

**SURGICAL PATIENT SATISFACTION WITH INTRAOPERATIVE NURSING CARE: A SCOPING REVIEW**Satisfação do cliente cirúrgico com os cuidados intraoperatórios: uma revisão *scoping*Satisfacción del paciente quirúrgico con el cuidado intraoperatorio: una revisión *scoping*

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**ABSTRACT**

**Background:** patient satisfaction with nursing care is a valid indicator of the quality of care and a useful tool for continuous quality improvement. Nonetheless, studies concerning patient satisfaction with perioperative nursing care in the operating room have been lacking, which limits the development of nursing interventions that may promote it. **Objective:** to map dimensions of patient satisfaction with perioperative nursing care in the operating room. **Methodology:** scoping review, oriented by The Joanna Briggs Institute methodology for scoping reviews, 2020 version. 8 articles were included in the scoping review after inclusion criteria application. **Results:** relevant dimensions of patient satisfaction with perioperative nursing care in the operating room were identified, namely: information, nurse-patient relationship, satisfaction of physiological needs and operating room environment. Nursing interventions that meet these dimensions were also identified. **Conclusion:** patient's empowerment, therapeutic relationship, physiological homeostasis and operating room efficiency are the most frequently identified dimensions and the more relevant to patient satisfaction with perioperative nursing care in the operating room.

**Keywords:** patient satisfaction; perioperative nursing; operating room

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**RESUMO**

**Enquadramento:** a avaliação da satisfação do cliente com os cuidados de enfermagem é um indicador válido da qualidade dos cuidados e uma ferramenta útil para a melhoria contínua da qualidade dos mesmos. Porém, verifica-se que a temática tem sido pouco explorada no período intraoperatório, impossibilitando a identificação e desenvolvimento de intervenções de enfermagem que a promovam. **Objetivo:** mapear as dimensões da satisfação do cliente com os cuidados de enfermagem no bloco operatório. **Metodologia:** revisão *scoping*, orientada pela metodologia do The Joanna Briggs Institute, na sua versão de 2020. Após aplicação dos critérios de inclusão, foram incluídos 8 artigos na revisão *scoping*. **Resultados:** foram identificadas algumas dimensões relevantes da satisfação do cliente com os cuidados de enfermagem no bloco operatório (informação fornecida, relação estabelecida com os enfermeiros, satisfação das necessidades fisiológicas e ambiente físico do bloco operatório) e intervenções de enfermagem capazes de as satisfazer. **Conclusão:** As necessidades informacionais e relacionais do cliente, a sua homeostasia física e emocional e o funcionamento eficiente do bloco operatório são as dimensões mais amiúde identificadas e com maior relevância para a satisfação do cliente com os cuidados de enfermagem no bloco operatório.

**Palavra chave:** satisfação do paciente; enfermagem perioperatória; sala cirúrgica

**RESUMEN**

**Marco contextual:** la evaluación de la satisfacción del cliente con la atención de enfermería es un indicador válido de la calidad de atención y una herramienta utilizada para mejorar la calidad de la atención. Sin embargo, parece que el tema ha sido poco explorado en el período intraoperatório, lo que hace imposible identificar y desarrollar intervenciones de enfermería que la promuevan. **Objetivo:** mapear las dimensiones de la satisfacción del cliente con el cuidado de enfermería en quirófano. **Metodología:** revisión "scoping" guiada por la metodología de The Joanna Biggs Institute, en la 2020. Después de la aplicación de los criterios de inclusión, se incluyeron 8 artículos en la revisión. **Resultados:** se han identificado algunas dimensiones relevantes en la satisfacción del cliente con la atención de enfermería en quirófano (información recibida, relación establecida con el personal de enfermería, satisfacción de las necesidades fisiológicas y entorno físico del quirófano) y las intervenciones capaces de satisfacerlas. **Conclusión:** Las necesidades de información y relacionales del cliente, su homeostasis física y emocional y el funcionamiento eficiente del quirófano son las dimensiones mas identificadas y com mayor impacto en la satisfacción del cliente con los cuidados de enfermería en quirófano.

