

INFORMATION PAPER ON FEMALE BREAST CANCER

What you need to know

- *Breast cancer is the most common cancer among women in Singapore.*
- *X-ray mammography is widely used for the screening of breast cancers.*
- *Women aged 50 years and older are advised to go for mammograms once every two years.*

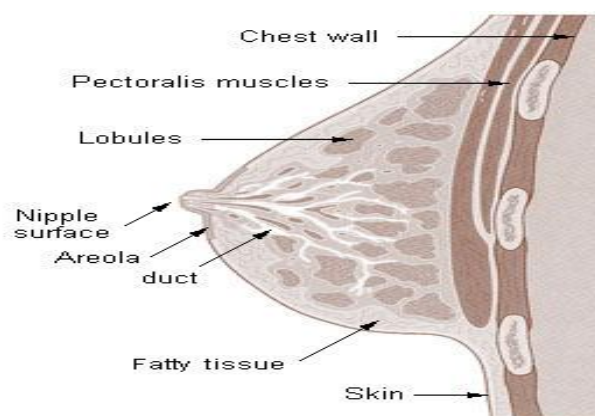
OBJECTIVES

This paper aims to provide an overview of the trends of breast cancer among women in Singapore, to raise awareness on its risk factors and to encourage screening for early detection of breast cancer.

INTRODUCTION

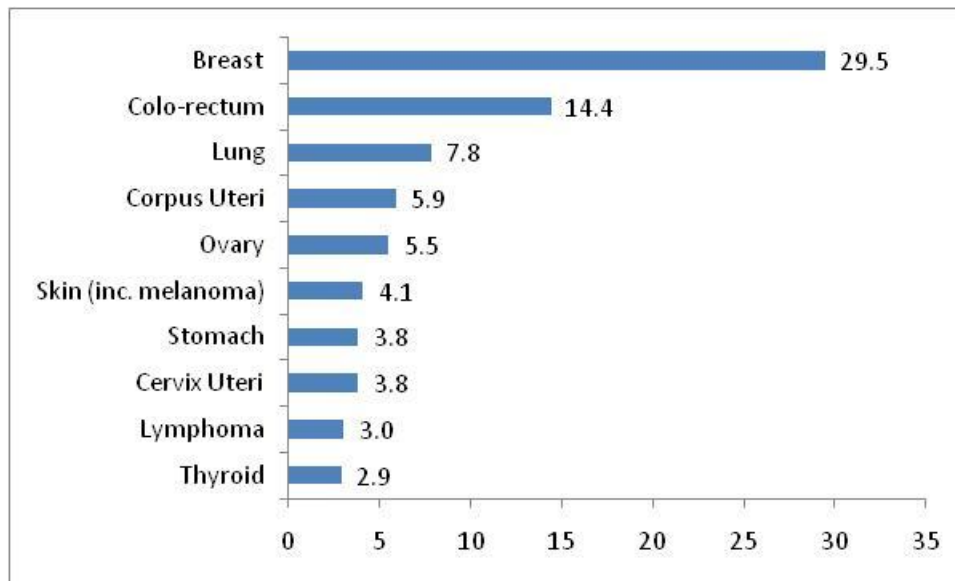
Breast cancer occurs mainly in women. Within the female breasts, there are groups of lobules that secrete milk in late pregnancy and early childbirth, milk is then funnelled through the ducts to the nipples (Figure 1). Breast cancers develop mainly in the linings of these ducts and less commonly in the lobules and nipples.

Figure 1: Anatomy of the Female Breast



Data from the Singapore Cancer registry indicates that breast cancer remains the most common cancer among women, followed by colo-rectal and lung cancers for the period 2005-2009 (Chart 1).

Chart 1: Ten Most Frequent Cancers in Women (%), 2005-2009



Among the ethnic groups, the Chinese women have the highest age-standardised incidence, followed by the Malays and the Indians (Table 1).

Table 1: Crude and Age-Standardised Incidence Rates of Female Breast Cancer by Ethnic Groups, 2005 – 2009

Variables	Number	CR (95% CI)	ASR (95% CI)
All	7458	82.3 (80.4-84.2)	60.0 (58.6-61.3)
Chinese	6029	88.3 (86.1-90.5)	60.8 (59.2-62.3)
Malay	842	68.6 (63.9-73.2)	58.7 (54.6-62.8)
Indian	438	57.5 (52.1-62.9)	53.8 (48.6-59.0)

