

# PRE- AND POSTOPERATIVE NURSING VISITS: COMPREHENSIVE REVIEW

*Visitas de enfermagem pré e pós-operatórias: revisão integrativa*

*Visitas de enfermería pre y postoperatorias: revisión integrativa*

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**ABSTRACT:** **Objective:** To analyze the scientific production about pre- and postoperative nursing visits. **Method:** Comprehensive review with searches in the Virtual Health Library, Web of Science, SCOPUS, LILACS, CINAHL, PubMed and SciELO databases. The research question was: “what is the focus of scientific articles that discuss pre- and postoperative nursing visits?”. **Results:** Nine recently published articles were identified, three of which were in international journals and six in Brazilian ones. Eight articles focused on the preoperative visit and only one on the postoperative visit. Most studies were classified as having a low level of evidence and two as having a moderate level. **Conclusion:** Studies on nursing visits are more focused on preoperative visits, finding that they reduce the anxiety of surgical patients and emphasizing that, when not performed, they directly worsen the quality of nursing care. Difficulties in making nursing visits are found in some services, either due to the high demand for care and administrative activities or due to the lack of knowledge of nurses and human resources. **Keywords:** Perioperative nursing. Nursing care. Perioperative period. Perioperative care. Nursing process.

**RESUMO:** **Objetivo:** Analisar a produção científica acerca das visitas de Enfermagem pré e pós-operatórias. **Método:** Revisão integrativa, com buscas nas bases de dados da Biblioteca Virtual em Saúde, Web of Science, SCOPUS, LILACS, CINAHL, PubMed e SciELO. A pergunta de pesquisa foi: “qual é o enfoque dos artigos científicos que discutem sobre as visitas de Enfermagem pré e pós-operatórias?”. **Resultados:** Identificaram-se nove artigos de publicações recentes, sendo três produzidos e publicados em periódicos internacionais e seis em nacionais. Oito artigos enfocaram a visita pré-operatória e apenas um a pós-operatória. A maioria dos estudos foi classificada com fraco nível de evidência e dois com moderada. **Conclusão:** A produção científica direciona-se mais para as visitas de Enfermagem no pré-operatório, afirmando que essas diminuem a ansiedade dos pacientes cirúrgicos e ressaltando que, quando não realizadas, interferem diretamente na qualidade da assistência de Enfermagem. Encontram-se, em alguns serviços, dificuldades para a realização das visitas de Enfermagem, seja pela alta demanda de atividades assistenciais e administrativas, seja pela falta de conhecimento dos enfermeiros e de recursos humanos. **Palavras-chave:** Enfermagem perioperatória. Cuidados de enfermagem. Período perioperatório. Assistência perioperatória. Processo de enfermagem.

**RESUMEN:** **Objetivo:** Analizar la producción científica sobre las visitas de enfermería pre y postoperatorias. **Método:** Revisión integradora, con búsquedas en las bases de datos Biblioteca Virtual en Salud, Web of Science, SCOPUS, LILACS, CINAHL, PubMed, SciELO. La pregunta de investigación fue: ¿Cuál es el enfoque de los artículos científicos que discuten las visitas de enfermería pre y posoperatorias? **Resultados:** Se identificaron nueve artículos de publicaciones recientes, tres de los cuales fueron producidos y publicados en revistas internacionales y seis nacionales. Ocho artículos se centraron en la visita preoperatoria y solo uno en la visita posoperatoria. La mayoría de los estudios se clasificaron como con un nivel de evidencia débil y dos como moderados. **Conclusión:** La producción científica está más dirigida a las visitas de enfermería en el período preoperatorio y afirman que esto reduce la ansiedad de los pacientes quirúrgicos y, cuando no se realiza, interfiere directamente con la calidad de los cuidados de enfermería. En algunos servicios se encuentran dificultades para realizar las visitas de enfermería, debido a la alta demanda de actividades asistenciales y administrativas, el desconocimiento de las enfermeras y la falta de recursos humanos.

**Palabras clave:** Enfermería perioperatoria. Atención de enfermería. Período perioperatorio. Atención perioperativa. Proceso de enfermería.

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## INTRODUCTION

Resolution No. 358 of the Federal Nursing Council of Brazil (COFEn), published in 2009, considers that the Systematization of Nursing Care (SAE) structures professional work in terms of method, personnel and instruments, making the Nursing Process (NP) possible<sup>1</sup>. This resolution determines that all Brazilian environments, whether public or private, that provide professional nursing care must carry out the NP in a deliberate and systematic way, and it is up to the nurse to carry it out and evaluate it<sup>1</sup>.

