DOI: 10.15253/2175-6783.2014000300019
www.revistarene.ufc.br

Review Article

Nursing diagnosis of delayed surgical recovery*

Diagnóstico de enfermagem recuperação cirúrgica retardada

Diagnóstico de enfermería recuperación quirúrgica retardada

Rosimere Ferreira Santana[1], Tallita Mello Delphino[1], Nathalia Martins Henriques[1], Priscilla Alfradique de Souza[2], Thais da Silva Soares[1], Shimmenes Kamacael Pereira[1]

The purpose of this study was to identify and analyze the nursing diagnosis of delayed surgical recovery, its defining characteristics and related factors according to NANDA-I taxonomy, through an integrative review. 34 articles were selected from MEDLINE, CINAHL, LILACS, and BDENF databases. In these, the delayed surgical recovery diagnosis was identified in a study. However, it was possible to identify the defining characteristics: difficulty to move about (36.4%) which requires help to complete self-care (27.3%) and the evidence of interrupted healing of the surgical site (27.3%). Additionally, the related factors were: pain (34.2%), postoperative surgical site infection (31.7%), postoperative expectations (31.7%), and obesity (2.4%). Other identified related factors were: advanced age (38.9%), diabetes mellitus (22.2%) and nutritional deficiency (16.7%). In conclusion, the diagnosis deals with a phenomenon of nursing surgical practice, recommended for the monitoring and standardized documentation of complications that may delay recovery and hospital discharge.
Descriptors: Nursing Diagnosis; Validation Studies; Perioperative Nursing.

Teve-se como objetivo identificar e analisar o diagnóstico de enfermagem recuperação cirúrgica retardada, segundo a taxonomia da NANDA-I, através de revisão integrativa da literatura, nas bases de dados MEDLINE, CINAHL, LILACS e BDENF. Foram selecionados 34 artigos, nos quais o diagnóstico esteve presente somente em um estudo. Porém foi possível identificar no conteúdo dos artigos as características definidoras: dificuldade para movimentar-se (23,5%), necessidade de ajuda para complementar o autocuidado (17,6%) e evidência de interrupção na cicatrização (17,6%). E fatores relacionados: dor (34,2%) infecção pós-operatória (31,7%), expectativas pós-operatórias (31,7%) e obesidade (2,4%). Outros fatores relacionados não listados na classificação NANDA-I foram identificados: idade avançada (38,9%), diabetes melito (22,2%) e deficiência nutricional (16,7%). Conclui-se que o diagnóstico trata de um fenômeno da prática de enfermagem cirúrgica recomendado para o monitoramento e documentação padronizada das complicações que podem retardar a recuperação e a alta hospitalar.
Descritores: Diagnóstico de Enfermagem; Estudos de Validação; Enfermagem Perioperatória.

El objetivo fue identificar y analizar el diagnóstico de enfermería recuperación quirúrgica retardada, según la taxonomía de la NANDA-I, mediante revisión integradora de la literatura, en las bases MEDLINE, CINAHL, LILACS y BDENF. Se seleccionaron 34 artículos, en que el diagnóstico estuvo presente solamente en un estudio. Pero fue posible identificar el contenido de los artículos las características definitorias: dificultad para moverse (36,4%), necesidad de ayuda para complementar el autocuidado (27,3%) y evidencia de interrupción en la cicatrización (27,3%). E factores relacionados: dolor (34,2%), infección postoperatoria (31,7%), expectativas postoperatorias (31,7%), y obesidad (2,4%). Otros factores relacionados no listados en la clasificación de la NANDA-I fueron: edad avanzada (38,9%), diabetes mellitus (22,2%) y la deficiencia nutricional (16,7%). Se concluye que el diagnóstico es un fenómeno de la práctica de la enfermería quirúrgica recomendada para el monitoreo y documentación estándar de las complicaciones que pueden retrasar la recuperación y el alta hospitalaria.
Descriptores: Diagnóstico de Enfermería; Estudios de Validación; Enfermería Perioperatoria.

