ABSTRACT
The surgical intervention is characterized as an invasive and often traumatic procedure for the patient and it requires preparation and care actions before and after the operative period. This study constitutes an integrative review which aims to investigate what are the nursing care actions required during the pre- and postoperative period discussed in the literature over the last 10 years. The inclusion criteria were: being written in Portuguese; being published within the period from 2000 to 2010; addressing the nursing care actions during the pre- and/or postoperative period, regardless of the surgery type; having the abstracts and full texts available in the databases of BIREME indexed in SciELO, MedLine, and LILACS, regardless of the research method. The research corpus consisted of 12 papers. We prepared a table which presents the synthesis of each paper under study. The analysis of papers indicated the existence of a gap in the scientific literature related to the nursing care actions offered to patients who underwent specific surgeries. Thus, we find that there’s a need for actions to encourage further studies to report the nurse’s experience and cover the multidisciplinary health team in all of its dimensions.

Keywords: Perioperative Nursing. Nursing Care. General Surgery.

INTRODUCTION
The surgical intervention is characterized as an invasive and often traumatic procedure for the patient(1); thus, it requires early preparation and care, that is, just during the preoperative period, a moment at which the patient arrives at the institution for undergoing the surgery. In this sense, nursing plays the crucial role of providing the patient with the best possible conditions for the surgical procedure and ensuring less chance of complications.

Understanding the entire dynamics surrounding the operative periods is the differential way for a proper nursing care practice, given that each period has its own peculiarities which, if detected, allow the provision of specific and individualized care actions.

In the nursing work process it’s a must being sensitive to the suffering of the other and knowing how to listen to her/his concerns and needs, since it makes the professional closer to the patient, who feels lonely and anxious in face of a surgical procedure, often unknown. Therefore, there’s a need to know the uniqueness of each patient and provide care in an individualized and humanized.

The patient, when admitted for a surgery, brings along with her/him fears and doubts by knowing that she/he’ll undergo an invasive procedure, which represents a critical situation, as well as an uncertainty with regard to the facts that may arise. From this perspective, nurse’s role in the social and technical space within the surgical clinic unit becomes more complex day after day, as it requires linking the human aspects observed in patient care, as a unique individual with particular issues(2). For this reason, there’s a need for systematizing professional care, using theoretical and practical kinds of knowledge to qualify care and embracement as strategies to minimize the suffering of the person who undergoes a surgical procedure.

Patient’s hospitalization may mean getting away from relatives and her/his social

*Graduated Nurse at Universidade Federal do Recôncavo da Bahia. E-mail: alana_queiroz@yahoo.com.br.
** Graduated Nurse at Universidade Federal do Recôncavo da Bahia. E-mail: ramon.andrade.souza@gmail.com
***Graduated Nurse at Universidade Federal do Recôncavo da Bahia. E-mail: flaviamenezes87@yahoo.com.br
****Nurse and Pedagogue. Msc in Nursing by Escola de Enfermagem, Universidade Federal da Bahia. Assistant Professor, Nursing Course, Universidade Federal do Recôncavo da Bahia (CCS-UFRB). E-mail:pfmenf@yahoo.com
environment. Patient’s work and daily life are momentarily interrupted and, often, lack of knowledge about the treatment leads to fear of death, fear of not waking up after anesthesia, fear of losing any body part, something which generates stress, lack of confidence, and malaise. This changed psychological state must be identified by nursing and worked on along with the patient, in order to keep her/him enjoying a good emotional status.

The nurse/patient relationship is of paramount importance in the surgical process, since the professional should be able to provide a qualified listening and realize the patients’ needs, which are often not expressed in words, but by means of gestures.

Nevertheless, sometimes the professional action still shows to be authoritarian and somber, concerned with following rules and routines and dealing with formal and objective aspects, although it’s known that the intimacy or familiarity of care requires more flexibility and interaction with the patient, in a search to know what her/his actual needs are, to plan nursing care.

