



**Practice of breast self-examination among teachers and general service assistants at the EMEF Prof. Izaura de Almeida Silva School in the municipality of Boa Esperança – ES**

**Prática do autoexame das mamas em professoras e auxiliares de serviços gerais da Escola EMEF Prof.<sup>a</sup> Izaura de Almeida Silva do município de Boa Esperança –ES**

DOI: 10.56238/isevjhv2n4-026

Receiving the originals: 01/08/2023

Acceptance for publication: 22/08/2023

**Thais Goncalves de Moraes**

Physiotherapy Student - UNEC

E-mail: tatamoraes2018@gmail.com

**Patricia Brandão Amorim**

Coordinator of the Physiotherapy course – UNEC

E-mail: brandaoamorim@hotmail.com

**Isabela Pinheiro Denardi**

Physiotherapy Student – UNEC

E-mail: isabelapinheirodenardi@gmail.com

**Jamilly Bertolácio Fernandes**

Physiotherapy Student – UNEC

E-mail: jamillybertolacio2016@gmail.com

**Rafaella Storari Mourão**

Physiotherapy Student – UNEC

E-mail: storarirafaella@gmail.com

**ABSTRACT**

**Introduction:** Breast cancer is a neoplasm that affects millions of women worldwide and has become a major public health problem. Studies show an increased incidence of breast cancer mortality, which can be diagnosed early through breast self-examination (BSE), thus reducing the prevalence of mortality. **Objective:** The objective of this research was to evaluate the knowledge of teachers and assistants of general services, of the morning and afternoon shift of the Izaura de Almeida Silva school in the municipality of Boa Esperança - ES, about the self-examination of the breasts. **Methodology:** This is a descriptive, exploratory and quantitative research, where the practice of breast self-examination in 16 teachers and 8 assistants of general services was analyzed. **Results:** Regarding the level of knowledge regarding breast self-examination, it was observed that 87.50% of the general service assistants know about breast self-examination and 12.50% do not, 93.75% of the teachers know about the MSA and 6.25% said they had no knowledge. Regarding the frequency in which they perform breast self-examination, 37.50% of the general service assistants answered annually; 12.50% answered every six months and 50% answered that they do not perform breast self-examination. 12.50% of the teachers stated that they perform monthly; 31.25% annually; 18.75% every six months and 37.50% answered that they do not perform the self-examination. **Conclusion:** The results obtained in the present study emphasized the importance



of conducting educational campaigns that provide more comprehensive information, educating and encouraging women to perform breast self-examination.

**Keywords:** Breast cancer, Breast self-examination, Teachers, General service assistants, Women's health.

## 1 INTRODUCTION

Breast cancer (MC) is one of the main malignant neoplasms that affect females, being an important public health problem worldwide and its incidence has increased over time, becoming one of the main causes of death in Brazil.

The early detection of breast cancer is essential to reduce the mortality rate of the disease, in addition to allowing the diagnosis to be made at an early stage, enabling the realization of less aggressive treatments, with fewer side effects and a more effective recovery. Among the methods of early detection of breast cancer are clinical examination, mammography, imaging tests such as ultrasound and breast self-examination (BSE).

The breast self-examination (BSE) does not replace mammography and clinical examination, but should be used as an ally in the early detection of breast cancer, as it is a non-invasive, free, painless and easy-to-perform method that can be performed by the woman herself, from the age of 20, independently and as a means of self-knowledge of the body.

In addition to increasing the chances of early detection, MSA can contribute to the success of treatment and a more favorable prognosis, when performed correctly, as well as the chances of cure are better, in view of increasing survival and promoting a better quality of life for women.

This article sought to evaluate the knowledge of teachers and assistants of general services of the school EMEF Prof<sup>a</sup> Izaura de Almeida Silva of the municipality of Boa Esperança - ES on the self-examination of the breasts, determining the rate of teachers and auxiliaries of general services who know and practice the AEM.

## 2 THEORETICAL BACKGROUND

### 2.1 CONTEXTUALIZATION OF BREAST CANCER

Breast cancer (CA) is a malignant neoplasm caused by the disordered proliferation of abnormal breast cells, which can form a tumor with the ability to invade other organs. There are several types of breast cancer, where some have a faster development and others can grow slowly. Therefore, when the disease is properly diagnosed from the beginning, there is a treatment with greater curative potential and a better prognosis, reducing the risks of death (INCA, 2022).



The malignant tumor develops in the mammary glands, from a proliferation of genetically altered cells that divide disorderly and have the ability to generate metastases. Metastases can spread through the body through the lymphatic and circulatory system, and can generate a subsequent tumor lesion from the original, in addition to the ability to establish itself in various organs of the body such as stomach, ovaries and lungs (PERFEITO *et al*, 2021). Breast carcinomas can often be located in the upper outer quadrant of the breast, and may be related to the greater number of glands in these places. Normally, the most affected cells are those of the lobes and breast ducts, giving rise to lobular and ductal carcinoma. The lesions caused can be painless, with irregular and fixed edges (MATOS *et al*, 2021).

This disease has resulted in a series of technical diagnoses that allow early detection and subsequent treatment, both reducing the mortality rate of the disease. An early diagnosis is essential to help women avoid surgical procedures that affect their psychological side and endanger the essence of female beauty, as well as avoiding the complete removal of the breast, which can negatively affect the woman's relationship with other people (COBA, 2016).

## 2.2 RISK FACTORS AND INCIDENCE OF THE DISEASE

For each year of the 2023-2025 triennium, approximately 704,000 new cases of cancer are expected in Brazil. In women, breast cancer is the most prevalent (after non-melanoma skin cancer), and 74,000 new cases are predicted per year until 2025 (INCA 2022). Breast cancer is considered the leading cause of death among Brazilian women, aged between 40 and 69 years (ARAÚJO *et al*, 2010). Due to the increased incidence of breast cancer mortality and the increasing estimate of cases, it is important that there is the provision of health services that enable early diagnosis and treatment (SOUSA *et al*, 2019). According to the World Health Organization (WHO), approximately 1,050,000 new cases of breast cancer occur worldwide per year. Breast cancer significantly affects women in the biopsychosocial and spiritual dimensions, because it is considered a disease that, in the medium or long term, results in breast mutilation (SILVA *et al*, 2009).

Breast cancer has its development resulting from several factors, such as genetic, environmental, endocrine, age, obesity and sedentary lifestyle, which can cause mutations in essential genes. A mutation in the BRCA1 and BRCA2 genes (genes that normally protect women against certain types of cancers), causes them to have their functioning altered, which increases the likelihood that the woman will have breast cancer (CHAMORRO *et al*, 2021). The manufacturing process of some foods, such as smoked and processed meats, can also increase the



risk of developing breast cancer, due to the production of substances that are harmful to the body, such as nitrosamine (BATISTA *et al*, 2020).