*Enhanced cutting of the Report of Scientific Initiation 2011-2012 PIBIC/CNPq/PROPPi.

[1]Escola de Enfermagem Aurora de Afonso Costa, Universidade Federal Fluminense. Niterói, RJ, Brazil.
[2]Nursing Scholl of San Antonio. Texas, Estados Unidos.

Corresponding author: Rosimere Ferreira Santana
Rua Doutor Celestino, 74, Centro, CEP: 24020-091. Niterói, RJ, Brazil. E-mail: rosifesa@gmail.com

Received: July. 23rd 2013; Accepted: Apr. 28th 2014.

Introduction

The nursing assistance during the post-surgery period is a challenge, due to the complex alterations which occur in this phase, such as: anesthesia recovery, pain, discomfort, surgery site, nausea, vomits, limitations of the movements, dependence for self-care, risk of infection, expectations regarding recovering, discharge, homecare and return to the activities[1-2].

In this context, in order to offer an assistance directed to the needs of the patients undergoing surgery, it is necessary that the nursing professionals correctly identify the possible diagnosis in this period, in order to act in an inadequate manner, making the reduction of possible complications feasible and avoid the delay in his recovery.

Thus, the accurate and precise nursing diagnosis of delayed surgical recovery can become an auxiliary tool in the promotion of orientation concerning the full recovery. Just like the careful observation of the healing process, the prevention of infection, the adequate feeding and the stimulus to the return of routine activities that, consequently, can contribute for the reduction of post-surgical complications[3-5].

The diagnosis of nursing delayed surgical recovery, according to the NANDA-International (NANDA-I) classification, is inserted in the domain 11 Security/Protection, defined as 'extension of the number of post-surgical days necessary to initiate and perform activities which maintain life, health and the welfare'[6:507].

These are defining characteristics, that is, observable Clues/Interferences which are grouped as manifestations of a nursing diagnosis, in the case of delayed surgical recovery mentioned in the NANDA-I classification: it postpones the return to the work/job activities; difficulty to move about; and evidence of interruption in the healing of the surgical area; fatigue; perception that it is necessary to have more time for recovery; loss of appetite with or without nausea; necessity of health to complete self-care; and report of pain and discomfort[6].

The related factors, which are known as those which show some kind of standardized relation with the diagnosis of nursing, there are in the NANDA-I classification for delayed surgical recovering: pain; postoperative expectations; postoperative surgical site infection; obesity; extensive surgical procedure and prolonged surgical procedure[6].

Therefore, it is important the identification of the diagnosis of delayed surgical recovery in the clinical practice of surgical nursing. But, not always the clinical evidences defined as pertinent in the taxonomy, correspond to what is observed in the literature[4,7]. This is also considered the first methodological step of the validation and diagnosis revision. So, there is the need of researches which help in the exposition of the pertinence of the diagnosis in the area of interest[4,7].

For such, an objective was elaborated as follows: identify and analyze the diagnosis of the delayed surgical recovery, as well as its defining characteristics and related factors through the integrative revision of the literature.

Method

The integrative revision was chosen as a wide method of revision which has as main purpose to gather and synthesize the studies made on a specific subject, elaborating a conclusion from the results shown in each study[8-9].

For the elaboration and organization of such review, six stages were established, as suggested in previous studies[8-12]. First, the elaboration of the guiding question of the integrative revision in which the prerogatives of clarity and specificity were considered, the help in the identification of the key words and in the delimitation of the information and choice of the studies.

So, the following question was made: how is the nursing diagnosis of the delayed surgical recovery, as well as its defining characteristics and the related

factors in the literature available presented? This phase includes the documentation of the descriptors used, of the bases of the data consulted, of the strategies of search and of the criteria of inclusion and exclusion delimited.

The investigation of the descriptors was made based on the Medical Subject Headings (MeSH) and Descriptors in Sciences of Health (DeSH) data of the terminology, with access through the PUBMED virtual library, were selected: nursing diagnosis, perioperative nursing and postoperative cares, both in Portuguese as well as in English. In the strategy of searching these were associated among themselves using the Boolean operators '*or*' and '*and*' in the ten types of possible combinations which made the design to select the intended articles possible.