It’s also possible to observe that, on a daily basis, nurses have a large amount of work related to patients’ guidance, aimed at providing emotional support, care, and information. Thus, an effective preoperative guidance helps the patient to deal with surgery, reduces the length of hospital stay, increases satisfaction with the service provided, minimizes surgical complications, and increases the psychological well-being.

Nurse’s action in direct or indirect care for the patient in a surgical clinic is unique, as it has to be quick and dynamic and cover the complexity of the various demands of patients in the three periods, directing care so that the patient is able to achieve, as soon as possible, the clinical, emotional, and social condition suitable for her/his hospital discharge. This way, care is observed in all contexts and it’s full of meanings, encompassing the attitude of being close to the person being cared for.

To meet her/his actual needs, it’s indispensable to observe the way how she/he is embraced and assisted by the nursing team, since these are factors which significantly influence the recovery and rehabilitation process.

In order to succeed in its interventions, nursing needs to meet the patient’s biological, social, psychological, and spiritual demands, providing a holistic view since she/he’s embraced at the unit until she/he’s discharged. Thus, in order to provide the nurse’s clinical practice with means, this review aims to investigate which nursing care actions needed during the pre- and postoperative period are discussed in the literature.

**METHODOLOGY**

This study constitutes an integrative literature review, a method which enables the broadest approach regarding reviews, by allowing the inclusion of experimental and non-experimental studies for a thorough understanding of the phenomenon under analysis.

During the drafting process, we established the goals, the search strategy, and the criteria for inclusion and exclusion of papers in the sample. Besides, we defined the information to be extracted from the selected papers and conducted a judicious analysis of the selected literature.

We adopted the following guiding question: “What are the nursing care actions needed during the pre- and postoperative period?”.

The bibliographical survey was conducted through the searching for journals in the databases of BIREME indexed in the Scientific Electronic Library Online (SciELO), the Medical Literature Analysis and Retrieval System Online (MedLine), and the Latin-American and Caribbean Literature in Health Sciences (LILACS), within the period from September to November 2011. Thus, we try to expand the research field, minimizing potential biases in the process for developing this integrative review.

To survey papers, we used the descriptors surgical nursing, nursing care, and surgery. We included in this study only the papers which met the following criteria: being written in Portuguese; being published within the period from 2000 to 2010; addressing the nursing care actions during the pre- and postoperative period; and having the abstracts and full texts available in the selected databases.

To access the papers, at first, we read the title and/or abstract of papers addressing the study topic. Then, each paper was fully read and those containing results related to nursing care in the
The pre- and postoperative period of patients undergoing any surgical procedure were included in the research corpus. The papers which didn’t address nursing care in the pre- and postoperative period were excluded from the study sample. Thus, we found a total of 12 papers.

To identify the studies, the abstract of all published papers were read and, when doubts arose, the full text was read.

To organize and systematize the papers, we created an instrument for evaluating the publications having the instrument validated by Ursi as a basis, arranged this way: location for identifying the study (title, year, volume, number, and journal) and space for the description of the institution where it was conducted; number of authors; classification of the occupational category (professor, clinical nurse, undergraduate nursing student) and academic status indicated by the authors; classification of the study (original research, literature review, course conclusion monograph, dissertation, thesis, update, and experience report); research type (quantitative, qualitative, qualitative/quantitative, review); collection and analytical technique; study subjects; theme; and geographic region where the study was conducted. These collected data set the variables under study.

After the judicious selection of papers, the study analysis phase started, where we used the thematic analysis according to Minayo. The papers found were numbered according to the location order (A1, A2, A3…), and the data were analyzed according to their content.

The thematic analysis operationalization covers the pre-analysis phase, which consists in the choice of documents to be analyzed and the resumption of hypotheses and initial objectives of the research. This step determines the recording units (keywords or sentences, the context units, and clippings), considering the central and objective question of the research; exploration of the material through the modification of the initial data obtained, in order to understand the text through its core meaning; and the processing of results obtained through the interpretation of already categorized data, which are correlated to the theoretical framework grounding the research.

Regarding the ethical aspects, the authors were attentive to record the information needed to identify the authorship of papers under study and they were careful to prevent modifying the information provided by these documents under analysis. Thus, we were impersonal in the reproduction and analysis of the material, in order to avoid bias.