Being female is considered a risk factor, since women have more breast tissue than men, so they are more exposed to endogenous estrogen. The growth of breast tissue cells is induced by estrogen, which increases the risk of genetic changes and, ultimately, the appearance of tumors. Due to hormonal factors and specific cell differentiation itself, women with a previous history, that is, women who have already developed cancer in one of their breasts, are at risk of developing the disease in the other breast (CABRAL, 2023).

### **3 IMPORTANCE OF BREAST SELF-EXAMINATION IN THE EARLY DETECTION OF BREAST CANCER**

The breast self-examination (BSE) is considered one of the main methods of prevention of breast cancer by women, where through this the woman can locate small changes in the breast as nodules up to 1 cm in diameter, thus reducing the possibility of metastasis and obtaining an improvement in quality of life (SILVA, 2010). It is recommended that MSA be performed by the female population from 20 years of age, at least 1 time per month, being seven to ten days after menstruation (in this period the breasts are less painful and swollen). Regarding women who no longer menstruate, it should be performed every 30 days. Performing the self-examination monthly, the woman gets to know her own breast better through palpation, facilitating the perception of some alteration such as the presence of nodules (DE ANDRADE, 2014).

It is notable that many women still have difficulties to perform breast self-examination or do not perform correctly. In view of this, some important conducts should be performed in the self-examination of the breasts such as: Inspection in front of the mirror (align the arms along the body observing the breast in front of the mirror. Then, the arms are raised observing if there is any anomaly in the contour of the breasts); Palpation of the breasts (standing or in front of the mirror, palpation begins through the armpits, and later around the breasts with circular, quadrant and spiral movements); and Expression (the nipple is pressed observing if there is the outflow of secretion), always observing if there is the presence of any change in the breasts (CABRAL, 2023). The diagnosis can be confirmed by a surgical procedure known as a puncture or biopsy, which consists of removing a small portion of the nodule for laboratory analysis. If the test is positive, treatment will be done according to the type of tumor. Available therapeutic options include surgery, radiotherapy, chemotherapy, and hormone therapy (FERNANDES *et al*, 2017).



Many young women believe that breast cancer is a disease that does not have great probabilities of occurring and that affects more the advanced ages, being the self-examination of the breasts often performed by women over 45 years. A large part of the female population does not have knowledge about the methods of early detection of breast cancer, such as breast self-examination, which should also be used as a form of self-care by women. Therefore, it is essential that the woman has a more in-depth knowledge of her breasts such as the size, shape, appearance of the skin and nipple, thus becoming a more simplified task to find any anomaly (COPPO, 2021).

In countries where resources are limited, for example in low- and middle-income countries, many cases of breast cancer are in the final stages, and more than three-quarters of women diagnosed with the disease are at an advanced stage. In view of this, MSA becomes extremely important in the early detection of breast cancer, especially in places where access to clinical examination and mammography may not be feasible. Therefore, it is based on that 80% - 90% of breast masses can be identified by women themselves through breast self-examination. However, when breast cancer is diagnosed in early stages, there is an increase in the favorable response to curative treatment, in addition to improving the survival of the woman and reducing the risk of death (DE CASTRO and VASCONCELOS, 2021).

#### **4 WOMEN'S SELF-ESTEEM IN THE FACE OF BREAST CANCER DIAGNOSIS**

In today's society, the body is overvalued and used to achieve social inclusion and power, making this trend inevitable. The beauty industry supports the relentless pursuit of an attractive and flawless body and will do everything to achieve this goal, including implantation of silicone prostheses, plastic surgery, use of anabolics, among others. In this sense, it should be noted that breast cancer requires treatments that lead to changes in the woman's self-image and self-esteem, especially the surgical and chemotherapy modalities, because they cause total or partial loss of the breast. Consequently, many women end up suffering from prejudice and marginalization because they do not fit the aesthetic profile imposed by society (MAIRINK *et al*, 2020).

As a result of social pressure, women idealize beauty standards, and breasts come to represent both sexuality and femininity. The brain's perception of the body is altered when, as a result of cancer, one or both breasts are removed and, as a result, the perception of oneself must be adjusted to a new reality. Soon, there is a negative impact on self-esteem, and many women may experience anxiety and nervousness when they get naked in front of their partners. There is also a fear in how society will react to seeing them without their breasts, and as a result, many women choose to wear clothes that can mask the absence of breasts (DONATO *et al*, 2018).



After receiving the diagnosis, the woman's life changes drastically occurring transformations that lead the woman to create questions and uncertainties about her future, in addition to bringing fear, anxiety, anger, and other changes, since within the treatment of breast cancer there is the possibility of breast removal, which can directly interfere with the woman's self-image and self-esteem, triggering impacts on physical, psychological, functional and social aspects. However, it is extremely important that women have a firm support base that provides comfort and support to deal with daily changes, providing the patient with a calmer way to deal with her feelings, in addition to recognizing and adapting to her "new body", providing greater well-being and better quality of life (GOIS *et al*, 2023).

## **5 PUBLIC POLICIES AIMED AT BREAST CANCER CONTROL**

The Ministry of Health (MH) has established strategies for the early diagnosis and rapid treatment of breast cancer, both of which are fundamental. The competencies of Primary Health Care (PHC), which include risk assessment and guidance of women on the symptoms and signs of diseases, should also always be considered in the planning of health education actions (GONÇALVES, 2020).

In 1994, the Family Health Strategy (FHS) was created by the Ministry of Health, being offered from primary care to the entire population, as a link to access to oncological care, ensuring measures aimed at prevention and agility in treatment. In view of this, it is essential the preparation and performance of FHS professionals in the investigation of suspected cases of breast cancer and dissemination of information that can make women aware of prevention methods (BUSHATSKY *et al*, 2014).

In 2010 the Pink October movement was implemented in the Unified Health System (SUS). This initiative was developed by INCA, and has since become part of the national breast cancer control program, aiming to alert the population about the prevalence of breast cancer in women around the world, so that its actions aim, in general, at early diagnosis in an attempt to reduce the mortality rate associated with this neoplasm (AGOSTINHO *et al*, 2019).

## **6 METHODOLOGICAL PROCEDURES**

This is a descriptive, exploratory and quantitative research, where the practice of breast self-examination in teachers and assistants of general services of the EMEF Prof. Izaura de Almeida Silva school was analyzed, using a structured, validated and modified questionnaire.



The questionnaire was based on the study by Ludimila Lima Silva, adapted from the research "Practice of breast self-examination in university students of the physiotherapy and administration course of UNEC – A comparative study". The general part of the questionnaire was used, where data were collected through 13 closed questions. The sample consisted of 16 elementary school teachers from 1st to 5th grade and 9 general service assistants. The questionnaire was applied on April 28, 2023.

