

# **REVIEW ARTICLE**



# Nursing care regarding the psycho-emotional aspects of women submitted to mastectomy

Amanda de Oliveira Bernardino<sup>1</sup>, Matheus Vinicius Barbosa da Silva<sup>2</sup>, Edite Barbosa Ferreira Filho<sup>3</sup>, Francisco de Assis da Silva<sup>3</sup>, Polyana Maccoy e Silva<sup>4</sup>, Rosana dos Santos Lima<sup>3</sup>

¹Departamento de Enfermagem, Programa de Pós-Graduação em Enfermagem, Universidade de Pernambuco (UPE) – Recife (PE), Brazil

### **ABSTRACT**

Breast cancer, or breast neoplasm, is one of the most frequent types of cancer, and one of the most prevalent among women. The diagnosis and specific treatments, such as mastectomy surgery, lead women to experience different feelings, with the most predominant negative thoughts. In this way, the objective of this study is to describe the importance of nursing care in the face of the psycho-emotional aspects of women after mastectomy. This is an integrative literature review study, developed in electronic Medline and Lilacs databases. The following terms were used: Breast neoplasm; Nursing; Emotions; Mastectomy. A total of 2,314 articles were found, of which eight were selected. The results and discussions were divided into two thematic axes: The first deals with the emotions of women after mastectomy, whose feelings arising from the diagnosis of the disease start to affect different areas, such as personality, sexuality, family, and social relationships. Furthermore, the second deals with nursing care after mastectomy, which must be conducted integrally, aiming at restoring physical and emotional health. Nursing is the vehicle capable of planning and collaborating with these women, promoting humanized treatment and assistance, oriented and aimed at a better quality of life, and stimulating self-help, self-esteem, and acceptance of their body.

Keywords: Breast neoplasm; nursing; emotions; mastectomy.

## INTRODUCTION

Breast neoplasms, also known as breast cancer, are characterized as a serious public health problem in Brazil and worldwide. It is the second most prevalent and incident type of cancer among women<sup>1</sup> and is related to the process of growth and development in society, thus putting women at greater risk. Its etiology is multifactorial and involves individual, socioeconomic, environmental, reproductive, hormonal, and genetic factors<sup>2</sup>.

Breast cancer, like other types of cancer, results from the unrestrained multiplication of abnormal cells, and in this type, specifically the disordered multiplication of abnormal cells in the breast, leading to tumor formation. It is a heterogeneous and

How to cite this article: Bernardino et al. Nursing care regarding the psycho-emotional aspects of women submitted to mastectomy. ABCS Health Sci. 2024;49:e024301 https:// doi.org/10.7322/abcshs.2022003.2044

Received: Feb 10, 2022 Revised: May 03, 2022 Approved: Jul 04, 2022

Corresponding author: Amanda de Oliveira Bernardino - Universidade de Pernambuco, Departamento de Enfermagem – Rua Francisco Mendes nº 127 – Piedade -CEP: 54410-150 - Jaboatão dos Guararapes (PE), Brazil - E-mail: amandaobernardino @ hotmail com

Declaration of interests: nothing to declare



This is an open access article distributed under the terms of the Creative Commons Attribution License

©2024 The authors

<sup>&</sup>lt;sup>2</sup>Departamento de Enfermagem, Universidade Federal de Pernambuco (UFPE) – Vitória (PE), Brazil

<sup>&</sup>lt;sup>3</sup>Departamento de Enfermagem, Centro Universitário Brasileiro (UNIBRA) – Recife (PE), Brazil

<sup>&</sup>lt;sup>4</sup>Departamento de Enfermagem, Centro Universitário Tiradentes (UNIT) – Recife (PE), Brazil

complex disease, which can show various clinical and morphological manifestations. The development of breast neoplasia does not have a single cause, i.e., several factors are related to the development of the disease, such as age, endocrine factors, genetic and hereditary factors<sup>3</sup>.

An effective tool for early detection of cases is mammographic screening, which allows detection in the subclinical stage in asymptomatic women, generating greater chances of cure and reducing mortality, and is considered a major advance towards controlling the disease. In Brazil, access to the service has increased in recent years among women between the ages of 50 and 69 who reported having a mammogram<sup>4</sup>.