So, there was an on-line search in the following databases: MEDLINE (Medical Literature and Retrieval System Online) through PUBMED, LILACS (Latin American and Caribbean Literature in Health Sciences), CINAHL (Cumulative Index to Nursing and Allied Health Literature) and BDENF (Nursing Databank). The access to these electronic bases occurred through the BIREME (Regional Library of Medicine) and the Periodical Portal of CAPES (Coordination of Improvement of University Level Subjects), the period of search occurred in August and September, 2012.

The following criteria for inclusion of the articles in the integrative revision were adopted: indexed articles published in English, Spanish or Portuguese, independently of the date of publishing with direct and indirect approach of the delayed surgical recovery theme, independently of the operative period, type of surgery, or age of the clientele, which complied with at least one guiding question of the research. As exclusion criteria: articles without determination of a clear methodology, duplicate texts, articles of reflection or editorials, and unpublished theses. It is worth highlighting that the articles which did not have free electronic access were acquired through the university library, with the whole access of the selected articles for reading.

The selection first occurred through the reading of the titles and abstracts, elimination of duplicates in more than one databases and recovery of the complete articles. Of the total of articles in the PUBMED (3827), LILACS (8245), BDEnf (5248) and CINAHL (6881) databases, 322 study abstracts were chosen, from these 190 repeated studies were removed, from which 132 studies were selected, thus remaining 86 selected articles, being this the initial sample of the study.

Such articles were submitted to a meticulous reading and the information collected, synthesized in an instrument of data collection containing: identification data of the article (title, authors, making, year, country of publishing, title of the journal, database), main concepts related to the nursing diagnosis delayed surgical recovery, concept of delayed surgical recovery, indications for delayed surgical recovery, methodological characteristics, main results, conclusion of the authors, implications for nursing, limitations of the study and classification of the level of evidence.

It is worth highlighting that each article had the evaluation of at least one scholarship student, one master nursing and the assigned instructor. After the reading of 86 articles, 34 articles were included, once they brought the content of the diagnosis delayed surgical recovery, besides theoretical methodological contributions which were later analyzed.

So, studies of several outlining were selected, classified according to the level of evidence proposed by Oxford/2009[13]. The evaluation of the quality of the studies was essential for the evaluation of the scientific conformation of the publishing[11].

Is this stage, occurred the characterization of the sample, with simple descriptive statistical use with distribution per year of publishing, country, employed method, professional category of the authors, journals and database of the articles selected in the study.

Later on, there was exhaustive reading, searching for the concepts of delayed surgical recovery, as well as the definitions of the defining characteristic

and related factors of the studied phenomenon. As the last stage in the analysis of research of the publishing, the evidences obtained in the studies included in the revision were analyzed and synthesized, comparing with what was found in the NANDA-I classification.

Results

The bibliometric profile of the 34 studies which complied with the guiding questions of the research included in the revision is presented in Table 1. Studies with qualitative (58.8%) and descriptive (41.2%) approaches predominated, and in most of the cases and experiences were reported; 70.6% of the studies were considered with low scientific evidence (1). But, three studies of a high evidence belonged to the area of nursing, with distribution in England, The United States of America and Sweden.

Regarding the general thematic of the articles, most of them dealt with the postoperative pain present in six studies (17.1%) and with the process of healing also in six studies (17.1%). In addition to that, infection of the surgical site was present in four studies (14.3%) and also in studies which approached nursing diagnosis in the perioperative, four studies(14.3%); postoperative feelings were identified in three studies (8.6%), followed by postoperative complications in two studies (5.7%) and nausea and vomit in one study (2.9%).

The description of general concept regarding delayed surgical recovery was observed, which somehow remind the diagnosis, but only in one article there was a direct report of its identification. Others which proposed to identify the nursing diagnosis in the perioperative phase did not report it.