Of the inclusion criteria, the 16 teachers and 8 general service assistants who were present on the date described were observed. 1 general services assistant who was not present was excluded.

All participants signed the Free and Informed Consent Form, agreeing to participate in the research. It is important to emphasize that the interviewees could give up participating in the research at any time, if they so desired. Under no circumstances will they be identified or have their names disclosed.

## 7 RESULTS AND DISCUSSION

A survey of data was carried out, through a questionnaire, referring to the knowledge of teachers and auxiliaries of general services about breast self-examination. The collected data were processed and properly represented in graphs and tables.

From the data collection it was possible to know the relationship of the age group of the participants, being between 23 and 30 years or more of age. It was observed that 12.5% of the General Services Auxiliaries were between 23 and 30 years old and 87.5% were over 30 years old. While 18% of the teachers were between 23 and 30 years old and 81.25% over 30 years old. It is recommended that the self-examination of the breasts be performed by the woman from the age of 20 (DE ANDRADE, 2014). If performed frequently and correctly, MSA can help in the identification of the nodule as well as in the early detection and early stage of cancer, increasing the chances of cure (SCHIMIDT and TAVARES, 2012).

According to table 1, the level of knowledge of the general services assistants was analyzed, where it was observed that 87.50% know the breast self-examination and 12.50% do not. As shown in table 1, it was noted that 93.75% of the teachers know the MSA and 6.25% do not.

When asked about having some knowledge about breast cancer, 75% of the general services assistants reported that they have some knowledge about the subject and 25% reported not having knowledge about breast cancer, as shown in table 1. Regarding the teachers, according



to table 1, 93.75% answered that they have some knowledge about breast cancer, and 6.25% reported not having knowledge about the subject.

Regarding the difficulty in performing the breast self-examination, from the data obtained in table 1, it was observed that 12.50% of the general service assistants have some difficulty in performing the breast self-examination, while 87.50% do not have difficulties in performing the self-examination. According to the data in table 1, it is possible to notice an increase in the difficulty in performing the self-examination, where 37.50% of the teachers reported having some difficulty in performing the AEM and 62.50% stated that they did not have difficulty in performing the self-examination.

When asked if any activity related to breast cancer prevention was performed on the occasions they attended the Basic Health Unit, 75% of the general services assistants said yes and 25% said that no activity was performed, according to table 1. According to the data obtained in table 1, 37.50% of the teachers said that some activity related to the prevention of breast cancer was performed in the times they attended the Basic Health Unit, and 62.50% reported that no activity was performed.

According to table 1, 75% of the general services assistants have already participated in some activity related to breast cancer prevention and 25% did not participate. Regarding the teachers, 25% stated that they had already participated in some activity related to the prevention of breast cancer and 75% did not participate, according to the data obtained in table 1.

As observed in table 1, 75% of the general service assistants stated that at some point some health professional of the Basic Health Unit examined their breasts and 25% answered that they did not have their breasts examined by any health professional of the BHU. According to the data in table 1, in relation to the teachers, 37.50% answered that at some point some health professional of the Basic Health Unit examined their breasts and 62.50% stated that they did not have their breasts examined by a health professional from the BHU.

Table 1: knowledge of teachers and general service assistants about breast self-examination

<b>Do you know breast self-examination?</b>	<b>Yes</b>	<b>Percentage</b>	<b>No</b>	<b>Percentage</b>
General Services Auxiliaries	7	87,50%	1	12,50%
Teachers	15	93,75%	1	6,25%
<b>Do you have any knowledge about breast cancer?</b>	<b>Yes</b>	<b>Percentage</b>	<b>No</b>	<b>Percentage</b>
General Services Auxiliaries	6	75%	2	25%
Teachers	15	93,75%	1	6,25%
<b>Do you have any difficulty performing breast self-examination?</b>	<b>Yes</b>	<b>Percentage</b>	<b>No</b>	<b>Percentage</b>
General Services Auxiliaries	1	12,50%	7	87,50%
Teachers	6	37,50%	10	62,50%



<b>In the times you attended the Basic Health Unit, was there any activity related to the prevention of Breast Cancer?</b>	<b>Yes</b>	<b>Percentage</b>	<b>No</b>	<b>Percentage</b>
General Services Auxiliaries	6	75%	2	25%
Teachers	6	37,50%	10	62,50%
<b>Have you participated in any activities related to the prevention of Breast Cancer?</b>	<b>Yes</b>	<b>Percentage</b>	<b>No</b>	<b>Percentage</b>
General Services Auxiliaries	6	75%	2	25%
Teachers	4	25%	12	75%
<b>Have any health professionals from the Basic Health Unit ever examined your breasts?</b>	<b>Yes</b>	<b>Percentage</b>	<b>No</b>	<b>Percentage</b>
General Services Auxiliaries	6	75%	2	25%
Teachers	6	37,50%	10	62,50%

Source: Research data

According to the survey data, the number of women who said they knew about breast self-examination was significant. In this way, it is important to also perform the self-examination of the breasts, having as main objective to help the woman to know her breast in detail, however, this can be difficult for some, so it must be well explained so that the woman is aware of the various signs that may be normal in some pathologies (PADOVANI, 2016).

Most of the women (75% of the general services assistants and 93.75% of the teachers) who participated in the research stated that they had knowledge about breast cancer. In view of this, it is of great value that women know and know how to take action in relation to breast cancer, so that it is possible to perform tests aimed at the early detection of the disease. By performing breast cancer screening, it is possible to decrease the mortality rate between 25% and 31%, promoting an increase in quality of life and reduction of advanced stages of the disease (FARIA *et al*, 2020).

Although some women do not have difficulties in performing breast self-examination, it can be observed that there is still a large portion of the female public that find it difficult to perform the AEM. Thus, to ensure that the various social groups are effectively reached, the dissemination of this practice needs to be encouraged at all levels of care, highlighting its importance. Participatory campaigns should be carried out in order to provide concrete information about the approach and importance of self-care, along with promotions to education, to ensure that these facts are ingrained and provoke changes in the behavior of women, so that the practice of MSA can achieve its goal of early detection of cancer and, consequently, decrease mortality of the neoplasm in question. (SMITH *et al*, 2009).

