# Community Awareness of the Danger of Breast Cancer among Women in Jeddah City

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*Abstract:* This paper aimed to research Community Awareness of the Danger of Breast Cancer among Women in Jeddah City, results shoes that :A total of 3000 questionnaires were completed:

**The** early diagnosis of breast cancer increase the chances of getting better outcomes:

- Percentage of those who answered yes: 79%
- Percentage of those who answered no: 17%
- Percentage of those who answered "I don't know": 4%
- Percentage of people who have heard about breast selfexamination: 76%
- Percentage of those who have not heard of breast selfexamination: 24%
- Percentage of those who know how to do breast selfexamination: 49%
- The percentage of those who do not know how to do breast self-examination is 51%.
- Percentage of women who do breast self-examination: 19%
- Percentage of women who do not do breast selfexamination: 51%
- Percentage of women who sometimes do breast selfexamination: 30%
- Percentage of those in their household with someone who has been diagnosed or exposed to it: 12%
- Proportion of women in their households who do not have someone with or are at risk of breast cancer: 88%

-Percentage of women who consult with a doctor or visit a specialized breast cancer center: 15%

- Percentage of women who do not consult a doctor or visit a specialized breast cancer center: 85%

- Percentage of those with knowledge of the initial signs of breast cancer: 34%

- Percentage unaware of the initial signs of breast cancer: 66%

- Percentage of those who have knowledge of breast cancer screening methods: 24%

- Percentage of those with intermediate knowledge of breast - cancer screening methods: 60%

- Percentage of those who have a good knowledge of breast cancer screening methods: 16%

- Percentage of those who attended a breast cancer campaign or activity: 34%

- Percentage of those who attended a breast cancer campaign or activity and did not benefit from it: 6%

- Percentage of those who have never attended a breast cancer campaign or activity: 60%.

#### Key words:

Community Awareness - Breast Cancer -Women - Jeddah City.

#### Introduction :

Breast cancer forms when abnormal cells grow in its tissue, and it is considered one of the most common cancers in women, although it may also affect men. Therefore, the entire month of October has been activated every year to raise awareness about breast cancer since 2006 AD.

Breast cancer became one of the most common types of cancer in the world in 2020 AD.

The International Agency for Research on Cancer estimates that there are more than 2.26 million new cases of breast

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cancer and about 685,000 deaths due to breast cancer worldwide, and in 2020 AD breast cancer ranked fifth among The most common causes of death from cancer in general.

Currently, there is not enough knowledge about the causes of breast cancer; But there is knowledge of the risk factors that increase the probability of contracting it, and therefore prevention and early detection of the disease remain the cornerstone of combating it. The appearance of lumps does not necessarily mean that it is cancer, as they may be due to the presence of cysts, abscesses, or other benign tumors. According to studies in Europe and America, one in eight women is at risk of developing breast cancer at some point in her life. Its treatment is considered effective if it is diagnosed early, and may include breast removal surgery, chemotherapy sessions, hormonal therapy, and biological therapy.

Breast cancer awareness helps remind women of the importance of breast self-examination and clinic examination to ensure that there is no tumor or abnormal symptoms suggestive of breast cancer, thus safeguarding women's health and providing early treatment options before the disease worsens and becomes more complicated. Breast cancer awareness is also a way to support and provide moral support to any woman suffering from the disease, so that women can regain hope and recover from the disease after treatment.

**Justification:** Evaluate the importance of community health awareness regarding breast cancer.

#### **Research Methods:**

Study design:

Cross –sectional

analytic study prospective

- Study area: Al-Baha Region
- Sample size:3000 sample
- Data

#### Collection:

A structured questionnaire will be developed particularly for the purpose of this study in Arabic and also translated to English.

#### Analysis procedure:

The analysis was primarily descriptive in nature and will perform by using SPSS program for windows.

## \*Ethical consideration:

Permission will be taken.

Data collection: Data collection will be (Arabic questionnaire). **\*Ethical consideration:** 

- Permission will be taken.
- Data collection: Data collection will be (Arabic
- questionnaire). Problem statement:

Community awareness of the importance of breast selfexamination and screening in clinics will lead to a decrease in the prevalence of the disease.

## **Rational:**

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The majority of breast cancer patients are more likely to suffer from long-term complications for several reasons, including lack of awareness of the disease.

The disease can be prevented if annual examinations are performed.