**Palabra clave:** satisfacción del paciente; enfermería periquirúrgica, quirófano

### INTRODUCTION

Quality in healthcare services is a relatively recent topic, with different conceptualizations regarding it. Avedis Donabedian's model is perhaps the one that has been gathering the greatest consensus. Donabedian (1993) has defined quality in healthcare as the result of the interaction of two elements: the attributes inherent to the science and technology of health care and the way in which these same attributes are applied in the practice of health care. According to Donabedian (1988), at the core of this interaction is the interpersonal relationship that is established between health professionals and patients, which is crucial for patient satisfaction and for their consent and adherence to the necessary care. For this reason, the author argues that the assessment of patient satisfaction is essential both in assessing the overall quality of healthcare systems and in their development and management. Research has been validating Donabedian's conviction, proving the impact of assessing patient satisfaction on improving the quality of healthcare systems (Al-Abri & Al-Balushi, 2014).

Patient satisfaction can be defined as the result of the difference between the patient's expectations regarding care and the patient's perception of the care actually received (Hawkins et al., 2014; Freitas et al., 2016). It represents the degree to which the patient is satisfied with the care received, being an assessment susceptible to the influence of the patient's own expectations and perceptions (Hertel-Joergensen et al., 2018). It is, therefore, a complex and subjective reality, which involves physical, emotional, social and cultural factors (Caljouw et al., 2008) and results from the patient's interaction with the healthcare system in which health care is provided (Hawkins et al., 2014).

Regarding it, patient satisfaction with healthcare must be understood by institutions and professionals as a result of the provision of care and an indicator of its quality (Farber, 2010; Hertel-Joergensen et al., 2018). Quality of healthcare is, therefore, multidimensional, and can only be achieved by integrating different but complementary perspectives: organizational, professional and patients (Rehnström et al., 2003).

Patient satisfaction assessment enables to integrate the contributions of patients in the construction of quality in healthcare systems, as "health care delivery systems exist to serve populations and, therefore, it is fundamental that people are placed at the center of efforts to institutionalize a culture of quality" (WHO, 2020, p. 15). That should "raise and enable a significant involvement of the communities served by the system and this should be prepared to welcome this involvement", namely involving "patients, families and communities in the planning, management, provision and evaluation of health services" (WHO, 2020, p. 15). In this way, it will be possible to "ensure that priorities reflect what matters and introduce a new level of responsibility for quality care" (WHO, 2020, p. 15).

Reflecting this changing paradigm, and in response to its statutory powers, the subject of quality has been addressed by the Portuguese Order of Nurses (OE) since 2001, having defined standards of quality in nursing care. The OE points out that "neither quality in healthcare is obtained only with the professional practice of nurses, nor the professional practice of nurses can be neglected, or left invisible, in the efforts to obtain quality in healthcare" (Conselho de Enfermagem, 2012, p. 6). But if the professional practice of nurses cannot be neglected in this issue, nurses also must not neglect that "they exist to serve

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citizens” (Conselho de Enfermagem, 2012, p. 7). Therefore, “nurses are aware that good care means different things to different people and, thus, the professional practice of nurses requires sensitivity to deal with these differences, seeking the highest levels of patient satisfaction” (Conselho de Enfermagem, 2012, p.13). Patients' satisfaction with nursing care is a powerful predictor of patients' overall satisfaction with the healthcare system (Özlü & Uzun, 2015), largely due to the relational nature of Nursing (Freitas et al., 2016). It is therefore important to recognize that perioperative nursing care is not limited to technical procedures, it also comprises a set of nursing interventions that intend to establish a relationship with the patients and create an environment conducive to the manifestation of their fears and concerns (Breda & Cerejo, 2021). Due to the increasing relevance of patient satisfaction as a tool for development of healthcare systems, it has become the first descriptive statement of the Quality Standards of Nursing Care and also of the Quality Standards of Specialized Care in Perioperative Nursing. Therefore, in Portugal, it is now expected that specialist nurses are able to develop and implement patient satisfaction assessment programs (Colégio da Especialidade de Enfermagem Médico-Cirúrgica, 2017). However, the scarcity, dispersion and heterogeneity of studies on the subject in the specificity of perioperative nursing and in the context of the operating room must be acknowledge. Therefore, preliminary research was