**RESULTS AND DISCUSSION**

In this integrative review, 12 papers were analyzed according to previously set criteria. In the survey conducted, 6 (50%) of these selected addressed care in surgeries as a whole, without naming the specific type of surgery; their theme covered the preoperative nursing visit, the general care actions, and the interventions related to hypothermia, pain, nausea, vomiting, and surgical site; 3 (25%) involved the theme cardiac/thoracic surgery, addressing the re-education of habits and customs, knowledge, and care actions for the pediatric patient, as well as language as a caring tool; 2 (16.66%) addressed the abdominal surgery, focusing on the process of caring for ostomy patients and use of drainage devices; and 1 (8.33%) portrayed the orthopedic surgery, focusing on the nursing care actions in this type of surgery.

Through this analysis, we found out the absence of publications portraying the nursing care specific to surgeries involving men’s health, thus, we indicate the need for scientific works on nursing which address this theme, in order to improve the quality of health care for this population, from the perspective of an integral care.

Regarding the surgical period, the postoperative was observed in 9 (75%) publications, 2 (16.66%) of them were related to the immediate postoperative (IPO). The preoperative period was approached in 2 (16.66%) studies analyzed and only 1 (8.33%) involved the pre- and postoperative together.

In the characterization of the methodological aspects of the publications, we found that the most frequent type of work (50%) were the publications from research projects, followed by those consisting in literature review, with 5 (41.66%) publications, and experience report, with only 1 (8.33%) publication.

As the professional profile of authors - a total of 33 -, professors stand out, with 14 (42.4%) authors; clinical nurses, with 12 (36.3%), followed by undergraduate nursing students, with 3 (9%)
authors. The category graduate student had 2 (6%) authors and the categories resident nurse and surgical service chief had 1 (3%) author each. The significant presence of professors in the production of scientific works indicates the importance of teaching as a key element for the success of educational institutions and the scientific progress of nursing.

It’s worth highlighting the significant presence of clinical nurses, since their practice brings an everyday life view, but no less rich in terms of theoretical grounding than the other scientific studies. We found out the need for greater participation of undergraduate nursing students in the production of scientific papers addressing the nursing care within the operative period.

Table 1 presents a synthesis of the studies included in this integrative review.