SAE enables nurses to put their technical-scientific and humanistic knowledge into practice, contributing to the quality of nursing care<sup>2</sup>. Likewise, perioperative nurses perform NP through the Systematization of Perioperative Nursing Care (SAEP), seeking to satisfy the needs of the surgical patient. Based on comprehensive, continuous, participatory, individualized, documented and evaluated care throughout the perioperative period, SAEP covers the immediate preoperative period (24 hours before surgery), intraoperative and immediate postoperative period (24 hours after surgery)<sup>2</sup>.

SAEP is divided into five phases: preoperative nursing visit; perioperative care planning; implementation of care; assessment of care, postoperative nursing visit; and reformulation of the care to be planned<sup>2</sup>. Its implementation allows the perioperative nurse to get closer to the patient, developing an individualized care plan based on scientific knowledge<sup>3</sup>.

The preoperative nursing visit aims to help the patient (and their family) to understand and prepare for the anesthetic-surgical treatment, identifying and analyzing individual needs, reducing anxiety, contributing to their recovery<sup>2,4</sup>. Adequate preparation of the patient for the anesthetic-surgical procedure is essential for the success of the procedure and for a quick return to daily activities<sup>5</sup>. During the visit, the nurse performs a general physical examination of the patient, advising them on fasting, removal of dental prostheses, contact lenses, jewelry and nail polish, prior body/oral hygiene and the surgical environment, given that this is a closed, complex unit, with several specificities, unlike other hospital environments, where the patient will be distant and isolated from their companion<sup>2</sup>. The Surgical Center (SC) has a large technological and bureaucratic apparatus, in which care often ends up being more mechanical and less humanized, so the nursing team must be careful so that the patient is not just one more client to be treated<sup>6</sup>. The information provided by the perioperative nurse to the patients

must be transmitted in a clear and objective way, according to their level of education and cognitive understanding, as well as that of their family members/companions, making sure that their doubts have been clarified<sup>7</sup>.

Dialogue and listening positively influence the perception that patients have in relation to the care provided in the SC, in addition to humanized, holistic and safe care<sup>8</sup>.

The World Health Organization (WHO) defines patient education as a learning experience, which aims to support people and communities in improving their health, expanding their knowledge and influencing their attitudes<sup>9</sup>. Technological resources can be used for health education that facilitate the understanding of care learning<sup>10</sup>. The technologies used are varied, and hypermedia and games, serial albums and booklets, and even printed materials can be used<sup>11</sup>.

For the education of the surgical patient in the preoperative period, pictures of the various places where the patient will go during the perioperative period can be used, such as: ward, SC and postanesthesia care unit (PACU)<sup>7</sup>. The use of this resource facilitates the teaching-learning process in preoperative guidelines, helping to stimulate self-care and reduce anxiety. Audiovisual education performed individually in the preoperative period reduces the level of anxiety and positively affects vital signs, reducing postoperative complications<sup>7,12</sup>. This benefit can also be achieved with the use of videos<sup>13</sup>. Therefore, patient education reduces anxiety and depression, consequently reducing the intensity of pain in the postoperative period<sup>14</sup>, as this period encompasses several factors (psychological, physical and emotional) that can influence recovery<sup>15</sup>.

The postoperative nursing visit must be performed by the perioperative nurse to assess the care provided and verify the results of care for the evolution of the patients, allowing the elaboration of a care plan until discharge<sup>2</sup>. In Brazil, most hospital SCs still do not adopt a formal care model to guide nurses' actions, so the care provided does not follow a pre-established plan<sup>16</sup>. Generally, perioperative nursing care is performed in an organized manner, but it is not documented, making it difficult to assure its continuity and not giving visibility to the work performed by the nursing team<sup>16</sup>.

The implementation of PACU within the SC is often hampered by the lack of human resources, lack of understanding of the importance that nurses have in patient care and nurses' knowledge about the physical examination. Even so, most nurses are committed to the realization of the PACU<sup>17</sup>.

## OBJECTIVE

To analyze the scientific production in pre- and postoperative nursing visits.

