

1.4 Breast screening habits

Early detection saves lives. HKBCF encourages women to foster a habit of regular breast screening. The recommendations are as follows:

Age	BSE	CBE	MMG
From 20 to 39	Monthly	Every 3 years	--
40 or above	Monthly	Every 2 years	Every 2 years

BSE: breast self-examination, CBE: clinical breast examination, MMG: mammography screening

Breast ultrasound imaging could be considered for dense breasts evident by mammogram at the discretion of doctor

Habits of breast examinations including breast self-examination, clinical breast examination, mammography screening and breast ultrasound imaging at the time of diagnosis among 959 patients were summarised below.

Breast self-examination

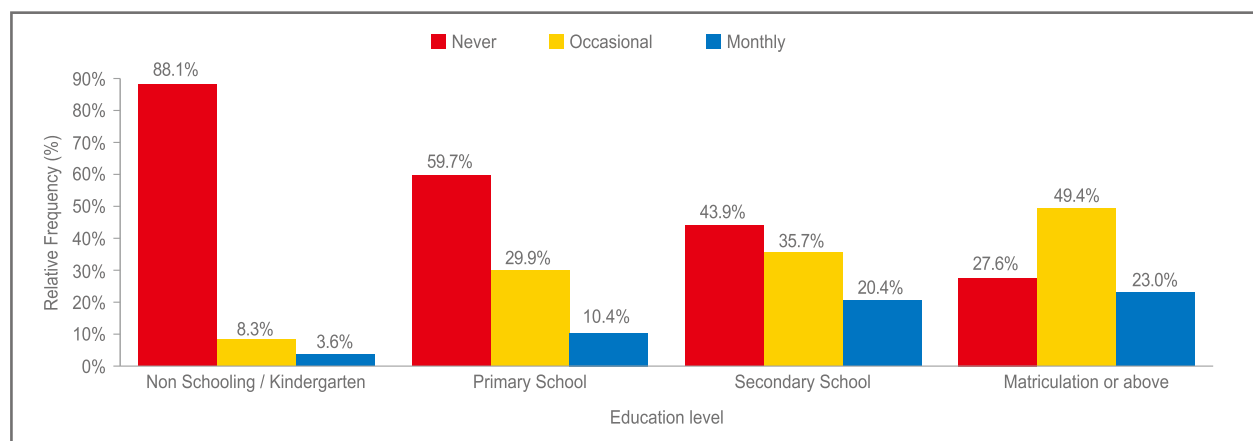
Only 15.9% of the patients performed breast self-examination on a regular basis whereas 84.1% had never or had occasionally practised breast self-examination at the time of diagnosis. Practice of regular breast self-examination in the patients aged 40 or above was 5.8% lower than in the patients aged below 40 (Table 1.4.1). Proportion of practising regular breast self-examination in the patients with lowest education level was 19.4% lower than that in the patients who completed matriculation education (Figure 1.4.1).

Table 1.4.1 Breast screening habits in the two age groups

Breast examination	Overall	Below age 40 (Younger group)	Age 40 or above (Older group)
BSE			
Never	492 (51.5%)	30 (37.0%)	465 (53.1%)
Occasional	312 (32.6%)	34 (42.0%)	277 (31.7%)
Monthly	152 (15.9%)	17 (21.0%)	133 (15.2%)
CBE			
Never	588 (61.3%)	46 (56.8%)	542 (61.7%)
Occasional	123 (12.8%)	10 (12.3%)	113 (12.9%)
Regular	248 (25.9%)	25 (30.9%)	223 (25.4%)
MMG			
Never	773 (80.9%)	64 (79.0%)	709 (81.1%)
Occasional	75 (7.9%)	6 (7.4%)	69 (7.9%)
Regular	107 (11.2%)	11 (13.6%)	96 (11.0%)
USG			
Never	785 (82.2%)	62 (76.6%)	723 (82.8%)
Occasional	82 (8.6%)	10 (12.3%)	72 (8.2%)
Regular	88 (9.2%)	9 (11.1%)	79 (9.0%)

BSE: breast self examination, CBE: clinical breast examination, MMG: mammography screening, USG: breast ultrasound screening