#### **Research questions:**

What is the level of awareness of the importance of selfexamination and clinic's screening for breast cancer in society? Does awareness of the long-term complications of the diseases reduce their occurrence?

#### Hypotheses:

Awareness of the long-term complications of breast cancer helps reduce its spread.

Research timeframe									
Research Project	30 Days								
Develop Research Proposal									
Ask for permission to access to									
Statistics									
Correspondent Statistics department	nt								
Bring statistic from statistical									
department									
Administer instrument(s)									
Ongoing data collection and analys	sis								
Final collection of data									
Research Report									

#### 1 Month:

## **Abstract Introduction:**

Breast cancer awareness helps remind women of the importance of breast self-examination and clinic examination to ensure that there is no tumor or abnormal symptoms suggestive of breast cancer, thus safeguarding women's health and providing early treatment options before the disease worsens and becomes more complicated.

Breast cancer awareness is also a way to support and provide moral support to any woman suffering from the disease, so that women can regain hope and recover from the disease after treatment. Breast self-examination to raise awareness of breast selfawareness.

To raise awareness of your breasts, use your eyes and hands to determine if there are any changes in the shape and texture of your breasts. If you notice any new breast changes, you should discuss them with your doctor. Although most breast changes found during a self-exam are benign, some changes may indicate something more serious, such breast cancer. as Doing a breast self-exam to make sure you know the normal look and feel of your breasts can help. If you notice a change in your breasts that looks abnormal, or if you notice a difference between one breast tell and the other. you can your doctor. There are several conditions that can cause changes in the breasts, including breast cancer.

#### There are two steps to a breast self-examination: First, perform the steps for a visual examination of your breasts:

- Stand facing the mirror and look for dimples, wrinkles, or changes in breast size, shape, or symmetry.
- Check to make sure the nipples are facing inward and not outward.
- Examine your breasts while placing your hands firmly on your hips.
- Examine your breasts by raising your arms above your head and pressing your palms together.
- Lift your breasts to see if the edges on the bottom are symmetrical or not.

#### Second, the steps for a manual breast examination:

- To lie down: Choose a bed or other flat surface to lie on your back. Lying down spreads the tissue of the breasts, making them thinner and easier to feel.
- In the bath: rub soap on your fingers and breasts to help your fingers glide over the skin more smoothly.
- Use the soles of your three middle fingers, not the tips, when examining. If you find it difficult to palpate with the soles of your fingers, use another part of your hands that is more sensitive, such as the palms or backs of your fingers.
- Use different levels of pressure. Your goal is to use different levels of pressure to feel different depths of the breast to feel all of the breast tissue. Use light pressure to feel the tissue closest to the skin, medium pressure to feel the tissue slightly deeper, and strong pressure to feel the tissue closest to the breast and ribs. Be sure to apply each level of pressure to each area before moving on to the next. Talk to your doctor or nurse if you are not sure how much pressure to apply.
- Take your time. Do not rush into anything. Careful examination of the breasts may take several minutes.
- Follow the same pattern. Proceed systematically to make sure the entire breast is examined. For example, imagine that a clock is ticking above your breast, or a piece of cake. Start near the collarbone and examine that part, moving your fingers toward the nipple. Then move your fingers to the next part.

## Make an appointment to see your doctor if you notice:

- A hard lump or nodule near the axillae.
- Changes in the appearance or condition of the breast, including a thickening of the breast or a noticeable fullness that stands out from the surrounding tissue.
- Cracking sounds, wrinkling, sagging, bulges or bumps in the skin of the breast.
- A recent change in the nipple so that it is pushed inward (inverted) instead of protruding outward.
- Redness, warmth, swelling, or pain.

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- Itching, peeling, ulceration, or rash.
- Bloody discharge from the nipple.

Breast cancer is a heterogeneous group of diseases, and it is known to start locally in the breast and gradually spread to the axillary lymph nodes to become invasive, and then spread to other organs. Many factors determine the risk factors that increase the likelihood of developing breast cancer, its symptoms and signs, methods of its control, diagnosis, staging, and treatment options.

- Facts:
  - Breast cancer ranks first among the most common types of cancer, globally, regionally, and locally.
  - Breast cancer is the most common cancer in the Kingdom and in women.
  - Breast cancer is more common in women over 40 years of age in the Kingdom.
  - More than 50% of breast cancers in the Kingdom are detected at advanced stages, compared to 20% in developed countries; this increases the mortality rate and reduces the chances of cure as well as the high cost of treatment.
  - Early detection of breast cancer by mammography by the grace of God - significantly increases cure and survival rates and improves treatment options and effectiveness.