carried out, in March 2022. JBI Evidence Synthesis, PROSPERO and Open Science Framework (OSF) databases were consulted in order to verify the existence of review protocols or literature reviews, scoping or systematic, already carried out or in progress, and none have been identified. Due to the evident gap identified, it was decided to carry out a scoping review as it is “a useful way to map areas of study where it is difficult to visualize the range of information that may be available” (Apóstolo, 2017, p.102). The Joanna Briggs Institute (JBI) 2020’s methodology (Aromataris & Munn, 2020) was adopted, in order to provide rigor and transparency to the scoping review. The review objective is to map the dimensions of patient satisfaction with nursing care in the operating room.

### **METHODOLOGY**

#### Scoping review question

Literature reviews aim to answer a question, and scoping reviews are no exception. Having adopted the JBI methodology, the mnemonic PCC (Population, Concept and Context) was used to elaborate the review question (table 1). Therefore, the review question is: “What are the dimensions of patient satisfaction with nursing care in the operating room?”. The present review also intended to answer the following secondary question: “Which Nursing interventions promote patient satisfaction with nursing care in the operating room?”.

Table 1

PCC elements of the scoping review question

<b>POPULATION</b>	Adults, aged 18 years or over, of both genders and undergoing surgical intervention in the context of hospital admission.
<b>CONCEPT</b>	“Patient satisfaction” as main concept to be explored within this scoping review. “Perioperative nursing”, as responsible for implementing interventions that promote patient satisfaction in the operating room.
<b>CONTEXT</b>	Conventional operating room.

#### Inclusion Criteria

Exploratory, descriptive and correlational studies were included in the research, with a quantitative or qualitative approach. Quantitative studies included experimental studies (including randomized controlled studies, non-randomized controlled studies or other quasi-experimental studies) and observational studies (descriptive studies, cohort studies, cross-sectional studies or case studies). Qualitative studies included phenomenological, ethnographic and grounded theory methodology studies, among others. Systematic reviews and gray literature, such as dissertations and journal articles, were also included. Studies in Portuguese and English were included, when full text article was available. No time limit was applied to the research given the relative novelty and evolution of the concepts “patient satisfaction” and “perioperative nursing”.

#### Search strategy

The research was developed in three stages (Peters, et al., 2020), in accordance with the JBI methodology. In the first stage, an initial search was carried out in the databases Medical Literature Analysis and Retrieval System Online (MEDLINE), via PubMed Central, and Cumulative Index to Nursing and Allied Health Literature (CINHAL), via EBSCOhost. This first stage

aimed to identify the natural terms used by authors in the titles and abstracts of articles, as well as index terms/keywords.

In the second stage, and with the terms to be used already identified, the search was carried out in the databases PubMed Central, Google Scholar, Scientific Electronic Library Online, (SciELO), ResearchGate and Repositório Científico de Acesso Aberto de Portugal (RCAAP). Via EBSCOhost, CINAHL, Nursing & Allied Health Collection, Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, Cochrane Methodology Register were used. “Patient satisfaction” AND (“perioperative nursing” OR “nursing interventions”) AND “operating room” was the Boolean phrase in which the search was based on, with adaptations to different scientific databases, that is, using the terms selected as index terms or as natural terms.

In a third stage, additional articles from the references of the previous included studies were researched, maintaining the selection methodology used for the articles obtained from scientific databases. The article selection process is shown in figure 1, as a flowchart and in accordance with PRISMA-ScR (Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews) (Tricco, et al., 2018).