It is estimated that millions of people are diagnosed with breast cancer every year. Within this context, breast cancer is considered the most common type of cancer among women<sup>5</sup>.

According to the Brazilian National Cancer Institute<sup>3</sup>, breast cancer in men is rare, accounting for only 1% of all cases. Most cases are related to genetic factors, and early detection is uncommon due to its rare nature.

When diagnosed in young women, the tumors are usually more aggressive, with the presence of molecular subtypes that have a worse prognosis. In women under the age of 35, ultrasound is indicated, together with a physical examination to identify palpable lesions, whereas in the presence of these, with a negative ultrasound result, investigation is recommended through punctures and surgical biopsies<sup>6</sup>.

Symptoms of breast cancer include the appearance of breast lumps, which are usually painless, rigid, and irregular in shape<sup>7</sup>. However, some tumors have a soft, globular, and well-defined consistency and biological changes such as aging increase this risk<sup>8</sup>.

According to the Brazilian Ministry of Health Ordinances No. 876/2013 and No. 1220/2014, access to cancer treatment for these patients should take place within 60 days within the Unified Health System (SUS) due to the complexity of the care provided to these breast cancer patients. The intervals from the first symptoms to the referral unit between diagnosis and treatment are considered, and some scientific delays can be mentioned: delay by the woman, referral, and hospital delays<sup>9</sup>.

After receiving the diagnosis, women face different feelings and situations, where the diagnosis and certain treatments lead them to experience negative thoughts. Certain treatments, such as surgery involving mastectomy, either total or partial removal, hurt

these women, as they alter a predominant characteristic of their femininity<sup>1,10,11</sup>.

Treatment consists of five modalities: local treatments (surgery and radiotherapy) and systemic treatments (chemotherapy, hormone therapy, and biological therapy), usually used together according to the susceptibility of the tumor. Systemic therapies and radiotherapy may be indicated before or after surgery<sup>6</sup>.

Women who experience mutilation suffer from difficulties in their routines, generating psycho-emotional consequences, evidenced by fear, anxiety, anguish, dissatisfaction, and altered perception of self-image. Allied to this, conditions of psycho-emotional illness related to abandonment arise, especially those involving their social participation, leading to changes in their lifestyle<sup>12</sup>.

Nurses play a fundamental role with breast cancer patients at all stages, from initial care to encouraging empowerment over their bodies and their health, in a holistic way, targeting the evident needs, and being able to guide these women on their journey, helping them to cope with the difficulties of their daily lives<sup>13</sup>.

Given this, this study aimed to describe the importance of nursing care about the psycho-emotional aspects of women with breast cancer who have undergone mastectomy surgery.

# **METHODS**

This is a descriptive integrative literature review with a qualitative approach, which was conducted in six stages: 1) Elaboration of the guiding question; 2) Literature search; 3) Data collection; 4) Analysis of the studies included 5) Discussion of the results; 6) Presentation of the integrative review<sup>14</sup>. The guiding question behind this study was: "How important is nursing care about the psycho-emotional aspects of women with breast cancer undergoing mastectomy surgery?".

The survey was conducted in the Virtual Health Library (VHL) from February to March 2021, and the articles identified were in the following databases: Medical Literature Analysis and Retrieval System On-Line (Medline) and Latin American and Caribbean Literature in Health Sciences (Lilacs). The terms used to search the literature were: "Breast Neoplasia", "Nursing", "Mastectomy" and "Emotions", using the Boolean operator "AND" (Table 1).

Inclusion criteria were articles published between 2015 and 2020, complete articles available in full, in Portuguese, English, and Spanish that answered the study question.

Table 1: Cross-referencing terms without inclusion criteria and with inclusion criteria

Crossroads	No inclusion criteria	With Inclusion Criteria	Results found
Breast cancer AND nursing AND emotions AND mastectomy	21	05	02
Breast cancer AND emotions AND mastectomy	113	36	05
Nursing AND emotions AND mastectomy	24	05	01
Total	158	46	08

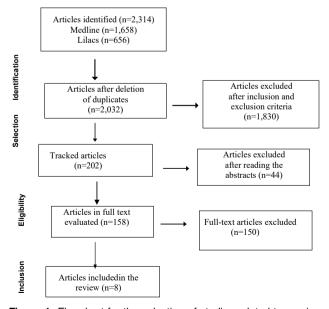
In the initial search, 2314 articles were identified. After selecting only those that met the inclusion criteria mentioned, the total was 202 titles. After reading the titles and abstracts, 158 articles were selected that met the proposed research objective and question. After reading the titles, abstracts, and full articles, a total of eight articles were found. To describe the search process, the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) flowchart was used in an adapted form<sup>15</sup> (Figure 1).

A tool was designed to help collect data, understand, and synthesize the results. It consisted of title, year, country, method, database, main results, and level of evidence. The instrument was completed independently by two authors to extract the main aspects covered. The results were interpreted by reading and comparing the articles, checking for aspects of the agreement, and then dividing the theme into axes, as proposed by Minayo<sup>16</sup>. The results were grouped into two distinct categories, corresponding to the content that emerged from the analysis: emotions and nursing care for women after mastectomy.

# **RESULTS AND DISCUSSION**

The eight studies included in the final sample of this review are presented according to the characterization of the articles analyzed, based on the description of the author, year of publication, title, objective, summary, and considerations of each study analyzed and the level of evidence, as shown in Table 2.

Most of the articles included took a qualitative approach (87.5%), with only one taking a quantitative approach (12.5%),



**Figure 1:** Flowchart for the selection of studies related to nursing care for the psycho-emotional aspects of women after mastectomy (n=8), according to the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) model. <sup>15</sup>.

which addressed the psycho-emotional impacts generated by mastectomy surgery and the care/assistance provided by nurses to these patients. About the discussion of the results, this stage was divided into two thematic axes, which are discussed in the subtopics below.

# Emotions of women submitted to mastectomy.

When a woman is diagnosed with breast cancer, she tends to go into a state of despair. This can be accompanied by an emotional and stressful outburst, which can culminate in negative feelings about her own life, which can be accompanied by crying, anger, fear of death, and guilt. Such feelings become very common at this time, as the diagnosis of the disease tends to be devastating and cause significant emotional distress<sup>17,18</sup>. In addition, other feelings such as bitterness, melancholy, crying, anxiety, and suffering, as well as a decrease in pride and self-esteem can be experienced, which can reflect negatively on the body image and sexuality of these women<sup>19,20</sup>.

The quality of life and self-esteem of women after the diagnosis of the disease and the news of the need for a mastectomy are profoundly shattering events. They affect her femininity and sexuality since the breast is intricately linked to motherhood and female sensuality<sup>21,22</sup>. The procedure, compared to conservative surgery, in most cases results in mood disorders, depression, anxiety, anger, and fear related to body image, which significantly reduces the quality of life<sup>23</sup>.

In this process, the feeling of castration, because of the mutilation suffered, can invade, and destroy the woman's entire emotional state. In addition to the feelings of sadness experienced by these women and the distorted view of their body image, they experience a state of existential emptiness and worry about what might happen in the future<sup>24,25</sup>.

Still about the impacts of mastectomy, the consequences on psychosocial dimensions stand out, where mood is usually the most affected. These can represent an important risk factor for the development of mood disorders, including depression and anxiety<sup>26</sup>.

In this sense, the biggest challenge faced by women throughout the process is the psycho-emotional side of dealing with surgery and treatment, which opens up an immense emotional and destructive wound<sup>27</sup>, because of the uncertainty of their lives<sup>28</sup>, as well as their sexuality and libido, which are affected by the loss of femininity and their image, lead to feelings of imbalance, impotence, fear, loss of autonomy and non-acceptance of changes in their life habits<sup>29,30</sup>.

# Nursing care for women after mastectomy

Evidence shows that more active and autonomous women are more accepting of the diagnosis of breast cancer and seek to improve their quality of life by changing their attitudes. To this

Table 2: Characterization of the articles that make up the sample of this integrative review.