The surgical site is also mentioned, corresponding to 31.4% of the studies, and this is highlighted and it makes us reflect on the contribution of the complications in the process of healing for the presence of the nursing diagnosis of delayed surgical recovery.

Table 1 - Distribution of the studies according to the databasis, country, year of publising, professional area, approach and type of study

Variables	n (%)
Databasis	
Pubmed	18 (52.9)
Lilacs	10 (29.5)
Cinahl	6 (17.6)
Country	
Brazil	17 (50)
The United States of America	9 (26.5)
England	3 (8.8)
Australia	3 (8.8)
Sweden	1 (3.0)
Thailand	1 (3.0)
Year	
Prior to 2006	12 (35.2)
2007	3 (8.8)
2008	7 (20.7)
2009	6 (17.6)
2010	4 (11.8)
2011	2 (5.9)
Area professional	
Nursing	31 (91.2)
Nursing and Medicine	3 (8.8)
Approach	
Qualitative	20 (58.8)
Quantitative	14 (41.2)
Type of study	
Exploratory descriptive	14 (41.2)
Study of revision	11 (32.3)
Theoric reflection	3 (8.8)
Experimental	3 (8.8)
Reports of experience	2 (5.9)
Observational	1 (3.0)

Facing this, the analyzed articles approached characteristics of the nursing diagnosis of delayed surgical recovery (defining characteristics), as well as the causes of those characteristics (related factors), presented in Table 2, as well as other possible related factors which are found in the literature, but not reported in the NANDA-I classification.

Table 2 - Distribution of the defining characteristics, related factors and related factors which need validation

Variables	n (%)
Defining characteristics	
Difficulty in moving about	4 (36.4)
Requires help to complete self-care	3 (27.3)
Evidence of interrupted healing of surgical area	3 (27.3)
Fatigue	1 (9.0)
Related Factors	
Pain	14 (34.2)
Postoperative surgical site infection	13 (31.7)
Preoperative expectations	13 (31.7)
Obesity	1 (2.4)
Related factors found in the literature but not reported in the NANDA-I classification	
Old age	7 (38.9)
Diabetes mellitus	4 (22.2)
Nutritional deficiencies	3 (16.7)
Use of corticoids	2 (11.1)
Nausea and vomit	1 (5.5)
Edema	1 (5.5)

Of the ten defining characteristics proposed in NANDA-I classification only five were evident in the literature. But, one of the defining characteristics according to NANDA-I was identified in the literature as a Related Factor: pain or discomfort. Similar to appetite without nausea and with nausea, it was described separately as nutritional efficiency and nausea and vomit and these were related as the cause of delayed surgical recovery, therefore, as related factors.

So, of the six related factors, four were mentioned, only the factors related to extensive surgical procedure and prolonged surgical procedure were not found in the articles.

It is worth highlighting that in the studies analyzed, other six possible related factors were found in the literature, but not mentioned in the NANDA-I classification[6]. However, they deserve validation by specialists and clinics for their inclusion in the classification studied.

Discussion

Only one article identified the nursing diagnosis delayed surgical recovery, however, this did not impede the revision, on the contrary, it showed that there were diffuse quotes of the defining characteristics and related factors in the literature directed to postoperative complications at random. But, the diagnosis of delayed surgical recovery gathers these characteristics and can provide the nurse the direction in the prevention of the postoperative complications in a systematic and organized manner.

The study which identifies the diagnosis was present in a patient submitted to a radical prostatectomy, characterized by the evidence of interruption in healing of the surgical site. That client had a prolonged hospitalization concerning to what was expected, verbalizing a great wish to return to his daily activities, besides the worry of remaining longer in the hospital than the other patients[14].

In a late postoperative, the authors commonly discuss the increase of the number of postoperative days, the difficulty for self-care and the delay in the healing of the site. The delay to return to the basic activities of life and work after a surgical procedure is mentioned as related to infection of the surgical site, which can delay the process of healing and so prolong the hospitalization of the patients, consequently delay the return to his normal activities and self-care[15-20]. So, there is an unleashing of events that inter-relate the defining factors and characteristics.

