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**BREAST CANCER** AWARENESS:  
EARLY DETECTION **SAVES LIVES**

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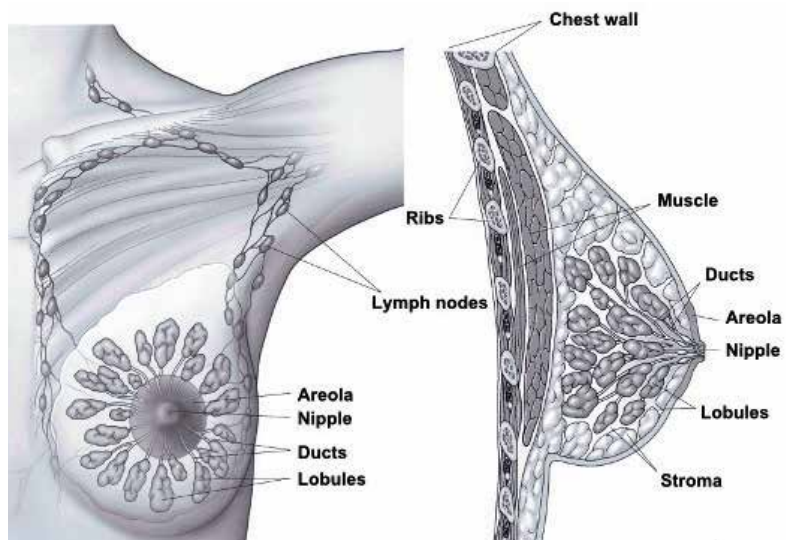
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## WHAT IS BREAST CANCER?

Cancer is the growth of abnormal cells that can invade and damage normal tissues in any part of the body. In the breast it can start and grow in any part of it.



Breast Anatomy

## INCIDENCE OF BREAST CANCER

In 2020, breast cancer was found in 2.3 million women around the world. This made it the most common cancer globally. Breast cancer can happen to women of any age after puberty in any country in the world, but the risk grows with age (WHO, 2022).

The incidence of breast cancer increases as a woman reaches menopause and after menopause and continues to rise as a woman gets older. At least 80% of recorded cases happened at this age group (menopausal 45-55). Breast cancer in women in their teens or 20's is not common. However, there have been recorded cases of women in their 20's diagnosed with breast cancer. Therefore, breast cancer awareness needs to start as early as when a woman reaches this age group. In men, breast cancer has been commonly diagnosed between the ages 60-70, but it can still happen at any age.

Breast cancer in men is not uncommon; it accounts for <1% of overall breast cancer statistics and can be diagnosed between the ages of 60-70 years old, but still it can happen at any age.

Over 50% of breast cancer cases in the Kingdom are found at a late stage compared to other countries, and which makes breast cancer less likely to be cured, and more expensive to treat.

Early detection is one of the most important breast cancer prevention strategies through the use of mammography, and other breast imaging exams. Hence, early detection of breast cancer is important for treating the disease, increasing the chance of being cured by more than 95% and lowering the risk of death by up to 30%. (MOH, 2022).

## WHAT IS BREAST AWARENESS?

Generally, awareness means having an ongoing knowledge of something. And that something is your body, in particular your own breasts. Getting to know and becoming familiar with their appearance; to learn how you feel your breasts at different times: before, during and after menstruation; as you grow older and as you have children. Men also need to be aware of their own breasts and any changes over time. If you are aware of your breast and know what is normal for you then you will be able to notice any irregular changes.

### A. Be aware of what is normal for you.

In reality, there is no such thing as normal breast. Each woman's or man's breast is different. What is normal for you will not be so with others, like your sister, cousin or friends. Each person's breast is different and it changes throughout your life. Some people can have lumpy breasts, or have one breast larger than the other, or breasts that are different shapes. Some have one or both nipples pulled in (inverted), which can be there from birth or has happened while the breasts were developing. This is why you need to know what is normal for you.

