Abstract

**Objective:** To describe the studies disseminated in online journals about the nursing care in the pre- and post-operative bariatric surgery.

**Method:** This is an integrative review of literature, a method that aims to gather and synthesize results of research about a topic. We conducted a survey of 405 articles, which, after passing by the inclusion and exclusion criteria, resulted in 8 scientific productions for analysis.

**Results:** The selected publications were divided into two thematic categories: Nursing care for the patient undergoing bariatric surgery and systematization of nursing care for patients under bariatric surgery.

**Conclusion:** The analysis of these studies evidences the importance of the nurse as an active member of the health team and essential in the whole process of bariatric surgery that the patient undergoes. It was also seen that the systematization of nursing care is determinant for a good recovery of these patients.

Keywords
Bariatric Surgery; Nursing Care; Obesity; Morbid Obesity.
Introduction

Obesity is a chronic disease regarded as an excessive accumulation of fat in the body that can reach compromising levels of the one’s general health. Sometimes insidious, it is increasingly being revealed as a most important public health problem because of the risks and associated factors. It is estimated that 2 to 8% of the resources available for health care in several parts of the world are related to obesity, and this worldwide epidemic is a reflection of the social, economic and cultural problems present in developing countries [1, 2].

The problem of obesity is already present in the health policy agenda nearly globally. Even with so much assurance by the part of the health teams, preventive measures are still a challenge, mainly among those who have already developed severe obesity [3].

According to data from the survey of family budgets conducted in 2008, about 15% of the adults are obese, and about half of the total Brazilian population is at least overweight. The most shocking is the speed with which obesity is growing every day, and this is due to the strong food habits presented in recent years that show an increase in the intake of foods of high caloric value, exacerbated palatability, low power of satiation and digestion associated with a high absorption [4].

The eating habits of contemporary society have established a food standard that is not at all healthy. Besides, when we check for the presence of factors sometimes presented by obese individuals, such as anxiety and depression, they face a higher risk for unstable eating [3].

The food standard evidenced by surveys led in Brazil shows a high percentage of consumption of foods rich in sugar, trans and saturated fats and salt, combined with low consumption of carbohydrates and fibers. Concerning food habits presented in recent years, there is an increase in the intake of ultra-processed foods, stabilization of consumption of fruits and vegetables and a low consumption of eggs, fish, and tubers, among others [4].

Most of obese people are the result of diverse failures in trying to change their eating habits. Without quality of life, acute weakness of the health framework, increased risks for the development and aggravation of comorbidities added to a strong emotional instability, the search for surgical treatment stands up. Generally, patients with morbid obesity (BMI ≥ 40 kg/m²) require special therapy, because their body dimensions should be considered along with comorbidities and surgical and anesthetic risk factors [4, 5].

After several unsuccessful attempts at weight loss, bariatric surgery has been one of the main treatment solutions for patients with morbid obesity, as it not only helps in weight reduction but also improves associated comorbidities [6].

According to the Brazilian Society of Bariatric Surgery, the surgical procedure consists of reducing the size of the stomach or altering the gastrointestinal tract, which makes it the most effective way for long-term weight loss and control. The preoperative procedure for bariatric surgery begins with the patient’s decision take part on the surgery [1].

To be a candidate for surgery, the patient must have a body mass index (BMI) more than or equal to 40 kg/m² or more than 35 kg/m² associated with some comorbidity. This, in turn, must also have tried to perform a treatment for obesity for at least five years through traditional methods performed by qualified professionals [7].

During the preparatory process for surgery, special care is required for those patients. Their obesity condition associated with comorbidities should be taken into account, making them more susceptible to high surgical risks. Such care is part of the professional routine of the nurse, being responsible for identifying possible problems. In the postoperative period, the greatest challenge is to diagnose the potential clinical impasses, since the nurse can bring several benefits to the care of those patients, directing the investigation of clinical conditions, controlling risks and evaluating nursing practice. It will also be possible to identify the most important nursing
diagnoses to facilitate the construction of care plans for patients undergoing bariatric surgery [8].