The conditions of the operative site are important for the diagnostic characterization for defining the presence or not of this diagnosis. The evidence of interruption in the healing of surgical site was characterized in the literature by the presence or the removal of yellowish secretion (pus), isolated or in the presence of red areas, as well as the suture dehiscence[21]. This complication was defined as the separation of the fascial layer, it is a worry once it is an event which leads to a prolonged recovery[14,19-20,22].

However, an evidence of interruption in healing in a generic terminology which can make it difficult for the nurse to identify the diagnosis is considered. So, the specification of the term with observational characteristics described soon after its exhibition in the NANDA-I classification is suggested, for example: edema, hyperemia, presence of pus and dehiscence of the site.

Surgical procedures generally result in alteration of the ability to promote self-care because of pain and fatigue, presenting difficulties for bathing/hygiene, for getting dressed and feeding himself[17,21-22], this also indicates that it is a relevant defining characteristic to the diagnosis. Therefore, pain and fatigue seem to be more the cause (related factor) of delayed surgical recovery than a defining characteristic.

The difficulty in moving about expected in the postoperative is characterized by the restriction in the physical movement, caused by the sensation of common pain in this period, orthopedic conditions and/or presence of drains which restrict the moving of the body[16-18]. That is, the patient with delayed surgical recovery will probably present difficulty to move about and therefore, it is an important clinical characteristic.

Concerning the delay to return to the habitual activities of life and work, the following was observed in the study: an association causing delay in the full recovering was observed in a study with extension of the postoperative days; open sites; difficulty to move about; deficit in self-care; with the postponement of the re-start of the activities[4], and they are important determinants of the degree of jeopardizing of the surgical recovery.

The perception that a prolonged time for recovery is necessary, is concerning the report of sensation or feeling of having his functional capacity decreased, and/or presenting physiological alterations which jeopardize the performance of daily activities, known as activities of daily life activities (DLAs)[4]. So, the patient reports to feel weakened and insecure for their performances and because of its defining characteristics, a longer period of time for his recovery is considered necessary, with the re-making of the report, indicating that it is related to what is verbalized by the patient concerning his recovery.

The defining characteristic, fatigue, was mentioned as a reduction of the peripheral blood flow and the incapacity of the heart to keep a sufficient cardiac debt to satisfy the tissue needs of oxygen[15]. And, its presence can be observed in some cases in the beginning of the process of surgical recovery or commonly associated to situations of oncological and cardiac surgeries, with predominance of clinical complaints.

Despite its high incidence, the report of pain in the postoperative was not considered a defining characteristic. For having commonly been associated to a contributing factor for the development of delayed surgical recovery, it can be considered as a related factor[23-29] to the concerned diagnosis.

The pain can induce postoperative complications, which can prolong hospitalization[17-21,22,25-27]. So, the associated factor pain should be highlighted, once the surgical stress activates the hypothalamic-pituitary-adrenal via, which causes liberation of catecholamine such as adrenaline and nor-adrenaline. This can lead to the increase of cortisol, and the protein and muscle exhaustion causing a delay in the heading of the surgical site[18-19,28,30-32].

The report of the evidence of the defining characteristics was found, such as the loss of appetite with nausea and loss of appetite without nausea with diagnosis[14-33]. However, the items separately, loss of appetite and nausea were mainly identified in specific surgeries, such as the gastro-intestinal ones.

As to the related factors, the postoperative infection of the incision was highlighted, causing the delay in the process of healing, and consequently a longer period of hospitalization[33]. The infection characterized by the presence of heat, flushing, pain and edema can occur due to the type of wound, the health of the patient, lack of principles of asepsis

and sequence in the development of healing. Such situations lead to the increase of risks to infection, jeopardizing the process of healing and recovery of the integrity of the skin of the patient, thus requiring longer hospitalization[15-20,25,29,33-35].

