Breast cancer has been the leading cancer as well as the number one cause of cancer deaths among women in Sri Lanka during past 10 years.

In 2011, one in seven of all cancers reported and more than one in three to four cancers reported among women was a breast cancer.

In Sri Lanka, one in 38 women has lifetime risk of developing breast cancer.

**Breast Cancer Incidence - 2011**

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>%</th>
<th>ASR</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>50</td>
<td>0.6</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Female</td>
<td>2419</td>
<td>26.5</td>
<td>23.3</td>
<td>23.0</td>
</tr>
<tr>
<td>Total</td>
<td>2469</td>
<td>14.1</td>
<td>12.2</td>
<td>11.8</td>
</tr>
</tbody>
</table>

Age Standardized Incidence Rate per 100,000 world population

CR – Crude Rate per 100,000 population

**Distribution of Breast Cancer Cases - 2011**

**Age Distribution of Incident Breast Cancer among Women in Sri Lanka - 2011**


National Cancer Control Programme
Ministry of Health, Nutrition & Indigenous Medicine
Public Health Complex, No 555/5, Elvitigala Mawatha, Colombo 05

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ncppsl@yahoo.com
www.nccp.health.gov.lk
Poor survival in breast cancer in low and middle income countries is mainly attributed to the advanced stage of the disease at diagnosis. Among staging available breast cancer patients (women) in 2011 in Sri Lanka, 18.3% were diagnosed at advanced stages.

**Women’s Breast Cancer Stage at the Time of Diagnosis in Sri Lanka - 2011**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>5.6%</td>
</tr>
<tr>
<td>II</td>
<td>32.7%</td>
</tr>
<tr>
<td>III</td>
<td>16.9%</td>
</tr>
<tr>
<td>IV</td>
<td>1.6%</td>
</tr>
<tr>
<td>Not Staged</td>
<td>43.1%</td>
</tr>
</tbody>
</table>

**Risk Factors for Breast Cancer**

**Modifiable**
- Being nulliparous
- Advanced age at first child birth
- Not breast feeding the child/children
- Obesity
- Lack of physical exercise
- Excessive alcohol consumption
- Using oral contraceptive pills for more than 5 years before the age of 35 years
- Prolonged hormone replacement therapy during menopause
- Having undergone ionizing radiation

**Non-modifiable**
- Age
- Family history
- Presence of BRCA gene mutations
- Early age at first menstruation
- Delayed menopause
- First degree relatives with breast cancer
- Higher breast density

**Signs and Symptoms of Breast Cancer**

Most common symptom is a breast lump. In addition, the following signs and symptoms have been reported:

- Breast pain
- Thickening/ hard area in the breast
- Skin changes – peau d’orange
- Satellite nodules or ulcers in the skin
- Nipple discharge – milky (non-lactating women), serous or blood stained
- Nipple inversion
- Erythematous patches

**The Triple Assessment in Diagnosis**

I. Clinical examination (history and examination)
II. Imaging (diagnostic mammography and/or ultrasonography)
III. Histological/ cytological assessment

**Mammography Facilities – Public Sector**

- Col. North Jaffna
- Col. South Kalutara
- N字符串
- N字符串
- N字符串
- N字符串

Early detection of breast cancer can be done through screening by mammography, clinical breast examination by a trained care provider and by self-examination of breasts. Even though the latter two methods of breast examination have not shown to reduce the breast cancer related mortality, evidence suggest they downgrade the tumour. Therefore, the World Health Organization recommend clinical breast examination as an important strategy to reduce the breast cancer burden in low-resource settings with strong health care system.

**Treatment Options**

The choice of treatment depends on many tumor related as well as patient related factors.

Surgery, radiotherapy and chemotherapy are the main means of treatment.

**Surgery**

- Breast conserving surgery: Ranges from a lumpectomy, wide local excision to a partial mastectomy or quadrantectomy.
- Mastectomy: Removal of all breast tissue including the nipple.
- Breast reconstruction surgery: Can be done at the same time as mastectomy (immediate reconstruction) or it can be carried out later (delayed reconstruction).
- Lymph node surgery: Sentinel lymph node biopsy may be carried out to find out the stage of the tumor.

**Radiotherapy**

- Breast radiotherapy: Following breast conserving surgery
- Chest wall radiotherapy: Following mastectomy
- Breast boost: Some women may be offered a boost of high dose radiotherapy in the area where the cancer was removed
- Radiotherapy to lymph nodes: For metastatic cancer with a spread to axillary lymph nodes

**Chemotherapy**

- Neo-adjuvant chemotherapy: Cytotoxic medication given prior to the surgery to shrink the tumor
- Chemotherapy: Usually a combination of cytotoxic drugs are given following the surgery

**Hormone Treatment**

For hormone receptor (oestrogen/progesterone) positive tumors

**Targeted Therapy**

For tumors with human epidermal growth factor receptor 2 (HER2)

Source for all data on breast cancer in Sri Lanka:
National Cancer Registry
National Cancer Control Programme

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