Author/ Year	Title	Objective	Summary/ Considerations	Level of evidence
Lima et al. 2018 <sup>21</sup>	Feelings experienced by women submitted to mastectomy	Unveiling the feelings of women submitted to mastectomy	After having their breasts removed, women feel mutilated due to the feeling that their femininity has been castrated, as the breast represents motherhood and a woman's sensuality. Nursing should therefore collaborate with women's femininity and sexuality, removing doubts through educational activities	4
Oliveira et al. 2017 <sup>22</sup>	The impact of breast cancer and mastectomy on sexuality	Estimating the impact of breast cancer and mastectomy on female sexuality	The first impact is that her femininity has been taken away through breast mutilation because it is a symbol that refers to both body image and sexuality. This is why they feel revolted and unaccepted. Thus, based on this view, nursing can contribute by holistically presenting care, giving support, attention, and emotional support to overcome this tough time experienced by bodily changes.	4
Timm et al. 2017 <sup>19</sup>	Body image from the perspective of women after mastectomy	Understanding the perception and feelings of women submitted to mastectomy about their body image	Feelings such as bitterness, melancholy, crying, anxiety, and suffering, as well as a decrease in pride and self-esteem, can hurt body image and sexuality. The nurses spent more time with the patients and developed effective interaction, providing support, and encouraging them to face the treatment.	4
Silva et al. 2016 <sup>35</sup>	Life trajectories of women who have undergone ectomy in the light of collective subject discourse	To analyze the life trajectory of women submitted to mastectomy who are members of a self-help group.	Humanized care will help women to accept their limitations and improve their self-image, both in social and family life, regardless of social class or religion.	4
Sousa et al. 2016 <sup>28</sup>	Women's feelings about the changes caused by mastectomy	Analyzing the feelings of women in a support group about the changes caused by mastectomy	The woman is vulnerable to a load of stress that contributes to an emotional imbalance and low self-esteem, accompanied by helplessness and fear. Nursing has a key role to play in providing care and assistance to these women, which must take place, by observing the mind and body reactions. It is important to remember that nursing must provide care for both women and their families.	4
Silva et al. 2020 <sup>20</sup>	Women's coping with cancer treatment and mastectomy as a repercussion of breast cancer	To find out how aging women who have undergone chemotherapy for breast cancer cope.	A mulher fica vulnerável a uma carga de estresse que contribui para um desequilíbrio emocional e baixa autoestima, acompanhados de desamparo e medo. A enfermagem tem um papel importante a desempenhar na prestação de cuidados e assistência a essas mulheres, que deve ocorrer como um todo, observando a reação da mente e do corpo. É importante lembrar que a enfermagem deve prestar assistência tanto à mulher quanto à sua família.	4
Rocha et al. 2019 <sup>25</sup>	Feelings of women who have undergone total mastectomy	Describe the feelings that emerge from women with breast cancer who have undergone total mastectomy	Sadness, existential emptiness, worry about what might happen in the future and a distorted view of their body image are all feelings expressed in this study. Nursing care involves providing information in a language that is accessible to them, with clear explanations, through dialog and exchanges. She defined three main types of care: a) active listening, and b) stimulating socialization, with participation in self-care practices.	4
Pacaric et al. 2018 <sup>24</sup>	The quality of life of Croatian women after mastectomy: a cross-sectional single-center study	Examining Quality of Life 1 month and 1 year after mastectomy.	The patients expressed most problems about sexual functioning and pleasure, as well as concerns about future health functioning. One year after mastectomy, there was no significant improvement in sexual functioning. The study showed that a multidisciplinary approach is guaranteed to successfully improve the QoL of breast cancer patients.	3

end, they seek psychological help to cope with the disease and guidance on treatment and care, which is most often provided by health professionals, especially nurses<sup>29,30</sup>.

Among the health professionals who take care of these patients, nurses stand out because they provide comprehensive care during all stages of the disease, passing on care guidelines and giving women a broad view of the disease and their recovery<sup>31</sup>. At each of these stages, the nurse is extremely important in providing care, by planning health actions, resulting in the provision of comprehensive care based on the needs experienced by the woman, respecting her individualities<sup>32</sup>.

The nursing team has shown itself to be the most capable and safest vehicle for clarifying doubts, guiding and supporting women after mastectomy regarding breast cancer treatment, encouraging them to strengthen their self-esteem, planning and outlining humanized treatment, and raising awareness among these women in the quest to improve their quality of life, acceptance of their bodies and rehabilitation and restructuring for a new life journey<sup>10,33</sup>.

Thus, the humanized and holistic treatment offered by nursing, coupled with religious belief and the support of family members strengthens and helps overcome the traumas experienced throughout

the journey and treatment, reducing the suffering of this woman, helping her to continue and re-establish herself in society<sup>22,34,35</sup>.

In this way, the support and care offered by nursing care in its entirety, planning, outlining and reorganizing the overcoming of mind and body, in the promotion of well-being in the post-surgical period, including chronic pain management<sup>26</sup> and lymphadenopathy evidenced in part of the patients in the post-surgical period<sup>36</sup>, strengthens the bond and establishes an alliance of respect on both sides, which helps to alleviate fears, loneliness and rejection on the part of the woman who will be returned but strengthened for society<sup>10,31,37</sup>.

Coping with the post-operative period and its impacts depends on the particularities of each woman's coping. According to the literature, in addition to the negative aspects, evidenced by negative feelings and emotions, it is possible to have opposite effects to this, the so-called post-traumatic growth, which can be worked on during and after the procedure, based on a centralized approach according to the woman's needs<sup>38</sup>.

Given the above, women who have undergone mastectomy surgery have physical, psychological, and rehabilitation needs. Within this context, nurses are trained to help them control the quality and quantity of their emotional flow to minimize the fears linked to their bodily, physiological, libidinal, and social selfimage; and to deal with feelings of insecurity and overcome the shock after living with the mutilation of their body.

Given this, it is considered extremely necessary for the nursing team to support women who are going through this process, giving them the emotional support to accept their self-image, and promoting increased self-esteem and awareness in the fight for healing and social life.

## Conclusion

The main emotions seen in the studies were: fear, anguish, revolt, feelings of guilt, and loss of identity and sexuality. Thus, after mastectomy, most women experience negative feelings and emotions, because the breast has a strong symbolism related to self-image, which primarily represents motherhood, sexuality, and sensuality, the loss of which awakens in women a feeling of castration, mutilation, and disfigurement.

It is known that body image is not only linked to its limits and clothing but also to physiological and libidinal aspects, which can cause self-image disorders and inhibition. From that moment on, their femininity is affected, disrupting their emotional and psychological aspects.

Therefore, welcoming family members, religion and beliefs are indispensable vehicles for overcoming the fragile psycho-emotional state, promoting the strengthening of these women in the face of treatment and the search for a probable cure.

#### REFERENCES

- Nascimento KTS, Fonsêca LCT, Andrade SSC, Leite KNS, Costa TF, Oliveira SHS. Sentimentos e fontes de apoio emocional de mulheres em pré-operatório de mastectomia em um hospitalescola. Rev Enfer UERJ. 2015;23(1):108-14. http://dx.doi.org/10.12957/reuerj.2015.15598
- Oliveira AC. Reconstrução mamária pós-mastectomia no hospital do servidor público municipal de São Paulo [master's thesis]. [São Paulo]: Hospital do Servidor Público do Município de São Paulo, 2015.
- Brasil. Ministério da Saúde. Instituto Nacional do Câncer José Alencar Gomes da Silva (INCA). Monitoramento de ações de controle do câncer de mama e rede de cuidado ao câncer de mama. Rio de Janeiro: INCA, 2015.
- Castro TM. Fatores associados à evolução clínica de mulheres com câncer de mama atendidas em um centro de referência no Rio de Janeiro [master's thesis]. [Rio de Janeiro]: Fundação Oswaldo Cruz, 2016.
- Cardoso DH, Muniz RM, Arrieira HO, Viegas AC, Arrieira ICO, Amaral DED. Mulheres sobreviventes ao câncer de mama: estratégias para promoção da resiliência. Rev Pesq Cuid Fund Online. 2018;10(2):474-84. https://doi.org/10.9789/2175-5361.2018.v10i2.474-484
- Abrahão KS. Fatores prognósticos em mulheres jovens com câncer de mama [master's thesis]. [Rio de Janeiro]: Instituto Nacional do Câncer, 2015.
- Franco CL. Caracterização dos casos confirmados de carcinoma mamário do Estado de Sergipe no ano de 2013 [Florianópolis]: Universidade Federal de Santa Catarina, 2014.

