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## INTEGRATIVE REVIEW OF THE LITERATURE

Cuidado de enfermagem perioperatório: revisão integrativa de literatura

Nursing perioperative care: an integrative review of literature

Cuidado de enfermería perioperatorio: revisión integradora de literatura

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### ABSTRACT

**Objective:** to know the nursing care performed in the perioperative period. **Method:** Integrative Review of literature in the databases Base de Dados de Enfermagem (BDENF) and Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS). Content analysis has been applied for analysis. **Results:** 23 papers and two categories: Perioperative nursing care and the organization of perioperative nursing care. In the first category, the guidelines in nursing care in are identified, as well as the prevention of hypothermia and skin lesions. In the second category, the studies show strategies to offer quality assistance through the organization of nursing work such as implementing models of care. **Conclusion:** The results reflect the characteristics of nursing care in the perioperative period and allow reflection on nursing care in different periods of the surgical experience. **Descriptors:** Nursing care, Perioperative nursing, Nursing.

### RESUMO

**Objetivo:** conhecer quais são os cuidados de enfermagem realizados no período perioperatório. **Método:** Revisão Integrativa de literatura nas bases de dados realizada na Base de Dados de Enfermagem (BDENF) e na Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS), com os descritores enfermagem perioperatória e enfermagem de centro cirúrgico. Para análise foi utilizado análise de conteúdo. **Resultados:** obtiveram-se 23 artigos e duas categorias: cuidado de enfermagem no perioperatório: identificam-se como cuidado as orientações de enfermagem, cuidados na hipotermia e na prevenção das lesões de pele. Na categoria organização da assistência de enfermagem no perioperatório, os estudos evidenciam estratégias desenvolvidas para ofertar qualidade de assistência por meio da organização do trabalho de enfermagem. **Conclusão:** Os resultados encontrados nesse estudo refletem as características do cuidado de enfermagem no perioperatório e possibilitam pensar sobre a assistência de enfermagem nos diferentes períodos da experiência cirúrgica. **Descritores:** Cuidados de enfermagem, Enfermagem perioperatória, Enfermagem.

### RESUMEN

**Objetivo:** Conocer los cuidados de enfermería realizados en el perioperatorio. **Método:** Revisión Integradora de literatura en Base de Datos de Enfermería (BDENF) y en Literatura Latinoamericana y del Caribe en Ciencias de la Salud (LILACS). Se utilizó el análisis de contenido. **Resultados:** Se obtuvo 23 artículos y dos categorías: cuidado de enfermería en el perioperatorio: se reconocen sus orientaciones, cuidados en la hipotermia y en la prevención de lesiones de piel. En la segunda los estudios evidencian estrategias para ofrecer cualidad de asistencia por la organización del trabajo de enfermería. **Conclusión:** Los resultados reflejan las características del cuidado de enfermería en el perioperatorio y permiten pensar en esa asistencia en diferentes períodos de la experiencia quirúrgica. **Descriptor:** Atención de enfermería, Enfermería perioperatória, Enfermería.

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## INTRODUCTION

**P**eriodic nursing aims at the care of surgical patient and his family, i.e., to develop the nursing assistance during pre-, intra-, and postoperative periods.<sup>1-2</sup>

Nursing care for patients and their relatives in the perioperative period must be carried out to minimize the risks and possible complications related to anesthetic and surgical procedures and hospitalization.<sup>3</sup> In this sense, the professional practice of nurse in perioperative requires a careful and continuous assessment of changes and needs presented by patient in order to implement appropriate interventions.<sup>4</sup>

In this way, nursing care, when systematically performed, allows the planning and implementation of integral care during the perioperative period. The systematic assistance is a process which seeks the promotion, maintenance and recovery of patient health, based on technical and scientific knowledge inherent to nursing.<sup>5</sup> Thus, it recommends the individualized and humanized assistance as well as interdisciplinary actions that aim to patient care.<sup>6</sup>

Drawing up the care plan, providing necessary information about surgical anesthetic procedure and guiding nursing staff can minimize risks, prevent complications and allow accurate evaluations, as well as establish adequate interventions in the different moments of surgical experience.

Knowing how the nursing care is done in perioperative period allows understanding the manner by which this practice occurs, to highlight relevant aspects to care quality promotion, and to identify possible gaps.