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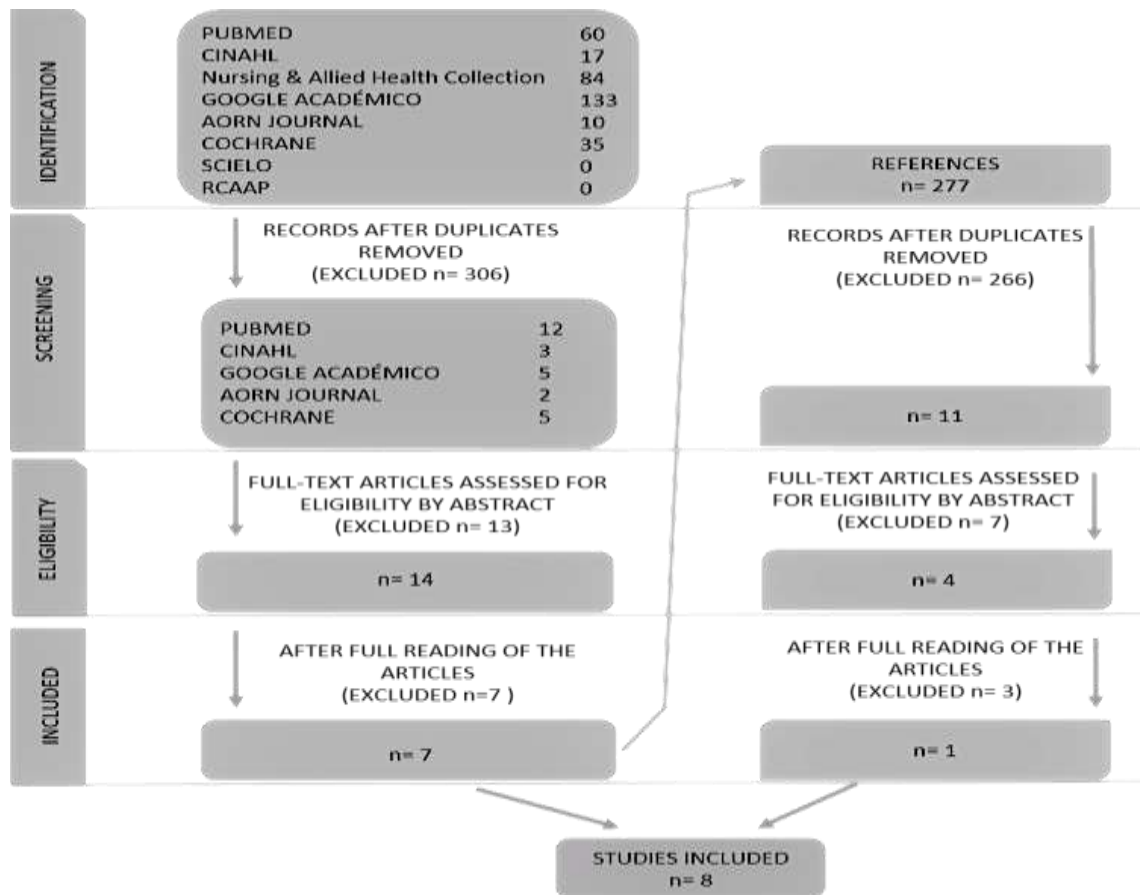


Figura1

Fluxograma do processo de seleção dos artigos (adaptada de PRISMA-ScR (Preferred Reporting Items for Systematic Review and Meta-Analyses extension for Scoping Reviews) (Tricco, et al., 2018)

## RESULTS

According to the JBI methodology for scoping reviews, the studies included were analyzed by two independent reviewers. A tabular instrument was developed for data extraction, partially reproduced

here (Table 2), in order to summarize the evidence relevant to the scoping review. In the tabular instrument, the extracted data is presented in regressive chronological order, that is, from the most recent article to the oldest.