Here are descriptions of the breast at different stages of life:

#### 1) Before menopause:

Your breast may feel different around and during your monthly period. The breast may become more sensitive, feels tender, heavy and lumpy particularly before a period starts because the milk producing part of the breast becomes active. It is also common to have one breast larger than the other or a different shape and different symmetry.

#### 2) After menopause:

After you reach the age of when your period had stopped, the breast may feel soft, less firm and not lumpy. This because the activity in the milk producing part of your breast has stopped.

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## YOU and BREAST PAIN

Most women will experience breast pain at some point in their life, whether it is before their monthly cycle or in between cycles. It is a symptom that can cause mild discomfort to severe pain. Without the proper information, women may think there is something seriously wrong with their breasts, which may then lead to anxiety and apprehension.

Breast pain is any discomfort, tenderness, or pain in the breast or underarm region. Usually, breast pain is NOT a sign of breast cancer.

So, what can cause breast pain? It may occur for a number of reasons. Usually, they are harmless causes that may primarily be related to changes in hormone levels, such as:

- Puberty in girls and sometimes for boys, too
- Menstruation and premenstrual syndrome (PMS)
- Pregnancy: More often during the first trimester
- Days following childbirth as milk is produced. However, breastfeeding mastitis, which is caused by a milk duct that is not properly draining and then becomes infected, should be treated. It has no correlation with cancer, but it can become a serious infection if left untreated.
- Menopause
- Tight or improperly fitted bras. You might want to check your measurement and have a right sized brassiere or one without wire if the breast pain occurs whenever you have a wired bra on.

Most ladies who experience constant breast pain have fibrocystic breast tissue (lumpy breast) which may be more painful during or around the menstrual period because it contains lumps that are inclined to be tender during this time. Fibrocystic breasts are not necessarily linked to cancer, and the lumps are fluid filled cysts rather than a mass of cells.

Breast pain is usually managed conservatively with pain medication, appropriately fitted brassiere, correct sleeping position, meditation and relaxation, and exercises and diet.

If you are uncertain of the breast pain that you are feeling, see your physician for a breast exam and consultation.

### REFERENCES:

<http://www.nationalbreastcancer.org/breast-pain>

<https://www.breastcancercare.org.uk/publications/benign-breast-conditions/breast-pain-bcc71>

### 3) During pregnancy and breast feeding:

During this time it is still important to be aware of your breasts. They may become, lumpy, and tender due to pregnancy changes. Take special notice on any breast changes not related to your pregnancy, like hard lumps. This because breast cancer can still develop during pregnancy or after childbirth. Breast cancer that develops at this stage is very difficult to detect because of the changes that the pregnancy is causing to your body and on your breast.

### B. Do a regular self-breast examination.

It is advisable to start a monthly self-breast examination as early as 20 years of age. The best time to do a self-breast examination is when your breast is not tender or swollen, usually on the tenth day after the first day of your period. Post-menopausal women and those who had a hysterectomy can pick any day of the month and keep it as a routine every month. There is no right and wrong way of checking your breast. You can do this in front of the mirror while you get dressed or while you are in the bath or taking a shower. These steps may help you in your self-breast examination: LOOK and FEEL technique:

## LOOK and FEEL Female:



In the shower

Check each breast in a circular motion using the pads of your fingers from the outside to the center of the entire breast, including under your armpit and around your collarbone. Feel for any lump, hard knot or thickening and swelling. Gently squeeze your nipple and check for discharge and lumps.



In front of a mirror

Stand in front of a mirror and with your arms on the side, check your breast for any visible changes, like skin discoloration.

Next, lift both arms above your head and check each breast for any changes in shape, size and contours. Check also for skin dimpling and changes in the nipple.



Lying down

You can also check your breast while lying down with a pillow under you and your arm above your head, then check each breast in a circular motion using the pads of your fingers from the outside to the center of the entire breast, including under your armpit and around your collarbone. Feel for any lump, hard knot or thickening and swelling

Gently squeeze your nipple and check for discharge and lumps.

