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A Report

# **BREAST CANCER: A REPORT**

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#### Abstract:

Breast cancer is defined as uncontrolled growth of breast cells creating a mass of tissues called "tumor". Though it can affect males, but it is more common in females especially at or above the age of 40 years. Breast cancer (also called) is one of the leading causes of cancer related deaths among females all over the world. Nearly a million women are given the diagnosis of breast cancer each year. During their lifetime, one in every nine women runs the chance of developing breast cancer. Pakistan has the highest incidence of breast cancer among Asian countries.<sup>1</sup>

In Pakistan, breast cancer is a serious public health issue that needs to be addressed right now. In Pakistan, women need to be more informed about breast cancer screening, diagnosis, and treatment options. The social and cultural hurdles that hinder women from getting timely medical attention for their breast issues must also be addressed. Women with breast cancer can live longer and experience better quality of life if they opt for early identification and treatment.

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#### **BREAST CANCER:**

Breast cancer is defined as uncontrolled growth of breast cells creating a mass of tissues called "tumor". Though it can affect males, but it is more common in females especially at or above the age of 40 years. Breast cancer (also called سرطان کا چہاتی) is one of the leading causes of cancer related deaths among females all over the world. Nearly a million women are given the diagnosis of breast cancer each year. During their lifetime, one in every nine women runs the chance of developing breast cancer. Pakistan has the highest incidence of breast cancer among Asian countries<sup>1</sup>. Following terminologies are used by the natives for different breast lumps: "rasoli" (رسولی), "gudood"( عنود), "gilti" (گلٹی), "sojan" (سوجن). Causes for breast cancer in developing countries like Pakistan include late presentation to healthcare facilities, lack of awareness about breast diseases, lack of health facilities in rural and urban areas, spiritual practices for healing, use of herbal medicines, self-medicated hormonal drugs, stigma of rejection by the partner and community, fear of a cancer being not curable. Discussing breast related problems is still considered a "taboo"2.

Risk Factors: In Pakistan, there are numerous biological, environmental, and societal risk factors for breast cancer. In Pakistan, the high incidence and death of breast cancer are caused by several causes. Many Pakistani women put off seeking medical care for breast problems because they are unaware of the problem, fear of being judged, or are limited by money. If they have cancer, it can already be in an advanced stage by the time they get to a medical facility and be difficult to treat<sup>1</sup>.

Lack of knowledge about breast diseases: Many Pakistani women are not aware of the warning signs and symptoms of breast cancer or the value of routine self-examination and screening. Additionally, there is a dearth of knowledge and education regarding the causes, risk factors, and treatment options for breast cancer<sup>3</sup>.

Lack of healthcare facilities in rural and urban areas: Pakistan suffers from a lack of infrastructure, skilled medical staff, and medical supplies for the detection and treatment of breast cancer. Additionally, geographical and cultural barriers prevent women from accessing and using health care. Spiritual practices and complementary therapies: In Pakistan, some women choose to use home remedies, herbal cures, or spiritual healers in place of going to a doctor for their breast issues. These actions could hinder or postpone receiving adequate care, which would worsen the situation<sup>4,5</sup>.

Symptoms of breast cancer may vary from female to female. This include a new lump in one or both breast, change in size or shape of breast, nipple discharge other than milk, retraction of nipple, dimpling of breast skin, swelling of breast and non-settling breast pain. Prognosis of breast cancer depends upon the stage in which it is diagnosed. Early the diagnosis, better the survival chances of a patient<sup>5</sup>.

Diagnosis and Treatment<sup>6-8</sup>: For diagnosis of breast cancer, stepwise investigations need to be done. Breast cancer therapy and diagnosis are influenced by a number of variables, including the patient's age, health status, preferences, and values as well as the kind, size, location, stage, and grade of the tumor. Breast cancer diagnosis and treatment options include:

Physical Examination: A healthcare worker or a doctor looks for any lumps, swellings, discomfort, and discoloration, changes in the skin or nipples, and discharge while also checking both breasts and the axilla (armpits).

*Non-invasive radio-imaging:* These examinations provide images of breast tissue using various radiation types without requiring the insertion of any instruments into the body.

Ultrasonography: Using sound waves, ultrasonography can tell a solid tumor from a cyst filled with fluid.

Mammography: Low-dose X-rays are used in mammography to find abnormal breast tissue alterations. Both screening and diagnostic uses are made of it. Women over the age of 35–40 or those with multi-focal illness prefer this imaging technique.

MRI: A powerful magnetic field and radio waves are used in magnetic resonance imaging (MRI) to provide precise images of the breast tissue. It is used to stage breast cancer or assess worrisome lesions that previous tests have not been able to clearly identify.

Positron emission tomography (PET): This imaging technique makes use of a radioactive material that is put into the bloodstream and builds up in regions with high metabolic activity, such as cancer cells. It is used to stage breast cancer and to look for metastases or recurrence.

### Invasive methods

Fine-needle Aspiration: A little needle is used in fineneedle aspiration to remove cells or fluid from a breast mass or cyst. It is employed to support the classification of a lesion as benign or malignant. *Tru-cut Biopsy:* A small core of tissue is removed from a breast lump using a bigger needle with a cutting edge in a procedure known as a "tru-cut biopsy." More tissue is obtained for histological analysis and molecular testing with this method.

Core biopsy: This procedure involves taking numerous tiny cores of tissue from a breast lump using a hollow needle that is linked to a spring-loaded tool. More tissue is obtained for histological analysis and molecular testing with this method.

*Open biopsy:* This surgical approach entails creating a skin incision and extracting all or a portion of the breast mass. It is used to eliminate a suspicious lesion or to confirm the diagnosis of one.

Treatment of Breast cancer

Surgery: Surgery entails either removing the entire breast (mastectomy) or the tumor along with some nearby normal tissue (lumpectomy). In order to screen for spread of cancer, it may also be necessary to remove part or all of the lymph nodes under the arm (axillary dissection) or close to the breastbone (internal mammary dissection). To lower the risk of recurrence or metastasis, surgery may be followed by radiation therapy, chemotherapy, hormone therapy, or targeted therapy.

Radiotherapy: High-energy photons or particles are used in radiation therapy to kill cancer cells or reduce tumor size. It may be administered either in advance of surgery (neoadjuvant) to shrink the tumor, following surgery (adjuvant) to eradicate any cancer cells still present, or as palliative care to ameliorate the symptoms of advanced disease. It can be external radiation therapy (also known as external beam radiation) and internal radiation therapy.

Chemotherapy: Drugs that either destroy cancer cells or prevent their growth are used. It can be administered either in advance of surgery (neoadjuvant) to reduce the size of the tumor and make it easier to remove, after surgery (adjuvant) to get rid of any cancer cells that could still be present, or as palliative care to improve the symptoms of advanced disease. Chemotherapy can be administered orally, intravenously, or intra-peritoneally (into the belly).

Hormonal Therapy: It employs medications that prevent the growth of some forms of breast cancer by

inhibiting the effects of hormones like progesterone and estrogen. It may be administered as a palliative measure to halt the progression of advanced disease or as an adjuvant therapy following surgery to stop metastasis or recurrence. It is possible to administer hormone therapy intravenously, subcutaneously, intramuscularly, or orally (by mouth).

#### **CONCLUSION:**

In Pakistan, breast cancer is a serious public health issue that needs to be addressed right now. In Pakistan, women need to be more informed about breast cancer screening, diagnosis, and treatment options. The social and cultural hurdles that hinder women from getting timely medical attention for their breast issues must also be addressed. Women with breast cancer can live longer and experience better quality of life if they opt for early identification and treatment.

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