Table 2

Summary table of data extracted from included studies

	TITLE	AUTHOR(S)/YEAR	PATIENT SATISFACTION DIMENSIONS	NURSING INTERVENTIONS
1	Patient satisfaction with perioperative nursing care in a tertiary	Anaba, P., Anaba, E. A., & Abuosi, A. A. 2020	<b>Information provided</b> (clarity and amount of information provided about the surgical procedure and stay in the operating room). <b>Nurse-patient relationship</b> (care shown to patient needs and the patient's	Preserve patient privacy Promote pain, nausea and vomiting management Maintain an empathetic, respectful and professional attitude towards the patient

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TITLE	AUTHOR(S)/YEAR	PATIENT SATISFACTION DIMENSIONS	NURSING INTERVENTIONS
hospital in Ghana.		<p>expectations regarding nurses' behaviours and attitudes).</p> <p><b>Patient fears and concerns</b> (patient's degree of fear or concern regarding operating room environment, waking up during the surgical procedure or pain).</p> <p><b>Patient discomfort and needs</b> (adverse results of anaesthesia that may influence patient satisfaction).</p> <p><b>Service</b> (patient perception regarding waiting times before surgery, surgery and discharge from the PACU).</p>	<p>Involve patient in decisions regarding the care to be provided</p> <p>Inform in a clear, detailed and intelligible way</p> <p>Promote the expression of patient's fears and concerns</p> <p>Promote practice guidelines (normothermia, positioning on the surgical table, prevention of surgical site infection)</p> <p>Promote the reduction of waiting times in the operating department</p>
2 Satisfaction of surgical patients with perioperative nursing care in a Spanish tertiary care hospital	Sillero, S. A., & Zabalegui, A. 2018.	<p><b>Communication with healthcare professionals</b></p> <p><b>Addressing patient needs</b></p>	<p>Improve quality and amount of information provide to patient</p> <p>Maintain an empathetic and available posture</p> <p>Increase contact/interaction time with the patient</p> <p>Provide individualized care</p> <p>Promote patient's participation in care</p> <p>Encourage patient to express doubts and questions</p>
3 Patient and Family Member Needs During the Perioperative Period	Davis, Y., Perham, M., Hurd, A. M., Jagersky, R., Gorman, W. J., Lynch-Carlson, D., & Senseney, D. 2014	<p><b>Information</b></p> <p><b>Physical comfort</b></p> <p><b>Communication</b></p> <p><b>Psychological support</b></p> <p><b>Professionalism and competence of healthcare professionals</b></p>	<p>Inform about and clarify the surgical experience</p> <p>Keep the patient informed throughout the surgical process</p> <p>Promote pain and nausea management</p> <p>Preserve patient's privacy and dignity</p> <p>Promote family members' presence in the surgical department's reception area and in PACU</p>
4 An Integrative Review of Factors Related to Patient Satisfaction With General Anesthesia Care	Hawkins, R. J., Swanson, B., & Kremer, M. J. 2012	<p><b>Modifiable dimensions</b> (information provided, pain, waiting times or delays, interpersonal skills of caregivers, fear or anxiety, nausea and vomiting, concern and kindness of caregivers, attention given by caregivers, feeling secure, well -being, privacy).</p> <p><b>Non-modifiable dimensions</b> (patient age).</p>	<p>According to the authors, nursing interventions that promote communication with the patient, efficiency of perioperative care and aim reduction of patient's anxiety, but without specifying which ones.</p>
5 The importance of Nursing in Perioperative Care: a patient's perspective	Westerling, K.; & Bergbom, I. 2008	<p><b>Pre-operative period:</b> information provided, clarification of doubts and fears, meeting surgical department's nurses, reception.</p> <p><b>Intraoperative period:</b> being recognized, welcomed, information provided, participation in care.</p> <p><b>Postoperative period:</b> continuity of caregivers, validation of procedure's success, recognition of patient's individuality.</p>	<p>Establish a therapeutic relationship</p> <p>Promote continuity of caregivers</p> <p>Inform about and clarify the surgical experience</p> <p>Empower for the surgical experience</p> <p>Promote feelings' expression</p>
6 The quality of perioperative care: development of a tool for the	Leinonen, T.; Leino-Kilpi, H., Stahlberg, M.-R., & Lertola, K. 2001	<p><b>Professionals' soft skills</b> (kindness, courtesy, humour, reliability, team cooperation).</p> <p><b>Performance</b> (task-oriented (maintenance of patient's homeostasis and physical safety, information and availability for the</p>	<p>Communicate professionally, empathetically and using humour</p> <p>Promote comfort and pain management</p> <p>Inform clearly and validate understanding of the provided information</p>