- Brasil. Ministério da Saúde. Instituto Nacional de Câncer José Alencar Gomes da Silva (INCA). Câncer de mama: é preciso falar disso. Rio de Janeiro: INCA, 2014.
- Moraes DC, Almeida AM, Figueiredo EN, Loyola EAC, Panobianco MS. Opportunistic screening actions for breast cancer performed by nurses working in primary health care. Rev Esc Enferm USP. 2016;50(1):14-21. https://doi.org/10.1590/S0080-623420160000100002
- Silva GF, Bastos KD, Araújo AJS, Bispo TCF, Oliveira GRSA, Schulz RS. Mulheres submetidas à mastectomia: aspectos sentimentais e emocionais. Rev Enferm Contemp. 2018;7(1):72-80. https://doi.org/10.17267/2317-3378rec.v7i1.1213
- Almeida TG, Comassetto I, Alves KMC, Santos AP, Silva JM, Trezza MCSF. Vivência da mulher jovem com câncer de mama e mastectomizada. Esc Anna Nery. 2015;19(3):432-8. https://doi.org/10.5935/1414-8145.20150057
- Dias LV, Muniz RM, Aline, Cardoso DH, Amaral DED, Pinto BK. Mulher mastectomizada por câncer de mama: vivência das atividades cotidianas. Rev Fun Care Online. 2017; 9(4):1074-80. http://dx.doi.org/10.9789/2175-5361.2017.v9i4.1074-1080
- Fonseca ABC, Rodrigues ESRC, Nóbrega MM, Nobre JOC, França GJ, Silva LP. Estimativa para o câncer de mama feminino: e a assistência de enfermagem na prevenção. Temas Saude. 2016;16(4):14-30.
- Souza MT, Silva MD, Carvalho R. Integrative review: what is it? How to do it? Einstein (São Paulo), 2010;8(1):102-6. https://doi.org/10.1590/s1679-45082010rw1134

- Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med.2009;6(7):e1000097. https://doi.org/10.1371/journal.pmed.1000097
- Minayo MCS. O Desafio do conhecimento: pesquisa qualitativa em saúde. 10 ed. São Paulo: Hucitec, 2007.
- Carvalho CMS, Amorim FCM, Silva RTS, Alves VF, Oliveira ADS, Monte NS. Sentimentos de mulheres com diagnóstico de câncer de mama. Rev Enferm UFPE. 2016;10(11):3942-50. https://doi.org/10.5205/reuol.9881-87554-1-EDSM1011201616
- Barros AES, Conde CR, Lemos TMR, Kunz JA, Ferreira MLSM. Sentimentos vivenciados por mulheres ao receberem o diagnóstico de câncer de mama. Rev Enferm UFPE. 2018;12(1):102-11. https://doi.org/10.5205/1981-8963-v12i01a22800p1453-1467-2018
- Timm MS, Perlini NMOG, Beuter M, Prates LA, Birk NM, Piccin C. A imagem corporal na ótica de mulheres após a mastectomia. Cienc Cuid Saude. 2017;16(1). https://doi.org/10.4025/ciencuidsaude.v16i1.30151
- Silva FCN, Arboit EL, Menezes LP. Enfrentamento de mulheres diante do tratamento oncológico e da mastectomia como repercussão do câncer de mama. Rev Pesqui Fund Online. 2020;12(1): 362-8. https://doi.org/10.9789/2175-5361.rpcfo.v12.7136
- Lima MMG, Leite KNS, Santos MLL, César ESR, Souza TA, Nascimento BB, et al. Sentimentos vivenciados pelas mulheres mastectomizadas. Rev Enferm UFPE. 2018;12(5):1216-24. https://doi.org/10.5205/1981-8963-v12i5a231094p1216-1224-2018
- Oliveira FBM, Silva FS, Prazeres ASB. Impacto do câncer de mama e da mastectomia na sexualidade feminina. Rev Enferm UFPE. 2017;11(Supl 6):2533-40. https://doi.org/10.5205/reuol.9799-86079-1-RV.1106sup201707
- Maharjan M, Thapa N, Adhikari RD, Petrini MA, Amatya KS. Quality
  of Life of Nepalese Women Post Mastectomy. Asian Pac J Cancer
  Prev. 2018;19(4):1005-12.
  https://doi.org/10.22034/APJCP.2018.19.4.1005
- Pačarić S, Kristek J, Mirat J, Kondža G, Turk T, Farčić N, et al. The quality of life of Croatian women after mastectomy: a cross-sectional single-center study. BMC Public Health. 2018;18(1):999. https://doi.org/10.1186/s12889-018-5929-0
- Rocha CB, Fontanele GMC, Macêdo MS, Carvalho CMS, Fernandes MA, Veras JMMF, et al. Sentimentos de mulheres submetidas à mastectomia total. Rev Cuid. 2019;10(1):e606. https://doi.org/10.15649/cuidarte.v10i1.606
- Tait RC, Zoberi K, Ferguson M, Levenhagen K, Luebbert RA, Rowland K, et al. Persistent Post-Mastectomy Pain: Risk Factors and Current Approaches to Treatment. J Pain. 2018;19(12):1367-83. https://doi.org/10.1016/j.jpain.2018.06.002

