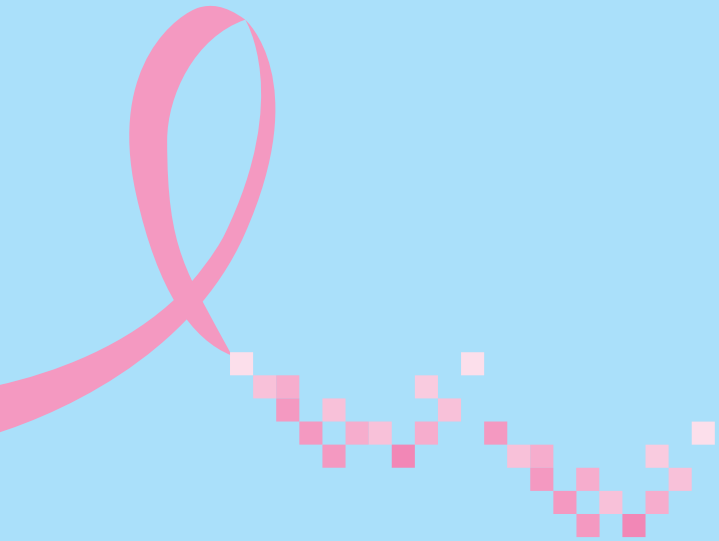

CHAPTER 2

DISEASE, TREATMENT TRENDS AND CLINICAL OUTCOMES OF BREAST CANCER

CHAPTER 2
DISEASE, TREATMENT TRENDS AND CLINICAL OUTCOMES OF BREAST CANCER

This chapter includes the clinical characteristics, cancer characteristics, histological and molecular characteristics, as well as the treatment modalities of 3,467 breast cancer cases and patient status of 3,375 cases.

The patterns of clinical characteristics and cancer characteristics were compared by the types of medical service the patients received at their diagnosis and during treatment. Based on the type of medical facilities where patients received treatment, they were classified into three groups: (1) private sector, (2) public sector and (3) a mix of private and public sectors.

The comparison by types of medical facilities enables us to understand the patterns and variation of clinical characteristics and breast cancer case management. Out of the 3,467 patients, 833 (24.0%) were diagnosed and treated at private medical facilities; 1,335 (38.5%) had their treatment at public medical facilities and 1,021 (29.4%) used both private and public medical services.

Key findings

I. Clinical presentations

- Approximately 75% of breast cancer cases were self-detected by chance, whereas only 13.8% were screen-detected.
- In self-detected cases, the majority (92.4%) of the patients presented with painless lumps; only 4.7% felt pain in their breasts; 4.9% had nipple discharge and 0.8% presented with palpable axillary nodes.
- 45% of breast cancer patients sought their first medical consultation within 1-3 months of the onset of symptoms.

II. Cancer characteristics

- Of the 3,467 breast cancer cases, 2,957 (85.3%) were invasive breast cancer; 422 (12.2%) were in situ breast cancer and 88 (2.5%) were unknown.
- The distribution of cancer at stages 0, I, IIA, IIB, III and IV at the time of diagnosis were 11.6%, 31.1%, 28.3%, 13.2%, 11.4% and 1.0% respectively ; 3.4% were unstaged.

III. Histological and molecular characteristics

- The most common histological type was ductal (invasive breast cancer: 84.8% and in situ breast cancer: 93.9%)
- Estrogen receptor positive (ER+), progesterone receptor positive (PR+) and human epidermal growth factor receptor 2 positive (HER2+) status was found in 75.3%, 63.3% and 23.7% of invasive breast cancer respectively. The most common molecular subtype in invasive breast cancer was ER+PR+HER2- subtype (46.9%). Triple negative (ER-PR-HER2-) accounted for 11.6% of invasive breast cancer.
- Estrogen receptor positive (ER+), progesterone receptor positive (PR+) and human epidermal growth factor receptor 2 positive (HER2+) status was found in 76.6%, 66.8% and 32.0% of in situ breast cancer respectively.

IV. Treatment modalities

- 98.4% of breast cancer patients underwent surgery. Breast conserving surgery rate was highest in the youngest patient group. Mastectomy rate was highest in the age group of 80 and above, and higher for patients using public medical services. The patients using private medical services had the highest rate of breast reconstruction.
- 63.2% of breast cancer patients received chemotherapy and 63.7% received radiotherapy.
- 66.2% received endocrine therapy. Tamoxifen was the most commonly used drug (83.5%), followed by aromatase inhibitors (18.4%).
- 6.2% of patients with invasive breast cancer received targeted therapy. Trastuzumab (92.4%) was the most commonly used drug in targeted therapy, followed by lapatinib (2.4%).
- 33.5% of breast cancer patients took complementary and alternative therapies. The most common type of alternative therapy was Chinese medicine (67.7%).

V. Patient status

- Follow-up studies were done on the clinical outcomes of 3,375 patients. The mean duration of the follow-up studies was 3 years.
- Locoregional and distant recurrences occurred in 2.6% and 2.7% of the patient cohort respectively.
- Breast cancer-specific mortality occurred in 0.2% of the patient cohort (7 patients died of breast cancer) with a mean follow-up of 3 years.