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TITLE	AUTHOR(S)/YEAR	PATIENT SATISFACTION DIMENSIONS	NURSING INTERVENTIONS
perceptions of patients		<p>patient's participation) and Person-oriented (respect patient's dignity, availability to help, ensure respect for patient's self-determination).</p> <p><b>Preconditions for care</b> (availability to patient's requests and needs and to justify the care provided).</p> <p><b>Progression throughout the surgical department</b> (waiting time to enter the operating room and to be transferred to the ward)</p> <p><b>Environment</b> (physical and social environment in the surgical department).</p>	<p>Promote questioning and encourage doubts and fears' expression</p> <p>Involve the patient in decision-making regarding the nursing care to be provided</p> <p>Preserve patient's privacy and dignity</p> <p>Validate consent for the care to be provided</p> <p>Provide emotional support</p> <p>Promote the reduction of waiting times in the surgical route</p> <p>Provide a calm environment, without excessive noise</p>
7 Intraoperative Nursing Care as Experienced by Surgical Patients.	Hankela, S., & Kiikkala, I. 1996	<p><b>Intrapersonal safety</b> (surgical procedure's success (improved mobility, pain reduction, performance of daily activities, improved quality of life) and integrity (fear of pain, death, incision and alteration of personal image; fear of anaesthesia).</p> <p><b>Extrapersonal safety</b> (self-determination ("role" of the patient; access to information as a condition for self-determination; "roles" of nurses, authority and exercise of power) and environment (operating room as a physical environment, noise during the procedure, different healthcare professionals, procedure duration).</p> <p><b>Interpersonal safety</b> (nurses' behaviour and actions).</p>	<p>Patient-oriented interventions (related to the humanization of care (touching and providing nursing care respectful to patients and their dignity), kindness (availability to help, promoting empathy, kindness and interaction with the patient), caring (being present, comfort, provide emotional support), support in the transition process (encourage, motivate, communicate and use humour) and advocacy (advocate for patient)).</p> <p>Task-oriented Interventions (related to education (prepare, instruct and guide, provide information), provide support (guide, explain, clarify and promote patient participation) and technical component (observation and monitoring)).</p>
8 The quality of intraoperative nursing care: patient's perspectives.	Leinonen, T., Leino-Kilpi, H., & Jouko, K. 1996.	<p><b>Biological-physiological perspective</b> (anaesthesia, sensitivity and gentleness in providing care, control of pain, nausea and shivering).</p> <p><b>Experiential perspective</b> (patient's general impressions, concerns and fears).</p> <p><b>Cognitive perspective</b> (accessibility and adequacy of the information provided and the healthcare professional who provides it).</p> <p><b>Functional perspective</b> (teamwork, continuity of care, patient participation in care and waiting times before the surgical procedure).</p> <p><b>Ethical perspective</b> (respect for client privacy, experiencing unpleasant or uncomfortable situations).</p> <p><b>Characteristics and competence of nurses</b> (level of knowledge of nurses, mastery of equipment used in the surgical procedure, performance in emergency situations, relational skills of nurses).</p> <p><b>Environmental perspective</b> (technical adequacy of the environment, safety and noise).</p>	<p>Promote pain and nausea management</p> <p>Promote normothermia</p> <p>Inform about and clarify the surgical experience</p> <p>Inform about the course of the surgical procedure</p> <p>Validate understanding of the information provided</p> <p>Encourage patient to ask questions about care provided</p> <p>Promote expression of fears and concerns</p> <p>Promote patient participation in decisions regarding the care to be provided</p> <p>Communicate professionally, empathetically and using humour</p> <p>Clarify any delays that may have occurred</p> <p>Promote a serene environment in the operating room</p>