The postoperative expectations were highlighted in the literature as feelings: anxiety, fear, worry, insecurity, guilt, depression and decrease of self-esteem, among others, that, once presented by the surgical patient can contribute to the delay of his recovery. Because of that the use of the term postoperative feelings is suggested, and after that, its specifications to make its comprehension in the NANDA-I classification easy[30].

Obesity was found in one study, however it is considered an important factor related to the delay of healing, due to the low irrigation of the adipose tissue resulting from the decreased blood flow causing delay in healing[19].

But the reported factors, extensive surgical procedure and prolonged surgical procedure, were not found in the analyzed articles. However, they can contribute for the risk of infection at the surgical site and should be investigated regarding its occurrence in other studies. Extensive surgeries are those of great size in which the body cavities on big blood vessels are exposed to room temperature, in large procedures such as abdomen, breast, vascular, thoracic spine with instrumentation or hip arthroplasty. Prolonged surgical procedures are those with duration longer than expected, when compared to the estimated time for the procedure; prolonging the duration of the surgery increases the exposition to potential adverse effects, which can delay the healing of the surgery[4].

As related factors which need validation, that is, related factors found in the literature but not mentioned in the NANDA-I classification which could influence in the delay of the recovery are: old age, diabetes mellitus, nutritional deficiency, edema, use of corticoids, nausea and persistent vomits[4,19-20,23,36].

Among these old age is highlighted, once the physiological alterations resulting from aging negatively influence in the recovery of the patient, bringing postoperative complications, concerning the surgical site[19,22]. These complications are due to the jeopardizing of the immunological system and low organic reserve to the act to an aggressive procedure[20, 23].

Likewise the diabetes mellitus was considered an important risk factor for infection, probably due to the alterations in the physiopathology of the healing, to the vascular and neuropathic complications and to the inhibitory effects in the mechanisms of defense[15,19,36].

Besides that, in the healing process, other factors are highlighted such as the nutritional deficiency, edema and use of corticoids, once the access of fluids in the tissues acts as an obstacle to angiogenesis[36]. Patients with jeopardizing of the immunological system or using corticoids may not demonstrate an effective inflammatory response, which can characterize a non-desired signal, prolonging the postoperative recovery[4,36].

In the postoperative 24 hours after receiving anesthesia an episode of nausea or vomit is defined. Besides the subjective aspect of discomfort the patients who did not present improvement in the symptoms related to nausea and vomit can have their discharge delayed[11].

So, the delay to the return to the normal functions, the elevation of hospital costs and the dissatisfaction of the patient are implications of the delayed surgical recovery by the potential organic consequences such as: tachycardia, hypertension, interruption of oral eating, dehydration, increase of the ocular and intracranial pressure, bleeding of the operative site by the increase of the venous pressure and dehiscence of the suture, risk of pulmonary aspiration and pneumonia. Such complications need nursing care in the promotion, prevention and recovery of the patient if correctly identified that is why the importance of the identification of this diagnosis in the area of surgical nursing.

Conclusion

There is scarcity of published works concerning the nursing diagnosis of delayed surgical recovery making the theme important because it deals with an emergent area in attention to health: the fast effective and low cost perioperative care.

The prolonged time in the postoperative, evidences of interruption in the surgical healing (dehiscence of the site, hyperemia, edema, heat and secretion), difficulty to move about, and the need of help to complement self-care are highlighted as strong characteristics which defined the diagnosis. These, associated to the related factors, postoperative infection at the site of the incision, pain and postoperative expectations are considered basic for the nursing diagnosis of delayed surgical recovery. The study also made possible the identification of related factors which need validation, because they are factors which can contribute for the delay in the recovery of the patient, and that until now are not available in NANDA-I: old age followed by the diabetes mellitus, nutritional deficiency, use of corticoids, nausea and persistent vomit.

So, the clinical assistance of the potential surgical complications is recommended from the accurate identification of the nursing diagnosis of delayed surgical recovery.

Acknowledgement

A research made with the financial support of the Programa Institucional de Bolsas de Iniciação Científica do Conselho Nacional de Desenvolvimento Científico e Tecnológico, process IC-134354/2011-2012, and of the Fundação de Amparo à Pesquisa do Estado do Rio de Janeiro, Pró-Reitoria de Pesquisa, Pós-Graduação e Inovação, process E-26/103.269/2012.

Collaborations

Santana RF contributed for the conception of the project and planning, analysis and interpretation of the data, writing and elaboration of the article and final approval of the version to be published. Delphino TM, Henriques NM and Pereira SK contributed for the conception of the project, analysis and interpretation of the data and writing of the article. Soares TS contributed for the analysis and interpretation of the data, writing and elaboration of the article. Souza PA contributed for the analysis and interpretation of the data, writing and elaboration of the article, intellectual and critical revision of the data.

References

1. Pompeo DA, Nicolussi AC, Galvão CM, Sawada NO. Intervenções de enfermagem para náusea e vômito no período pós-operatório imediato. Acta Paul Enferm. 2007; 20(2):191-8.
2. Zago MMF, Casagrande LDR. A comunicação do enfermeiro cirúrgico na orientação do paciente: a influência cultural. Rev Latino-Am Enfermagem. 1997; 5(4):69-74.
3. Organização Mundial da Saúde. Segundo desafio global para a segurança do paciente: Manual - Cirurgias seguras salvam vidas. Rio de Janeiro: OMS; 2009.
4. Rothrock JC. Alexander: cuidados de enfermagem ao paciente cirúrgico. Rio de Janeiro: Elsevier; 2011.
5. Holanda RH, Silva VM. Diagnósticos de enfermagem de pacientes em tratamento hemodialítico. Rev Rene. 2009; 10(2):37-44.
6. Herdman TH, organizadora. Diagnósticos de enfermagem da NANDA: definições e classificação 2012-2014. Porto Alegre: Artmed; 2013.
7. Lopes MVO, Araújo TL, Silva VM. Methods for establishing the accuracy of clinical indicators in

predicting nursing diagnoses. Int J Nurs Know. 2012; 23(3):134-9.