It is of paramount importance that activities are carried out aimed at the prevention of breast cancer, which is still little stimulated in the UBS. This fact can be evidenced, according to the data



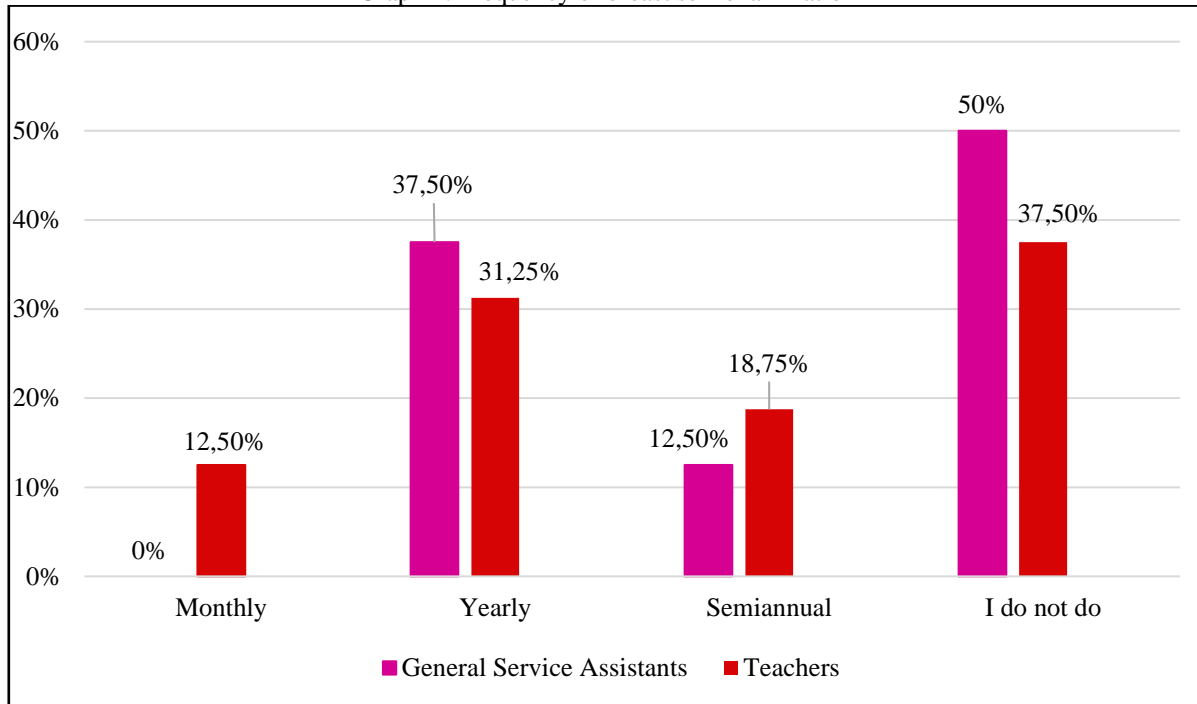
obtained in table 1, which shows that 62.50% of the teachers stated that in the times they attended the Basic Health Unit, no activities related to the prevention of breast cancer were performed. In view of this, the competencies of Primary Health Care (PHC), which include risk assessment and guidance of these women on the symptoms and signs of diseases, should also always be considered in the planning of health education actions, aiming at activities, campaigns and other educational resources for the dissemination of information on the means of prevention and early detection of breast cancer (GONÇALVES, 2020).

In this sense, the strategies used to control breast cancer should focus on prevention measures, such as reducing risk factors associated with the disease, early detection of cancer (identifying the disease as soon as possible), cancer treatment, rehabilitative care and better quality of life. This makes it essential that the family health team be trained to make women aware of the need for special attention to the breasts (SOUZA *et al*, 2016).

It is necessary that women have their breasts evaluated annually in an appropriate way by trained doctors and/or nurses, through physical and gynecological examination, such as through the Clinical Breast Examination (ECM), so that an accurate diagnosis can be made. In this way, the woman can be informed about the risk factors for breast cancer, prevention methods, possible changes that may occur in the breasts and request for tests to complement the diagnosis if necessary (OHL *et al*, 2016).

According to the data in graph 1, when asked about the frequency with which they perform breast self-examination, 37.50% of the general services assistants answered annually; 12.50% answered every six months and 50% answered that they do not perform breast self-examination. According to graph 1, when approached about the frequency with which they perform breast self-examination, 12.50% of the teachers answered that they perform it monthly; 31.25% responded annually; 18.75% answered every six months and 37.50% answered that they do not perform the self-examination.

Graph 1: Frequency of breast self-examination

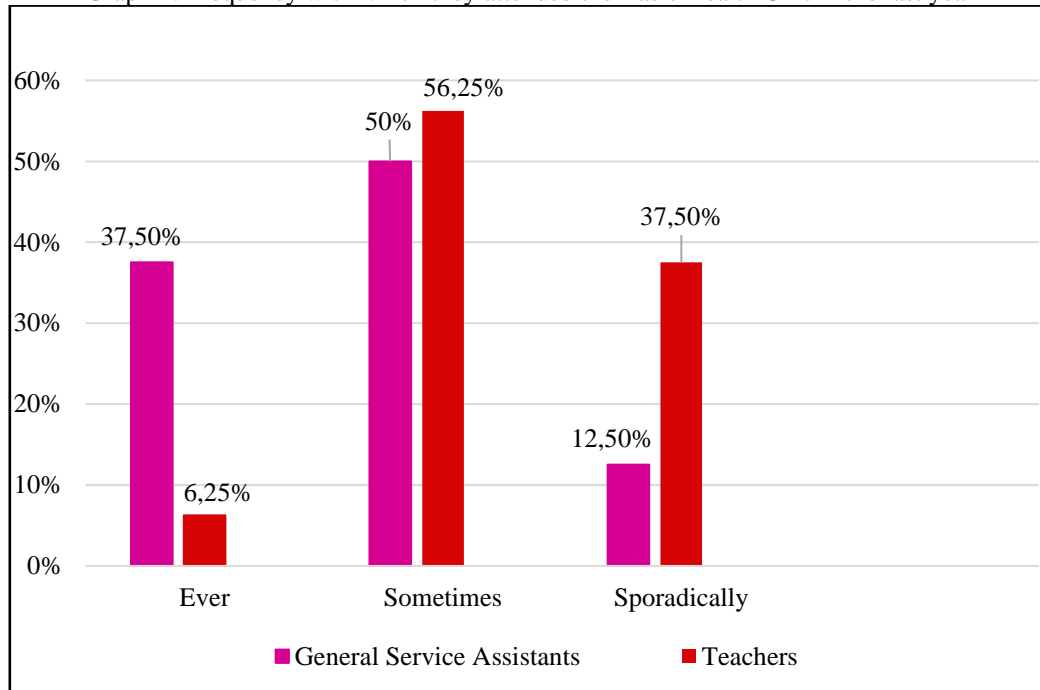


Source: Research data

Based on the data obtained in Graphs 1 and 2, it can be stated that 50% of the general service assistants and 37.50% of the teachers, that is, most of the women surveyed, do not perform breast self-examination. Thus, it is important that there are actions that enable educational campaigns on the importance of performing breast self-examination, favoring early detection. Through the MSA, the woman will be able to identify the neoplasm at an early stage having a better chance of cure (DE CASTRO and VASCONCELOS, 2021).