### DISCUSSION

The aim of this scoping review is to answer the question “What are the dimensions of patient satisfaction with nursing care in the operating room?”. All selected articles identify dimensions of patient satisfaction with intraoperative nursing care, despite using different methodologies to accomplish it. It was also possible to identify nursing interventions that aim to address these same dimensions or needs of patients.

Anaba et al. (2020), Sillero & Zabalegui (2018), Davis et al. (2014), Leinonen et al. (2001) and Leinonen et al. (1996) used a quantitative approach to the subject, using questionnaires to assess patient satisfaction with hospital-based nursing care, although they were not specific for the intraoperative period. In turn, Westerling & Bergbom (2008) and Hankela & Kiikala (1996) opted for a qualitative approach, conducting interviews, from which directly identified the dimensions and nursing interventions relevant to patient satisfaction with nursing care in the intraoperative period. Hawkins et al. (2012) conducted an integrative literature review, identifying dimensions of patient satisfaction with nursing care previously presented in other studies and with relevance to the intraoperative period.

Despite the different methodologies, cultures, geographies and a timespan of almost 30 years, the dimensions of patient satisfaction with nursing care in the operating room identified are relatively similar, something that is worth noting. Information provided, quality of interaction with nurses, participation in care and satisfaction of physical needs, such as pain control, are dimensions highlighted by all authors and to which the identified nursing interventions aim to address.

In the included studies, the information provided and communication with patients revealed an important relationship with patient satisfaction with perioperative nursing care. According to Davis et al. (2014), is one of the dimensions most valued by patients. Sillero & Zabalegui (2018) also state that patients have a better surgical experience when they perceive that they are well informed and understand the surgical process and, for this reason, the authors suggest interventions to increase the quantity and quality of information provided to patients. The information provided allows the patient to feel participative and empowered, thus being able to understand and appreciate the intraoperative period and minimize anxiety (Westerling & Bergbom, 2008). Regarding this dimension, Leinonen et al. (2001) highlight that in perioperative nursing care it is important to adequately inform the patients, but also to encourage them to express doubts and opinions. Leinonen et al. (1996) also state that the patient must be informed throughout the surgical process and that the understanding of given information must be validated, having verified that the lack of information about the course of the surgical procedure was the only cause of patient dissatisfaction. Because the information provided has such a significant impact on patient satisfaction, Anaba et al. (2020) even state that the acquisition and development of nurses' communication skills is crucial to improve the quality of perioperative care.

From the included studies, the relevance of the quality of the nurse-patient relationship for the patient's satisfaction with the surgical experience also emerges. However, this relationship requires time, availability and continuity from nurses throughout the entire



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perioperative period, something that Westerling & Bergbom (2008) and Sillero & Zabalegui (2018) found to be frankly valued by patients. Also Anaba et al. (2020) concluded that, of the five dimensions evaluated in their study, the nurse-patient relationship was the only predictor of the patient's overall satisfaction with perioperative nursing care. Also for this reason Hankela & Kiikkala (1996) argue, in the conclusion of their article, that the nurse's main role during the intraoperative period is to support the patient in integrating their experiences during this period. This will only be possible if the relationship establish between nurses and patients is one of closeness and trust, respecting patient's self-determination and dignity, and in which patient is allowed to share and participate. In this sense, the preoperative visit is especially important, even essential in perioperative care, as an intervention that promotes nurse-patient relationship, with direct repercussions on the quality of intraoperative nursing care (Westerling & Bergbom, 2008).

Regarding patients' physical/physiological homeostasis dimension, Anaba et al. (2020) refer to the need to adopt guidelines and protocols, both in controlling pain, nausea and vomiting, and in minimizing healthcare-associated infections. Davis et al. (2012) corroborate that pain and nausea management is highly valued by patients, and should therefore be the subject of attention by perioperative nurses. Davis et al. (2014) also concluded that patients also valued the information provided in the pre-operative period regarding the management of pain and nausea resulting from the surgical and anesthetic procedures. Leinonen et al. (2001) also state that it is necessary to assess the presence of pain prior to the

surgical procedure, since the intensity of pain prior to the procedure adversely affects the patients' surgical experience and their satisfaction with the care provided. Hawkins et al. (2012) also found that pain was the second most referenced dimension in the studies included in the integrative review they carried out, being identified in 6 of the 9 studies. However, the results of Sillero et al. (2018) contradict the remaining studies, as postoperative pain did not have a significant impact on patient satisfaction with nursing care. The authors attribute this finding to the expectation that the patients included in the study had of experiencing postoperative pain. Also in this dimension, the relevance of nursing interventions regarding normothermia is highlighted. Leinonen et al. (1996) state that the feeling of cold and shivering were the least satisfactory experiences patients had in the intraoperative period.

The management of the surgical department, despite being identified under different dimensions in the included studies, also deserves particular attention. Nursing interventions that promote shorter waiting times within the operating department were identified as relevant to patient satisfaction with perioperative care. Leinonen et al. (2001) state that the longer patients wait, the lower their satisfaction with care, which is in line with the findings of Leinonen et al. (1996) in which patients identified waiting times to enter the operating room and to be transferred to the ward as a cause of dissatisfaction. Also Hawkins et al. (2012) identified the same problem, being mentioned in 4 of the 9 studies included in the integrative review performed. Anaba et al. (2020) also highlight that long waiting times are important predictors of dissatisfaction with care, thus should be target by

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health professionals and those responsible for managing surgical departments. Therefore, different authors address the need for nursing interventions that promote the efficiency of operating rooms, improving provision of care and patient's pathway along perioperative period.

### CONCLUSION

This scoping review aimed to identify patient satisfaction dimensions with nursing care in the operating room and, when possible, nursing interventions that address them. The information provided, communication with healthcare professionals, nurse-patient relationship, management of pain, nausea and vomiting and management of waiting times within the surgical department are the dimensions most frequently identified in the studies included. According to the authors, these should be considered when promoting continuous improvement in the quality of perioperative nursing care. Therefore, for a satisfactory surgical experience, patients should be kept informed of the surgical process, supported in their physical and emotional needs and surrounded by an environment that ensures their homeostasis and safety. If the identified nursing interventions to promote it are integrated into a therapeutic relationship with perioperative nurses, patient satisfaction with nursing care in the operating room will be higher. We can therefore state that patient satisfaction with the surgical experience is as dependent on the relationships established with healthcare professionals as the success of the surgical procedure is dependent on the technical skills of these same professionals.

Nonetheless, limitations of the selected studies must be addressed. In most of the included studies, non-specific assessment instruments were adapted for the intra-operative period. In the remaining studies, data was collected from patients through interviews, resulting in small samples, although with similar findings. However, nonetheless these authors reached similar findings, the sample sizes did not allow them to develop specific instruments for assessing patient satisfaction with nursing care in the operating room. Finally, the current scoping review may be useful to support future research regarding patient satisfaction with nursing care in the operating room. More studies will be needed to develop specific instruments for assessing patient satisfaction with intraoperative nursing care and to evaluate which nursing interventions are most effective in meeting patient expectations. Therefore, this scoping review could be a starting point for reflection on nursing practice and for the implementation of patient satisfaction assessment as a tool for continuous perioperative nursing care quality improvement.

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