Project On

Survey on Breast cancer in pregnancy and breast feeding mothers

Submitted To

The Department of Pharmacy,

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In the partial fulfillment of the requirements for the degree of Bachelor of Pharmacy

Submitted By

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APPROVAL

This Project Survey on Kidney Disease in Bangladesh, submitted to the Department of Pharmacy, Faculty of Allied Health Sciences, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Pharmacy and approved as to its style and contents.

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DECLARATION

I, at this moment, announce that I am carrying out this project study under the supervision of "Ms. Aklima Akter," Assistant Professor, Department of Pharmacy, Faculty of Allied Health Sciences, Daffodil International University, Impartial Compliance with the Bachelor of Pharmacy Degree Requirement (B. Pharm). This project, I declare, is my original work. I also state that neither this project nor any part thereof has been submitted for the Bachelor's award or any degree elsewhere.

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DEDICATION

To friends & family

ABSTRACT

Pregnant women are susceptible to the uncommon but deadly disorder of breast cancer. Given that both the mother's health and the health of the growing foetus must be taken into consideration, the diagnosis and treatment of breast cancer during pregnancy offer special problems. Breast lumps, changes in breast size or form, skin changes, and nipple discharge are all signs of breast cancer during pregnancy. My aim of this study was to see the current summary of breast cancer and how much people are affected this during pregnancy. The questionnaire begins with a review, followed by 22 questions that are completely relevant to the topic at hand. There was a total of 110 patients that participated in this research. This study was carried out at the National Institute of Cancer Research and Hospital (NICRH). This survey found that 91.3% of people knew about Breast Cancer before they were diagnosed with it. 8.7% of people do not know what Breast Cancer is. So, we can say that asthma is a common illness. According to the results of this survey, 84.1 percent of persons suffer from Breast Cancer. 15.9 percent of the population does not have any symptoms of Breast Cancer. The stage of the cancer, the fetus's gestational age, and the mother's general health all have a role in how breast cancer during pregnancy is treated. Surgery, radiation treatment, chemotherapy, or a combination of these are all possible options. Pregnant women should have frequent breast checks and tell their doctor right away if they see any changes or anomalies. Breast cancer therapy and early identification may increase the likelihood that both the mother and the fetus will survive.

Keywords: Pregnant, Disease, Cancer, Inflammation

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Introduction

1.1. Cancer

A group of diseases known as cancers are characterized by abnormal cell growth that may spread. Tumors that are benign do not grow. A lump, irregular bleeding, a protracted cough, weight loss, and gastrointestinal abnormalities are among the symptoms. Cancer or another condition might be at blame for these symptoms. [1] More than 100 cancers may affect humans. 22% of cancer patients die from tobacco use.10% are brought on by obesity, a bad diet, inactivity, or binge drinking.[2-4] Diseases, radiation, and pollution are some more worries. Helicobacter pylori, hepatitis B, hepatitis C, human papillomavirus, Epstein-Barr virus, and HIV (HIV) are responsible for 15% of cancer cases in poor nations. These elements alter the genes in cells. [3] Cancer demands many genetic changes. 5–10% of cancers are inherited. [4]

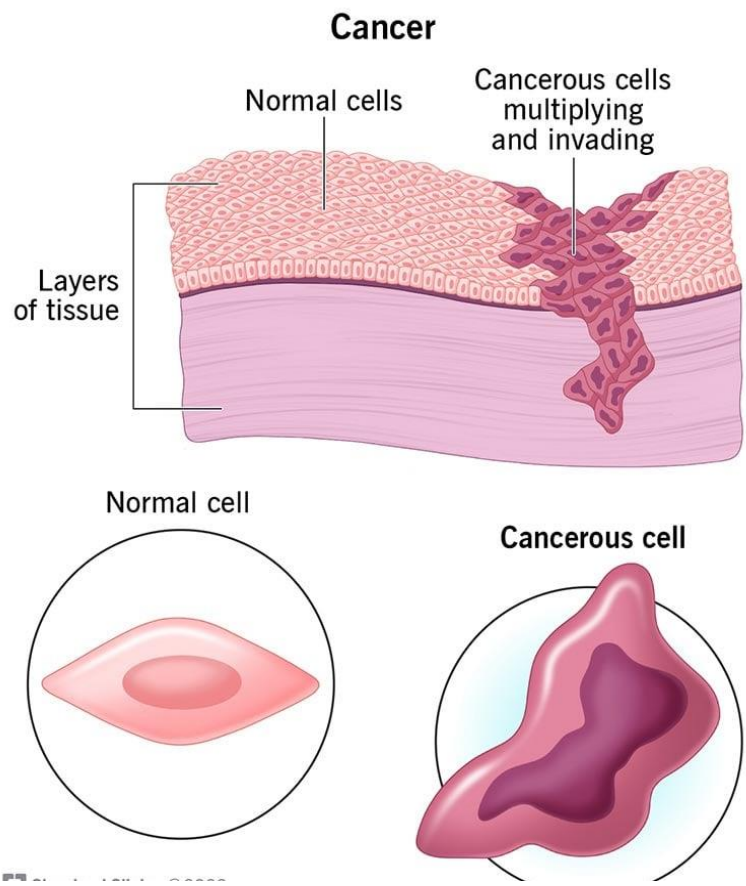


Fig 01 : Cancer **[Courtesy; google]**

Cancer can be found through symptoms and screening tests. The diagnosis is confirmed by medical imaging and a biopsy. Some cancers are less likely to happen if you don't smoke, stay at a healthy weight, drink less alcohol, eat lots of vegetables, fruits, and whole grains, eat resistant starch, get vaccinated against certain diseases, eat less processed and red meat, and spend less time in direct sunlight.[5-6]Screening for cervical and colon cancer is a good idea.

The test for breast cancer is controversial. [7] Cancer is treated with radiation therapy, surgery, chemotherapy, and focused therapy. Controlling pain and other symptoms is important. Patients with very bad diseases need hospice care. [8] Whether or not a person lives depends on the type and stage of cancer at the start of treatment. In the industrialised world, 80% of children under 15 will still be alive in five years. 66% of people with cancer in the U.S. are alive after five years. In 2015, 90,5 million people got cancer.[10] There were 23.6 million new cases of cancer and 10 million deaths around the world in 2019. These numbers are up 26% and 21% from the previous decade. [11]Men often get cancers of the lung, prostate, colon, and stomach. Cancers of the breast, colon, lungs, and cervix are common in women. Other types of skin cancer than melanoma would make up 40% of all new cancer cases every year.[12] In Africa, children are more likely to get non-Hodgkin lymphoma than acute lymphoblastic leukaemia. In 2012, 165,000 kids under 15 have cancer. Many types of cancer are more common in industrialised countries and get worse as people age. Rates are going up because people in developing countries are living longer and their ways of life are changing. In 2010, the world spent $1.16 trillion on cancer each year. [13]

1.2. History of Cancer

Cancer has always been a part of the human experience. Breast cancer is mentioned in the Egyptian Edwin Smith Papyrus, which dates back to about 1600 BC. Hippocrates (460 BC - 370 BC) identified many types of cancer, which he called "o" karkinos . (crab or crayfish). [14] The veins in a solid malignant tumor seem "extended on all sides like the animal the crab has its feet, whence it obtains its name," which is how the word came to be. [15]

Fig 02 : Engraving with two views of a Dutch woman who had a tumor removed from her neck in 1689 **[Courtesy; google]**

Galen said that the word "breast cancer" comes from the perception of the tumor's lateral expansions and the surrounding swollen veins as resembling a crab. Celsus (c. 25 BC – 50 AD) recommended surgery as a treatment for cancer, which he named karkinos (also known as "crab" in Latin), in his book On the Diseases of the Human Body. Galen was a physician who supported the use of purgatives rather than surgery and flourished in the second century AD. These rules have been extensively observed for more than a thousand years. In order to find a cause of death, it was standard practise for medical practitioners to dissect dead bodies starting in the 15th century and continuing throughout the 16th and 17th centuries.[16] According to German researcher Wilhelm Fabry, breast cancer. Francois de la Boe Sylvius, a Dutch professor and supporter of Descartes, claims that acidic lymph fluid causes cancer. His contemporaries believed that cancer was contagious and spread like a poison, including Nicolaes Tulp. [17] Doctor John Hill attributed the growth of cancer in the nasal passages to tobacco use in 1761. A kind of scrotal cancer known as chimney sweeps' carcinoma was found to be more common among chimney sweeps, according to a 1775 study by the British physician Percivall Pott [18–19]. In the 18th century, when microscopy grew more widespread, it was discovered that the "cancer poison" spread from the primary tumour to the lymph nodes and eventually to distant sites (metastasis). Between 1871 and 1874, an English doctor named Campbell De Morgan first presented this theory of the disease. [20]

1.3. Epidemiology of Cancer

There will reportedly be 18.1 million new cases of cancer worldwide in 2018, with 9.6 million deaths as a result. Twenty percent of men and seventeen percent of women will be diagnosed with cancer in their lifetimes, with thirteen percent of men and nine percent of women succumbing to the disease. [21] Nearly 7.98 million individuals passed away from cancer in 2010, up from an estimated 12.7 million new cases in 2008 (excluding non-melanoma skin cancers and other non-invasive cancers). [22] About sixteen percent of all fatalities are caused by cancer. According to the American Cancer Society, as of 2018, lung cancer was responsible for 1.76 million fatalities, followed by colorectal cancer (860,000), stomach cancer (780,000), liver cancer (780,000), and breast cancer (800,000). (620,000). This means that invasive cancer is the primary cause of mortality in the industrialized world and the second largest cause of death in the developing world.

More than half of all instances are found in poor countries. Cancer was responsible for 5.8 million deaths in 1990.[23] Longer life expectancies and changes in lifestyle, especially in the developing world, are chiefly responsible for the rising death toll. Age is the single most important predictor of cancer. [23] Although cancer may affect anyone of any age, the majority of those diagnosed with aggressive cancer are over the age of 65. [24] Cancer expert Robert A. Weinberg said, "If we lived long enough, sooner or later we would all have cancer." Immunosenescence [25], accumulating DNA errors [26], and hormonal changes associated with aging all have a role in the observed correlation between aging and cancer. [27] The aging process' impact on cancer is complicated by both its promotion (through DNA damage and inflammation) and inhibition (by vascular aging and endocrine alterations) in the course of human life. [28] Particularly prevalent, but seldom deadly, are slow-growing tumors. Up to 36% of individuals have undetected and seemingly innocuous thyroid cancer at the time of death, according to autopsy studies in Europe and Asia, while 80% of men have prostate cancer by age 80, according to the same research. [29-30] Because these malignancies do not often result in the patient's death, detecting them would have been an unnecessary overdiagnosis.Leukemia accounts for 34% of all juvenile malignancies, followed by brain tumors at 23%, and lymphomas at 12%. One in every 285 American children will be diagnosed with cancer. The annual rate of rise for juvenile cancer in the United States was 0.6% between 1975 and 2002, whereas in Europe it was 1.1% between 1978 and 1997. [31] In the United States, the number of young people lost to cancer has dropped by 50 percent between 1975 and 2010. [32]

1.4. Symptoms of Cancer

Over a hundred distinct forms of cancer have been identified. As a direct consequence of this, the symptoms of cancer might vary greatly from one individual to the next. It is strongly recommended to have regular screenings, such as mammograms and checks for worrisome moles on the skin, in order to detect cancers in their early stages and provide patients the best chance of survival.[33] Cancer's outward symptoms in the body are notoriously ill-defined and difficult to attribute to a specific cause. People sometimes fail to recognize the warning signs of cancer because they incorrectly ascribe the symptoms to the normal aging process.[34]

Several examples include the following:[35]

- Feces or urine that have blood in them.
- Alterations may be seen in the breast shape, nipple size, and surface skin texture.
- Hoarseness and other alterations to the voice are examples.
- A persistent hacking cough that does not respond to any treatment
- Issues with chewing and swallowing are present.
- Chronic exhaustion as well as frailty
- Nocturnal sweating that makes it difficult to fall or stay asleep
- Problems associated with urinating, such as incontinence and urinary tract infections
- Changes in the skin, such as the development of a new mole or the continuation of an existing one
- Abdominal discomfort
- Anomalous shifts in body weight for which there is no explanation

Although it's true that cancer may make you feel terrible, pain is seldom an early warning sign that the illness is in its early stages.If you are having these symptoms but are unclear what is causing them, you should see a doctor as soon as possible.[36]

1.5. Causes of Cancer

Mutations, also known as alterations to the DNA in your cells, are considered to be the primary cause of cancer. It is possible to inherit genetic mutations. The effects of environmental factors might also manifest themselves after delivery in certain cases.

The following are examples of carcinogens, which are external factors that might cause cancer:

- Carcinogens that are present in the environment, such as ultraviolet and radiation (UV) cigarette smoke, asbestos, alcohol, air pollution, tainted food and drinking water, and other mild chemical carcinogens may all lead to cancer.
- Biological toxins such as viruses, bacteria, and parasites may cause cancer.

According to WHO Trusted Source, smoking, drinking alcohol, having a high body mass index (BMI), eating a diet low in fruits and vegetables, and not getting enough exercise might be responsible for around 33 percent of all deaths caused by cancer.[37-38]

1.6. Classification of Cancer

Cancers are categorized by the tissue from which they first developed or by the organ where they first appeared.

Cancer of the breast, for instance, is an example of carcinoma, or cancer that develops in epithelial tissue. This is a tissue that makes up a certain layer of skin.

Cancers may be categorized according to the kind of tissue they originate in, as in the following examples:

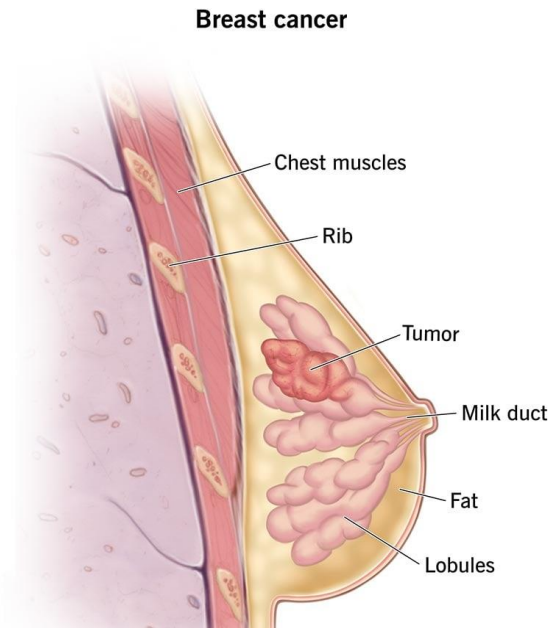
- Cancer of the epithelial tissues, such as those lining the digestive system or the mucous membranes, is called carcinoma. The National Cancer Institute reports that carcinomas account for 80%–90% of all cancer diagnoses.
- Leukemia is a kind of cancer that starts in the bone marrow.
- Lymphoma is cancer that starts in the lymphatic system, which includes the spleen, tonsils, and thymus. Hormonal and immunological functions are connected by this system.
- Cancers of the mixed kind develop in two or more cell types, maybe from separate groups.
- This kind of myeloma, which most often manifests in the bone marrow, develops in plasma cells, which are normally found in the blood.
- Sarcomas are cancers that begin in the connective tissue and may spread to other organs and tissues. People under the age of 40 have a higher sarcoma incidence rate.

A doctor can distinguish one form of cancer from another by looking at its cancer cells, which all look somewhat different. In order to provide the best care possible, oncologists need to have a thorough understanding of how cancers are often categorized.[39]

1.7. Breast cancer

Breast cancer refers to a kind of cancer that begins in the breast tissue. Breast cancer warning signs include the existence of a lump, a change in breast shape, dimples on the skin, nipple fluid, an

inverted nipple, or a red, scaly patch of skin. If the disease has gone to the extremities, the patient may have symptoms such as pain in the bones, swollen lymph nodes, difficulty breathing, and a yellowing of the skin.[40]



Risk factors for developing breast cancer include obesity, inactivity, alcoholism, hormone replacement treatment following menopause, ionizing radiation, early menarche, delayed or no childbearing, advanced age, and personal or family history of breast cancer. Having a personal or family history of breast cancer is another major risk factor.[41] Five to ten percent of incidences [42] may be traced back to a person's inherited genetic propensity. For example, the genes BRCA1 and BRCA2 have been linked to this hereditary vulnerability.

Fig 03 : Breast cancer [Courtesy; google]

Most cases of breast cancer begin in the cells that line milk ducts and the lobules that produce milk for those ducts. Cancers that begin in the ducts are known as ductal carcinomas, whereas those that begin in the lobules are called lobular carcinomas.When it comes to breast cancer, there may be more than 18 different subtypes. Ductal carcinoma in situ, for example, develops from non-invasive precursor lesions. To confirm a diagnosis of breast cancer, a biopsy must be performed. Suspect tissue is excised for microscopic examination. [43] After a diagnosis has been made, more testing is done to assess whether or not the cancer has spread to other regions of the body and which therapy have the highest chance of success. Breast cancer screening is controversial due to concerns about its possible benefits and drawbacks. Findings from a 2013 Cochrane study concluded that it was not feasible to identify whether or not mammographic screening causes more harm than good. This is because a large fraction of women who receive a positive diagnosis do not really have the disease. [44] Evidence of benefit was found in people aged 40–70 in a 2009 research by the United States Preventive Services Task Force. Women between the ages of 50 and 74 are

encouraged to be screened every two years, according to the group [45]. When used in conjunction with other preventative measures, the anti-cancer medicines raloxifene and tamoxifen may be an option for those at high risk of developing breast cancer. Removal of both breasts surgically is another potential prophylactic measure for high-risk women. Surgery, radiation therapy, chemotherapy, hormone therapy, targeted therapy, and many more are all available to those who have been diagnosed with cancer. Surgical options range from breast-conserving procedures to more drastic measures like mastectomy. [46] Breast reconstruction might happen at the same time as the first operation, or at a later time. When cancer has spread to other parts of the body, treatment focuses mostly on improving the patient's quality of life and alleviating suffering. The potential results of breast cancer treatment vary depending on the kind of cancer, the patient's age, and the stage of the disease.After five years, the survival rate in England and the USA is between 80% and 90%, respectively [47]. Five-year survival rates are lower in many developing countries. Breast cancer is the most frequent kind of cancer in women, accounting for one-fourth of all cases. In 2018, there were 2 million new cases and 627,000 deaths due to the illness. [48] More women than men are affected by it, and it is more common in developed countries [49]

1.7.1. History of Breast cancer

Breast cancer was the most common kind of cancer in ancient writings. Because autopsies were infrequent, early medicine couldn't detect interior malignancies. In its advanced stage, breast cancer could be felt through the skin and formed fungating lesions: the tumor would become necrotic (dead from the inside) and ulcerate through the skin, leaking fetid, black fluid. The earliest breast cancer evidence comes from Egypt's Sixth Dynasty, 4200 years ago.[50] A woman's remains from Qubbet el-Hawa indicated metastatic damage. The Edwin Smith Papyrus recounts eight breast cancers or ulcers cauterized. "No therapy" is written about the condition. For ages, doctors had the same opinion about comparable instances. Ancient medicine, from the Greeks through the 17th century, was founded on humoralism and thought breast cancer was caused by imbalances in the body's fluids, notably black bile.Also called divine punishment. [51] Theodora's court physician Aetios of Amida suggested a mastectomy in AD 548.Doctors didn't relate breast cancer to armpit lymph nodes until the 17th century, when they better understood the circulatory system. French surgeon Jean Louis Petit conducted complete mastectomies that included axillary

lymph node removal to minimize recurrence. [52] Petit's approach drew on the procedures of Bernard Peyrilhe, who excised the pectoral muscle beneath the breast to enhance the prognosis. Poor outcomes and patient danger led doctors to disagree with 17th-century surgeons like Nicolaes Tulp, who said "the only treatment is a timely surgery." Richard Wiseman noted in the mid-17th century that after 12 mastectomies, two patients died during the procedure, eight died soon after from advancing malignancy, and just two were cured. Early breast cancer therapy was conservative. Patients were treated with detox purges, blood letting, and alkaline arsenic to decrease acidity Anne of Austria's breast cancer was treated with hemlock juice compresses in 1664. When the lumps grew, the King's doctor used arsenic ointments. In 1666, the royal patient died in agony. Each failed breast cancer therapy spurred a market for quack, herbalist, chemist, and apothecary therapies. Mastectomy was unpleasant and risky without anesthetic and antiseptics. 18th-century anatomical findings led to new views concerning breast cancer's genesis and progression. John Hunter said neural fluid caused breast cancer. Other surgeons believed milk in mammary ducts caused cancer. Theories of breast trauma causing malignant alterations were advanced. Breast lumps and swellings sparked debates concerning hard tumors and benign cancer stages. Medical opinions differed on urgent therapy. Benjamin Bell recommended removing the whole breast, even if just part was diseased. [53] Breast cancer was rare until the 19th century, when hygiene and illness control increased longevity. Before, most women died before developing breast cancer. In 1878, Scientific American proposed pressure therapy to produce local ischemia when surgery was not practicable. William Stewart Halsted began radical mastectomies in 1882, supported by aseptic technique and anesthesia. The Halsted radical mastectomy removed both breasts, lymph nodes, and chest muscles. This caused long-term agony and incapacity, but was vital to avoid cancer recurrence. Halsted's radical mastectomy boosted 20-year survival rates from 10% to 50%. In the 1920s and 1930s, breast cancer staging methods were created to measure growth and spread. Janet Lane-Claypon published the first case-controlled research on breast cancer epidemiology in 1926 for the British Ministry of Health. [54] In the 1950s, breast-sparing surgeries, sometimes followed by radiation treatment, replaced radical mastectomies in Europe. George Crile Jr.'s Cancer and Common Sense argued that cancer sufferers should understand treatment alternatives. Crile became friends with Rachel Carson, who underwent a major mastectomy for breast cancer in 1960. Jerome Urban championed superradical mastectomies until

1963, when ten-year survival statistics were equivalent to radical mastectomy. Carson died in 1964, and Crile challenged the widespread practice of the Halsted radical mastectomy. What Women Should Know About Breast Cancer was released in 1973. Betty Ford's 1974 breast cancer diagnosis prompted frank discussion about treatment choices.[55] In the 1970s, a new understanding of metastasis led to seeing cancer as a systemic disorder, and more sparing techniques were devised. [56] In the 1980s and 1990s, hundreds of women who had finished normal therapy wanted and got high-dose bone marrow transplants. 15–20% of women died from the severe treatment. The Nurses' Health Study and Women's Health Initiative trials revealed hormone replacement treatment increases breast cancer. [57]

1.7.2. Symptoms of Breast cancer

Among the possible signs and symptoms of breast cancer are the following:

- ✓ A breast bulge or thickening that has a distinct texture in comparison to the surrounding tissue.
- ✓ Alteration in the size, shape, or appearance of one or both breasts
- ✓ Alterations to the skin around the breast, such as dimpling, may be a sign of breast cancer.
- ✓ A nipple that has recently been inverted.
- ✓ Peeling, scaling, crusting, or flaking of the pigmented patch of skin around the nipple (areola) or breast skin might be signs of a condition called atopic dermatitis.
- ✓ Changes in the color of your breast skin, similar to those seen on an orange's peel, as well as pitting[58-60]

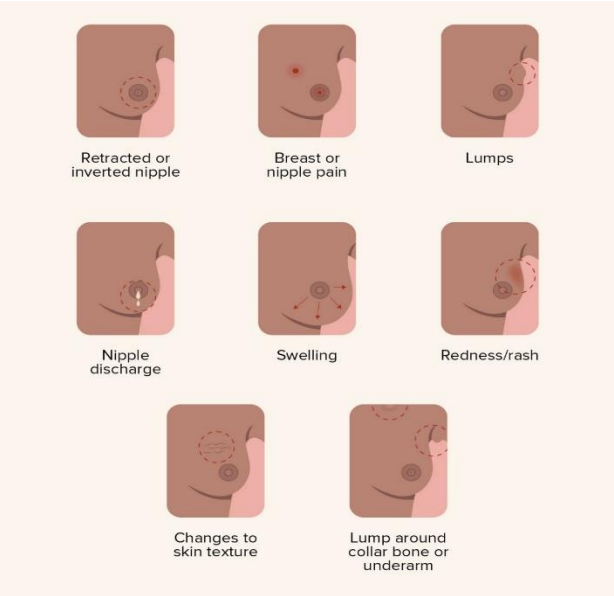


Fig 04 : Symptoms of Breast cancer [Courtesy; google]

1.7.3. Risk Factors of breast cancer

Breast cancer risk factors include:

- Older
- Genealogy
- BRCA2, BRCA1 (more frequent among Ashkenazi Jews), and CHEK2 mutations.
- Hormones (natural and administered)[61]
- Period before 12
- Past breast cancer
- Previous noncancerous breast conditions.[62]

Lifestyle factors may raise breast cancer risk in men and women.

- Chubby
- Insufficient exercise
- Booze.

Radiation and benign breast disease are also linked.[63]

1.7.4. Causes of breast cancer

When abnormal cells in your breast proliferate and multiply, this may lead to the development of breast cancer. However, researchers are unsure as to what precisely triggers the beginning of this process in the first place.On the other hand, research suggests that there are a number of risk factors that might make your likelihood of having breast cancer higher.[65] These are the following:

- Age. If you are 55 or older, your chance of developing breast cancer rises.
- Sex. The risk of breast cancer developing in women is much higher than in males.
- Genealogy includes the study of families. It is more probable that you will be diagnosed with breast cancer at some time in your life if one or more of your parents, siblings, children, or other close relatives have already been affected by the illness. It is estimated that between five and ten percent of breast cancers are caused by a single faulty gene that is inherited from one generation to the next and may be identified by genetic testing.
- Smoking. Using tobacco products has been associated with an increased risk of developing a wide variety of cancers, including breast cancer.
- Drinking alcohol According to the findings of several studies, consuming alcohol may raise a woman's chance of developing some forms of breast cancer.
- Obesity. Obesity is linked to an increased chance of developing breast cancer as well as experiencing a breast cancer recurrence.
- Radiation exposure. It is more probable that you will get breast cancer if you have a history of receiving radiation treatment, particularly to your head, neck, or chest.
- Hormone replacement treatment, often known as HRT. The use of hormone replacement treatment, often known as HRT, has been linked to an increased likelihood of developing breast cancer in patients.

There are a great number of additional elements that may play a role in elevating a person's risk of acquiring breast cancer. Find out whether you are at danger by having a conversation with your healthcare professional.[66-68]

1.7.5. How is breast cancer diagnosed?

Your breasts will be examined, and your healthcare professional will inquire about your family history, medical history, and any symptoms you may be experiencing at this time. In addition, the healthcare practitioner that you see may advise you to undergo breast exams in order to screen for any abnormalities.[69] These testing could involve the following:

- Mammogram. These specialized X-ray scans may identify abnormal growths or alterations that have occurred in your breast. Mammograms are routinely performed as part of preventative care for breast cancer.

Fig 05 : Mammogram **[Courtesy; google]**

- Ultrasonography. This test takes photos of the tissues that are located inside of your breast by using sound waves. It is used in the process of aiding in the diagnosis of breast masses or abnormalities.
- Scanning using positron emission tomography (PET): When doing a PET scan, specialized dyes are used to highlight potentially dangerous locations. During this examination, your healthcare professional will inject a specialized dye into your veins and then use the scanner to capture pictures of you.
- This diagnostic procedure, known as magnetic resonance imaging or MRI, makes use of magnets and radio waves to generate pictures that are distinct and detailed of the structures found inside of your breast.

- In the event that your healthcare professional notices anything questionable on the imaging tests, they may perform a biopsy on the breast tissue of the patient. They are going to deliver the sample to a pathology lab so that it may be analyzed.[70]

1.7.6. What is the breast cancer stages?

The stage of cancer helps indicate how far the disease has spread across the body. The prognosis is dependent on a number of aspects, such as the size and location of the tumor, as well as whether or not the cancer has spread to other parts of the body. The following are the primary stages of breast cancer:

Stage 0. The illness does not spread to other areas. This indicates that it has not yet emerged from the milk ducts in your breast.

Stage I. Cancer cells have spread to the breast tissue that is close by at this stage (stage I).

Stage II. The size of the tumor is either more than 5 centimeters in diameter and has not migrated to the lymph nodes under the arm, or it is less than 2 centimeters in diameter and has spread to the lymph nodes under the arm. At this point, the size of the tumors may range anywhere from 2 to 5 cm wide, and they may or may not spread to the lymph nodes in the surrounding area.

Stage III. At this time, the cancer has already progressed beyond the site where it first began. Cancer is possible that it has invaded neighboring tissue as well as lymph nodes, but it has not yet migrated to organs farther away. Breast cancer that has progressed to a localized stage is often referred to as stage III.

Stage IV. Your cancer has gone to other parts of your body, such as your bones, liver, lungs, or brain, in addition to your breast. Breast cancer that has spread to other parts of the body is referred to as stage IV breast cancer.[71-72]

1.7.7. Breast cancer subtypes

Among the many subtypes of breast cancer are:

Infiltrating (invasive) ductal carcinoma. This kind of breast cancer begins in the milk ducts and quickly spreads to neighboring breast tissue. This is the most prevalent kind of breast cancer, accounting for almost 80% of all occurrences.

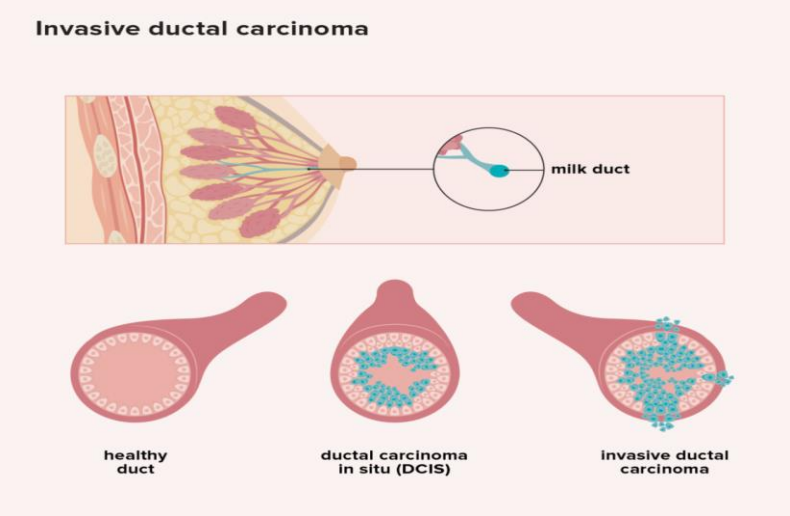


Fig 06: Invasive ductal carcinoma [Courtesy; google]

Ductal carcinoma in situ. Due to the lack of metastasis (spread of cancer cells outside the milk ducts), some experts classify ductal carcinoma in situ as a precancerous condition rather than a cancerous one. This illness can be easily remedied. The cancer may be stopped in its tracks and prevented from metastasizing and becoming aggressive if treatment is started quickly enough.

Infiltrating (invasive) lobular carcinoma. Your breast lobules (the area where milk is made) have developed cancer that has spread to neighboring tissue. About 10%-15% of breast cancers may be attributed to this factor.

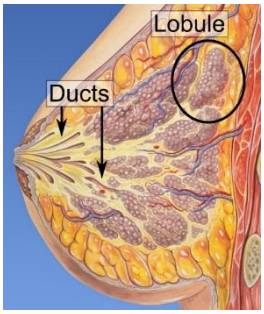


Fig 07: Infiltrating (invasive) lobular carcinoma [Courtesy; google]

Lobular carcinoma in situ. If you have abnormal cells in the lobules of your breast, a diagnosis of lobular carcinoma in situ is likely. Although it's not technically cancer, this marker has been shown to predict an increased risk of developing breast cancer in the future. Regular clinical breast examinations and mammography are essential for women with lobular cancer in situ.

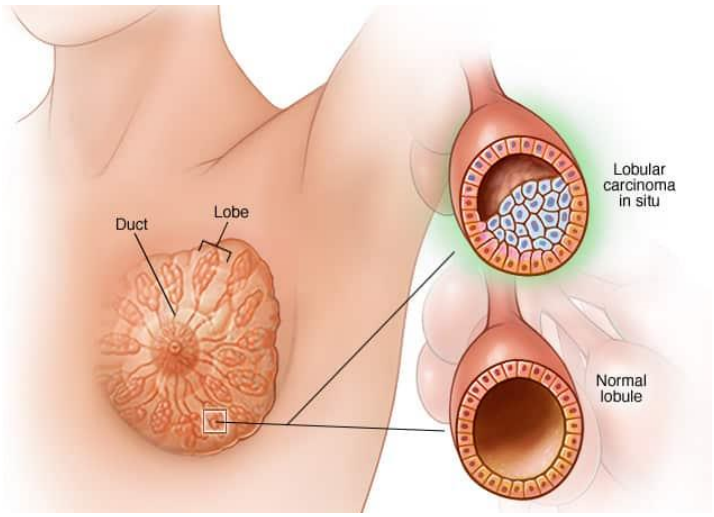


Fig 08: Lobular carcinoma in situ [Courtesy; google]

Triple negative breast cancer (TNBC). Triple negative breast cancer accounts for roughly 15% of all occurrences and is very difficult to treat. Breast cancer that lacks ER, PR, and HER2 is said to be triple negative. Since this is the case, diagnosis and therapy become more challenging.

Inflammatory breast cancer. This kind of cancer is rare and very dangerous since it acts like an infection. Inflammatory breast cancer is characterized by a variety of skin changes, including redness, swelling, pitting, and dimpling. It's brought on by cancer cells blocking lymph veins in the skin.

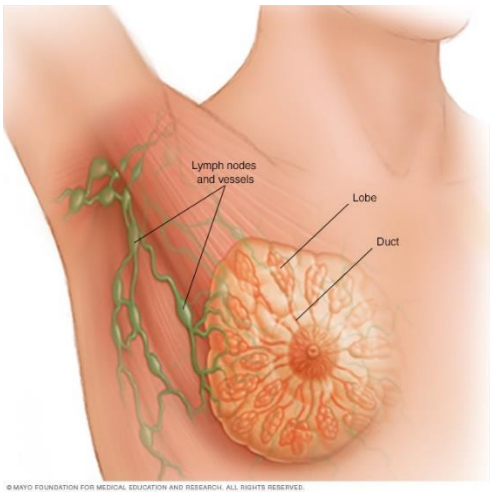


Fig 09: Inflammatory breast cancer [Courtesy; google]

Paget's disease of the breast. Breast Paget's disease describes an autoimmune disorder. Nipple and ovaries are particularly vulnerable to this kind of cancer (the skin around your nipple).[73-75]

1.7.8. Prevention

Lifestyle

Breast-feeding, not smoking, limiting alcohol use, increasing physical activity, and keeping a healthy body weight are all proven ways for women to lower their chance of developing breast cancer.[76] As much as 38% of breast cancers in the US, 42% in the UK, 28% in Brazil, and 20% in China may be avoided if these changes were implemented. Postmenopausal women, like those of all ages, may get the advantages of moderate activity like brisk walking. [77] Those who regularly engage in vigorous physical exercise may cut their chance of developing breast cancer by roughly 14 percent. [78] Efforts to get people moving more often and cut down on their sedentary habits may have other advantages, such as lowering the chances of developing diabetes and cardiovascular disease,"strong evidence that higher levels of physical activity and less sedentary time are likely to lower breast cancer risk, with findings broadly similar across breast cancer subtypes," according to a research that examined data from 130,957 women of European ancestry. [79] Vegetables, fruits, whole grains, and legumes were recommended for preventing cancer by the American Cancer Society and the American Society of Clinical Oncology in 2016.[80] The chance of developing breast cancer may be reduced by 10% if you eat a lot of citrus fruits. [81] It seems that the intake of omega-3 polyunsaturated fatty acids from marine sources lowers the risk. [82] There may be protective effects from eating plenty of soy products. [83]

Pre-emptive surgery

Since BRCA1 and BRCA2 mutation carriers are at an extremely high risk of developing breast cancer, it may be prudent to remove both breasts before the presence of any cancer or suspicious lump or lesion (a procedure known as "prophylactic bilateral mastectomy" or "risk reducing mastectomy") is detected.[84-85] This technique should only be performed on high-risk women due to a lack of evidence supporting its use in any other population. [86] Those at high risk due to family history should seek genetic counseling and then undergo BRCA testing. It's not something you should do every day. This is due to the wide variety of possible alterations to BRCA genes,

from relatively innocuous polymorphisms to the plainly lethal frameshift mutations.Most genealogical alterations with observable consequences remain unanswered. These inconclusive, meaningless test findings are more likely to be obtained from a person with a moderate risk profile. It is unknown whether removing the second breast in people who have breast cancer increases survival, although doing so may lower the chance of cancer in the second breast (contralateral risk-reducing mastectomy, or CRRM). [87]

Medications

Selected ER-modulators lower breast cancer risk but raise thromboembolism and endometrial cancer dangers. The total death toll is holding steady. [88-89] Therefore, they are not advised for women with an average chance of developing breast cancer, but they should be made available to women over the age of 35 who are at high risk. [90] The effectiveness of these drugs in preventing breast cancer persists for at least five years after therapy has ended. [91] Inhibitors of aromatase (such exemestane and anastrozole) may be more effective than selective estrogen receptor modulators (like tamoxifen) in lowering breast cancer risk, and they are not linked to an increased risk of endometrial cancer or thromboembolism. [92]

Fig 10: Anastrozole [Courtesy; google]

1.7.9. Treatment

The treatment of breast cancer is determined by a number of criteria, the most important of which are the person's age and the stage of the disease. When there is a larger danger of cancer returning after treatment has been completed, or when the stage of the disease has progressed further, treatments become more intensive. The standard treatment for breast cancer is surgery, and thereafter, patients may have chemotherapy, radiation therapy, or both types of treatment. It is best to tackle the problem from many disciplinary angles. Cancers that have hormone receptors that are positive are often treated with hormone-blocking medication that is administered over the course of many years. Certain instances of metastatic breast cancer and other advanced stages of the disease may be treated with monoclonal antibodies or other immune-modulating therapies. Despite the fact that research is currently being conducted on this kind of therapy. [93]

Surgery

During surgery, the tumor and sometimes part of the tissue around it are cut out physically, along with some of the surrounding tissue. During the procedure, a biopsy of one or more lymph nodes may be conducted. In many cases, a sentinel lymph node biopsy is used to sample lymph nodes, although this is not always the case.

Typical surgical procedures consist of:

- ✓ The removal of the whole breast is known as a mastectomy.
- ✓ The removal of one-fourth of the breast by a procedure known as a quadrantectomy.
- ✓ Lumpectomy refers to the surgical removal of a fraction of the breast.

After the tumor has been removed, the affected individual has the option of undergoing breast reconstruction surgery, which is a subspecialty of plastic surgery, in order to enhance the cosmetic look of the area that has been treated. Women also have the option of using breast prosthesis or opting to have a flat chest to provide the appearance of having breasts beneath garments. After a mastectomy, the patient is free to utilize the breast prosthesis whenever they see fit.[94-95]

Medication

Adjuvant therapy refers to the use of medications both after and in addition to surgical treatment. Neoadjuvant treatment is a term that refers to chemotherapy and any other forms of therapy that are administered prior to surgical intervention. When combined with other therapies, aspirin may result in a lower death rate from breast cancer. At the moment, there are three primary categories of medicines that are used in the adjuvant treatment of breast cancer: hormone-blocking drugs, chemotherapy, and monoclonal antibodies. [96-97]

Hormone replacement treatment

Certain types of breast cancer cannot continue to progress without estrogen. They are distinguishable from other breast cancer cells because to the presence of estrogen receptors (ER+) and progesterone receptors (PR+) on the surface of their cells (sometimes referred to together as hormone receptors). These ER+ tumors are treatable with medications that either block the receptors, such as tamoxifen, or alternatively stop the synthesis of estrogen with an aromatase inhibitor, such as anastrozole or letrozole. Tamoxifen is one example of a treatment that blocks the receptors. It is suggested that tamoxifen be used for a period of ten years. A higher risk of postmenopausal bleeding, endometrial polyps, hyperplasia, and endometrial cancer is associated with the use of tamoxifen. Combining tamoxifen with an intrauterine system that releases levonorgestrel may result in an increase in vaginal bleeding after one to two years, but it may reduce the risk of endometrial polyps and hyperplasia, though it does not necessarily reduce the risk of endo [98] The use of letrozole is suggested for a period of five years.Aromatase inhibitors are only appropriate for women who have already gone through menopause; nonetheless, within this population, aromatase inhibitors seem to be superior than tamoxifen. Because the main type of aromatase in premenopausal women is distinct from the active aromatase in postmenopausal women, these medicines are ineffective at blocking the predominant aromatase in premenopausal women. This is because the active aromatase in postmenopausal women has changed. [99] It is not recommended to provide aromatase inhibitors to premenopausal women who still have fully functional ovaries (unless they are also on treatment to stop their ovaries from working). The use of aromatase inhibitors or endocrine treatment may be combined with the use of CDK inhibitors. [100]

Chemotherapy

Chemotherapy is most often administered to patients whose breast cancer has progressed to stages 2–4 and has been shown to be of particular benefit in instances of estrogen receptor-negative (ER-) illness. Combinations of the chemotherapeutic drugs are often given to patients for treatment durations ranging from three to six months. Cyclophosphamide and doxorubicin are both components of one of the most popular treatment protocols, which is abbreviated as "AC." In certain cases, a taxane medicine like docetaxel is added, and when this occurs, the treatment protocol is referred as as "CAT." Cyclophosphamide, methotrexate, and fluorouracil are three other medications that are often used in therapy (or "CMF"). [101] The majority of chemotherapy drugs accomplish their intended goal of curing cancer by killing rapidly dividing cancer cells, which they do by either inducing DNA damage during the replication process or by using some other method. However, the drugs can cause harm to normal cells that are rapidly dividing, which might result in major adverse consequences. For instance, doxorubicin may cause damage to the heart muscle, which is the most serious of its potential side effects.[102]

Monoclonal antibodies

Trastuzumab is a monoclonal antibody that targets HER2. It has increased the five-year disease-free survival rate of HER2-positive breast tumors from stage 1–3 to around 87% (the total survival rate is 95%). Overexpression of the HER2 gene or its protein product is related with higher disease recurrence and a poorer prognosis in breast cancer, which occurs in between 25% and 30% of breast cancers. Overexpression of HER2 in breast cancer is associated with increased disease recurrence. Trastuzumab, on the other hand, comes with a hefty price tag, and its use comes with the risk of substantial adverse effects (about 2% of patients who take it incur significant heart damage). In patients with severe illness, the addition of the antibody pertuzumab, which blocks HER2 dimerization and works in conjunction with trastuzumab, is suggested treatment. [103-104]

Fig 11: Trastuzumab **[Courtesy; google]**

Radiation

After surgery, radiotherapy is administered to the area of the tumor bed and any nearby lymph nodes in order to eliminate any tiny tumor cells that may have evaded removal during the surgical procedure. It is possible that it will have a favorable impact on the microenvironment of the tumor if it is administered intraoperatively as targeted intraoperative radiation. External beam radiotherapy and brachytherapy are both types of radiation treatment that may be administered (internal radiotherapy). In the traditional treatment for breast cancer, radiation is administered after surgical removal of the tumor. It is also possible to provide radiation to the breast cancer while it is being operated on. When administered in the appropriate dosage, radiation may lower the chance of recurrence by between 50 and 66% (a reduction in risk of between 1/2 and 2/3), and it is regarded vital in the treatment of breast cancer that consists of removing just the lump (Lumpectomy or Wide local excision). Irradiating just a portion of the breast to treat early breast cancer may not

provide the same level of control over the cancer in the breast as treating the full breast and may produce more severe side effects. [105]

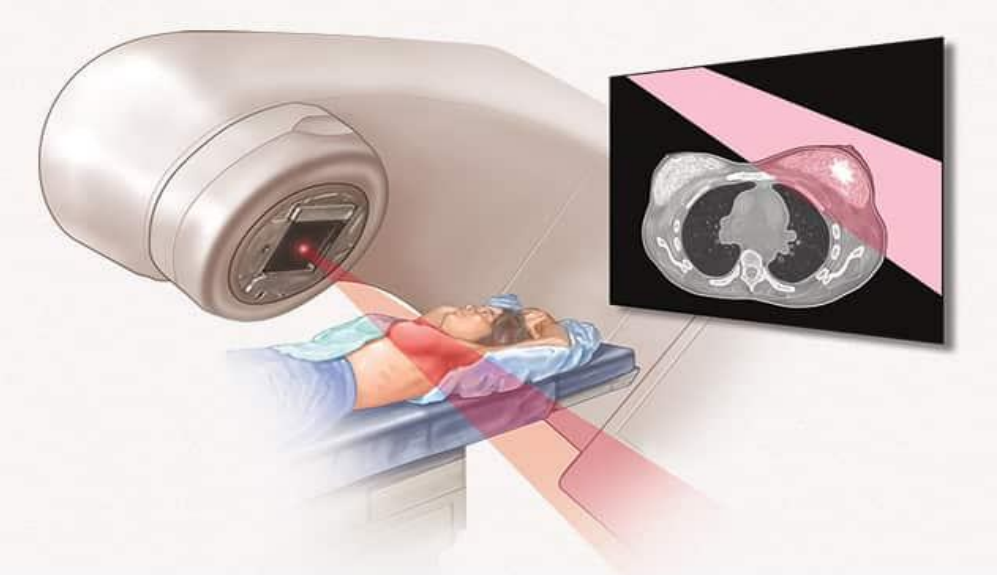


Fig 12: Radiotherapy **[Courtesy; google]**

Care after initial breast cancer therapy, often known as "follow-up care," may be extensive and may include frequent laboratory testing in asymptomatic patients in an effort to achieve early diagnosis of any metastases. This kind of care is also referred to as "follow-up care." In terms of early detection of recurrence, overall survival, and quality of life, a review has found that follow-up programs consisting only of regular physical examinations and annual mammography are just as effective as more intensive programs consisting of laboratory tests. This was determined by comparing the two types of programs. People who have breast cancer may experience short-term improvements in their functional ability, psychosocial adjustment, and social participation after participating in multidisciplinary rehabilitation programs. These programs frequently include physical activity, education, and psychological assistance. After undergoing breast cancer surgery or radiation, it is very uncommon for patients to have upper limb issues such as discomfort in the shoulders and arms, weakness, and mobility restrictions. Research conducted in the United Kingdom found that beginning an exercise program seven to ten days following surgery may help prevent upper limb difficulties. [106-107]

1.8. Breast Cancer During Pregnancy

Cancer of the breast is a specific kind of cancer that originates in the cells of the breast. It is more frequent in women than in males, however both sexes may be affected by the condition. When a woman is pregnant and a breast cancer diagnosis is made, it may be a very challenging scenario for the mother as well as for the healthcare personnel that are involved.The risk of developing breast cancer during pregnancy is very low, occurring in just around one in every three thousand pregnancies. On the other hand, it is essential to keep in mind that breast cancer is the form of cancer that is discovered in a pregnant woman the most often.When a woman is pregnant, it may be difficult to diagnose and treat breast cancer since there are worries for the mother's safety as well as the safety of the baby that is growing inside of her. The treatment of breast cancer that occurs during pregnancy calls for the collaboration of a number of specialists, including an obstetrician, a breast surgeon, a radiation oncologist, and a medical oncologist. The many treatment choices for breast cancer that develops during a woman's pregnancy are determined by the stage of the disease, the gestational age of the fetus, and the mother's personal preferences. Surgical removal, treatment with chemotherapeutic drugs, and treatment with radiation are all potential treatments that may be explored. The timing of these treatments, as well as the order in which they will be administered, will be meticulously planned in order to reduce the potential risks to the unborn child.In order to get therapy started as soon as possible, it may be essential in certain situations to start the labour process early or to deliver the baby before the due date. This choice will be made by the healthcare team after taking into consideration the potential negative and positive effects on the mother as well as the unborn child.Since chemotherapy medications and radiation therapy might be hazardous to the infant, breast-feeding is typically not suggested during cancer treatment. Nonetheless, if the therapy is finished successfully, it is feasible that breastfeeding may be continued.In general, the therapy of breast cancer that occurs during pregnancy calls for careful consideration of the particular difficulties that are presented by this circumstance. It is feasible to obtain favourable results for the mother as well as the infant if appropriate preparation and care coordination are carried out.[108-109]

Fig 13: Fetus [Courtesy; google]

1.8.1. Treatment

Breast cancer diagnosed during pregnancy is a difficult medical illness that has to be treated using a multidisciplinary strategy because of its complexity and difficulty. The specific actions that will be taken during treatment are going to be determined by a number of things, including the stage of the disease, the gestational age of the foetus, and the general health of the mother.

The following are some potential treatments for breast cancer that may be administered during pregnancy:

- Surgery is by far the most common kind of therapy for breast cancer, and it is often the initial step in the process of treating breast cancer in pregnant patients. The size and location of the tumour will determine the sort of surgery that may be performed. It is possible that the surgeon may suggest either a lumpectomy or a mastectomy.

- Chemotherapy is a systemic treatment that kills cancer cells throughout the body by using medications. Chemotherapy is also known as drug therapy. Depending on the stage of the disease, chemotherapy may be administered either before or after surgical treatment.
- Radiation treatment involves subjecting cancer cells to high-energy radiation in order to eradicate the disease. After surgery, it's possible to utilise it to wipe out any cancer cells that are still present.
- Hormone therapy: Hormone therapy is a treatment for breast cancer that is used to treat breast cancer that is positive for the hormone receptor. It does this by inhibiting the synthesis of hormones that are responsible for promoting the growth of cancer cells.
- Monitoring of the foetus It is vital to do close monitoring of the foetus during the therapy. In order to check on the fetus's well-being, non-stress tests and ultrasounds could be administered.
- Treatment deferral In some circumstances, it may be prudent to postpone therapy until after the delivery of the baby. The stage and kind of cancer, in addition to the gestational age of the baby, are all factors that should be considered while making this choice.

It is essential to keep in mind that the course of therapy for breast cancer diagnosed during pregnancy should be customised and structured around the particular requirements of the woman being treated. It is advised that a multidisciplinary team of healthcare specialists work together to offer the best possible care for the mother and baby. This team should include an obstetrician, an oncologist, and a neonatologist.

Literature Review

2.1. Adrienne G. Waks, MD. Eric P. Winer, MD "Breast Cancer Treatment A Review" JAMA. 2019;321(3):288-300.

Over the course of their lifetimes, 12% of American women will be diagnosed with breast cancer, and more than 250 000 new cases of the disease were discovered there in 2017. The present state of local and systemic breast cancer treatment is the main topic of this review. Human epidermal growth factor 2 (ERBB2; formerly HER2) and estrogen or progesterone receptor molecular markers are used to classify breast cancer into three main subtypes: hormone receptor positive/ERBB2 negative (70% of patients), ERBB2 positive (15%–20%), and triple-negative (15%) (tumors lacking all three standard molecular markers). At the time of diagnosis, more than 90% of breast cancers do not have metastatic disease. Therapeutic objectives for patients who present without metastatic disease include eliminating the tumor and avoiding recurrence. With 85% 5-year breast cancer-specific survival for stage I triple-negative tumors compared to 94% to 99% for hormone receptor positive and ERBB2 positive tumors, triple-negative breast cancer is more likely to recur than the other 2 subtypes. Patients with hormone receptor-positive tumors receive endocrine therapy, with some also receiving chemotherapy; those with ERBB2-positive tumors receive chemotherapy plus ERBB2-targeted antibody or small-molecule inhibitor therapy; and those with triple-negative tumors receive chemotherapy alone. Systemic therapy for nonmetastatic breast cancer is determined by subtype. All patients with nonmetastatic breast cancer receive surgical resection as local therapy, with postoperative radiotherapy being taken into account if a lumpectomy is performed. A portion of systemic therapy is now frequently administered prior to surgery. Investigations are being done into adjusting postoperative care based on preoperative care response. Depending on the subtype, metastatic breast cancer is treated with the intention of extending life and relieving symptoms.

2.2. Yi-Sheng Sun, Zhao Zhao et al "Risk Factors and Preventions of Breast Cancer" Int J Biol Sci. 2017; 13(11): 1387–1397.

The second most common malignancy among women is breast cancer. Breast cancer is a multi-step process that involves several cell types, and it is still difficult to prevent globally. One of the greatest ways to avoid breast cancer is by early detection. Due to early detection, the 5-year relative survival rate for patients with breast cancer is over 80% in several industrialized nations. Both the knowledge of breast cancer and the creation of prevention measures have advanced significantly in the last ten years. By identifying breast cancer stem cells, the etiology and processes behind tumor treatment resistance are disclosed, and several breast cancer-related genes are discovered. For the chemoprevention of breast cancer, individuals now have additional pharmacological alternatives, and biological prevention has recently been created to enhance patients' quality of life. We will cover the most important research on breast cancer's pathophysiology, associated genes, risk factors, and preventive measures that have been conducted in recent years. These results are a modest advancement in the protracted battle against breast cancer.

2.3. Joann G. Elmore, MD, MPH et al "Screening for Breast Cancer" JAMA, March 9, 2005—Vol 293, No. 10

Mammography screening is advised for women 40 years of age and older by all major US medical organizations. At 14 years of follow-up, screening mammography decreases breast cancer mortality by between 20% to 35% in women aged 50 to 69, and somewhat less in those aged 40 to 49. With variations depending on the woman's age and the evaluation category the radiologist assigned, around 95% of women with abnormalities on screening mammography do not have breast cancer. Studies comparing full-field digital mammography to screening film have not shown statistically significant differences in cancer detection; however, the effect on recall rates (the proportion of screening mammograms thought to have positive findings) was not evident. A second, bigger research did not uncover any changes that were statistically significant, however one study revealed that computer-aided detection enhances cancer detection rates and recall rates. Clinical breast exams used for screening pick up some cancers that mammography misses, however the sensitivity reported in the community is lower (28% to 36%) than in randomized trials

(around 54%). Breast self-examination has not been shown to be useful in lowering breast cancer mortality, but because of false-positive results, it does lead to an increase in breast biopsies. Although they are not advised for screening the general population, magnetic resonance imaging and ultrasound are being researched for the purpose of screening women who are at high risk for breast cancer. The sensitivity of magnetic resonance imaging has been reported to be much greater in high-risk women than that of mammography, while specificity is often lower. There is no information on how magnetic resonance imaging affects breast cancer mortality. Each woman should have an honest conversation about the potential advantages and disadvantages of screening.

2.4. Olivia Jane Scully, Boon-Huat Bay, George Yip and Yingnan Yu "Breast Cancer Metastasis" Cancer Genomics & Proteomics September 2012, 9 (5) 311-320

The majority of fatalities from breast cancer are caused by metastasis, which is a kind of breast cancer. It is essential for the therapy of breast cancer as well as the prognosis of how the disease will evolve to find breast cancer metastases at the earliest possible stage. Predicting and diagnosing the early phases of breast cancer metastasis in patients may be accomplished with the use of new methods that include the examination of circulating tumor cells. These approaches have shown promising outcomes. In addition, the development of therapeutic approaches to fight breast cancer metastasis will be impossible without a clearer knowledge of the metastatic cascade in breast cancer. In this review, the existing and innovative techniques for detecting breast cancer metastasis, as well as the processes involved in metastasis and the therapy of breast cancer metastasis, are examined. Additionally, the review will cover the treatment of breast cancer metastasis.

Purpose of the study

Breast glandular tissue contains lining cells (epithelium) that are where breast cancer develops. The malignant development is initially contained inside the duct or lobule, where it often exhibits no symptoms and has a low risk of spreading (metastasis). The prevalence of breast cancer is rising quickly these days; hence this research was carried out physically with the goals listed below.

- To determine the age at which women are most likely to develop breast cancer.
- To learn the signs of breast cancer.
- To check the breast cancer survival rate.
- Determine how breast cancer affects women socially.
- To determine the number of women who are concerned about breast cancer.
- To determine when women see a doctor for breast cancer-related signs.

Methodology

4.1. Introduction:

The questionnaire begins with a review, followed by 22 questions that are completely relevant to the topic at hand. There was a total of 110 patients that participated in this research. This study was carried out at the National Institute of Cancer Research and Hospital (NICRH)

4.2. Research Design:

This survey was carried out to learn people's perspectives on breast cancer as well as the ways in which it influences their lives. The survey was conducted at the National Institute of Cancer Research and Hospital, and it was cross-sectional research that relied only on participants' physical responses. The questions were created using Microsoft Word

4.3. Method of Data Analysis:

After an assortment of information, all information was checked for precision and internal consistency to deny missing or clashing data, and those were discarded. Information investigation was done through Microsoft's dominant refreshed rendition.

4.4. Ethical Considerations

Before beginning the information assortment, educated verbal permission was taken from the investigation members. The obscurity of the respondents was kept private, and study subjects were educated that they could have the option to leave the program at any.

4.5. Survey Questionaries

1. Patient Name ……..

2. Gender

- Male
- Female

3. Marital Status

- Yes
- No

4. Occupation

- Student
- Job Holder
- Business
- Others

5. Education Level

- College Student
- Undergraduate student
- Postgraduate student

6. Your Age

- Under 20 years old
- 20-40 years old
- Upper 40 years old

7. Location

- Rural
- Urban

8. Do you know about Cancer?

- Yes
- No

9. Do you know about Breast Cancer?

- Yes
- No

10. Do you have Breast Cancer?

- Yes
- No

11. Do you have any Breast tumors?

- Yes
- No

12. How long have you had Breast Cancer?

- Under one year
- 1-3 years
- Upper 3 years

13. Do you think, Using Undergarments (Bra) for a long time can cause Breast Cancer?

- Yes
- No

14. Do you think, Breast size can affect Breast Cancer?

- Yes
- No

15. Do you know how to self-diagnosis Breast Cancer?

- Yes
- No

16. Which type of medication do you take?

- Chemotherapy
- Radiotherapy
- Surgery
- All of this

18. Do you ever follow up doctor for Breast Cancer?

- Yes
- No

19. Do you take any medicine for Breast Cancer?

- Yes
- No

20. Which type of drug do you take for Breast Cancer?

- Trastuzumab
- Abemaciclib.
- Abraxane
- Ado-Trastuzumab Emtansine
- Others

21. Do you face any adverse effects from taking medication?

- Yes
- No

21. Do you have any family history of Breast Cancer?

- Yes
- No

22. Do you think Breast Cancer affects your lifestyle?

- Yes
- No

23. Pharmacologically Management of breast cancer?

- Yes
- No

Result & Discussion

5.1. Breast Cancer

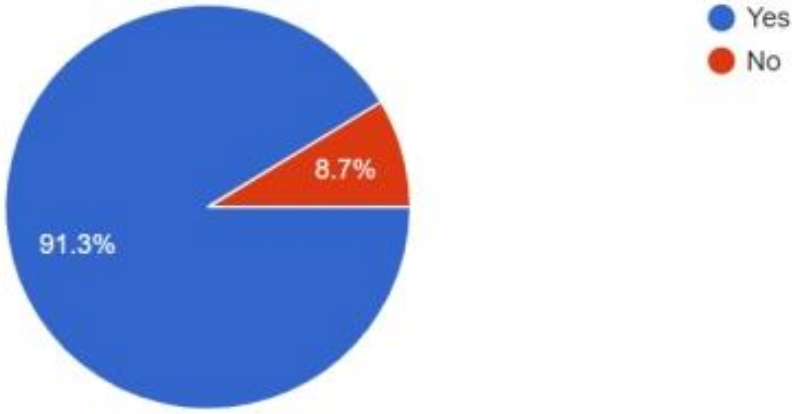


Fig 14: Breast Cancer

This survey found that 91.3% of people knew about Breast Cancer before they were diagnosed with it. 8.7% of people do not know what Breast Cancer is. So, we can say that asthma is a common illness.

5.2. Location

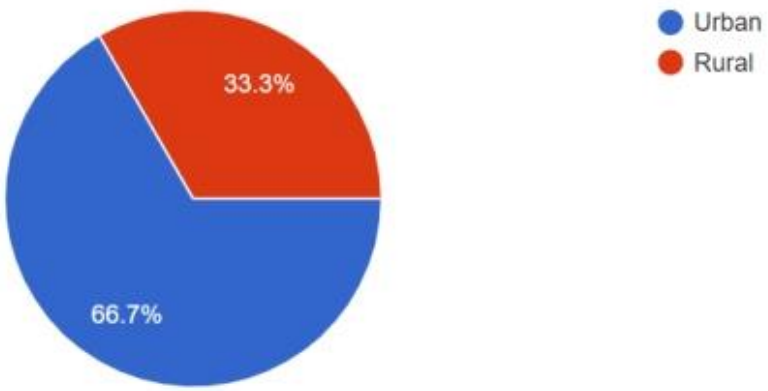


Fig 15: Location

According to the poll, 66.7 % of persons living in urban areas have Breast Cancer. 33.3 % of those living in rural areas suffer from Breast Cancer. Breast Cancer is especially common among city dwellers.

5.3. Being afflicted with Breast Cancer

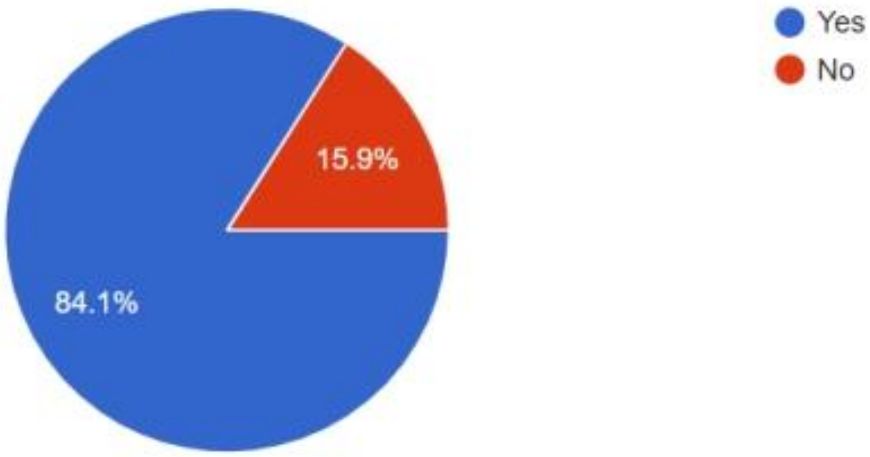


Fig 16: Being afflicted with Breast Cancer

According to the results of this survey, 84.1 percent of persons suffer from Breast Cancer. 15.9 percent of the population does not have any symptoms of Breast Cancer

5.4. Duration

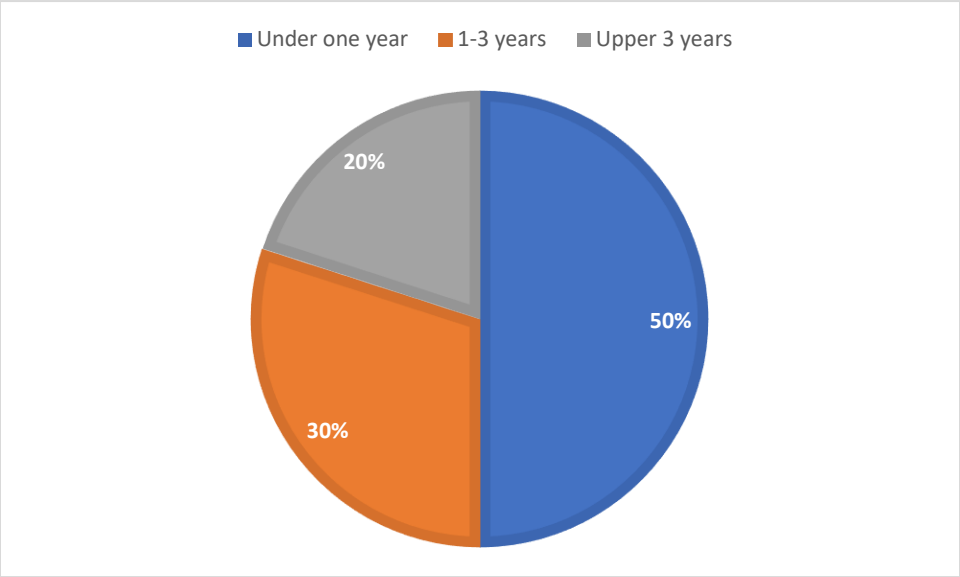


Fig 17: Duration

In this survey,50% people are suffering from Breast Cancer under one years. 30% people are suffering from breast cancer 1-3 years old. 20% people are upper 3 years old.

5.5. Self-Diagnosis

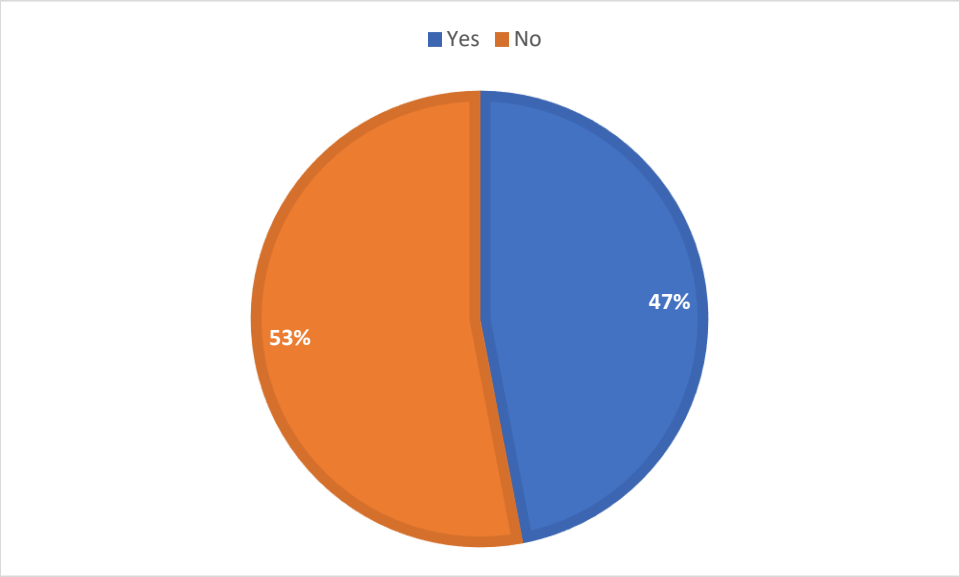


Fig 18: Self-Diagnosis

In this survey, 47% people know self-diagnosis of breast cancer. 53% people don't know about this.

5.6. Type of medication

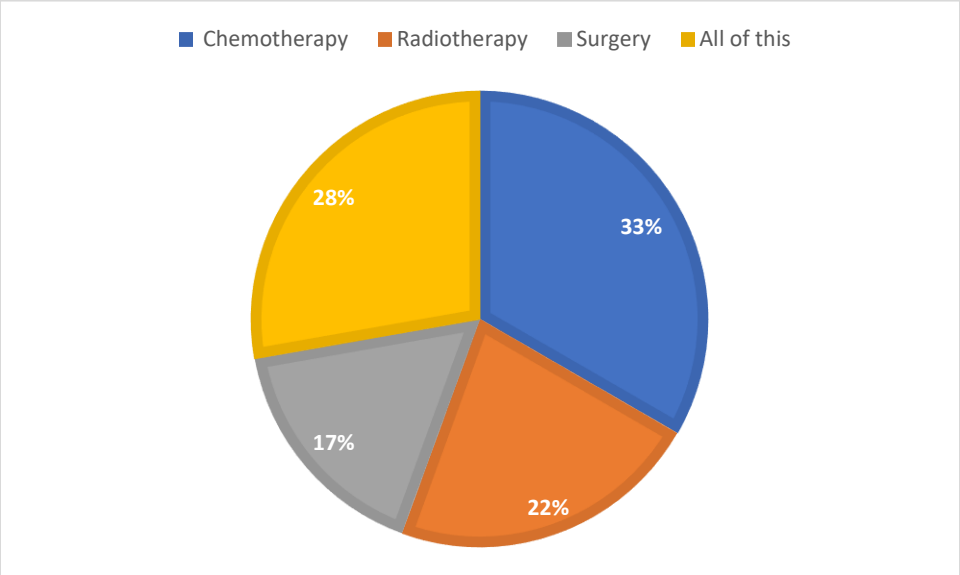


Fig 19: Type of medication

According to this survey, 22% people are take radiotherapy. 33% people take chemotherapy as medication. 17% people are surgery their breast. 28% people are take all of this.

5.7. Drug

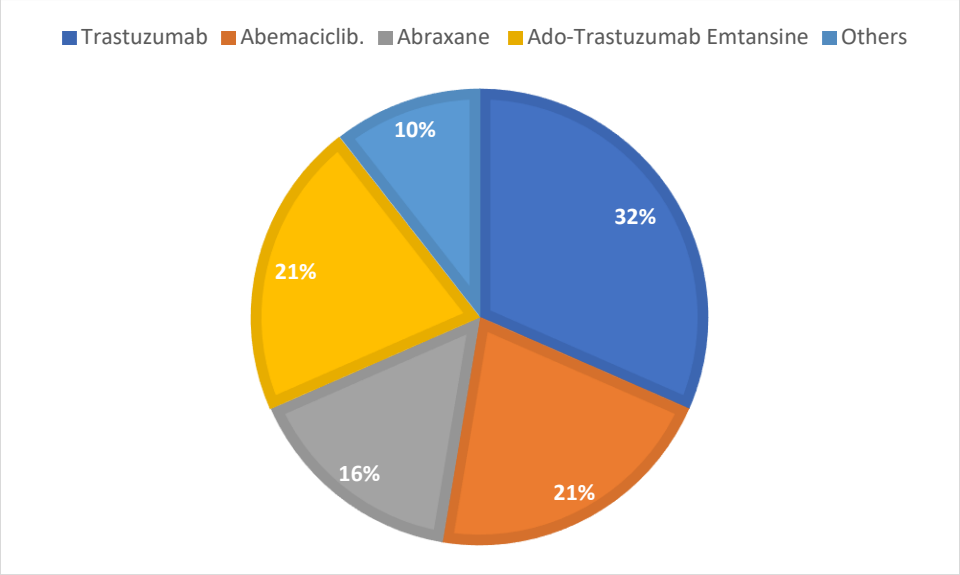


Fig 20: Drug

In this survey, 32% people are take trastuzumab as their drug. 21% people take abemaciclib. 16% people take abrzxane. 10% people take other drug.

5.8. Family History

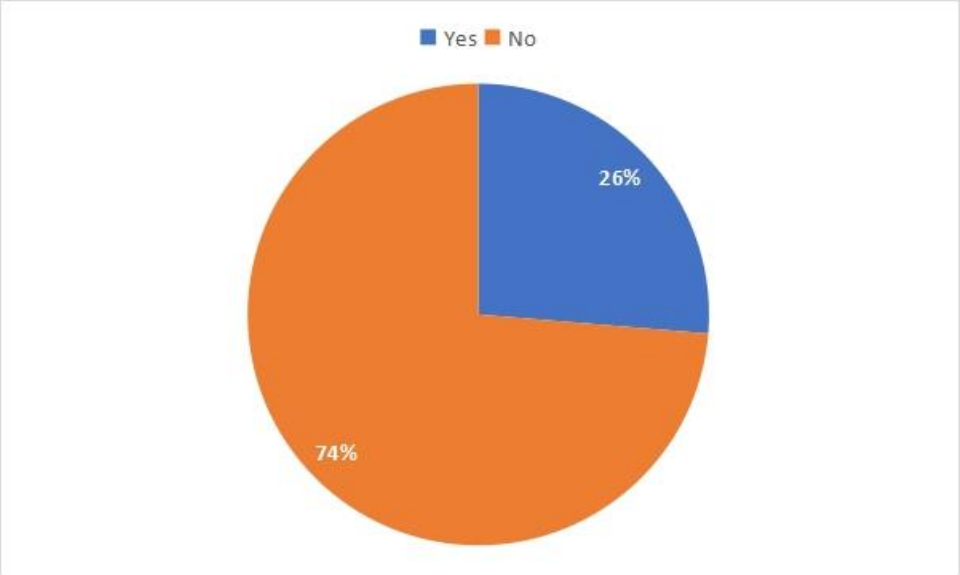


Fig 21: Family History

According to this survey around 26% respondents has familiar suffering from Breast Cancer and 74% respondents has no familiar suffering from Breast cancer.

5.9. Social Impact

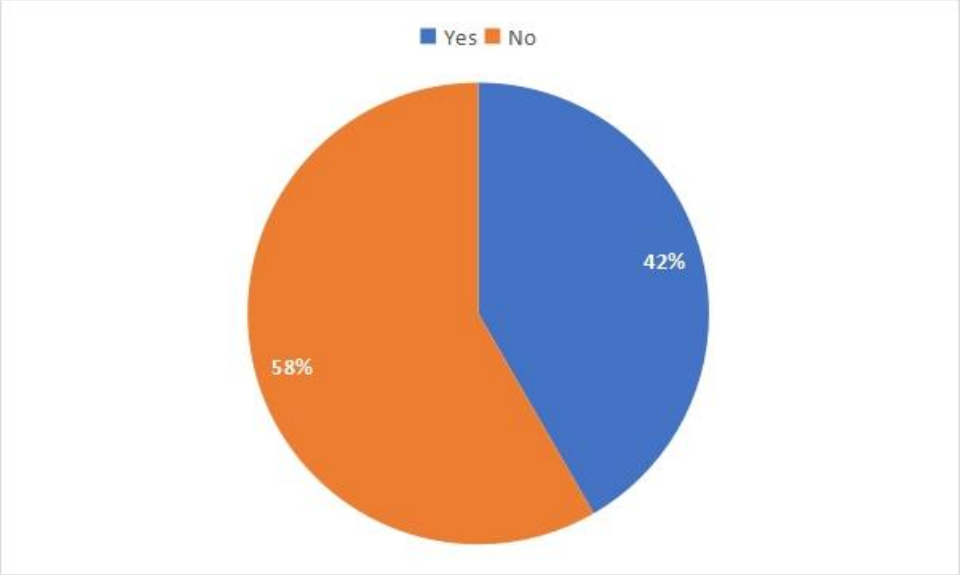


Fig 22: Social impact

According to this survey 42% respondents has said breast cancer has social impact and 58% respondents has no idea about this.

5.10. Follow up doctor

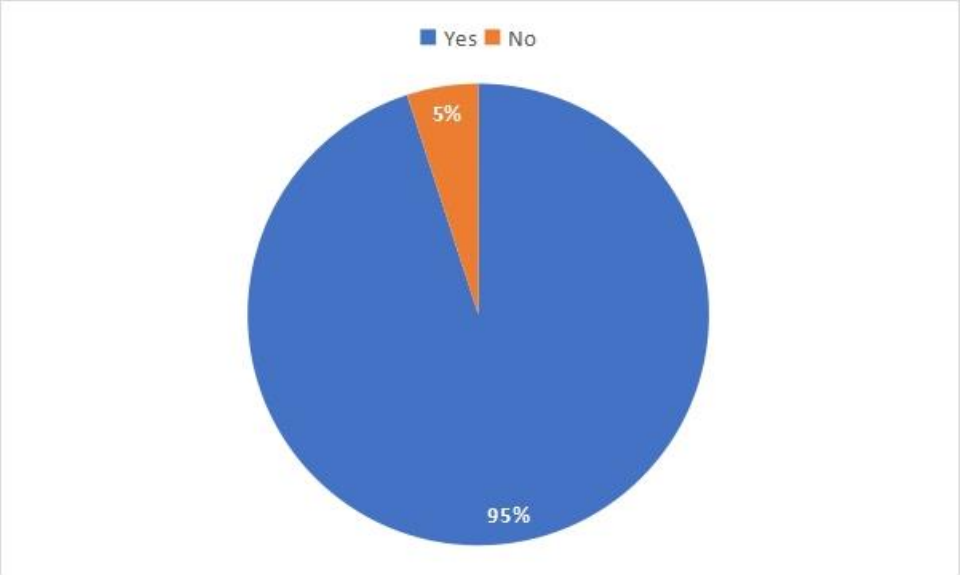


Fig 23: Follow up doctor

According to this survey 95% respondents regular follow up a doctor for eye cataract and 5% respondents are not related with that.

5.11. Pharmacologically management of breast cancer

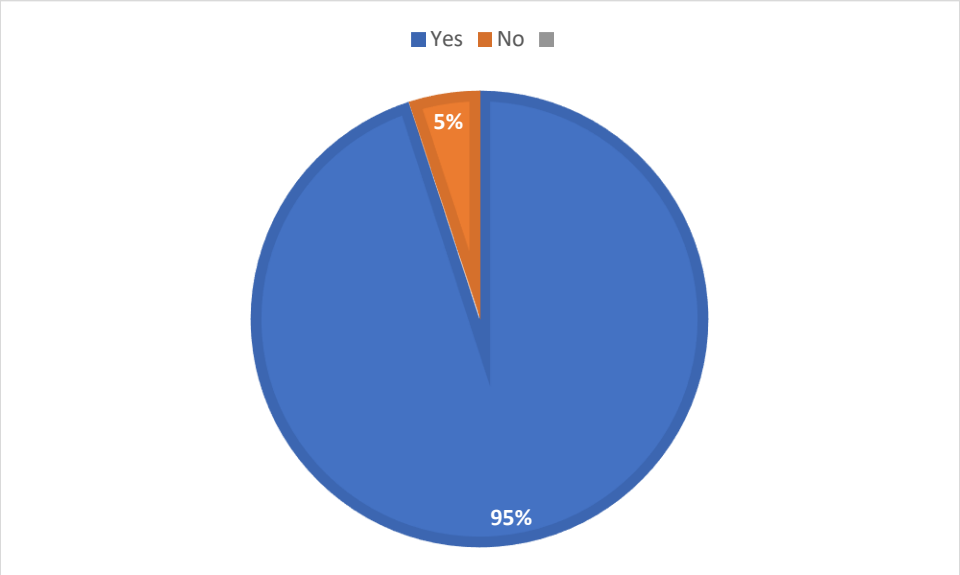


Fig 24: Pharmacologically management of breast cancer

According to this survey around 95% peoples manage the breast cancer pharmacologically which is include chemotherapy, oral medication, IV medication and 5% have no idea about this.

Conclusion

Breast cancer during pregnancy is a rare occurrence, but it can be difficult to diagnose and treat due to the pregnancy. Symptoms may be masked, delayed diagnosis may occur, and treatment options may include surgery, chemotherapy, radiation therapy, or a combination of these therapies. Multidisciplinary care may involve an obstetrician, medical oncologist, surgeon, radiation oncologist, and neonatologist. Breastfeeding may not be possible or safe for the baby. It is essential to discuss any concerns or questions about breast cancer during pregnancy with a healthcare provider who specializes in treating pregnant women with breast cancer. With appropriate care, women with breast cancer during pregnancy can receive effective treatment while protecting the health of their unborn child.