When asked about the frequency with which they attended the basic health unit in the last year, according to graph 2, it was found that 37.50% of the general service assistants always attend, 50% sometimes and 12.50% sporadically. Regarding the teachers, 6.25% answered that they always attend; 56.25% sometimes and 37.50% sporadically, according to graph 2.

Graph 2: Frequency with which they attended the Basic Health Unit in the last year



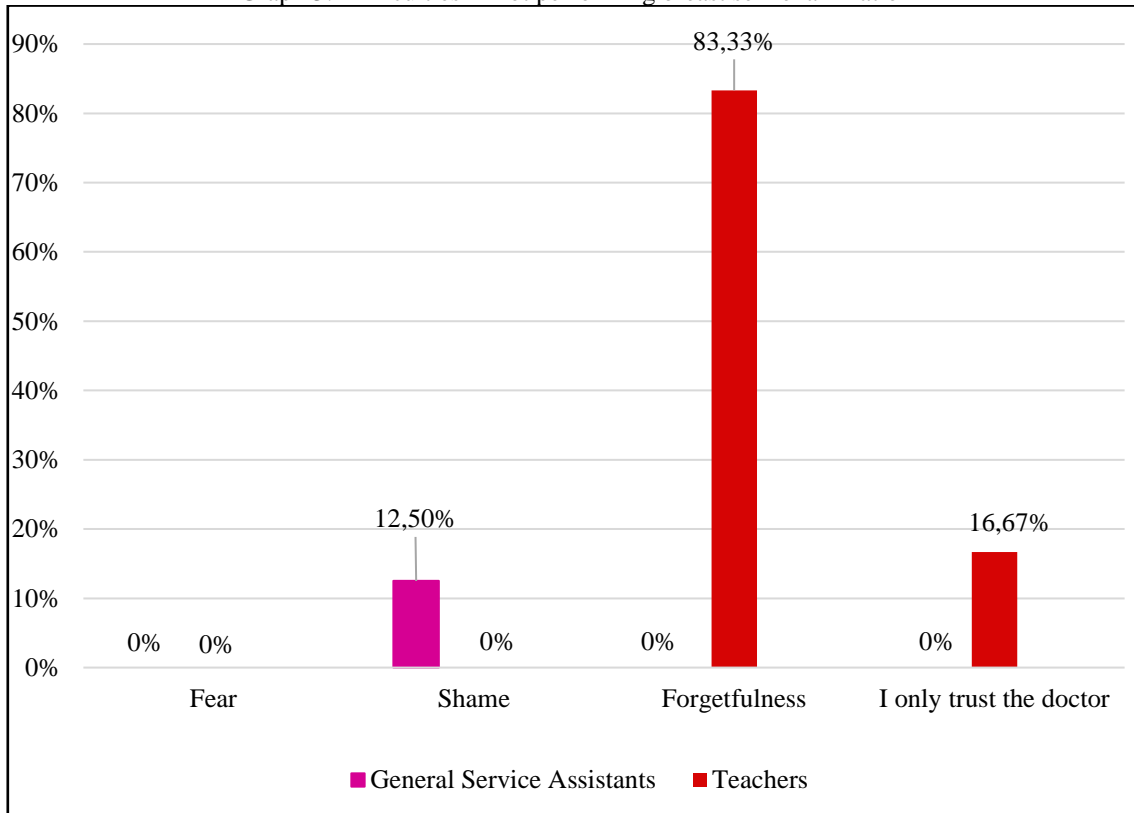
Source: Research data

It is important that women have the habit of always attending the Basic Health Unit (UBS), because this is considered the gateway to the SUS (Unified Health System) in Brazil, and in addition to developing health education activities, it also offers breast cancer screening measures (DOS SANTOS *et al*, 2020).

In relation to the work of professionals who work in basic health units, it is essential that they begin to use educational methodologies that encourage women to understand and become aware of self-care with the body as well as to have a responsible attitude towards their health (BATISTON *et al*, 2011).

Most of the women surveyed stated that they did not have difficulties in performing the AEM, and therefore, among the auxiliaries of general services, only 12.50% answered that they had some difficulty in performing the breast self-examination, with shame being the only reason, as shown in graph 3. Among the teachers, there was an increase in the rate of responses in relation to presenting some difficulty to perform the self-examination of the breasts. In view of this, according to graph 3, a total of 6 teachers answered to present some difficulty, where 83.33% answered that the main reason for not performing the MSA was forgetfulness and 16.87% answered that they only trust the doctor.

Graph 3: Difficulties in not performing breast self-examination

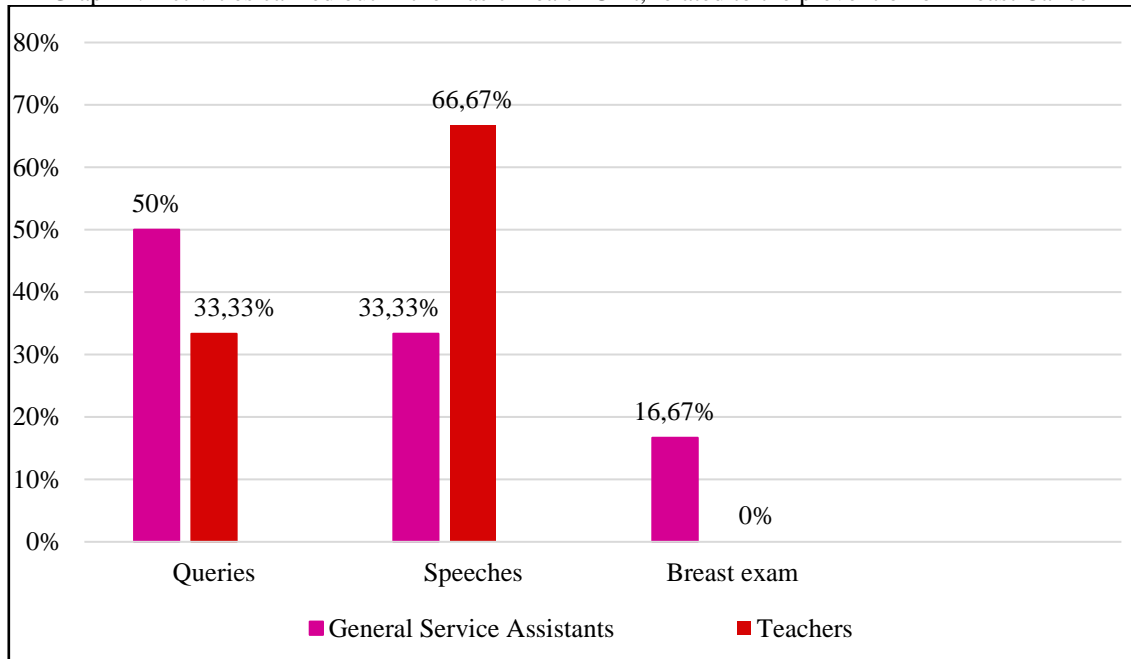


Source: Research data

Currently there is a small percentage of women who do not have so many difficulties in performing the AEM, but most still feel a certain difficulty, fear, shame or even forget to perform it, and this should be related to the woman's self-care, where she can know her body better, in addition to identifying possible anomalies that can be analyzed early by a health professional. Breast self-examination involves a simple and painless technique that enables an effective therapeutic intervention, having the additional benefit of allowing the individual woman to be examined, since it provides practice, in addition to prolonging the life of the woman with quality, becoming a valuable choice strategy that assists in the secondary prevention of breast cancer (COPPO, 2021).

When asked about which activities related to the prevention of Breast Cancer were performed in the Basic Health Unit, 50% of the general service assistants answered consultations, 33.33% lectures and 16.67% breast examination, as shown in graph 4. According to graph 4, 33.33% of the teachers answered that consultations were held and 66.67% lectured.

Graph 4: Activities carried out in the Basic Health Unit, related to the prevention of Breast Cancer

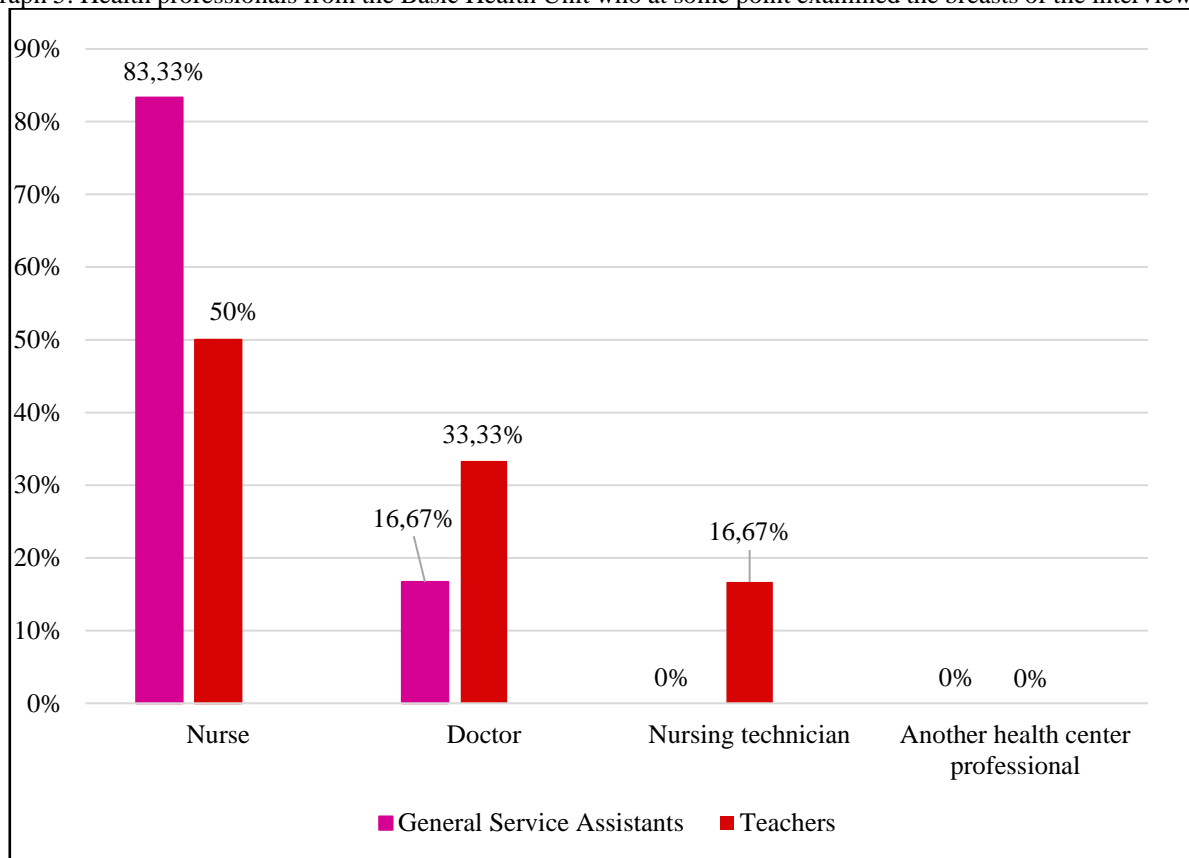


Source: Research data

Thus, it is emphasized the need to carry out and develop strategies, events and educational programs aimed at raising awareness and awakening in women the desire for self-care through the change of life habits and examinations, thus favoring the reduction of the incidence of cases of breast cancer and the early detection of neoplasia. Based on these concerns, the Ministry of Health establishes priorities for the creation of initiatives that can lead to the development of health policies specifically aimed at the prevention of breast cancer in the care areas, such as in Basic Health Units (OLIVEIRA, 2020).

According to the data obtained in graph 5, 83.33% of the general services assistants answered that they had already had their breasts examined by a nurse from the Basic Health Unit and 16.67% said it was by the UBS doctor. Regarding the teachers, 50% said they had their breasts examined by a nurse, 33.33% by a doctor and 16.67% by the UBS nursing technician, as shown in graph 5.

Graph 5: Health professionals from the Basic Health Unit who at some point examined the breasts of the interviewees