- Arab C, Correia CK, Demonico BB, Vilarino GT, Andrade A. Câncer de mama e reações emocionais: revisão sistemática. Rev Baiana Saude Publica. 2016;40(4):968-90. https://doi.org/10.22278/2318-2660.2016.v40.n4.a1679
- 28. Sousa KA, Pinheiro MBGN, Fernandes MC, Costa SP, Oliveira EJC, Silva ID. Sentimentos de mulheres sobre as alterações causadas pela mastectomia. Rev Pesq Cuid Fund Online. 2016;8(4):5032-8. https://doi.org/10.9789/2175-5361.2016.v8i4.5032-5038
- Frohlich M, Benetti ERR, Stumm EMF. Vivências de mulheres com câncer de mama e ações para minimizar o estresse. Rev Enferm UFPE. 2014;8(3):537-44. https://doi.org/10.5205/1981-8963-v8i3a9708p537-544-2014
- Paiva ACPC, Salimena AMO, Souza IEO, Melo MCSC. Significado do diagnóstico de neoplasia mamária: compreensão fenomenológica de mulheres. Rev Baiana Enferm. 2015;29(1):59-67. https://doi.org/10.18471/rbe.v29i1.12239
- Ferrari CF, Abreu EC, Trigueiro TH, Silva MBGM, Kochla KA, Souza SRRK. Orientações de cuidado do enfermeiro para a mulher em tratamento para câncer de mama. Rev Enferm UFPE. 2018;12(3):676-83. https://doi.org/10.5205/1981-8963-v12i3a23299p676-683-2018
- Lima EOL, Silva MM. Quality of life of women with locally advanced or metastatic breast cancer. Rev Gaucha Enferm. 2020;41:e20190292. https://doi.org/10.1590/1983-1447.2020.20190292
- 33. Nicolau SRTC. Cuidados sensíveis de enfermagem a mulheres submetidas a mastectomia: subsídios para uma ação educativa com enfoque na dimensão ética e estética [master's thesis]. [Niterói]: Escola de Enfermagem Aurora de Afonso Costa, 2015.
- 34. Otani MAP, Barros NF, Marin MJS, Pinto AAM. Comunicação entre profissional de saúde e paciente: percepções de mulheres com câncer de mama. Nursing (São Paulo). 2018;21(242):2272-6.
- Silva MB, Pessoa Júnior JM, Miranda FAN. Trajetória de vida de mulheres mastectomizadas à luz do discurso do sujeito coletivo. Rev Pesq Cuid Fund Online. 2016;8(2):4365-75. https://doi.org/10.9789/2175-5361.2016.v8i2.4365-4375
- Martínez GDB, Martínez MEH, Raygoza NP. Nursing intervention in women who developed lymphedema after. Ecancermedicalscience. 2018; 12:827. https://doi.org/10.3332/ecancer.2018.827
- Garcia SN, Jacowskib N, Castro GC, Galdino C, Guimarães PRB, Kalinke LP. Os domínios afetados na qualidade de vida de mulheres com neoplasia mamária. Rev Gaucha Enferm. 2015;36(2):89-96. http://dx.doi.org/10.1590/1983-1447.2015.02.45718
- Kroemeke A, Bargiel-Matusiewicz K, Kalamarz M. Mixed Psychological Changes Following Mastectomy: Unique Predictors and Heterogeneity of Post-traumatic Growth and Post-traumatic Depreciation. Front Psychol. 2017;8:12. http://dx.doi.org/10.3389/fpsyg.2017.01245