Bariatric surgery is responsible for a series of physical and psychic changes experienced by patients who undergo this procedure. Surgical and anesthetic advances, with increasing changes in demographics and patient obesity levels, have increased the need for effective and vigilant nursing care [9]. The individual’s expectation regarding treatment, hospitalization and quality of care is a factor that may have repercussions on their stabilization [10].

It should be emphasized that the quality of care directed to the hospitalized patient for the surgical procedure is of the responsibility of the nurse, which makes him an indispensable professional for the entire process [11].

Nursing consultation in the pre-operative period of bariatric surgery is the first interaction between the nurse and the patient, being extremely important for achieving success in the nursing interventions. The way this patient is received by the nursing team is salutary, since it will be this link that will facilitate the development of the whole process until recovery [1].

Despite the relevance of the nursing team’s work in relation to care provided to the patient and his safety during the entire surgical process, it is still not properly recognized how those professionals perform for the benefit of patients undergoing bariatric surgery [3].

Thus, it should be considered that nurses’ performance in the care of patients submitted to bariatric surgery is still poorly distinguished among health professionals. It is important to show the nursing care to the patient undergoing bariatric surgery, since this care is little evidenced and valued by the patients themselves. However, this study is justified by the need for research that seeks to reveal and evidence nursing care in the pre- and post-operative period dispensed to the patients undergoing this procedure.

Thus, the question was raised: ‘How are described the publications present in online databases that discuss nursing care for patients undergoing bariatric surgery?’

Given the above and considering the importance of nursing care to the patients submitted to this procedure, the objective of this research was: To characterize the studies disseminated in online journals about nursing care in the pre- and post-operative period of bariatric surgery.

Method
This is a study of an integrative review of the literature character. The purpose of this method is to group and synthesize research results about a given topic into an organized way, so that it contributes to a deepening of knowledge about the subject, and it has been used in the production of articles, dissertations and theses in the area since the last decades [12]. The use of this method allows a result of the current situation of knowledge about the topic addressed, the implementation of interventions in health care and the identification of gaps that need further surveys about the subject.

In order to guarantee methodological rigor, the six stages of the integrative review were used to organize the information collected: 1 - Elaboration of the guiding question; 2 - Search or sampling in the literature; 3 - Data collection; 4 - Critical analysis of included studies; 5 - Discussion of results; and 6 - Presentation of the integrative review [13].

The articles were selected from the Virtual Health Library (VHL) database: Latin American and Caribbean Literature on Health Sciences (LILACS), Nursing Database (BDENF - Nursing) and Medical Literature Analysis and Retrieval System Online (MEDLINE) and in the bibliographic database Scientific Electronic Library Online (SciELO). The descriptors used were: “bariatric surgery”, “nursing care”, “obesity” and “morbid obesity”, according to the Health Sciences Descriptors (DeCS) and Medical
Subject Headings (MeSH) through Boolean operators "AND" and "OR", with the purpose of facilitating the searches of the materials indexed in the databases.

The research universe consisted of online articles belonging to the health field, related to nursing care for the bariatric patient, through access to the VHL and SciELO site. For the selection of the studies, inclusion criteria were defined: being available in the selected databases, contemplating the proposed theme, being available in full text, being publications of the type article, in the period from 2006 to 2016 and being in Portuguese, English or Spanish. The exclusion criteria were: dissertations and theses, do not provide the text in full for free, do not contemplate the proposed theme.

Data collection was performed using a tool (form) and occurred between January and April 2016. The information contained in this instrument aimed at the characterization and contributions of the selected publications in order to meet the objectives proposed for the investigation. There are: article identification, professional training of the authors, database, year and origin of the publication, focus given to the theme and contribution of the study.

