpatient surgeries create new challenges for preoperative education, patient preparation, and the connection between the patient and the healthcare system (Koivisto et al., 2020).

To improve communication in perioperative care, it is necessary to develop structured preoperative interventions focusing on conveying information and explaining procedures in a way that the patient can understand (Krupic, 2019).

## 2. METHODS

A qualitative exploratory study was conducted following the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines (Tong et al., 2007).

Twenty-three semi-structured interviews were conducted with nurses who provided care to surgical patients. The inclusion criteria required participants to have at least five years of nursing experience and work in either the inpatient services of a general surgery department or the operating room of a central hospital. The sample was selected using a purposive sampling method. The interviews were conducted by one of the researchers who was a nurse experienced in conducting interviews. The interviews took place in a room set up for the purpose by the nurse manager in the participants' respective departments. The interviewer and the interviewees did not know each other in advance. An interview script was created and pre-validated by the research team. The nurses were asked about their perception of the preoperative approach to elective surgical patients and the factors that can impact the quality of preoperative preparation, both positively and negatively. Each participant provided written informed consent before the audio-recorded interviews, which were later transcribed. The interviewees were allowed to decide if there was any aspect of the interview that they did not want to disclose. No changes were suggested. The interviews lasted on average 30 minutes. The interviewer met frequently with the other researchers to analyze the main themes mentioned by the participants.

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Data were analyzed using Bardin's (2018) content analysis technique. First, the pre-analysis stage involved a preliminary reading and preparation of the material. Then, the data were coded, and the registration units were identified. Categories and subcategories were created using semantic, lexical, or expressive criteria. Finally, the analysis was shared with the participants for validation, and no changes were made.

The Ethics Committee of a Portuguese Hospital and University Center approved this research (074/CES-CHUC-138-18).

### 3. RESULTS

This sample consisted of 23 nurses, of whom 21 were women and 2 men, with a mean age of 45 years. Approximately 65% had been working for 21 years or more: 12 in inpatient units and 11 in operating rooms. Regarding professional qualifications, 11 were specialist nurses, and 12 were generalist nurses. In terms of academic education, five held a master's degree and 18 held a bachelor's degree.

The interviews' content analysis revealed three thematic units: difficulties experienced, contributions of the preoperative nursing consultation, and aspects to consider when organizing the consultation. This article focused on the difficulties experienced by nurses when preparing surgical patients and identified its categories and subcategories (Table 1).

**Table 1** – Characterization of the results by thematic unit, categories, and subcategories

Thematic unit	Categories	Subcategories
Difficulties experienced	Preparation of the surgical patient	Physical preparation Emotional preparation Patient knowledge Logistical aspects Lack of time
	Conditions for the preparation of the surgical patient	Shortage of nurses Poor communication between the inpatient and operating room teams Lack of structure in the preparation of the surgical patient

The participants were asked about their perception of the difficulties experienced during the preoperative preparation of patients undergoing elective general surgery. They reported difficulties with the preparation process and its conditions.

Regarding the preparation process, the interviewees identified problems related to the physical preparation of surgical patients. In some cases, they considered it to be inadequate. Others reported that preoperative preparation only focuses on the physical dimension:

*"Most of the time I think 'there was no preoperative preparation'. Sometimes 'they haven't even showered', at least apparently. Often their hair has not been removed".* (IN\_19).

*"We do the bare minimum. All the actual preparations for surgery, we do them very well, the physical preparation. The rest falls short..."* (IN\_17).

The participants noted the focus on the physical preparation for surgery to the detriment of the emotional preparation. Nurses do not place enough value on psychological preparation, even for patients with high levels of anxiety:

*"I think there is still a big gap in psychological preparation. Nurses do not value it"* (IN\_1).

This aspect influences patient knowledge, given that it limits their ability to understand the information they are given and does not meet their information needs:

*"Patients have no idea what to expect, what's going to happen here in the operating room, and that's probably also because we don't do the preoperative visit"* (IN\_2).

*"I believe patients are often misinformed"* (IN\_2).

The analysis of the participants' statements also revealed that the information provided to surgical patients during preoperative preparation is often limited to the logistical aspects of the unit's routines and are considered mere bureaucracy:

*"At admission, what I do is, I show them the unit, the physical space, the colleagues at the unit, our offices, so that they can come to us. We collect the necessary information"* (IN\_11).

*"We inform them about what will happen on the day of admission, which is more bureaucratic, like the tests they're going to do"* (IN\_23).

The participants mentioned difficulties related to the conditions for preparing surgical patients, including lack of time, shortage of nurses, poor communication between inpatient and operating room teams, and lack of structure in preparing the surgical patient. The interviewees reported a lack of time to properly prepare their surgical patients before surgery. They reported spending little time with them, which makes it difficult to clarify doubts and find the ideal time for the patient to understand the information they want to provide. This aspect also seems to be related to shorter preoperative periods:

*"Patients are often admitted on the same day they are going to have surgery... There's often not enough time to do this preparation."* (IN\_1).

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*"They have so many doubts on admission day that there's often no time to clarify them"* (IN\_23).