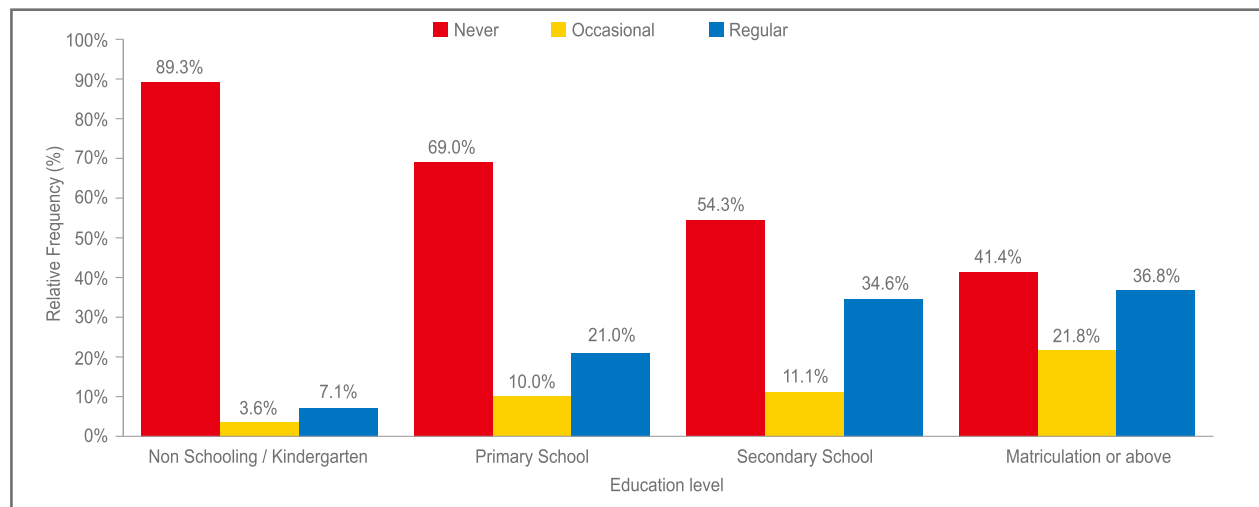
Figure 1.4.1 Habits of breast self-examination at the time of diagnosis by education level



Clinical breast examination

Regular clinical breast examination was performed in 25.9% of the patients whereas 74.1% had never or occasionally practised clinical breast examination at the time of diagnosis. Proportion of practising regular clinical breast examination was 5.5% lower in the patients aged 40 or above than in the patients aged below 40 (Table 1.4.1). Proportion of practising regular clinical breast examination in the patients with lowest education was 29.7% lower than in the patients who completed matriculation (Figure 1.4.2).

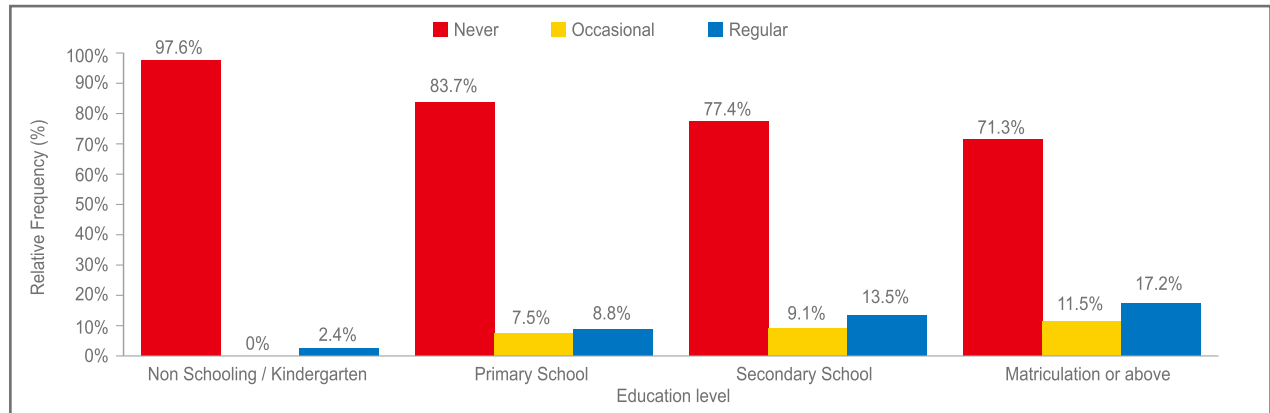
Figure 1.4.2 Habits of clinical breast examination at the time of diagnosis by education level



Mammographic screening

11.2 % of the patients performed regular mammographic screening whereas 88.8% had never or had occasionally performed mammography at the time of diagnosis. Proportion of practising regular mammography in the patients aged 60 or above was 8.9% lower than in the patients aged 40-59. Proportion of patients practising regular mammography in the lowest education group was 14.8% lower than the counterpart in the group with matriculation or higher education (Figure 1.4.3).