There were found 405 articles, of which 391 did not respond to the guiding question, 6 were repeated in the databases searched, which resulted in the selection of 8 articles to compose the sample of this integrative review.

After searching the databases, the evaluation of the localized studies was carried out, identifying the relevant information to be taken from the studies: the title of the article, year of publication, authors, periodical, modality, origin, methodology, database, objective and contribution of the study.

The data of the studies included in the research were categorized, analyzed and discussed, establishing relationships with the theoretical basis in focus.

Results

Description of the studies

Of the 8 articles included in the present study, 5 (62.5%) are in the LILACS database, while 2 (25.0%) studies are in the BDENF database, and 1 (12.5%) is in MEDLINE. Concerning the modality of the studies, 6 (75.0%) were original articles and 2 (25.0%) revisions. The year of greatest prevalence of publications related to the subject was 2012, 2013 and 2014 with 2 (25.0%) of the sample, followed by the years 2009 and 2016 with 1 (12.5%) each. It should be noted that in the years 2006, 2007, 2008, 2010, 2011 and 2015 we had no publications that met the criteria of the present study.

Table 1 below shows the descriptions of the articles used in the sample.

Table 1. Description of the studies included in the integrative review sample. João Pessoa (PB), Brazil, 2006-2017.

<table>
<thead>
<tr>
<th>Code</th>
<th>Year</th>
<th>Title</th>
<th>Authors</th>
<th>Journal</th>
<th>Method</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>2012</td>
<td>Perioperative nursing in weight reduction surgery: an integrative literature review [3].</td>
<td>Rodrigues RTF, Lacerda RA, Leite RB, Graziano KU, Padilha KG.</td>
<td>USP Nursing School of Nursing</td>
<td>Integrative review</td>
<td>MEDLINE</td>
</tr>
<tr>
<td>03</td>
<td>2012</td>
<td>Protocol of nursing care to patients in pre-and post-operative Bariatric Surgery [6].</td>
<td>Felix LG, Soares MJGO, Nóbrega MML.</td>
<td>Brazilian Nursing Journal – REBEN</td>
<td>Methodological</td>
<td>BDENF</td>
</tr>
</tbody>
</table>
Discussion

In this section of the study, there will be assessed and discussed the scientific productions about nursing care to the patient in the pre- and post-operative of bariatric surgery. To organize the development of the presentation, the studies were divided into two thematic categories: (1) Nursing care for patients undergoing bariatric surgery; (2) Systematization of nursing care for bariatric surgery patients.

Nursing care to the patient undergoing Bariatric Surgery

Care directed to the patient starts in the pre-operative, from the patient’s admission to the preparation of the patient for surgery. The start of the guidelines appropriate to the operative course of the patient is given at this stage of the process, when the nurse, in a systematized way, performs the necessary explanations related to the pre-surgical care. (Table 2)

The pre-operative is the time when a closer contact with the patient should be established. This approach is important, both for the nursing professional and for the other members of the multiprofessional team [7].

It is important mentioning that this moment has a great contribution for the continuity of care, patient stay in the hospital environment and even the surgical procedure itself, considering that most patients undergoing bariatric surgery will feel free to expose doubts and share anxieties arising from the operative procedure [11].

Given this context, the nurse is considered a bridge of communication between the patients and the other professionals comprised with the treatment. This professional is recognized by others as an calculator and integrator of different skills, because he

Table 2. Description of the articles included in the thematic 1 and their main approaches.

<table>
<thead>
<tr>
<th>Code</th>
<th>Year</th>
<th>Title</th>
<th>Authors</th>
<th>Journal</th>
<th>Method</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>2013</td>
<td>Nursing diagnosis related factors and risk of post-operative Bariatric Surgery [18].</td>
<td>Moreira RAN, Caetano JA Barros LM, Galvão MTG.</td>
<td>USP Nursing School of Nursing</td>
<td>Descriptive</td>
<td>BDENF</td>
</tr>
<tr>
<td>03</td>
<td>2014</td>
<td>Perioperative communication from the perspective of patients undergoing Bariatric Surgery [7].</td>
<td>Morales CLP, Alexandre JG, Prim S, Amante LN.</td>
<td>Text &amp; Context -Nursing</td>
<td>Qualitative and Descriptive</td>
<td>LILACS</td>
</tr>
<tr>
<td>05</td>
<td>2016</td>
<td>Clinical profile, diagnosis and nursing care for post-operative patients of Bariatric Surgery [22].</td>
<td>Steyer NH, Oliveira MC, Gouvêa MRF, Echer IC, Lucena AF.</td>
<td>Gaucha Nursing Journal</td>
<td>Cross-sectional</td>
<td>LILACS</td>
</tr>
</tbody>
</table>

Source: BDENF, LILACS and MEDLINE, 2006-2016.
is always close to the patient and because he is able to detect easier the changes in the health process of his patients [1].

To conceive perioperative nursing care, it is necessary to develop a practice of prescribing care, not neglecting your obligations, and to focus your attention on patient care in a holistic way [14].

The visit of the nurse in the pre-operative makes possible the detection of possible problems in the evolution of the patient, increasing the chances of detection of possible care failures that must be corrected in the progress of the care process [15].

Reasonable care in the performance of surgeries, is to take care in a safe and qualified way, providing safety within the nursing care in the stages of the surgical process, which requires a good planning, from the characteristics of the physical environment to the decision making with the conduits pertinent to direct care, so that all these components meet the needs and peculiarities of the patient undergoing bariatric surgery [16].

The relevance of the nursing professional’s performance to patient safety undergoing this surgery is established through ready-made guidelines for recommendations, which are based on traditional clinical practice science [3].

It is of the responsibility of the nurse to implant, assess and monitor all the care implemented in the patient’s care. It is important to recognize the nurse’s admirable contribution to the role of quality management in the care and care of bariatric patients [15].

The need to address challenges related to the human and material resources deficit due to the low supply of special equipment by health institutions should be observed for weight-reducing surgery patients. It is necessary to be involved in caring, making it something good-looking and able to contemplate in the routine of care for the patients undergoing bariatric surgery, given the great need to deal with their specificities, both material/technological and clinical [17].

One of the most mentioned nursing care in many studies is the management of analgesic drugs, in order to give patients a better comfort. Then there is hygiene. However, other care considered important is often neglected, such as assessing the patient’s anxiety and even identifying allergies. These data show the need for a greater emphasis on nursing care during the daily care of patients who seek more care from the nurse regarding care [11].

**Systematization of nursing care for patients undergoing Bariatric Surgery**

The Systematization of Nursing Care (SAE) represents a set of dynamically related elements, through work methods and strategies. Able with the nursing process as a way of care assistance, the SAE has the function of identifying the factors of contribution and aggravation to the health situation of the patients. The SAE, as an organizational process, makes the care more humanized, considering that it develops and implements this, it is necessary to establish a clinical reasoning permeated by humanitarian traces and integrating the individual, contemplating him as a whole, but a whole constructed by parts [1, 14]. (Table 3)

**Table 3.** Descriptions of the articles included in the second thematic category and their main approaches.

<table>
<thead>
<tr>
<th>Code</th>
<th>Systematization of nursing care for patients undergoing bariatric surgery</th>
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<tbody>
<tr>
<td>03</td>
<td>The study had the purpose to build a protocol of nursing care for the patient in pre-and post-operative Bariatric Surgery.</td>
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<tr>
<td>04</td>
<td>The focus of this study was to identify the key factors proposed by Nanda diagnoses for patients undergoing Bariatric Surgery.</td>
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<tr>
<td>05</td>
<td>It sought to identify nursing diagnoses according to taxonomy II of NANDA-I in post-operative patients of Bariatric Surgery, proposing interventions and results of nursing according to the Nursing Interventions Classification and Nursing Outcomes Classification.</td>
</tr>
<tr>
<td>08</td>
<td>The study analyses the clinical profile, the diagnoses and nursing care for post-operative patients of Bariatric Surgery.</td>
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</table>
More precisely, in the field of surgical nursing, the nurse must have mastery over the skills of the surgical proposals, the advantages and disadvantages of the techniques employed, as well as the process triggered from each one, so that he can plan the specific care for the preparation, maintenance and recovery of patients [8].

To start the SAE for patients undergoing this type of surgery, it is necessary to perform the nursing report, which serves as a guideline for identifying the patient’s problems. A good nursing report contemplates information related to the patient’s health in a totalitarian way, that is, it accommodates the biopsychosocial needs of the patient [11,14].

The nursing report consists of a systematized script that seeks to collect data from the sick person, considered of great value to the nurse, since it is the professional that will enable the diagnosis of potential problems involving the patient [14].

The implementation of this assistance process directs how the nurse’s practice should occur, providing autonomy to this professional. Nursing diagnoses (DE) describe the profile of patients based on their health problems, which unbalances their basic human needs, allowing the nurse to direct care for what is shown to be of greatest need for that patient [18, 19].

After identifying the nursing diagnoses, care planning should be performed. This, in turn, involves definition of aims, objectives, methodologies and techniques for implementing care and the type of nursing system to be established [18]. It is worth emphasizing that the nursing process is guided by the differential clinical reasoning of the nurse professional, using the care plan as a primary tool for the nursing professional. However, the implementation of actions is of the responsibility of the complete nursing team, including the nurse (more complex care) as a provider of care services [14, 19].

In the case of patients undergoing bariatric surgery, as managers of nursing problems and potential participants in the diagnostic decision-making process, nurses are responsible for listing the patient’s priorities inserted in the pre- and post-operative [21].

Among the various nursing diagnoses found in patients undergoing bariatric surgery, the most common are impaired tissue integrity, imbalanced nutrition: more than bodily needs, impaired physical mobility, altered comfort, self-care deficit, risk of infection, risk of imbalance the volume of liquids, etc. Therefore, nurses need to understand the entire surgical process from decision making through surgery to the post-operative. This care should be implemented during hospitalization and post-discharge, providing educational guidelines to facilitate the full recovery of the patient [22].

The SAE can lead to questioning about the risks and the planning of care for bariatric surgery patients. The diagnoses established by the nurse are of chief importance to highlight the specificities of each patient, because as fruits of logic applied to the evidence-based clinic developed by him, he conceives the professional the chance to identify it [8].

Continuing the work between the teams, SAE becomes an important tool that makes care something dynamic and optimized, strengthening the ties between professionals of the multiprofessional team, which only brings benefits for the treatment of patients, more specifically of those submitted to bariatric surgery [1,18].

Conclusion
Analyzing the studies used in this integrative review, we concluded that the nurse, as an active member of the multiprofessional team, is of great importance in surgical care, since he becomes the principal link between the patient and the other professionals, facing the numerous situations in the daily life of health care.

Concerning patients undergoing bariatric surgery, they need special care, which demands greater attention due to their more limited health conditions.
Therefore, it is necessary a nursing professional able to make available the necessary attention and care to achieve therapeutic success.

The results found in the studies show the need of a strategic planning in the construction of a systematization of the nursing care with quality, seeking to implement care in a humanized way, obeying the needs of each one. All care presents its difficulties, but it is up to the nursing team to seek to overcome such barriers in order to improve care for their patients.

An important topic to highlight is the scarcity of studies about the subject in question, represented by the limited sample of this work. This shows the need for more research in the area, in order to improve a standard care.

This study brings as a contribution to nursing the visibility of the importance of nursing care to an audience that has many limitations, fears and doubts about all the treatment that will be submitted, as the nurse is the closest professional who remains with each patient, it is evident his importance and the need of publications that discuss the subject.

References


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