This investigation aims to know, in scientific publications, what the nursing cares performed in perioperative period.

## METHOD

The present study was based on integrative literature review which consists in the analysis of scientific knowledge produced regarding a particular topic. This method allows the synthesis of multiple studies published and provides general conclusions about a study area.<sup>7</sup>

We performed the following steps: subject identification, as well as definition of the guiding question and descriptors; establishment of criteria for inclusion and exclusion of publications, definition of databases, selection of studies, extraction, organization and

summarization of information from a data bank, assessment of studies included in the review, interpretation of results, and knowledge synthesis.<sup>7</sup>

The guiding question designed was: What are the nursing cares performed during the perioperative period?

For publications selection, search was conducted on April 2011 into the following databases: Database in Nursing (BDENF) and Latin-American and Caribbean Center on Health Sciences Information (LILACS). We used the next descriptors separately: perioperative nursing and Operating Room Nursing.

The inclusion criteria were: papers Articles about the theme, with full text available, published between 2000 and 2010.

We excluded publications focusing on children, adolescents, as well as researches directed to teaching-learning activities, ministerial manuals, theses, dissertations, and books.

For the collection and organization of data, a synoptic table was drawn containing the information: title, year, authors, source location, objectives, methodological approach, methods, results and conclusions. The selected papers were identified by letter A followed by Arabic number in gin ascending order. We used the content analysis to analyze the data.<sup>8</sup>

## RESULTS AND DISCUSSION

In the LILACS database 193 documents were found with Perioperative Nursing descriptor, of these, 20 were selected after reading their title and abstract. Then, the papers were fully read. With Operating Room Nursing descriptor we found 182 documents. However, just one met criteria for inclusion and the full text was read.

In the BDENF database, we found 213 documents with Perioperative Nursing descriptor. The reading of title and abstract allows selecting two papers for entirely reading, the rest of them did not meet criteria for inclusion or it was repeated in the other database. With Operating Room Nursing descriptor, we found 228 documents, but no paper was included.

As results, we have found 23 articles which are presented in the following table:

Identification	Authors	Title	Year
A1	Pérez ACV, Cerdeira GAI, Munilla GVA	Effects of different methods used in perioperative warming in the adult	2009
A2	Lopes CM, Galvão CM	Surgical Positioning: Evidence for Nursing Care	2010
A3	Silva DC, Ivim NAT	Surgical Center environment and its elements: implications for nursing care.	2010
A4	Flório MC S, Galvão CM	Surgery in out patient units: identification of nursing diagnoses in the perioperative period	2003
A5	Rocha LA, Maia TF, Silva L F	Nursing diagnoses in patients outgoing cardiac surgery	2006
A6	Piccoli M,	Perioperative nursing: identification of the nursing	2007

	Galvão CM	diagnosis infection risk based on levine's conceptual model.	
A7	Oliveira MAN	Management of new technologies in a surgery center by nurses in hospitals located in Feira de Santana - BA	2004
A8	Gasperi P, Radunz V, Prado ML	Trying to re-educate habits and customs: nursing care process in heart surgery pre and postoperative period.	2006
A9	Magalhães A, MM, Juchen BCJ	Primary nursing: adapting a new work role at the Surgical Nursing Service of the Hospital de Clínicas de Porto Alegre.	2000
A10	Zago MMF, RossiLA	Critical analysis of rituals in the medical and surgical nursing setting	2003
A11	Brito MFP, Galvão C M	Nursing care in the use of electro surgery.	2009
A12	Galdeano LE, Rossi L A	Elaboration and validation of data collection instruments for the perioperative period of cardiac surgery.	2002
A13	Baggio MA, Teixeira A, Portella MR	Pre-surgical of cardiac surgery patient: the nursing assistance making a difference	2001
A14	Grittem L, Méier MJ, Gaievicz AP	Nursing preoperative visit: nurses's perceptions at a teaching hospital	2006
A15	Gotardo JM, Galvão MG	Assessment of hypothermia in the immediate postoperative period.	2009
A16	Ursi ES, Galvão CM	Perioperative prevention of skin injury: an integrative literature review.	2006
A17	Foschiera S, Piccoli M	Perioperative nursing: emotional and social diagnoses of nursing in the preoperative visit based on the theory of Ida Jean Orlando	2004
A18	Mostardeiro SCTS, Pedro ENR	Patients with facial image alteration: care circumstances	2010
A19	Borges GAS, Diccini S	Dressing protocol in craniotomy and incidence of infection	2004
A20	Suriano MLF, Barros ALBL	Identification of nursing diagnoses most frequently in the perioperative period of patients undergoing cardiovascular surgery.	2003
A21	Meirelles NF, Alves DY, Andrade N	Restructure of the SAEPTo oncological client according to Nanda taxonomy and King's theory.	2002
A22	Luisotto MM, Carvalho R, Galdeano LE	Renal transplantation: diagnosis and nursing intervention in patients during immediate postoperative period	2007
A23	Volpato MP, Cruz DALM	Nursing diagnoses in patients admitted to a medical-surgical unit.	2007