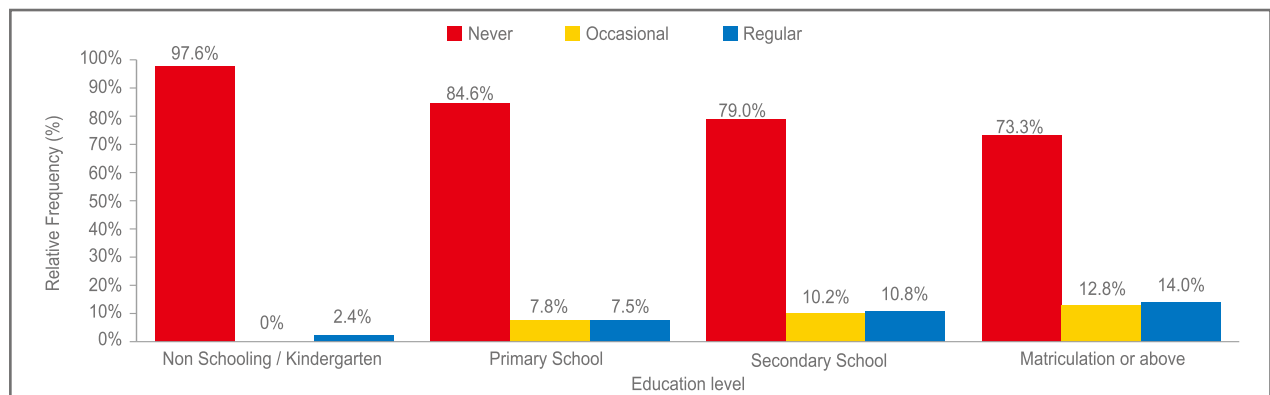
Figure 1.4.3 Habits of mammography screening at the time of diagnosis by education level



Breast ultrasound screening

Breast ultrasound imaging is often recommended by doctors for women with dense breast seen on mammography. It was shown that 9.2% of the patients performed regular breast ultrasound imaging. About 90% had never or occasionally performed breast ultrasound imaging at the time of diagnosis. Proportion of practising regular breast ultrasound was 2.1% lower in the patients aged 40 or above than in the patients aged below 40 (Table 1.4.1). Proportion of the patients practising regular breast ultrasound imaging in the lowest education group was 11.6% lower than that in the matriculation or higher education group (Figure 1.4.4).

Figure 1.4.4 Habits of breast ultrasound screening at the time of diagnosis by education level





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



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The research includes clinical characteristics, cancer characteristics, histological and molecular characteristics and the treatments of 2,130 breast cancer cases, of which the patient status of 1,630 is also included for survival analysis.

The patterns of clinical characteristics, cancer characteristics and types of treatments were compared by cancer stage at diagnosis and by the types of medical care. Based on the type of medical care received, the patients were classified into three categories: (1) total private medical care, (2) total public medical care and (3) a mix of private and public medical care. Medical care refers to treatment provided by healthcare providers such as hospitals and clinics.

The allocation of medical care types helps us further understand the patterns and variability of clinical characteristics and breast cancer case management. Out of the 2,130 patients, 492 patients (23.1%) were treated in private medical facilities, 511 patients (24.0%) received treatment in public medical facilities and 869 patients (40.8%) received treatment in both private and public medical facilities.

The BCR has only been in operation since 2008. The mean (average) follow-up time for patients is about 2 years. Therefore, the information presented in this Chapter was premature for any conclusion on the clinical outcomes. It is noteworthy that the information collected from long-term follow-up studies including cancer recurrence, survival and mortality by cancer stage at diagnosis would be particularly valuable for improvement of breast cancer care.

Key Findings

I. Clinical presentations

- About 77% of breast cancers were self-detected whereas only 13.2% of breast cancers were screen-detected.
- Median tumour sizes of self-detected patients and screen-detected patients were 2.0 cm and 1.4 cm respectively.
- In self-detected cancers, the majority (89.4%) were painless lumps, only 4% had pain, 4.6% showed other visible breast symptoms such as nipple retraction, nipple discharge, skin change and asymmetry and 0.3% presented with palpable axillary node.

II. Cancer characteristics

- Of 2,130 breast cancer cases, 1853 (87%) were invasive breast cancers, 252 (11.8%) in situ breast cancers and 25 (1.2%) being unknown.
- Distribution of cancer stages 0, I, IIA, IIB, III, IV and unstaged at the time of diagnosis were 11.4%, 31.4%, 28.7%, 12.3%, 12.5%, 0.8% and 2.9% respectively.

III. Histological and molecular characteristics

- The most common histological type of invasive breast cancer was ductal carcinoma (82.4%).
- Estrogen receptor positive (ER+), progesterone receptor positive (PR+) and human epidermal growth factor receptor 2 positive (HER2+) were found in 75.5%, 63.5% and 23.1% of invasive breast cancers respectively. The most common molecular subtype in invasive breast cancer was ER+PR+HER2- subtype (48.6%). Triple negative (ER-PR-HER2-) accounted for 12.1% of invasive breast cancers.

IV. Treatments

- 98.7% underwent surgery. The mastectomy rate in the "total public medical care" group was two-fold of the counterpart in the "total private medical care" group.
- The chemotherapy rate was 67.9% in the 1,853 patients with invasive breast cancer.
- The radiotherapy rate among the 2,130 patients was 64.8%. Chest wall, whole breast and local boost were the three most common radiated regions.
- Among the 2,130 patients, 64.1% received endocrine therapy. