



Dr. Nk akalukanyi Daniel
MBChB(Muk), MMED G. Sur(Muk)
Surgeon, TMH
Author

BREAST CANCER

What you may need to know



What you should know about breast cancer

- Breast cancer accounted for 5% of all malignancies in **Kenya** and only second in number to **cancer** of the cervix. The incidence rate in females was 1.08 per 100,000 person-years. The incidence was low because the rural **Kenyans** have difficult access to the oncology facilities in Nairobi.

- Data from Kisii Teaching and Referral Hospital indicate that cancer of oesophagus, cervix, breast and prostate are the most common types of cancers in Kisii County and its catchment area, however no clear statistical data to that effect
- There are many types of breast cancer that differ in their capability of spreading (metastasize) to other body tissues.
- The causes of breast cancer are unknown, although medical professionals have identified a number of risk factors.
- There are many different types of breast cancer.
- Breast cancer symptoms and signs include
 - a lump in the breast or armpit,
 - bloody nipple discharge,
 - inverted nipple,
 - orange-peel texture or dimpling of the breast's skin (peau d'orange),
 - breast pain or sore nipple,
 - swollen lymph nodes in the neck or armpit, and
 - a change in the size or shape of the breast or nipple.
 - Breast cancer can also be symptom free, which makes following national screening recommendations an important practice.
- Breast cancer is diagnosed during a physical exam, by a self-exam of the breasts, mammography, ultrasound testing, and biopsy.
- Treatment of breast cancer depends on the type of cancer and its stage (0-IV) and may involve surgery, radiation, or chemotherapy.

What is breast cancer?

Breast cancer definition

Breast cancer is a malignant tumor (a collection of cancer cells) arising from the cells of the breast. Although breast cancer predominantly occurs in women, it can also affect men.

Breast cancer and its complications can affect nearly every part of the body.

Breast Cancer Symptoms & Signs

Breast cancer does not always produce symptoms; women may have cancers that are so small they do not produce masses that can be felt or other recognizable changes in the breast.

When symptoms do occur, a lump or mass in the breast is the most common symptom.



The most common sign of breast cancer is a new lump or mass in the breast.

In addition, the following are possible signs of breast cancer:

- Thickening or lump in the breast that feels different from the surrounding area
- Inverting of the nipple (as a change from previous appearance)
- Nipple discharge or redness (especially any bloody discharge)
- Breast or nipple pain
- Swelling of part of the breast or dimpling

What are the different types of breast cancer? Where does breast cancer come from?

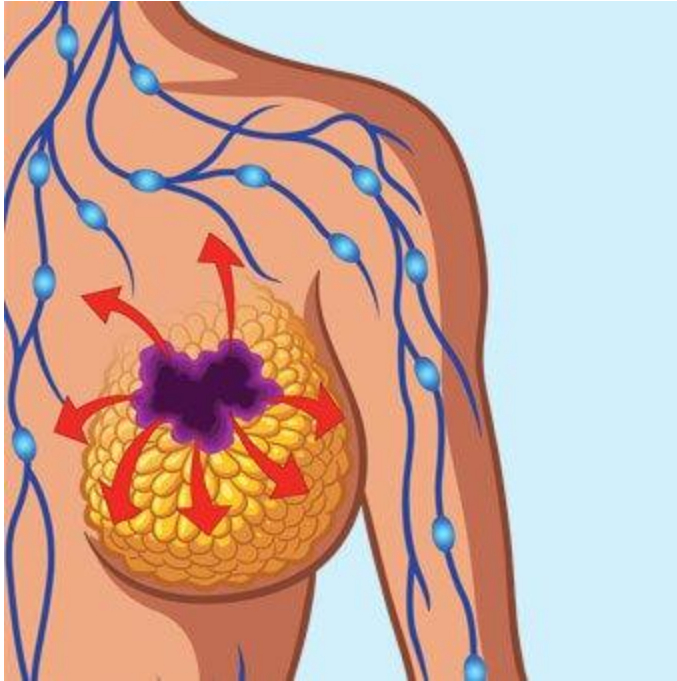
There are many types of breast cancer. Some are more common than others, and there are also combinations of cancers. Some of the most common types of cancer are as follows:

- ***Ductal carcinoma in situ***: The most common type of non-invasive breast cancer is ductal carcinoma in situ (DCIS). This early-stage breast cancer has not spread and therefore usually has a very high cure rate.
- ***Invasive ductal carcinoma***: This cancer starts in the milk ducts of the breast and grows into other parts of the surrounding tissue. It is the most common form of breast cancer. About 80% of invasive breast cancers are invasive ductal carcinoma.
- ***Invasive lobular carcinoma***: This breast cancer starts in the milk-producing glands of the breast. Approximately 10% of invasive breast cancers are invasive lobular carcinoma.

- The remainder of breast cancers are much less common and include the following:
 - **Mucinous carcinoma** are formed from mucus-producing cancer cells. Mixed tumors contain a variety of cell types.
 - **Medullary carcinoma** is an infiltrating breast cancer that presents with well-defined boundaries between the cancerous and noncancerous tissue.
 - **Inflammatory breast cancer**: This cancer makes the skin of the breast appear red and feel warm (giving it the appearance of an infection). These changes are due to the blockage of lymph vessels by cancer cells.
 - **Triple-negative breast cancers**: This is a subtype of invasive cancer with cells that lack estrogen and progesterone receptors and have no excess of a specific protein (HER2) on their surface. It tends to appear more often in younger women and African-American women.
 - **Paget's disease of the nipple**: This cancer starts in the ducts of the breast and spreads to the nipple and the area surrounding the nipple. It usually presents with crusting and redness around the nipple.
 - **Adenoid cystic carcinoma**: These cancers have both glandular and cystic features. They tend not to spread aggressively and have a good prognosis.
 - **Lobular carcinoma in situ**: This is not a cancer but an area of abnormal cell growth. This pre-cancer can increase the risk of invasive breast cancer later in life.

- Papillary carcinoma, Phyllodes tumor, Angiosarcoma, Tubular carcinoma, are other very uncommon breast cancers

What causes breast cancer?



There are many risk factors that increase the chance of developing breast cancer. Although we know some of these risk factors, we ***don't know the cause of breast cancer*** or how these factors cause the development of a cancer cell.

We know that normal breast cells become cancerous because of mutations in the DNA, and although some of these are inherited, most DNA changes related to breast cells are acquired during one's life.

Proto-oncogenes help cells grow. If these cells mutate, they can increase growth of cells without any control. Such mutations are referred to as oncogenes. Such uncontrolled cell growth can lead to cancer.

What are breast cancer risk factors? How do you get breast cancer?

Some of the breast cancer risk factors can be modified (such as alcohol consumption) while others cannot be influenced (such as age). It is important to discuss these risks with a health care provider when starting new therapies (for example, postmenopausal hormone therapy).

Several risk factors are inconclusive (such as deodorants), while in other areas, the risk is being even more clearly defined (such as alcohol use).

The following are risk factors for breast cancer:

- **Age:** The chances of breast cancer increase as one gets older.
- **Family history:** The risk of breast cancer is higher among women who have relatives with the disease. Having a close relative with the disease (sister, mother, daughter) doubles a woman's risk.
- **Personal history:** Having a breast cancer diagnosis in one breast increases the risk of cancer in the other breast or the chance of an additional cancer in the original breast. Women diagnosed with certain benign (non-cancerous) breast conditions have an increased risk of breast cancer. These include atypical hyperplasia, a condition in which there is abnormal proliferation of breast cells but no cancer has developed.
- **Menstruation:** Women who started their menstrual cycle at a younger age (before 12) or went through menopause later (after 55) have a slightly increased risk.
- **Breast tissue:** Women with dense breast tissue (as documented by mammogram) have a higher risk of breast cancer.

- **Race:** White women have a higher risk of developing breast cancer, but African-American women tend to have more tumors that are aggressive when they do develop breast cancer.
- **Exposure to previous chest radiation or use of diethylstilbestrol** increases the risk of breast cancer.
- Having **no** children or the first child **after** age **30** increases the risk of breast cancer.
- Breastfeeding for one and a half to two years might slightly lower the risk of breast cancer.
- Being **overweight** or **obese** increases the risk of breast cancer both in pre- and postmenopausal women but at different rates.
- Use of **oral contraceptives** in the last **10** years increases the risk of breast cancer slightly.
- Using combined hormone therapy after menopause increases the risk of breast cancer.
- **Alcohol consumption** increases the risk of breast cancer, and this seems to be proportional to the amount of alcohol used. A recent meta-analysis reviewing the research on alcohol use and breast cancer concluded that all levels of alcohol use are associated with an increased risk for breast cancer. This includes even light drinking.
- Exercise seems to lower the risk of breast cancer.
- Genetic risk factors: The most common causes are mutations in the **BRCA1** and **BRCA2** genes (breast cancer and ovarian cancer genes). Inheriting a mutated gene from a parent means that one has a significantly higher risk of developing breast cancer.

SELF BREAST EXAM

Breast Self-Examination (BSE)

One of the most important ways to detect breast cancer.

Make Breast Examination a Health Habit

Follow these steps to examine your breasts regularly once a month.

Changes to look for that are not normal for you

- Lump in your underarm
- Lump, hard knot, or thickening
- Unusual swelling, warmth, redness, or darkening
- Change in size or shape
- Changing or puckering of the skin
- Itchy, scaly sore or rash of the nipple
- Induration or pulling in of the nipple or other parts of the breast
- Sudden onset of discharge from your nipple
- Pain in one spot that does not go away
- Any other changes

Important facts to remember!

- * Know your risks. Learn your family health history and talk to your doctor about your personal risk.
- * Learn about breast cancer screening. Discuss screening mammograms and tests with your doctor. When should screening start? How often? What tests are appropriate for your risk and age?
- ** Check your breasts at the same time each month. The best time of the month to perform your breast check is 2-5 days after your menstrual cycle ends. If you no longer have a period, choose a date each month that will be easy for you to remember.
- ** Learn what to expect for you. Know how your breasts normally look and feel. Remember to look, feel, and squeeze. Examine both breasts and breasts.
- ** Don't panic. Don't worry. If you notice any breast or underarm area changes, the earlier an abnormality is detected, the more effective treatment will be.
- ** Signs and symptoms of breast cancer are not the same for all women. Your changes should be discussed with your doctor.
- ** Healthy lifestyle changes can reduce your risk. Maintain a healthy weight, breast-feeding babies, and stay physically active by walking, swimming to your child, etc.

Squeeze...

Squeeze to check for discharge:

1. Squeeze gently to check for any discharge.

See your doctor right away to report dimpling, lumps, nipple discharge, hardening areas, irregular shape, swelling, nipple retraction, and any other changes or abnormalities.

Look...

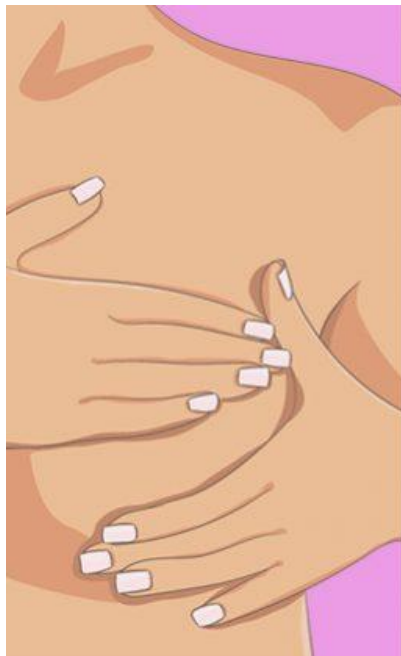
Look for changes in front of the mirror:

1. Hold your arms at your sides. Facing front and sideways.
2. Place your hands on your hips and tighten your chest muscles.
3. With your hands still on your hips, raise your shoulders to the top.

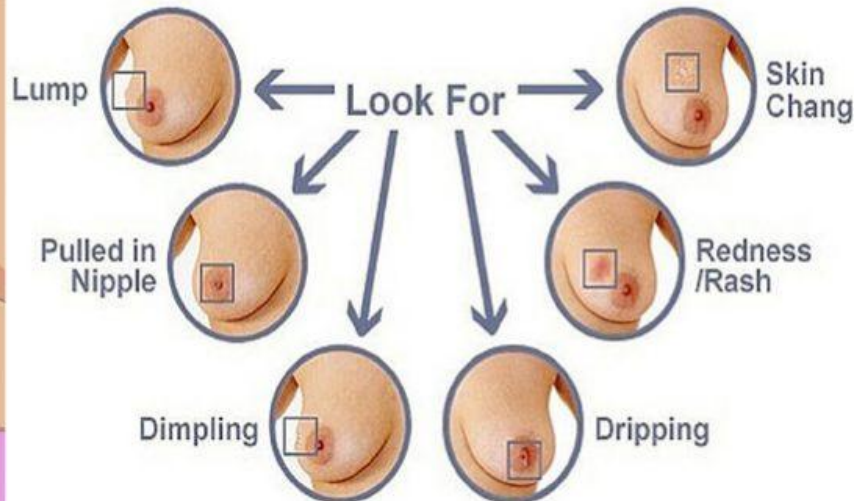
Feel...

Feel for changes:

1. The down on your back with a folded towel or pillow under your right shoulder and your feet right under your feet.
2. With three middle fingers of your left hand, check your right breast.
3. Draw using light, circular, and firm pressure to circles without lifting fingers off of your skin.
4. Rotate to get each breast quarter.
5. Feel for changes to your breast and above and below your collarbone.
6. Repeat the same pattern on your left breast, using your right hand.
7. These steps may be repeated when sitting up and while bathing or showering using soapy hands.



SYMPTOMS OF BREAST CANCER



What is the role of Tabaka Mission Hospital(TMh) in Breast cancer management?

TMH provides a comprehensive package of care for patients affected and diagnosed with Breast conditions including breast cancer,

The following services are readily available and easily accessible at TMH

- Breast cancer screening ; this involves comprehensive breast exam, Fine needle aspiration cytology(FNAC), Excision biopsy of breast lumps
- Radiological Diagnosis using Ultrasonography, Mammography
- Surgical Management of confirmed breast cancer
- Palliative care for terminal stages of breast cancer
- Community sensitization through Breast self-exam and follow up
- Individual and Group counseling
- Referral and Linkage to Specialized Oncology centers within the country

What is your role as member of Kisii community and the Surrounding?

- Be vigilant about the state of your breasts be it male or female
- Seek medical advice every time you notice something unusual with your breasts
- Ensure you keep your clinic appointment days and medication prescribed for any breast condition
- Visit the Breast clinic regularly(Every Wednesday for TMH)

REMEMBER BREAST CANCER IS CURABLE IF DETECTED AND MANAGED EARLY