CR: Crude rate per 100,000 per year

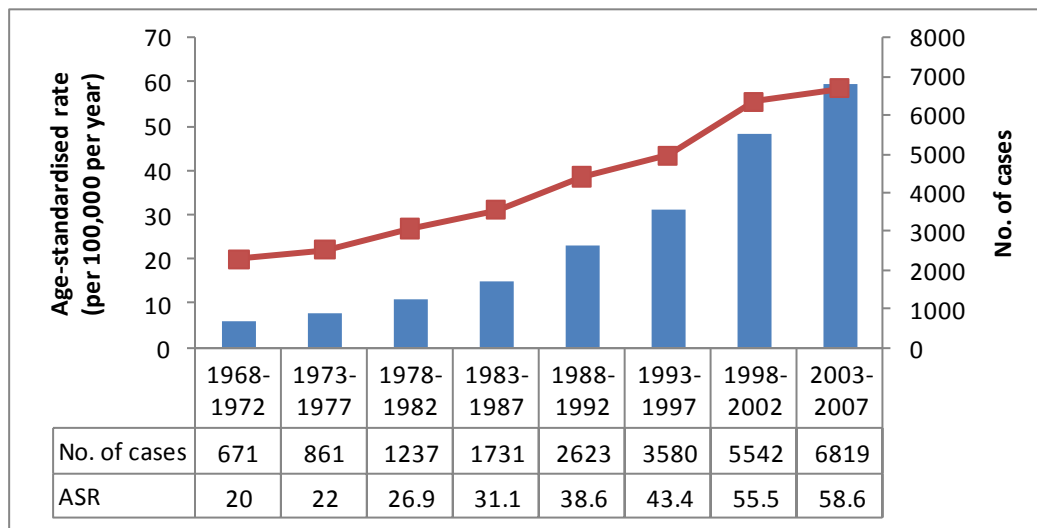
ASR: Age-standardised rate per 100,000 per year

WHAT IS THE TREND OF BREAST CANCER IN SINGAPORE?

The number of newly diagnosed breast cancers in females has been consistently on the rise over the last forty years. The age-standardised incidence rate had increased almost 3 fold from 20.0 (1968-72) to 58.6 per 100,000 per year (2003-07) (Chart 2).

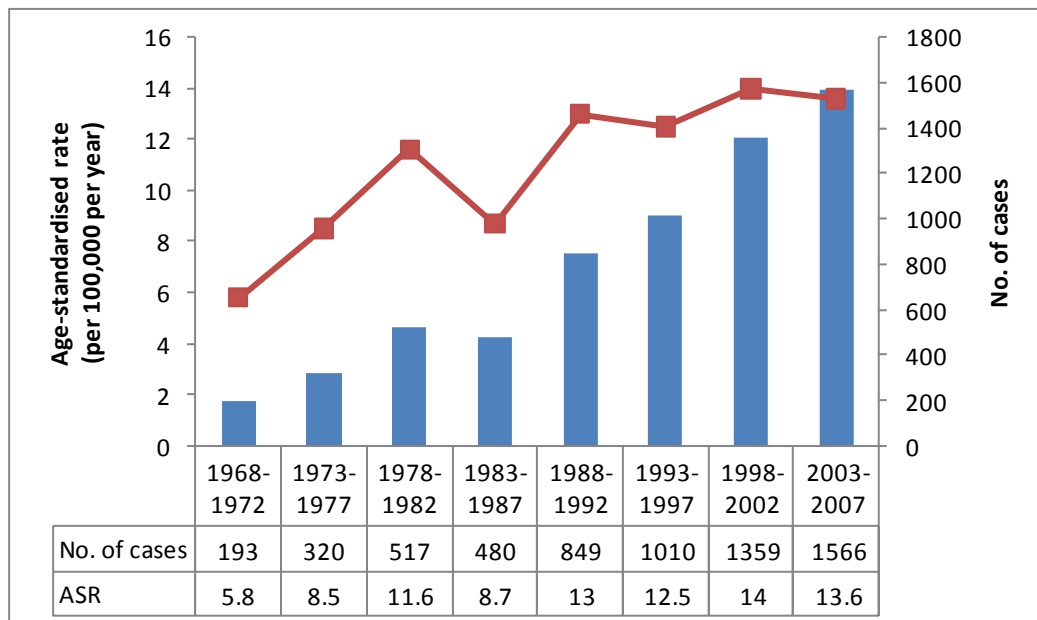
Based on cancer registry data for the period 2005-2009, the lifetime risk for breast cancer was estimated to be 6.12%. This means that Singapore women have a 1 in 16 chance of developing breast cancer in their lifetime. For the period 2003 to 2007 there were 6819 newly diagnosed cases of breast cancers and 1566 deaths from breast cancers.

Chart 2: Number and Age-Standardised Incidence Rates for Female Breast Cancer (per 100,000 women per year): 1968-2007



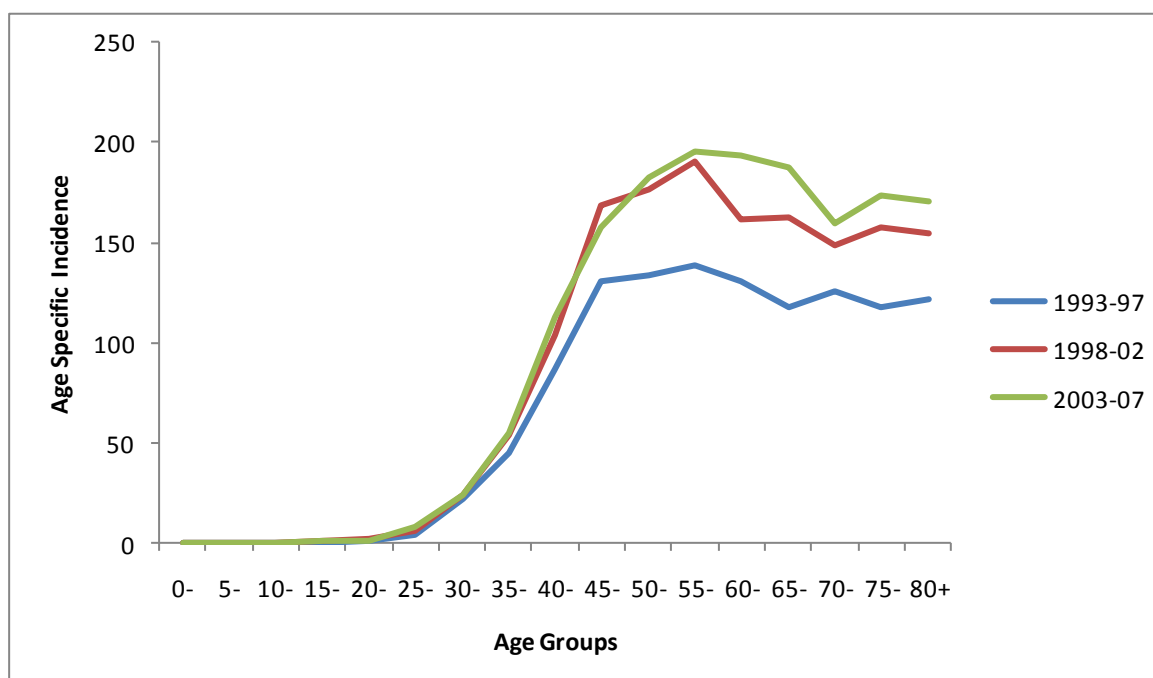
Despite the increasing trends, the age-standardised mortality rates for breast cancer have been fairly stable since 1990 ranging from 12.5 to 14.0 per 100,000 women per year for the period 1988-2007 (Chart 3).

Chart 3: Number and Age-Standardised Mortality Rate for Female Breast Cancer (per 100,000 women per year): 1968-2007



The age-specific incidence for female breast cancer rises with age and peaks after menopause at the age group 55-59 (Chart 4).

Chart 4: Age Specific Incidence Rates (per 100,000 women per year) for Female Breast Cancer



WHAT ARE THE RISK FACTORS OF BREAST CANCER?

The risk of breast cancer increases with age. Other risk factors for breast cancer include:

- Having a family history of breast cancer in a first-degree relative
- A past medical history of malignant or benign (non-cancerous) breast disease
- A history of ovarian cancers
- Early onset of menstruation
- Late menopause
- Having first child after the age of 30
- Women who have fewer children or never had children
- Women on hormone replacement therapy
- Weight gain after menopause

However, the absence of any risk factors does not necessarily safeguard a woman against breast cancer. Regular screening and self breast examination are important and recommended for early detection of breast cancer as early stages of the disease may not have any symptoms.

SHOULD I BE SCREENED FOR BREAST CANCER?

Early stages of breast cancer may not have any symptoms; hence regular screening is important to see if it could be present. Breast cancer can be treated effectively if detected early. Women should look out for the signs of breast cancers which include:

1. A painless lump in the breast or armpit
2. Rashes around the nipple
3. Discharge from the nipple
4. Changes in the skin over the breast or nipple
5. Retraction (pulling in) of the nipple

A monthly breast self-examination (BSE) is recommended for women from the age of 30 to improve the awareness of their own breasts and breast cancer. The best time to do a BSE is 7 to 10 days after the start of menstruation.

X-ray mammography is most reliable way to detect breast cancer, even before any lumps can be felt.

WHEN SHOULD I GO FOR BREAST CANCER SCREENING?

Women at normal risk aged 40-49 should be encouraged to go for mammograms every year after discussing with their doctor on the risks and benefits. Women aged 50 years and older are advised to go for mammograms once every two years.

WHERE CAN I GO FOR SCREENING?

X-ray centres at selected polyclinics and hospitals as well as private X-ray centres offer mammography. Alternatively, women can join the BreastScreen Singapore (BSS)¹ programme which offers subsidised mammography for Singapore citizens and permanent residents at the X-ray centres of polyclinics. Details of BSS can be obtained at the Health Promotion Board website (www.hpb.gov.sg).

¹ Organised by the Health Promotion Board, BreastScreen Singapore is the national breast cancer screening programme which encourages women aged 50 and above to go for regular screening mammography.

CAN BREAST CANCER BE PREVENTED?

There is some evidence to suggest that physical activity, maintaining a healthy diet and limiting alcohol intake to less than one drink per day can reduce the risk of breast cancer². Current HPB physical activity guidelines recommend 150 minutes of moderate intensity or 75 minutes of vigorous intensity physical activities per week to gain substantial health benefits. More information on healthy living can be obtained at the Health Promotion Board website.

² Adami, H.O., Hunter, D., Trichopoulos, D. Textbook of Cancer Epidemiology. Second edition.