<table>
<thead>
<tr>
<th>Paper</th>
<th>Results</th>
<th>Recommendations/conclusions</th>
</tr>
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<tbody>
<tr>
<td>A1</td>
<td>- It brings the use of scientific words, with different meanings. It brings that language is fully understood by the nursing team and presented in a natural way, however it isn’t mastered by the clients.</td>
<td>- The authors propose a reflection on the use of an understandable language, so that it’s a tool for nursing care. - Care has lots of symbols and meanings, which, according to the situation experienced, provides the reality involved with meaning, something which may generates misinterpretations. So, it’s a must that language constitutes a nursing tool.</td>
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<tr>
<td>A2</td>
<td>- It brings as care actions cleaning, monitoring, and promotion of wound healing through: search for inflammation signs, dehiscence; observation of drainage characteristics; cleaning; maintenance of the drainage device; application of strips for getting closer to the edges; removal of sutures; change of wound dressings; teaching of self-care.</td>
<td>- The nurse may use strategies to optimize healing of the surgical site. - It’s up to the nurse assessing and documenting in an adequate way healing of the surgical site, since, through this systematized action will have means for decision-making and implementation of behaviors which meets patient’s needs better.</td>
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<tr>
<td>A3</td>
<td>- 22 (100%) of respondents regard the visit as one of their assignments. However, only 36.3% state to provide preoperative visit, while 63.7% report not doing it, due to lack of a hospital’s protocol.</td>
<td>- It’s noticed as an obstacle to the provision of visit the lack of theoretical and practical knowledge. - The visit is essential because it allows the identification of bio-psycho-social-spiritual aspects and the planning of an individualized and good quality care.</td>
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<tr>
<td>A4</td>
<td>- Nurse’s close contact with the patient and family is a must for patient’s good recovery and rehabilitation.</td>
<td>- The author recommends trying the application of the McGill Model of Nursing associated to Carraro’s nursing care model. - It brings the need for concern with the physiological, social, family, and spiritual aspects.</td>
</tr>
<tr>
<td>A5</td>
<td>- The care actions provided are patient’s physical preparation, with few guidelines with regard to the surgical procedure and nursing care. - Some of these care actions make patients very embarrassed.</td>
<td>- The author brings that we should instigate reflections, raise awareness, or influence ideas, nursing professionals’ ways of acting and thinking, since there’s a need for reconstructing new practices in care for the surgical patient within the preoperative period.</td>
</tr>
<tr>
<td>A6</td>
<td>- The care actions identified were: move patients smoothly and slowly, manage pain, avoid hypotension, put fresh towels on the forehead, increase intravenous fluids, encourage deep and slow breathing, apply entertainment and relaxation techniques, avoid contact with certain odors, record each episode of nausea and vomiting.</td>
<td>- There’s a need that the nurse is grounded on scientific knowledge, to implement effective interventions against nauseas and vomiting in the postoperative period and provide an individualized and good quality care. - Evidence shows that there’re alternative interventions for preventing and controlling nauseas and vomiting, which may improve these complications and patient’s satisfaction.</td>
</tr>
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</table>
A7 - Attention to the mechanical ventilator, cardiac monitoring, sample collection, drugs, and physical examination were mentioned by all respondents.
- The importance of a structured team was mentioned by 18.2% of nurses interviewed.
A8 - The most cited nursing care actions were: checking vital signs, performing position changes, encouraging walking, monitoring and reporting pain signs, guiding the patient, facilitating self-care, and taking care of injuries, administering medicines.
A9 - The care actions provided are mainly focused on the patient’s physical preparation, with little guidance regarding the surgical procedure and the nursing care actions performed.
- Some of these care actions make patients very embarrassed: placement of the surgical gown and the removal of underwear and dental prosthetics.
A10 - It proposes a care for the patient who underwent a surgery and carries a drainage device covering four care measures: maintenance, hospital stay, mobilization, and removal of the drainage device.
A11 - It brings that the support grounded on a competent interdisciplinary work, where the family and the patient constitute the meaningful element which enables the achievement of a higher level of quality of life.
A12 - Hypothermia was an event observed within the IPO, affecting 66.6% of the patients under investigation.
- The region adopted by the nursing team to measure body temperature is the axillary.
- The nursing interventions were: use of thermal blanket; use of fleece blanket folded in half associated to cotton sheet.

Regarding the purpose of this review, i.e. identify what are the nursing care actions required in the pre- and postoperative period, it was observed in the papers which make up the sample how necessary is the provision of nursing care during these periods, since there still exist major deficits with regard to the bio-psycho-spiritual preparation, which must be solved as much as possible, to reduce possible harms to patient’s health.

Regarding the research, it may be said that nursing research is important due to its potential to legitimize doing and seek new care ways, making closer the theoretical and practical profession’s dimensions and contributing to improve population’s quality of life and, at same time, providing the professional practice with support.

Through the integrative review, it was possible to see which nursing actions are more frequently discussed. Language, although not a direct nursing care action, is addressed by A1 as an essential tool for the practice of nursing care in an integral way. A1 found out, by means of a survey with nurses at a cardiac intensive care unit, that language constitutes a special way of caring for, through verbal and non-verbal communication, but it emphasizes that, to be a major nursing care tool, language should be a part of the interaction process. Thus, the use of
language as a nursing care broadens the horizons of nursing knowledge, allowing the understanding of the reality experienced.

A2(13) signals that evaluating the surgical site during the postoperative period is one of the nurse’s activities which contribute to a better patient’s recovery, by inspecting this site during all phases in the healing process.

