

REPORT HIGHLIGHTS

- ► The total number of breast cancer patients covered by this report was 7,241.
- ► The mean age of the patients at diagnosis was 50.1 years and the median age at diagnosis was 48.8 years. By comparison, the median age at diagnosis in US women was 61 years.
- ► The most common bra size was 34 inches (26.5%) and the most common bra cup size was B or smaller (56.3%).
- ► Among the 57% of the patients who were working before diagnosis, 8.9% reported that they were required to work night duties.

Risk factors

► The 10 most common risk factors for breast cancer in the patients:

	%
Lack of exercise (<3 hours / week)	(74.9)
No breastfeeding	(63.4)
High level of stress (>50% of time)	(37.1)
Being overweight / obese	(36.1)
No childbirth / First live birth age after 35	(23.5)
Family history of breast cancer	(14.9)
Diet rich in meat / dairy products	(13.9)
Early menarche (<12 years old)	(13.3)
Use of hormone replacement therapy	(11.0)
Frequent night shifts	(8.9)

▶ 83.2% of patients had 2 or more risk factors. Only 3.2% did not have known risk factors.

Screening habits

▶ The rates of regular breast self-examination and mammography screening (21.9% and 24.6% respectively) in the cohort were low. Interestingly, the rates of those who had never conducted breast self-examination or clinical breast examination were higher in patients aged 40 and above than patients under 40.

Cancer characteristics, histological and biological characteristics and treatment for breast cancer

- ▶ Of the 6,848 patients, 87.1% self-discovered their breast cancer by chance.
- ▶ 82.1% were diagnosed at early stages (stages 0-II); 14.1% were diagnosed at advanced stages (stages III-IV) and 3.8% were unstaged. Of them, 5,822 patients (85%) had invasive breast cancer.
- ▶ 1,589 patients (23.2%) were diagnosed and treated at private medical facilities; 2,797 (40.8%) had their treatment at public medical facilities; 2,462 (36.0%) used both private and public medical services.
- ▶ 30.8% of the patients sought medical consultation within one month of the onset of symptoms. 27.6% of the patients took more than 12 months to seek their first medical consultation.
- ➤ Tumour size of invasive breast cancer cases ranged from 0.01-22 cm. The mean tumour size in self-detected cases vs. screened-detected cases: 2.3 cm vs. 1.9 cm. Nearly half (48.1%) of the patients had tumours larger than 2 cm.
- ▶ Of the patients, 12.1% (829) had in situ breast cancer with mean tumour size of 2.14 cm (range: 0.02-9 cm). 42.3% of patients had in situ tumours larger than 2 cm.

Histological and biological characteristics of invasive and in situ cancer:

	Invasive cancer %	In situ cancer %
Histological type		
Ductal	83.8	91.7
Lobular	4.1	1.4
Others	12.1	6.9
Biological characteristics		
ER+	75.5	77.2
PR+	63.0	67.2
HER2+	22.3	30.9
Ki67 index ≥ 14%	54.6	30.5
ER-PR-HER2-	12.6	_
Lymphovascular invasion	on 29.7	_

ER+: oestrogen receptor positive; ER-: oestrogen receptor negative

PR+: progesterone receptor positive; PR-: progesterone receptor negative

HER2+: human epidermal growth factor receptor 2 positive

HER2-: human epidermal growth factor receptor 2 negative



Treatment

- ▶ Within the patient cohort, the most common combination of treatments was surgery, chemotherapy, endocrine therapy and radiotherapy (30.0%).
- ► The most common treatment combination used for stage 0 cases was surgery and radiotherapy (42.3%).
- ► The most common treatment combination used by patients of stage I disease was surgery, endocrine therapy and radiotherapy (24.8%).

	Total Treatment in		Treatment in			St	age		
	%	private sector		0	1	IIA	IIB	III	IV
		%	%	%	%	%	%	%	%
Surgery	98.4	60.5	39.5	99.2	99.9	99.8	99.9	99.6	61.9
Breast conserving surgery	37.7	46.3	25.3	55.4	49.6	37.8	24.3	14.9	7.1
Mastectomy	62.3	53.7	74.7	44.6	50.4	62.2	75.7	85.1	92.9
Chemotherapy	62.1	20.0	80.0	_	41.3	83.8	91.6	93.8	89.9
Radiotherapy	62.3	21.8	78.2	54.8	55.4	59. 7	78.4	93.7	67.0
Endocrine therapy	65.9	21.1	78.9	21.8	73.1	73.5	74.6	75. 3	82.9
Targeted therapy	6.4	24.9	<i>7</i> 5.1	_	3.1	7.7	8.2	14.8	13.8

Physical discomfort after treatment

▶ Among all types of treatment, chemotherapy was the most distressing for patients (55.5%). Chemotherapy was not required for stage 0 patients; 41.3% of stage I patients underwent chemotherapy, and 83.8-93.8% of patients diagnosed at stage II or higher stages were treated with chemotherapy.

Treatment	% of patients with severe discomfort	Common forms of discomfort
Chemotherapy	55.5	Vomiting
Radiotherapy	10.0	Dry skin, skin burns
Surgery	9.9	Wound pain
Targeted Therapy	7.9	Pain
Endocrine Therapy	7.0	Hot flushes

Psychosocial impact of diagnosis & treatment

- ► Results showed that at the time of diagnosis, 33.4% of patients felt depressed, and 18.2% of patients were in disbelief. 11.8% worried about recurrence all the time.
- ► After treatment, 52.8% patients felt that cancer changed their value system.
- Older patients were less likely to have positive changes in the outlook of life after breast cancer (with the exception of pateints over 80).
- ➤ Younger patients were more likely to worry about recurrence (60.5% in age group of 50-59; 67.9% in age group of 20-29).
- ➤ 78.5% of patients reported lifestyle modifications after breast cancer diagnosis. The most common change was change in diet (71.2%), followed by increase in exercise (59.2%).
- ► The most common way of managing negative emotions reported by the patients was direct verbal expression (52.7%).