Table 1: Synoptic table, results from integrative research, 2011.

The content analysis resulted in two categories: perioperative nursing care and the organization of perioperative nursing assistance.

The perioperative nursing care category includes the articles A1, A2, A8, A10, A11, A13, A14, A15, A16, A18, which is possible to identify the nursing guidelines, care in hypothermia cases and prevention of skin injuries.

The nursing guidelines (A8, A10, A13, A14, A18) are identified as nurse' role and they are developed in pre- and post-operative periods as a strategy to promote health and to reeducate habits and customs. Also, these guidelines aim to prepare the patient for surgical anesthetic procedure, to clarify their doubts in physiological, social, familial, economic and spiritual aspects and to minimize the anxiety, which may provide a care based on human values. Thus, the acceptance of physical and visual changes originated from surgical procedure by patient and his family may become easier.

The nurses in their professional practice intends to identify the patient needs through the dialogue, the listening and the guidelines that contribute to improve knowledge and skills required to maintain appropriated behavior health.<sup>9</sup>

For this, it is necessary to establish communication and a trust relationship between nurse and patient in order to guiding, as well as providing comfort and help, and, thereby, assisting on adaptation to the period that may be perceived as stressful by patient.<sup>5</sup> The nursing guiding is an important factor of nursing care and it helps the patient and his family to coping with health- disease process.

The patient preparation in preoperative period regarding to surgery information and to dynamics that precedes the surgical anesthetic procedure provide understanding and knowledge about procedure for patient and his family, as well as the acceptance of the possible changes, which favors mental and physical fit thereto.<sup>10-11</sup> As the patient feels enlightened about their doubts, fears are minimized and it is possible to prevent complications in the postoperative period.<sup>11</sup>

The surgical patient experiences a period of conflicts that arise from uncertainty, fear of the unknown, and seek for protection and solution for health problems.<sup>5</sup> Thus, the guidelines are a strategy to promote the assistance quality.

The care for hypothermia (A1, A15) has emphasis on prevention. The studies highlight two warming methods: system of forced warmed air and dermal warming passive method, wool blanket folded in half and cotton sheet. The control of patient temperature, as a strategy to prevent hypothermia in trans-operative and immediate postoperative periods, is pointed as essentially important too.

The risk of hypothermia and its complications to the patient, such as increase of morbidity, increased incidence of infection on surgical site, cardiac system disturbances and impaired platelet function, represent a concern for nursing care.<sup>12</sup>

The interventions for minimize the risks of hypothermia are focused on the use of thermal mattress, evaluation of patient body temperature during the trans-operative, and limited exposure of the skin.<sup>12</sup> The interventions to prevent hypothermia have to concentrate efforts on patient warming through thermal manta or blankets and on temperature control.<sup>13</sup>

Regarding to skin injuries (A2, A11 e A16) we identified the prevention of lesions caused by surgical positioning and by burns.

The prevention of a lesion caused by the surgical positioning occurs through of effective devices for each surgical position in order to promote the relief of pressure interfaces through the use of dynamic air mattresses or coverage to reduce the skin injury incidence and to keep the surgical position stable.

Evaluating the patient and identifying the devices more adequate for each situation are nurse' roles. The forecasting and provision of resources for adequate surgical positioning avoid friction and prevents lesions.<sup>14</sup>

The prevention of burns is concentrated on care with dispersive plate in electro surgery. Since burns are lesions on patient's skin that may result from electric scalpel use, this situation can occur due to human error in non-placement or to improper placement of dispersive plate. Also, it may be caused by the lack of knowledge about equipment.<sup>14</sup>

In this way, we highlight that nursing care in perioperative period are performed aiming to minimize risks and to prevent complications originating from surgical anesthetic procedure.

The category perioperative nursing care organization includes the following articles: A3, A4, A5, A6, A7, A9, A12, A17, A19, A20, A21, A22 and A23. The studies present strategies developed for quality of care through the organization of nursing assistance, such as: implementing care models, establishing diagnoses and appropriate interventions, building instruments to guide nursing actions, preparing the environment and mastering the technology.

Regarding to implementation of care models (A9 and A21) we identified experiences to organize and to document nursing assistance, namely: change of the teamwork model to Primary Nursing model and the restructuring of the Systematization of Perioperative Nursing Care (SAEP).

It is known that nursing develops its actions in an organized manner during daily work, but the lack of systematic records can affect the continuity and the quality of care.

In this sense, the institutions need to apply formal models of assistance. The assistance model is characterized as a set of concepts and propositions that guide and lead the practice, education and research, it's the scientific method application.<sup>15</sup>

Systematization of Perioperative Nursing Care (SAEP) is a process whose objective is to perform the data collection, diagnosis and planning of nursing actions, as well as evaluate the patient in perioperative assistance process. This process is conducted based on a systematic, evaluated, individualized and recorded methodology.<sup>6</sup>

The definition of nursing diagnosis and adequate interventions (A4, A5, A6, A17, A20, A22 e A23) were highlighted as a manner to organize and to guide the assistance. The diagnoses most frequently identified in the studies were anxiety, risk for infection and impaired skin integrity. The interventions identified are guidelines, asepsis control and correct surgical positioning with minimization of attrition. Some of these assistance actions stood out in this investigation into the category perioperative nursing care.

In the literature we attested that other authors.<sup>15</sup> highlight the following diagnoses as prevalent: risk of infection, risk for skin injury and emotional risk during perioperative period. These authors still point that the nursing diagnoses have been used to subsidize the care planning and nursing interventions. They should not be used separately but as part of the assistance systematization.<sup>15</sup>

The construction of instruments for data collection and of protocols to record and to guide the actions was highlighted too (A12 e A19). The researchers strengthen the idea that it is necessary to organize nursing care, especially the records, and to formalize the actions of an institutional way.

Inadequate record of nursing actions may cause a wrong assistance because the annotation provides information concerning the care conducted on patient, ensuring the communication among the health team members and the information continuity.<sup>16</sup> In this way, instruments that allow the standardization of recorded information and that respect the individuality of each patient are essential to assistance quality.

The preparation of the environment regarding to provision and forecasting of materials, the technology mastering and the adaption of patient to environment (A3 and A7) are highlighted as part of nursing care organization.

The feelings experienced by patients may be a result from the hospitalization disease-related process, the need for a surgical procedure, the removal of daily activities and of social and family life, as well as the hospital environment.

The ambience of surgical center can maximize the patients and families' feelings in perioperative period, due to the physical area, technology applied, work dynamic and specialized care. The doubt of the patients and their families, as well as the possible risks to patients' health when they are undergoing to anesthetic surgical procedure may to represent higher wear and, consequently sufferings.<sup>17-5</sup>

In this sense, perioperative nursing develops strategies to provide a systematic care and, thus, to qualify the assistance. Then, patients, professionals and health assistance institutions are benefitted.

## CONCLUSION

Concerning the nursing care performed during perioperative period, scientific productions highlight that it is done to minimize risks and to prevent the complications commonly found in this period. Noteworthy are the nursing guidelines to patient and his family and the interventions on specific situations to prevent skin injuries and hypothermia. Besides, to promote a qualified assistance, investigations point the need of organizing the nursing assistance, constructing and to implementing actions for an integrated and individualized care which constitutes the nursing work essence.

We believe that results found in this study reflect the characteristics of nursing care in perioperative and allow thinking about nursing care in different periods of the surgical experience. Besides, these results establish the importance of institutional actions for systematization and consequently for care quality.

We evidence the need to develop other studies that describe the perioperative nursing care concerning pain management and complications in respiratory, renal, hemodynamic, neurologic systems, among others. We stand out the great importance given to reception, transport and discharge of the patient in S.C. and their consequences.

The exercise of professional activity into perioperative nursing requires specific knowledge and development of skills to manage the care, the work process and the technology.

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