## METHOD

This was a comprehensive literature review, a method used in evidence-based practice and widely applied in the field of nursing<sup>18</sup>. The purpose of this method is to achieve an in-depth understanding of a given subject on the basis of previous studies<sup>19</sup>.

This study included six steps:

1. identification of the subject and elaboration of the research question;
2. establishment of the inclusion and exclusion criteria;
3. identification of the selected studies;
4. classification of the selected studies;
5. analysis and interpretation of the results;
6. presentation of the results<sup>20</sup>.

The guiding question of the defined research was: “what is the focus of the scientific articles that discuss pre- and postoperative nursing visits?”.

The inclusion criteria were: scientific articles published in the last 10 years, in Portuguese, English or Spanish, with an approach on pre- and postoperative nursing visits. Articles that did not address pre- and postoperative nursing visits, letters, dissertations and theses were considered exclusion criteria.

The electronic databases used were: PubMed, CINAHL, LILACS, SciELO, Web of Science and SCOPUS. The searches were carried out in January 2021, using a controlled descriptor (nursing), available in Descriptors in Health Sciences (DeCS/MeSH), and uncontrolled descriptors (perioperative nursing visit, preoperative nursing visit, postoperative nursing visit, nursing visit, perioperative visit, preoperative visit and postoperative visit). They were combined with each other, using the Boolean operators AND and OR, as shown in Chart 1.

To select the articles that met the inclusion criteria, the repeated articles were initially excluded; later, the selection was carried out by reading the title, after reading the abstract and, finally, reading the article in full. Initially, 209 articles were selected, and articles were excluded in the following order: 42 for being repeated, 129 after reading the title; 22 after reading the abstract and 7 after reading the article in full. Therefore, the final selection sample consisted of nine articles. The summary of the searches in the databases for the selection of articles is described in Chart 2.

The Rating System for the Hierarchy of Evidence for Intervention/Treatment Questions scale was used to classify the level of evidence (LE):

- I. systematic review or meta-analysis of randomized clinical trials;
- II. randomized clinical trials;
- III. nonrandomized clinical trials;
- IV. case-control and cohort studies;
- V. systematic reviews of descriptive and qualitative studies;
- VI. descriptive or qualitative studies;
- VII. opinion of authorities and/or specialist reports<sup>21</sup>.

**Chart 1.** Search terms used according to databases.

Database	Search term
PubMed	<i>("perioperative nursing visit" OR "preoperative nursing visit" OR "postoperative nursing visit" OR "nursing visit" OR "perioperative visit" OR "preoperative visit" OR "postoperative visit") AND nursing</i>
CINAHL	<i>("perioperative nursing visit" OR "preoperative nursing visit" OR "postoperative nursing visit" OR "nursing visit" OR "perioperative visit" OR "preoperative visit" OR "postoperative visit") AND nursing</i>
LILACS	<i>("perioperative nursing visit" OR "preoperative nursing visit" OR "postoperative nursing visit" OR "nursing visit" OR "perioperative visit" OR "preoperative visit" OR "postoperative visit") AND nursing</i>
SciELO	<i>("perioperative nursing visit" OR "preoperative nursing visit" OR "postoperative nursing visit" OR "nursing visit" OR "perioperative visit" OR "preoperative visit" OR "postoperative visit") AND nursing</i>
Web of Science	<i>("perioperative nursing visit" OR "preoperative nursing visit" OR "postoperative nursing visit" OR "nursing visit" OR "perioperative visit" OR "preoperative visit" OR "postoperative visit") AND nursing</i>
SCOPUS	<i>("perioperative nursing visit" OR "preoperative nursing visit" OR "postoperative nursing visit" OR "nursing visit" OR "perioperative visit" OR "preoperative visit" OR "postoperative visit") AND nursing</i>

**Chart 2.** Overview of database searches.

Database	Articles identified in the search	Repeated	Excluded after reading the title	Excluded after reading the abstract	Excluded after reading the whole paper	Selected articles
Web of Science	19	0	14	3	1	1
SCOPUS	51	14	29	7	1	0
LILACS	18	0	8	2	3	5
CINAHL	15	5	8	0	0	2
PubMed	100	18	69	10	2	1
SCIELO	6	5	1	0	0	0
TOTAL	209	42	129	22	7	09