Source: Research data

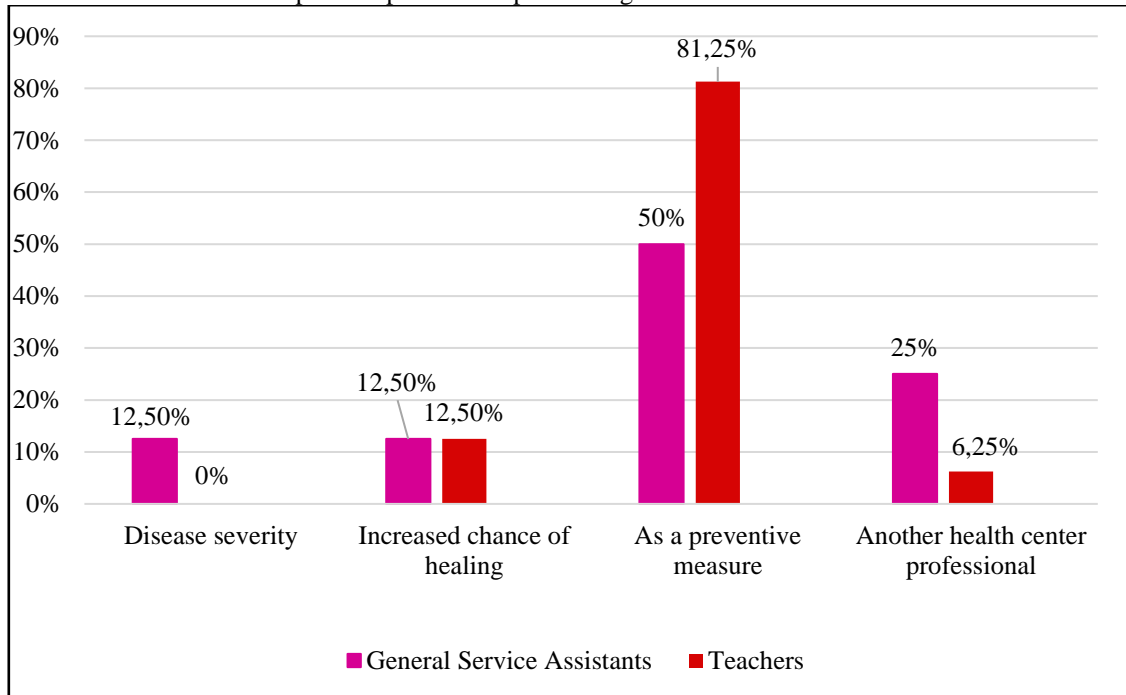
The first step for the practice of breast self-examination to be ingrained is the awareness of the internal health team that works in the basic units about the importance of this procedure. It is essential that these professionals maintain their knowledge about the importance of MSA to provide quality information on this topic, either individually or in groups, to the population that demands the services of health units, in addition to promoting an adequate and accurate assessment of women's breasts. It is also crucial to use the available resources to allow more women to practice this activity at various ages and in various social contexts (SILVA *et al*, 2009). It is necessary that health professionals, especially nurses, have qualification for the promotion of health education as well as the offer of mammographic examinations for the female population (CAVALCANTE *et al*, 2013).

Regarding the importance of performing breast self-examination, according to Graph 6, it was observed that 12.50% of the general service assistants answered that the performance of self-examination is important due to the severity of the disease, 12.50% due to the increased chance of cure, 50% as a preventive measure and 25% due to the increase in cancer cases. According to graph 6, 81.25% of the teachers answered that breast self-examination is important because it is



used as a preventive measure, 12.50% because of the increased chance of cure and 6.25% due to the increase in cancer cases.

Graph 6: Importance of performing breast self-examination



Source: Research data

The goal of breast self-examination is not only to aid in the diagnosis of breast cancer, but also to give the woman the knowledge of her body and enable her to recognize abnormalities more quickly in the breasts (DE SÁ and VIEIRA, 2022). According to research, breast self-examination (BSE) helps in the early detection of breast cancer, as well as in the early stages of the disease, where up to 90% of cases can be confirmed by palpation (SCHIMIDT and TAVARES, 2012).

## 8 CONCLUSION

Thus, it is concluded that the present study responded to the general objective proposed, analyzing the knowledge of teachers and auxiliaries of general services about breast self-examination. From this it was possible to show that the majority (87.50% and 93.75%) of the women analyzed demonstrated to have knowledge about breast self-examination, but there was a significant percentage (50% and 37.50%) of women who did not perform breast self-examination.

However, due to the high mortality rate associated with breast cancer and all associated problems, it is crucial to carry out educational campaigns that provide more comprehensive information about the performance of MSA as well as the importance of self-care, making women



understand the importance and meaning of breast self-examination, providing them with more security and autonomy to perform it.



## REFERENCES

- AGOSTINHO, Juliano Cualhato; LIMA, Talys Vinícius; FERREIRA, Rita de Cássia Valente. Análise dos fatores de risco do Câncer de Mama e avaliação da campanha preventiva “Outubro Rosa”. Revista Saúde UniToledo, v. 3, n. 2, 2019.
- ARAÚJO, Verbena Santos et al. Conhecimento das mulheres sobre o autoexame de mamas na atenção básica. Revista de Enfermagem Referência, v. 3, n. 2, p. 27-34, 2010.
- BATISTA, Geovanne Valdevino et al. Câncer de mama: fatores de risco e métodos de prevenção. Research, Society and Development, v. 9, n. 12, p. e15191211077-e15191211077, 2020.
- BATISTON, Adriane Pires et al. Conhecimento e prática sobre os fatores de risco para o câncer de mama entre mulheres de 40 a 69 anos. Revista brasileira de saúde materno infantil, v. 11, p. 163-171, 2011.
- BUSHATSKY, Magaly et al. Câncer de mama: ações de prevenção na estratégia de saúde da família. Revista de Pesquisa Cuidado é Fundamental Online, v. 6, n. 2, p. 663-675, 2014.
- CABRAL, Patrícia Espanhol. PROMOÇÃO DA SAÚDE EM MULHERES MASTECTOMIZADAS. Revista Multidisciplinar do Nordeste Mineiro, v. 1, p. 01, 2023.
- CAVALCANTE, Sirlei de Azevedo Monteiro et al. Ações do Enfermeiro no rastreamento e Diagnóstico do Câncer de Mama no Brasil. Revista Brasileira de Cancerologia, v. 59, n. 3, p. 459-466, 2013.
- CHAMORRO, Hugo Meneghel<sup>1</sup>; COLTURATO, Pedro Luís; FATTORI, Nielse Cristina de Melo. Câncer de mama: fatores de risco e a importância da detecção precoce. Revista Científica Eletrônica de Ciências Aplicadas, 2021. Disponível em: [http://www.fait.revista.inf.br/imagens\\_arquivos/arquivos\\_destaque/ObsnYePSzKiorJa\\_2021-7-2-16-36-0.pdf](http://www.fait.revista.inf.br/imagens_arquivos/arquivos_destaque/ObsnYePSzKiorJa_2021-7-2-16-36-0.pdf). Acesso em: 02 de maio de 2023.
- COBA, Jorge Luis Puig. Prevenção do câncer de mama: intervenção educativa através do autoexame. Portal Regional da Biblioteca Virtual em Saúde, 09 de set. de 2016. Disponível em: <https://core.ac.uk/download/pdf/84843059.pdf> . Acesso em: 02 de maio de 2023.
- COPPO, Cinara Bozolan. Conhecimentos de mulheres sobre o câncer de mama e autoexame: revisão bibliográfica. Revista Terra & Cultura: Cadernos de Ensino e Pesquisa, v. 37, n. 73, p. 80-90, 2021.
- DE ANDRADE, Simone Aparecida Fernandes. A importância do autoexame e exame clínico das mamas. UNILUS Ensino e Pesquisa, v. 11, n. 23, p. 111-113, 2014.
- DE CASTRO, Felipe Azeredo; VASCONCELOS, Flávio Lúcio. Impacto do autoexame das mamas no diagnóstico de câncer de mama em países de média e baixa renda: uma revisão de literatura. Brazilian Journal of Health Review, v. 4, n. 1, p. 2973-2996, 2021.
- DE SÁ, GABRIELE; VIEIRA, MILENE PIRES DE MORAES. O PAPEL DO ENFERMEIRO NA IMPORTANCIA DA ORIENTAÇÃO DO AUTO EXAME DA MAMA: CONTRIBUIÇÃO