## WHAT YOU CAN DO:

- Self-breast exams start at age 20.
- Annual screening mammogram start at age 40.
- Know your own risks (family, medical and personal history).
- Eat a well-balanced diet, avoid unhealthy foods.
- Increase physical activities like regular exercise.
- Maintain a healthy weight.
- Quit smoking.
- Regular consultation with your doctor and regular clinical breast exams.

## IF YOU NEED MORE INFORMATION:

- Go and see your doctor. List the concerns that you want to ask.
- Only use reputable and trustworthy Internet resources.
- Only use reputable and trustworthy publications like medical journals and books.

Internet resources:

National Campaign for Breast Cancer Awareness – Ministry of Health KSA  
<http://www.moh.gov.sa/en/HealthAwareness/Campaigns/Breastcancer/Pages/stat.aspx>

American Cancer Society – USA  
<http://www.cancer.org/cancer/breastcancer>

NHS Breast Cancer Screening Programme – UK  
<http://www.cancerscreening.nhs.uk/breastscreen/breastcancer.html>

Macmillan Society – UK  
<http://www.macmillan.org.uk/>

National Breast Cancer foundation – USA – has a downloadable app called the Early Detection Plan to guide you in performing self-breast exams.  
<http://www.nationalbreastcancer.org/>



## E. Breast Biopsy

Sometimes a sample of a breast abnormality must be taken. This is called a biopsy. This is a procedure to take a small tissue sample from the breast from the abnormality seen by mammogram or ultrasound, or the abnormality that you have seen/felt during the breast exam. The sample will then go to the laboratory to be tested under the microscope. The result of this test will guide your physician if the abnormality needs more attention/treatment or needs to be followed up with future breast imaging exams.

LOOK and FEEL Male:



### Stand in front of a mirror:

Check each breast in a circular motion using the pads of your fingers from the outside to the center of the entire breast, including under your armpit and around your collarbone. Feel for any lump, hard knot or thickening and swelling.

Gently squeeze your nipple and check for discharge and lumps. Check your breast for any visible changes like skin discoloration.



### C. Changes to look out for.

When checking your breasts look for any changes that are not normal for you. These changes could be:

- a. Breast changes in size or shape, enlargement or swelling.



A change in size or shape

- b. Skin discoloration or redness or a rash like skin texture around the breast or around the nipple (dimpling, puckering, peau d' orange) or the skin looks like an orange skin.



Redness or a rash on the skin and/or around the nipple

- c. Nipple discharge and note the color of the liquid that is coming out.



Discharge (liquid) that comes from the nipple without squeezing

- d. Lump(s) – it can be a hard knot or thickening. Note if it is movable or attached in place. Also take note if it is painful.



A lump or thickening that feels different from the rest of the breast tissue

- e. Nipple retraction or inverted, (being pulled in).



Your nipple becoming inverted (pulled in) or changing its position or shape

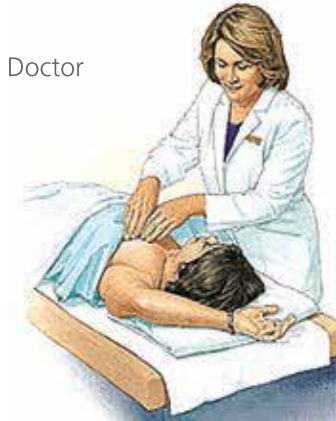
### C. Self breast examination/clinical breast examination

Once a month do your self-breast exam. Have your doctor examine you before or after your screening mammogram. The doctor may be able to notice any breast changes that you might have missed.

Self-Breast Exam



Clinical Breast Exam by a Doctor



### D. MRI (Magnetic Resonance Imaging)

Women who are high risk (have met several risks factors) based on their family, medical and personal history, should also have a yearly MRI together with their mammogram. Your doctor will determine if you are at high risk, and if you are, will advise you about this test.