A3(14) brings the importance of the preoperative nursing visit at the surgical center and the surgical clinic or the hospitalization sector, indicating that it constitutes the first step for systematizing care, covering the three phases of the surgical process. Through the visit, the nurse collects information on the patient and identifies her/his needs, in order to make the perioperative nursing care individualized and effective and help the nurse to plan and implement assistance, in order to provide the patient with a faster recovery and an assistance which minimizes the risk of complications during the postoperative period. Thus, the nursing visit is addressed as a primary nursing care action, since it enables the detection, solution, and referral of problems, as well as maintaining the bond with the client. In addition to these nursing care actions, other actions were identified, as shown in Table 1.

The nurse’s care process in the pre- and postoperative period, according to A4(15), must comprise, besides the physiopathological, the emotional aspects of the patient and her/his family. A4 also brings the importance of making patients and their relatives active agents for promoting their health, through a reeducation of habits and customs. Working on self-care is one of the strategies used by nursing to promote the individuals’ health, and it should be worked on in all spheres covering the health care sector, such as hospitals, health units, households, and the community.

Patient’s welfare, according to A5(16), should be the main goal of the professionals who assist the surgical patient. The preoperative period requires attention on the part of the nurse, mainly for physical, psychological, and spiritual preparation of the individual admitted to the surgical clinic. It’s in this context that A5 brings that nursing is challenged to provide a good quality care in the preoperative period, stressing that the care provided to the patient during this period should be planned according to the individuality of each patient, based on scientific evidence, in view of the importance of nursing to maintain the patient’s well-being; A5 portrays the main nursing care actions performed along with the surgical patient during the preoperative period, as shown in Table 1.

The postoperative patient, regardless of the surgery undergone, may present reactions generally caused by the use of anesthesia, such as, for instance, nausea and vomiting. Based on this assumption, A6(17) brought in its research a literature review on the nursing interventions effective for preventing and controlling the nausea and vomiting observed in the patient during this period.

The care actions which the patient needs during the postoperative period, according to A6, constitute a challenge, due to the complex physiological changes that occur during this phase. Thus, the nursing care actions provided to the surgical patient should also be performed during this period, regardless of the type of surgery, on all surgical patients, and regardless of the factors sex, age, and sexual orientation. Nevertheless, we should take into account the peculiarities of each individual within her/his individuality. From this perspective, the nursing care actions during the postoperative period, according to A6, constitute a challenge, due to the complex physiological changes that occur during this phase. Thus, the nursing care actions provided to the surgical patient should also be performed during this period, regardless of the type of surgery, on all surgical patients, and regardless of the factors sex, age, and sexual orientation. Nevertheless, we should take into account the peculiarities of each individual within her/his individuality. From this perspective, the nursing care actions during the IPO were portrayed by A7(18), from the perspective of care for the pediatric patient during the IPO of congenital heart disease. Knowing and understanding patients’ needs is a key factor for the provision of nursing care, justifying the scientific production of nursing aimed at specific age groups and surgeries, such as A7.

Also from this perspective, A8(19) evaluated the nursing interventions prescribed to patients during the post-operative of orthopedic surgery and A8 conducted a comparison between the care actions prescribed by nurses with the activities proposed in the Nursing Interventions Classification (NIC). Thus, through this study it was possible to identify the main nursing care actions along with patients in the post-operative of orthopedic surgery.

Quantifying pain is something complex and immeasurable, thus, various factors should be evaluated and no complaint should be disregarded. Analyzing subjective things requires from the health care professional a
heightened sensitivity and a unique look, whose main focus lies on the patient/client’s needs. In this context, pain is one of the factors which signal the homeostasis breakdown, indicating a cell imbalance. A9\(^{(20)}\) portrays the importance of nursing in the control of postoperative pain and the importance of implementing this action, conducting a discussion on the management of postoperative pain by means of analgesic agents and cognitive-behavioral interventions, also bringing a discussion on the ethical and economic aspects.

In addition to care actions provided to the patient, conducting indirect actions is needed for the biopsychosocial well-being and the individual’s recovery, for instance, actions aimed at care with devices to help curing the patient. A10\(^{(21)}\) brings in this perspective an approach aimed at the maintenance of laminar and tubular drainage devices, portraying the basics of care for individuals using these devices. Understanding the dynamics surrounding the care for a surgical patient is a mandatory factor, given that all operative periods require providing a nursing care aimed at these types of devices, as A10 reports in its bibliographical study.

Another device very observed in the clinical practice is the Karaya or colostomy bag, a device which requires specific and systematized actions to be started in the preoperative phase, going through the intraoperative and the immediate, mediate, and late postoperative, as observed by A11\(^{(22)}\) in its scientific production.

Carrying out a scientific research on the probable needs during the perioperative period is an essential factor for acquiring knowledge which grounds the nursing clinical practice and, as a consequence, the implementation of interventions aimed at meeting the actual needs of the surgical patient, as, for instance, interventions which promote the prevention of perioperative hypothermia. A12\(^{(23)}\) addressed the evaluation of hypothermia, causing complications such as increase in morbidity, incidence of surgical site infection, and oxygenation, leading to a disorder in the cardiac system and damage to the platelet function. In addition to the complications, A12 portrayed the measures which nursing should take for treating hypothermia, as shown in Table 1.

We noticed, even identifying 12 publications bringing the theme under analysis, that nursing needs further studies which address this issue, given that the development and dissemination of scientific works by nursing is a key factor for the evolutions of scientific knowledge in nursing.

We observed, through the analysis of studies, that nurses need to observe the reactions of these patients, as at this treatment time they’re faced with an actual situation which requires adaptation and, as a possible solution to the problem, the surgery. This way, the nurse may act in order to guarantee this support and identify its needs, by means of dialogue, listening, and guidelines which contribute to the improvement of knowledge and skills required to maintain an adequate health behavior\(^{(23)}\).

**FINAL REMARKS**

The analysis of studies showed that there’s a gap in the scientific literature related to nursing care actions in specific surgeries. Thus, we realize the need for implementing actions to encourage further studies bringing the nurse’s experience, as well as further studies addressing the multidisciplinary team in all of its dimensions. From this perspective, the scientific works should be conducted in all Brazilian regions, especially those presenting the lowest percentage of publications on the theme within the period analyzed in this study.

The nursing professional, when planning and developing actions along with the population cared for, regardless of the postoperative period, should be open to dialogue and sensitive enough to realize the client’s needs and able to meet any needs presented, whether bio-physiological or social, through connections with a multidisciplinary team.

In this sense, understanding the importance of providing nursing care actions for promoting the patient/client’s well-being, it’s also important that the surgical clinics produce a care protocol pointing out problems which may be often identified in the surgical units, with nursing interventions/care actions for each problem identified, in order to establish and regulate the planning of nursing care. In addition to the protocol, there’s a need to prepare a nursing hospital discharge plan which contains guidelines on home care.
REFLEXÕES SOBRE CUIDADOS DE ENFERMAGEM NO PRÉ E PÓS-OPERATÓRIO: UMA REVISÃO INTEGRATIVA DA LITERATURA

RESUMO
A intervenção cirúrgica caracteriza-se como um procedimento invasivo e, muitas vezes, traumático para o paciente e exige preparo e cuidados antes e depois do período operatório. Este estudo constitui uma revisão integrativa que tem por objetivo investigar quais são os cuidados de enfermagem necessários no período pré e pós-operatório discutidos na literatura nos últimos 10 anos. Os critérios de inclusão foram: ser escrito em português; ter sido publicado no período entre 2000 e 2010; abordar os cuidados de enfermagem no período pré e/ou pós-operatório, independentemente do tipo de cirurgia; ter os resumos e textos integrais disponíveis nas bases de dados da Bireme, indexados na SciELO, no MedLine e Lilacs, independentemente do método de pesquisa. O corpus da pesquisa foi constituído por 12 artigos. Foi elaborada uma tabela que apresenta a síntese de cada artigo em estudo. A análise dos artigos indicou a existência de uma lacuna na produção científica relativa aos cuidados de enfermagem oferecidos a pacientes submetidos a cirurgias específicas. Assim, constata-se a necessidade de ações de incentivo a novos estudos que reportem a experiência do enfermeiro e contemplem a equipe multidisciplinar de saúde em todas as suas dimensões.


REFERENCES

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