The interviews also revealed difficulties related to human resource management. The participants reported that the shortage of nurses influences their professional activity and hinders the preoperative preparation of patients:

*"There is a shortage of nurses in the inpatient units that affects the outcomes we see here in the operating room"* (IN\_2);

*"We are limited above all by the lack of staff"* (IN\_17).

Additionally, the interviewees reported a lack of communication between the inpatient and the operating room teams. The main issues were related to the transition of care and the different information systems for documenting care in the two services, which could affect continuity of care and even patient safety:

*"I don't have feedback on how preoperative preparation is done in the inpatient unit"* (IN\_15);

*"The inpatient nurses don't know the operating room, they don't know what happens here, so I think better communication is essential"* (IN\_2).

Finally, the nurses reported a lack of structure in the preparation of surgical patients. They reported that this preparation is often a routine intervention that lacks planning or a clear process, depending on the conditions at the time. The lack of structure can jeopardize the patient's understanding of the information provided, causing further anxiety:

*"Preoperative preparation is not structured, which means that we only meet them at the time of admission"* (IN\_9);

*"At the moment (...) things aren't structured"* (IN\_13);

*"They can't even process the information because everything is done under great stress and all at once(...) The information given is not validated"* (IN\_17).

#### 4. DISCUSSION

The nurses interviewed in this study stated that preoperative patient preparation often prioritizes the physical component over the emotional and psychological aspects. Torres et al. (2020) also found that preoperative preparation extends beyond the physiological aspect and is mainly influenced by the patient's mental and emotional status. An individualized, patient-centered approach is required to address issues such as anxiety and health literacy during preoperative preparation, which may improve pain management and the surgical experience.

Like the findings of this study, Filho et al. (2020) also found that the work process is fragmented and that human resources and time are insufficient during the perioperative period. They identified weaknesses in the systematization of preoperative preparation of surgical patients in health services. Schiavon et al. (2021) emphasized the challenges in communication between healthcare professionals and patients, as well as the lack of professional knowledge about relevant information for patients. They also noted the absence of preoperative nursing consultations or visits, which can harm the surgical experience during the perioperative period.

To optimize the surgical process, it is essential to implement autonomous nursing interventions in the preoperative period. Fernández et al. (2023) identified preoperative predictors of postoperative complications that nurses could improve, such as anxiety, health education, and patient knowledge.

The lack of human resources, namely perioperative nurses, affects preoperative preparation. Nijkamp and Foran (2021) conducted an integrative literature review and found that nurse-patient ratios, among other factors, have a significant impact on patient safety. Sufficient human resources can greatly enhance the quality and safety of care.

The results of this study are consistent with Işık et al. (2020), who concluded that communication failures are a major problem in the perioperative environment. According to these authors, effective communication and teamwork in the perioperative team are central to patient safety. They identified three causes for communication problems in this environment: institutional factors, individual factors, and the specificity of the perioperative environment. Marsh et al. (2020) found that perioperative nurses reported that communication and preparation were neglected more often than patient safety and legal requirements. They also found that the number of operating rooms, nurses' training, and professional category, as well as personal perceptions of safe allocations, also influence the omission of perioperative care.

According to Krupic (2019), communication should be enhanced by organizing and implementing preoperative meetings, involving patients in this dialogue, and developing nurses' skills.

One limitation of this study is its small sample size (inpatient and operating room nurses). However, a larger sample size could have made it difficult to analyze the interviews in depth. Although they did not know each other in advance, the interviewer works in the same institution as the interviewees and is familiar with the organizational dynamics. This familiarity may have influenced the way some of the nurses expressed their ideas. Finally, the participants came from different departments within the same hospital, which, together with the type of study and its intentional sampling, limited the generalization of the results.

#### CONCLUSION

From these results, it can be concluded that nurses find that the preoperative preparation of surgical patients is not always the most appropriate due to several factors identified in this study. These factors include aspects related to preoperative preparation

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and aspects related to the conditions for preoperative preparation. Nurses often have limited time for preoperative preparation, which can result in an imbalance between physical, emotional, and psychological preparation and knowledge. Additionally, the human resources available, including the nurse-patient ratio, can influence the amount of time spent with surgical patients. Moreover, the nurses also reported communication issues (both oral and written) between inpatient and operating room teams, as well as a lack of structure and planning in preoperative preparation. Therefore, to better prepare patients for surgery, nurses should provide a structured intervention. This can be done through a preoperative nursing consultation, a preoperative nursing visit, or ideally, both.

## AUTHOR CONTRIBUTIONS

Conceptualization, M.G., M.A.P and N.M.; data curation, M.G., M.A.P and N.M.; formal analysis, M.G., M.A.P and N.M.; investigation, M.G., M.A.P and N.M.; methodology, M.G., M.A.P and N.M.; project administration, M.G., M.A.P and N.M.; resources, M.G., M.A.P and N.M.; supervision, M.A.P and N.M.; validation, M.A.P and N.M.; visualization, M.G., M.A.P and N.M.; writing-original draft, M.G.; writing-review and editing, M.G., M.A.P and N.M.

## CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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