## **Breast Cancer Statistics:**

- The total number of cancer cases in the Kingdom according to the latest statistics of the Saudi Cancer Registry in 2016, reached (16,859), of which (13,161) were among Saudis, with a percentage of 78.1%, of which men accounted for 44.1%, while women accounted for 55.9% of them, according to the latest statistics from the Saudi Cancer Registry. Breast cancer (2282 cases) ranked first with 17.3% in both sexes and 30.4% of all cancers in women. This was followed by colorectal cancer and thyroid cancer with a rate of 27.2 per 1,000 Saudi women.
- The eastern region ranked first in the number of infections with a rate of 46.7/1000, followed by Riyadh with a rate of 33.8/1000, then Al-Qassim with a rate of 31.7/1000, Makkah Al-Mukarramah with a rate of 29.7/1000, and Al-Jawf in fifth place with a rate of 25/1000. The mean age of the injuries was 50 years.

#### The importance of early detection with a mammogram:

- Early detection is one of the most important secondary prevention strategies.
- It aims to diagnose breast cancer in the early stages of the disease and to facilitate access to more diagnostic and treatment procedures in hospitals.
- Early detection serves to improve the quality and outcome of breast cancer treatment, increase cure rates to over 95%, and reduce mortality rates by up to 30%.

## <u>Risk factors that increase the risk of developing breast</u> <u>cancer:</u>

#### What are the causes of breast cancer?

The causes of breast cancer are not fully known and understood, as there are a number of interrelated factors, including genetic factor, hormonal factor, environmental factors, social biology, and organ physiology that may affect its development, in addition to other risk factors, such as: Breast reproduction disorders. associated with the development of breast cancer, especially when the biopsy shows typical hyperplasia. However, no risk factors can be detected in 70% of cancer patients.

## **Genetic Predisposition:**

A family history of breast cancer in first-degree relatives (mother, sister, daughter) increases the risk of developing breast cancer. The risk depends on whether the cancer was bilateral in the breasts and occurred in the premenopausal or postmenopausal period; the risk is up to three times higher for those without a family history. The likelihood of the presence of a genetic factor is 5-10% of breast cancer cases, and the likelihood of the presence of this factor increases with the presence of many affected relatives and the occurrence of cancer at a younger age. Two genes (BRACA1, BRACA2 and p53) are the cause of most hereditary breast cancers. **Breast diseases:** 

Clinically, it was found that out of 100 patients aged 40-60 years who have a breast problem, breast diseases are most likely to be distributed as follows: 30% have no breast lesion, 40% have fibrocystic changes, 7% have benign tumor, 10% have cancer.

#### Breast diseases can be divided into the following groups:

Inflammatory lesions: These are rare lesions that may be acute or chronic, such as acute mastitis, ductitis, posttraumatic infections, and granulomatous mastitis. Benign fibrocystic lesions: These represent the most common disease of the breast and account for approximately 40% of all breast surgeries. They are commonly seen between the ages of 30 and 40, rarely develop after menopause, and often affected by hormonal disruption. are Benign breast tumors: these are rare tumors that include adenomas, tumors of the papillary ducts, proliferative breast disease, and phyllodes.

#### Inflammatory lesions:

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#### **Proliferative disease of the breast:**

Epidemiological studies have identified changes in the breast that may lead to an increased risk of breast cancer and are associated with hyperplasia with or without stereotypy. These lesions are often accompanied by fibrocystic changes that appear abnormal mammograms. on Finally, increased psychosocial support and available palliative care can improve the quality of life of women with breast cancer and their families. epidemiological studies have identified changes in the breast that may lead to an increased risk of breast cancer and are associated with hyperplasia with or without stereotypy. These lesions are often accompanied by fibrocystic changes that appear abnormal on mammograms.

Finally, increased psychosocial support and available palliative care can improve the quality of life of women with breast cancer and their families.

#### **Early Breast Cancer Symptoms:**

A new hard lump in the breast or underarm is the most common warning symptom of breast cancer, and the cancerous mass is often painless, hard and with uneven edges. However, they can sometimes be soft, rounded, and painful.

However, initial breast cancer symptoms may vary from person to person. Other early symptoms of breast cancer include:

Peeling of the skin in the nipple or breast area, or the appearance of redness and rash.

A change in the color or texture of the skin of the breast or nipple, such as wrinkled skin.

Increase the size of one or both breasts, or change in the shape and rotation of the breast.

It should be noted that the appearance of changes in the breast or nipple does not necessarily mean malignant breast cancer, as benign breast tumors may also cause some changes in the breast, as may be caused by other conditions, such as eczema, and swollen lymph nodes resulting from infection or other disease in the breast.

However, it is always recommended that you see your doctor immediately after noticing any symptoms that may be indicative of breast cancer for appropriate diagnostic tests.

## Symptoms of Advanced Breast Cancer:

Enlarged single breast, inversion of the nipple inward, poor appetite, unexplained weight loss, enlarged lymph nodes in the armpit, visible veins on the breast.

## Methodology:

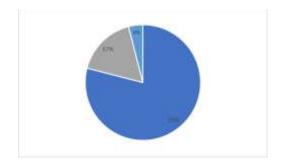
- A cross-sectional web survey was introduced to the residents of Albaha region.
- The questionnaire contain sections focused on participants' socio-demographic, different.

#### **Results:**

A total of 3000 questionnaires were completed:

First questionnaire question: Does early diagnosis of breast cancer increase the chances of getting better outcomes:

- Percentage of those who answered yes: 79%
- Percentage of those who answered no: 17%
- Percentage of those who answered "I don't know": 4%

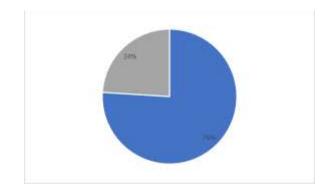


We recommend raising awareness to the community by spreading breast cancer health education in schools and gathering places.

The second question in the questionnaire: Have you heard about breast self-examination?

Percentage of people who have heard about breast self-examination: 76%

Percentage of those who have not heard of breast self-examination: 24%

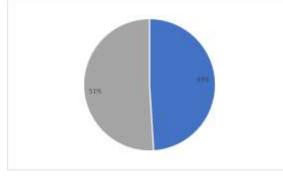


We recommend raising awareness to the community by disseminating breast cancer health education in the media. **The third question in the questionnaire:** 

Do you have knowledge of breast self-examination?

Percentage of those who know how to do breast selfexamination: 49%

The percentage of those who do not know how to do breast selfexamination is 51%.



We recommend raising awareness of the community on how to perform breast self-examination and activating the role of field clinics in the community.

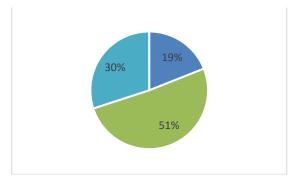
The Fourth question in the questionnaire:

Do you do breast self-exams?

Percentage of women who do breast self-examination: 19%

Percentage of women who do not do breast self-examination: 51%

Percentage of women who sometimes do breast self-examination: 30%

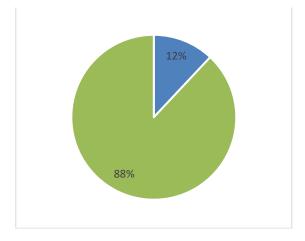


We recommend spreading awareness to the community about the importance of breast self-examination, and we recommend practicing it.

**The Fifth question in the questionnaire:** Do you have breast cancer in your family?

Percentage of those in their household with someone who has been diagnosed or exposed to it: 12%

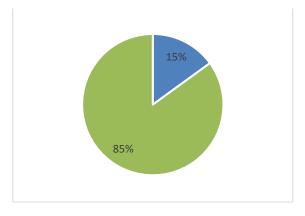
Proportion of women in their households who do not have someone with or are at risk of breast cancer: 88%



#### The Sixth question in the questionnaire:

Have you ever seen a doctor who specializes in breast cancer? Percentage of women who consult with a doctor or visit a specialized breast cancer center: 15%

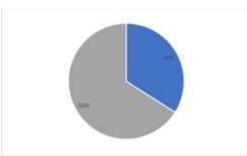
Percentage of women who do not consult a doctor or visit a specialized breast cancer center: 85%



#### The Seventh question in the questionnaire:

Do you have knowledge of the initial signs of breast cancer? Percentage of those with knowledge of the initial signs of breast cancer: 34%

Percentage unaware of the initial signs of breast cancer: 66%

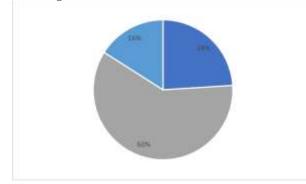


#### Question eight in the questionnaire:

Do you have knowledge of breast cancer screening methods? Percentage of those who have knowledge of breast cancer screening methods: 24%

Percentage of those with intermediate knowledge of breast cancer screening methods: 60%

Percentage of those who have a good knowledge of breast cancer screening methods: 16%



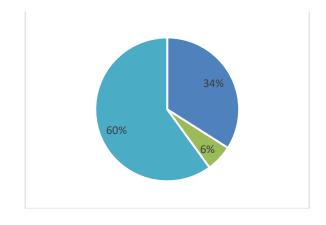
## The Ninth question in the questionnaire:

Have you attended a breast cancer campaign or activity?

Percentage of those who attended a breast cancer campaign or activity: 34%

Percentage of those who attended a breast cancer campaign or activity and did not benefit from it: 6%

Percentage of those who have never attended a breast cancer campaign or activity: 60%



#### **Conclusion:**

Our survey found that respondents were generally aware of breast cancer, with the exception of some information that has yet to be made known.

#### I. Introduction:

Breast cancer awareness helps to remind women of the importance of breast self-examination and clinic examination to ensure that there is no tumor or abnormal symptoms suggestive of breast cancer, thus safeguarding women's health as well as providing early treatment options before the disease worsens and becomes more complicated. Breast cancer awareness is also a way to support and provide moral support to any woman suffering from the disease, so that women can regain hope and recover from the disease after treatment.

## **II. Material and Methods:**

A cross-sectional internet survey was conducted among the residents of Al-Baha region.

Respondents have to answer all questions of the web questionnaire using MCQs. The questionnaire focuses on different aspects of awareness and coping with breast cancer.

The questionnaire aims to collect information from the participants in Arabic language to make it easier for the respondents.

Questions focused on different aspects.

## III. Result:

A total of 3000 questionnaires were completed:

**First questionnaire question:** Does early diagnosis of breast cancer increase the chances of getting better outcomes:

Percentage of those who answered yes: 79%

Percentage of those who answered no: 17%

Percentage of those who answered "I don't know": 4%

## **The Second question in the questionnaire:** Have you heard about breast self-examination?

Percentage of people who have heard about breast self-examination: 76%

Percentage of those who have not heard of breast self-examination: 24%

## The Third question in the questionnaire:

Do you have knowledge of breast self-examination? Percentage of those who know how to do breast self-examination: 49%

The percentage of those who do not know how to do breast self-examination is 51%.

## The Fourth question in the questionnaire:

Do you do breast self-exams?

Percentage of women who do breast self-examination: 19%

Percentage of women who do not do breast self-examination: 51%

Percentage of women who sometimes do breast self-examination: 30%

## The Fifth question in the questionnaire:

Do you have breast cancer in your family?

Percentage of those in their household with someone who has been diagnosed or exposed to it: 12%

Proportion of women in their households who do not have someone with or are at risk of breast cancer: 88%

#### The Sixth question in the questionnaire:

Have you ever seen a doctor who specializes in breast cancer?

Percentage of women who consult with a doctor or visit a specialized breast cancer center: 15%

Percentage of women who do not consult a doctor or visit a specialized breast cancer center: 85%

#### The Seventh question in the questionnaire:

Do you have knowledge of the initial signs of breast cancer? Percentage of those with knowledge of the initial signs of breast cancer: 34%

Percentage unaware of the initial signs of breast cancer: 66% **Question Eight in the questionnaire:** 

Do you have knowledge of breast cancer screening methods?

Percentage of those who have knowledge of breast cancer screening methods: 24%

Percentage of those with intermediate knowledge of breast cancer screening methods: 60%

Percentage of those who have a good knowledge of breast cancer screening methods: 16%

#### The Ninth question in the questionnaire:

Have you attended a breast cancer campaign or activity?

Percentage of those who attended a breast cancer campaign or activity: 34%

Percentage of those who attended a breast cancer campaign or activity and did not benefit from it: 6%

Percentage of those who have never attended a breast cancer campaign or activity: 60%

Note:

Our survey concluded that our respondents in general have awareness of the breast cancer except for some information that needs awareness, the mass media and the print media including the internet will become an important source of healthcare promotion.

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