DESSA TÉCNICA NA IDENTIFICAÇÃO PRECOCE DO CANCER DE MAMA. Revista Universitas da Fanorpi, v. 4, n. 8, p. 59-71, 2022.

DONATO, Ana Paula; VIZZOTTO, Betina Pivetta; BRAZ, Melissa Medeiros. Apoio Social a mulheres com câncer de mama. Saúde (Santa Maria), v. 44, n. 2, 2018.

DOS SANTOS, Jomábia Cristina Gonçalves et al. A VIVÊNCIA DO ENFERMEIRO SOBRE O AUTOEXAME DE MAMA NA ATENÇÃO BÁSICA: THE NURSE'S EXPERIENCE ON BREAST SELF-EXAMINATION IN BASIC CARE. Cadernos ESP, v. 14, n. 2, p. 48-53, 2020.

FARIA, Luan Viana et al. Conhecimentos e práticas de usuárias da atenção primária à saúde sobre o controle do câncer de mama. HU Revista, v. 46, p. 1-8, 2020.

FERNANDES, Bruna Barcelos; ALVES, Mytissa Veronica Silva Grillo; CANAL, Fabiana Davel. A CONSTRUÇÃO SÓCIO-HISTÓRICA DO CÂNCER DE MAMA: DO SURGIMENTO AS FORMAS DE TRATAMENTO. Rev. AMBIENTE ACADÊMICO (ISSN Impresso 2447-7273, ISSN on line 2526-0286), v. 3, n. 1, 2017.

GOIS, Roberto Luis Barreto et al. Autoestima e autoimagem da mulher com câncer de mama. Research, Society and Development, v. 12, n. 4, p. e17212441028-e17212441028, 2023.

GONÇALVES, Letícia Thaynara. Do diagnóstico à cura do câncer de mama: estudo de caso. Pontifícia Universidade Católica de Goiás - PUC Goiás, 9 de Dez. de 2020. Disponível em: <https://repositorio.pucgoias.edu.br/jspui/handle/123456789/1188>. Acesso em: 01 de maio de 2023.

INCA - INSTITUTO NACIONAL DE CÂNCER JOSÉ ALENCAR GOMES DA SILVA. Câncer de mama: O câncer de mama é caracterizado pelo crescimento de células cancerígenas. Rio de Janeiro, 04 de jun. de 2022. Disponível em: <https://www.gov.br/inca/pt-br/assuntos/cancer/tipos/mama>. Acesso em: 11 de abr. de 2023.

INCA - INSTITUTO NACIONAL DE CÂNCER JOSÉ ALENCAR GOMES DA SILVA. INCA estima 704 mil casos de câncer por ano no Brasil até 2025. Rio de Janeiro, 23 de nov. de 2022. Disponível em: <https://www.gov.br/inca/pt-br/assuntos/noticias/2022/inca-estima-704-mil-casos-de-cancer-por-ano-no-brasil-ate-2025>. Acesso em: 11 de abr. de 2023.

MAIRINK, Ana Paula Alonso Reis et al. Vivência de mulheres jovens diante da neoplasia mamária. Revista Brasileira de Cancerologia, v. 66, n. 4, 2020.

MATOS, Samara Elisy Miranda; RABELO, Maura Regina Guimarães; E PEIXOTO, Marisa Costa. Análise epidemiológica do câncer de mama no Brasil: 2015 a 2020/Epidemiological analysis of breast cancer in Brazil: 2015 to 2020. Brazilian Journal of Health Review, [S. l.], v. 4, n. 3, p. 13320-13330, 2021.

OHL, Isabella Cristina Barduchi et al. Ações públicas para o controle do câncer de mama no Brasil: revisão integrativa. Revista Brasileira de Enfermagem, v. 69, p. 793-803, 2016.

OLIVEIRA, Diego Augusto Lopes et al. Autocuidado e prevenção do câncer de mama: conhecimento das estudantes de graduação em saúde. Revista eletrônica acervo saúde, v. 12, n. 10, p. e4429-e4429, 2020.



PADOVANI, Camila et al. Fatores de risco para o câncer de mama: conhecimento por um grupo de mulheres obesas. Rev. enferm. UFPE on line, p. 2319-2327, 2016.

PERFEITO, Rodrigo Silva; DA SILVA AMARAL, Roseli Pereira; SOUZA, Lúcio Marques Vieira. Reabilitação fisioterapêutica no pós-operatório de mulheres mastectomizadas com câncer de mama. Revista Interdisciplinar de Saúde e Educação, v. 2, n. 1, p. 112-124, 2021.

SCHIMIDT, Teresa Cristina Gioia; TAVARES, Renata Szilagyí. Autoexame das mamas: quem ensina se cuida? Enfermagem Brasil, v. 11, n. 4, p. 192-199, 2012.

SILVA, Alessandra dos Anjos Gomes da. Análise sobre a prática do autoexame das mamas entre mulheres atendidas em centro de saúde nº03 da Ceilândia-DF. 2010. 53 f. Monografia (Graduação) – Universidade Católica de Brasília, Brasília, 2010. Disponível em: <https://repositorio.ucb.br:9443/jspui/bitstream/10869/1808/5/Alessandra%20dos%20Anjos%20Gomes.pdf>. Acesso em: 18 de abr. de 2023.

SILVA, Raimunda Magalhães da et al. Realização do auto-exame das mamas por profissionais de enfermagem. Revista da Escola de Enfermagem da USP, v. 43, p. 902-908, 2009.

SOUSA, Samara Maria Moura Teixeira et al. Acesso ao tratamento da mulher com câncer de mama. Saúde em Debate, v. 43, p. 727-741, 2019.

SOUZA, Fernanda de Oliveira et al. A importância da assistência integral à saúde da mulher na prevenção do câncer de mama: um projeto de intervenção. Ensino, Saúde e Ambiente, v. 9, n. 1, 2016.