## RESULTS

Regarding the characteristics of the nine articles analyzed, it was found that the publications were relatively recent, with three articles in 2014, two in 2013, two in 2020, and only one in 2016 and 2018. Three articles were published in international journals and six in national journals: *Medicine Journal*; *Scandinavian Journal of Caring Sciences*; *Journal of Caring Sciences*; *Revista de Enfermagem da Universidade Federal de Santa Maria (UFSM, Nursing Journal of the Federal University of Santa Maria)*; *Revista da Sociedade de Cardiologia do Estado de São Paulo (SOCESP)*; *Journal of the Society of Cardiology of the State of São Paulo*; *Revista da Associação Brasileira de Enfermeiros de Centro Cirúrgico, Recuperação Anestésica e Centro de Material e Esterilização (SOBECC, Journal of the Brazilian Association of Surgical Center Nurses, Anesthetic Recovery and Material and Sterilization Center)*; *Revista de Pesquisa Cuidado é Fundamental Online (Research Journal Care is Essential Online)*; *Revista Brasileira de Enfermagem (REBEn, Brazilian Journal of Nursing)*; and *Revista de Enfermagem da Universidade Federal de Pernambuco (UFPE, Nursing Journal of the Federal University of Pernambuco Online)* (Chart 3).

As can be seen in Chart 3, most studies (5) exhibited LE VI, while the others showed LEs II (1), III (1), V (1) and VII (1).

## DISCUSSION

Of the nine articles analyzed, eight<sup>22-25,27-30</sup> focused on the nurse's visit in the preoperative period and one<sup>26</sup> in the postoperative period.

In relation to the preoperative period, anxiety is a nursing diagnosis frequently identified in the preoperative period of

surgical patients<sup>25</sup>. Most studies have shown that the preoperative nursing visit is effective in reducing the anxiety of surgical patients<sup>2-25,27,28,30</sup>. Studies<sup>23,25</sup> state that during the nurse's visit, based on health education, it is possible to resolve the patient's doubts and acquire information about the anesthetic-surgical procedure, reducing stress and the level of anxiety, making the process more tranquil. The nurse has the role of welcoming and bonding with the patient, experiencing a positive interaction, based on active listening and dialogue during the visit<sup>23</sup>.

It is observed in the preoperative visit<sup>22-24,27-29</sup> that, in addition to the improvement in the quality of care offered in the operative preparation, the reduction of anxious symptoms has been shown to be beneficial in the prevention of complications for the surgical patient. Thus, the preoperative visit can offer a better surgical experience also in the postoperative period, especially in the short term<sup>22,28</sup>.

Two articles<sup>26,27</sup> highlight the importance of the visit as a step in the PACU, for the nursing work process and qualification of care, allowing more scientific assistance, guaranteeing universality of language, control of records and better patient assessment<sup>26,27</sup>. The preoperative visit is an activity included in the PACU, and when not performed, it weakens the process, directly interfering with the quality of nursing care<sup>22</sup>.

In the context of pediatrics, one article<sup>30</sup> focused on the importance of offering toys to children and providing parents with detailed information about their children's treatment during the preoperative visit. These measures reduce the anxiety of children undergoing surgery and are effective for better understanding by parents during the treatment process<sup>30</sup>.

There was a lack of studies related to the postoperative nursing visit. Only one study<sup>26</sup> considered this attribution to

**Chart 3.** Summary of the articles selected as the study sample.

Authors Year of publication Site of study	Objective	Method Level of evidence	Conclusion of articles
Xu et al. <sup>22</sup> 2020 China	To investigate the influence of nursing visits against preoperative anxiety and postoperative complications in patients submitted to laparoscopic cholecystectomy.	Randomized clinical trial LE II	The preoperative nursing visit can decrease anxiety and postoperative complications in patients submitted to Videolaparoscopic cholecystectomy.
D'Eça Jr. et al. <sup>23</sup> 2020 Brazil	To evaluate the quality of the data from the checklist of the preoperative nursing visit in a university hospital in northeastern Brazil.	Cross-sectional LE VI	The quality of the data on the preoperative visit checklist is satisfactory, as incompleteness is low and the information is robust and reliable.
Ribeiro and Silva. <sup>24</sup> 2018 Brazil	To discuss through the literature about anxiety in the preoperative period of cardiac surgeries and the importance of nursing in this process.	Review of the literature LE VI	The preoperative nursing visit is fundamental for the collection of data on the surgical patient, as it enables the detection and resolution of problems or alterations related to the biopsychosocial and spiritual aspects that may interfere directly with the expected result.
Gonçalves and Medeiros <sup>25</sup> 2016 Brazil	To identify if the preoperative visit could minimize the anxiety level experienced by surgical patients.	Exploratory, prospective, descriptive LE VI	The preoperative nursing visit contributed to a decrease in the level of anxiety.
Xavier et al. <sup>26</sup> 2014 Brazil	To evaluate the quality of nursing care provided to the patient in the intraoperative period.	Quantitative, descriptive LE VI	The postoperative visit instrument was effective in assessing the quality of nursing care provided in the intraoperative period.
Amorim et al. <sup>27</sup> 2014 Brazil	To understand the meanings of the therapeutic interpersonal relationship between nurses and patients, from the adoption of the Transpersonal Care Theory, on the preoperative nursing visit after the experiencing the surgical process.	Qualitative study LE VI	The postoperative visit is effective for assessing the quality of nursing care provided in the intraoperative period.
Sadati et al. <sup>28</sup> 2013 Iran	To investigate the effects of preoperative nursing visits on anxiety and postoperative complications in candidates for laparoscopic cholecystectomy.	Prospective, semi-experimental, randomized clinical trial LE III	The study showed that preoperative nursing visits can decrease the level of preoperative anxiety and postoperative complications.
Bosco et al. <sup>29</sup> 2013 Brazil	To report the experience of nursing residents in performing the preoperative visit.	Descriptive study, experience report type LE VII	The nursing visits provide the resident with the opportunity to deepen the studies about surgical and anesthetic types and perioperative care, besides stimulating and facilitating contact with the patient/family. The preoperative visit is increasingly necessary in hospital practice, and the nursing professional needs to be able to perform it.
Ghabeli et al. <sup>30</sup> 2014 Iran	To determine the effect of toys and visits on reducing the anxiety of children before surgery and of their mothers and on the satisfaction with the treatment process.	Quasi-experimental post-test study with a control group. LE V	Providing toys for children and informing parents about medical information have a great effect on reducing anxiety in children and family members and increase maternal satisfaction with the treatment process.

assess the quality of care provided to patients in the intra-operative period.

In some services, there are difficulties in carrying out nursing visits, mainly due to the nurses' lack of knowledge or limited personnel and material resources, in addition to the high demand for care and administrative activities<sup>27</sup>. Continuous training and efforts by the SC management team are necessary so that the quality of care is not impaired<sup>23</sup>.

Most studies (5) showed LE VI, while the others had LEs II (1), III (1), V (1) and VII (1).

As limitations of the study, the search of the databases resulted in most of the articles being national and there were few articles that addressed the topic of postoperative nursing visits.

This study contributes to the areas of nursing and health, by providing relevant information about the importance of pre- and postoperative nursing visits for patients and/or their families and encourages perioperative nursing to invest in this practice.

## FINAL CONSIDERATIONS

This review made it possible to know and analyze the focus of selected scientific articles that addressed pre- and postoperative nursing visits. The low number of studies on this topic is noteworthy, as some research shows that when the preoperative visit is not performed the quality of nursing care decreases. This fact can be explained by the difficulty that some services have in carrying out visits, the high demand for care and administrative activities from nurses, as well as the lack of knowledge and human resources.

It was evidenced that the preoperative nursing visit reduces the anxiety of surgical patients, based on health education,

allowing the nurse to clarify the doubts of patients and their families/companions about the anesthetic-surgical procedure, providing better experience for the patient and even preventing postoperative complications.

Few publications on postoperative nursing visits were identified, and this step is very important to assess the quality of care patients are provided during the operation. Thus, it is evident that there is a need for perioperative nursing to invest in this theme.

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## CONFLICT OF INTERESTS

The authors declare there is no conflict of interests.

## AUTHORS' CONTRIBUTIONS

**CDC:** Conceptualization, Data curation, Formal Analysis, Methodology, Project administration, Writing — original draft, Writing — review & editing. **BRA:** Conceptualization, Data curation, Formal Analysis, Methodology, Writing — original draft, Writing — review & editing. **AFF:** Conceptualization, Data curation, Formal Analysis, Methodology, Writing — original draft, Writing — review & editing. **ASL:** Conceptualization, Data curation, Formal Analysis, Methodology, Writing — original draft, Writing — review & editing. **RCAC:** Conceptualization, Formal Analysis, Methodology, Writing — review & editing, Supervision.

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