8. Mendes KDS, Silveira RCCP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. Texto Contexto Enferm. 2008; 17(4):758-64.
9. Galvão CM, Sawada NO, Trevizan MA. Revisão sistemática: recurso que proporciona a incorporação das evidências na prática da enfermagem. Rev Latino-Am Enfermagem. 2004; 12(3):549-56.
10. Souza MT, Silva MD, Carvalho R. Revisão integrativa: o que é e como fazer. Einstein. 2010; 8(1):102-6.
11. Pompeo DA, Rossi LA, Galvão CM. Revisão integrativa: etapa inicial do processo de validação de diagnóstico de enfermagem. Acta Paul Enferm. 2009; 22(4):434-8.
12. Barbosa LR, Melo MRAC. Relações entre qualidade da assistência de enfermagem: revisão integrativa da literatura. Rev Bras Enferm. 2008; 61(3):366-70.
13. Philips B, Ball C, Sackett D, Badenoch D, Straus S, Haynes B, et al. J Oxford Centre for evidence-based medicine [Internet]. 2009 [cited 2013 jul 15]; Available from: http://www.cebm.net/index.aspx?o=1025
14. Napoleão AA, Caldato VG, Petrilli Filho JF. Diagnósticos de enfermagem para o planejamento da alta de homens prostatectomizados: um estudo preliminar. Rev Eletr Enf. [periódico na Internet]. 2009;11(2):286-94. Disponível em: http://www.fen.ufg.br/revista/v11/n2/v11n2a08.htm
15. Feijó E, Cruz ICF, Lima DVM. Infecção da ferida - revisão sistematizada da literatura. Online Braz J Nurs. [periódico na Internet]. 2008; 7(3). Disponível em: http://www.objnursing.uff.br
16. Galdeano LE, Rossi LA, Santos CB, Dantas RAS. Diagnósticos de enfermagem no perioperatório de cirurgia cardíaca. Rev Esc Enferm USP. 2006; 40(1):26-33.
17. Silva FS, Viana MF, Volpato MP. Diagnósticos de enfermagem em pacientes internados pela clínica ortopédica em unidade médico-cirúrgica. Rev Gaúcha Enferm. 2008; 29(4):565-72.
18. Pivoto FL, Lunardi Filho WD, Santos SSC, Almeida MA, Silveira RS. Nursing diagnoses in patients in the postoperative period of cardiac surgery. Acta Paul Enferm. 2010; 23(5):665-70.
19. Flório MCS, Galvão CM. Cirurgia ambulatorial: identificação dos diagnósticos de enfermagem no período perioperatório. Rev Latino-Am Enfermagem. 2003; 11(5):630-7.
20. Whitby M, Mclaws ML, Collopy B, Looke DF, Doidge S, Henderson B, et al. Post-discharge surveillance: can patients reliably diagnose surgical wound infections? J Hosp Infect. 2002; 52(3):155-60.
21. Pieper B, Sieggreen M, Freeland B, Kulwicki P, Frattarolli M, Sidor D, et al. Discharge information needs of patients after surgery. J Wound Ostomy Continence Nurs. 2006; 33(3):281-9.
22. Duarte YAO, Andrade CL, Lebrao ML. O Índex de Katz na avaliação da funcionalidade dos idosos. Rev Esc Enferm USP. 2007; 41(2):317-25.
23. Lenardt MH, Melo DK, Betiolli SE, Seima MD, Michel T. As concepções do cuidado gerontológico de enfermagem frente às complicações pós-operatórias do idoso. Cogitare Enferm. 2010; 15(3):420-6.
24. Queiroz FC, Nascimento LC, Leite AM, Flósria-Santos M, Lima RAG, Scochi CGS. Manejo da dor pós- operatória na Enfermagem Pediátrica: em busca de subsídios para aprimorar o cuidado. Rev Bras Enferm. 2007; 60(1):87-91.
25. Brown D. A literature review exploring how healthcare professionals contribute to the assessment and control of postoperative pain in older people. J Clin Nurs. 2004; 13(6B):74-90.
26. Persegona KR, Zagonel IPS. Relação intersubjetiva do enfermeiro e criança com dor. Esc Anna Nery. 2008; 12(3):430-6.
27. Pimenta CAM, Santos EMM, Chaves LD, Martins LM, Gutierrez BAO. Controle da dor no pós-operatório. Rev Esc Enferm USP. 2001; 35(2)180-3.
28. Hughes E. Principles of post-operative patient care. Nurs Stand. 2004; 19(5):43-51.
29. Brenner ZR. Preventing postoperative complications. Nurs Manage. 2000; 31(12):17-22.
30. Pereira SG, Rosehein DP, Bulhosa, Lunardi VL.

Vivências de cuidados da mulher mastectomizada: uma pesquisa bibliográfica. Rev Bras Enferm. 2006; 59(6):791-5.

31. Camargo TC, Souza IEO. Atenção à mulher mastectomizada: discutindo os aspectos ônticos e a dimensão ontológica da atuação da enfermeira no hospital do câncer III. Rev Latino-Am Enfermagem. 2003; 11(5):614-21.

32. Pedrolo FT, Hannickel S, Oliveira JZ, Zago MMF. A experiência de cuidar do paciente cirúrgico: as percepções dos alunos de um curso de graduação em enfermagem. Rev Esc Enferm USP. 2001; 35(1):35-40.

33. Nonino EAPM, Anselmi ML, Dalmas JC. Avaliação da qualidade do procedimento curativo em pacientes internados em um Hospital Universitário. Rev Latino-Am Enfermagem. 2008; 16(1):57-63.

34. Vuolo JC. Assessment and management of surgical wounds in clinical practice. Nurs Stand. 2006; 20(52):46-56.

35. Odom-Forren J. Watch that incision! Nurs Manage. 2004; 35 suppl:16:21.

36. Ferreira AM, Andrade D. Sítio cirúrgico: avaliação e intervenções de enfermagem no pós-operatório. Arq Ciênc Saúde. 2006; 13(1):27-33.