## B. Breast ultrasound

Ultrasound can see deep in the breast by using sound waves. Ultrasound can be used to tell if a new lump in the breast is a solid mass or a cyst filled with fluid. In JHAH, ultrasound is used in conjunction with mammogram if there are any abnormalities seen by mammogram and needs more detailed clarification of these abnormalities. In this case, an ultrasound can be done together or after a screening mammogram. An ultrasound is also used if you feel a mass or are experiencing any of the physical symptoms. Again the ultrasound can be done together with a mammogram or on its own if you are less than 40 years old.



- f. Swelling in the armpit or around the collarbone.



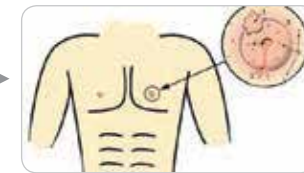
A swelling in your armpit or around your collarbone

- g. Constant pain and/or itching in any parts of your breast and under your armpit.



Constant pain in your breast or your armpit

- h. In men examine the breast for:



- 1: Lump
- 2: Nipple Discharge
- 3: Reddening
- 4: Inversion of the Nipple
- 5: Skin Dimpling

KNOW YOUR LEMONS!!!



## D. What to do if you find any changes in your breast that is not normal for you.

DON'T PANIC! Not all breast changes are caused by cancer. There are many reasons for these changes in the breast and some of them are harmless but they still need to be checked out as soon as possible. You know better than anyone what is not normal for you so go and see your Doctor as soon as you can and find out what is causing these changes.

## E. What to expect when you see your Doctor

Similar to your self-breast examination, your doctor will do a clinical breast examination and examine you for the breast changes that you have observed. Ask for a female doctor if you it make you more comfortable. Your doctor will ask you your family and medical history. He/she will also ask for a mammogram for you to better visualize and find any changes inside your breasts. Your doctor may also ask for more tests as needed.

If you are less than 40 years old, your doctor may ask for a breast ultrasound instead, because younger women's breast tissue is generally dense compared to older women and a mammogram will not give a good image.

## KNOW YOUR RISK FACTORS FOR BREAST CANCER

Aside from being breast aware, you should also be aware of your risks for developing breast cancer. If you are aware of these risks then inform your Doctor so that he/she will give you special tests that are right for you, to monitor for and detect breast cancer at its early stages.

- Gender - being female gives more risk than men.
- Increasing age – 81% of breast cancer is common after the age of 50.
- Previous history of breast or any cancer, particularly if received radiation to the chest.
- Family history of breast cancer or any cancer – 5%-10% of breast cancer is hereditary with BRCA1 or BRCA2 gene mutation .
- Having proven benign breast disease in the past – fibroadenoma, breast cysts, fibrocystic changes.
- Early puberty or menstruation.
- Late menopause.
- Not breastfeeding or has stopped breast feeding for long-term.
- Not having children or late childbearing age > 30 years old.
- Current use of hormone replacement therapy.
- Obesity (for post-menopausal women only).
- Chronic smoking (cigarettes, shisha).

### The risk factors for men include:

- Radiation exposure to the chest.
- High levels of the hormone estrogen (gynecomastia).

- Family history of breast cancer, especially breast cancer that is related to the BRCA2 gene.

Men have a higher chance of detecting breast cancer late than women do, because awareness is less and they are less likely to assume a lump is breast cancer, which can cause a delay in seeking treatment.

## BREAST SCREENING

### A. Mammogram

From the age of 40, women should start having special X-rays called mammograms. This is done once a year and is called a screening mammogram, where the X-ray can detect any abnormal changes inside the breast. During a mammogram, each breast is compressed between two plates for a few seconds to flatten and spread the tissue. This may cause you discomfort but it will only be for a moment, because it is necessary to produce a good, readable mammogram for your benefit.

If you are attending your annual screening mammogram and you noticed any changes in your breast, see your doctor as soon as you can, since breast cancer can still develop in between mammograms.

Some breast cancer does not come with hard lumps or masses or any breast changes. These types of breast cancer are found only on screening mammograms and that is why annual screening is very important.

For men, mammograms are done if they feel any hard lumps/mass around their breasts.



Mammogram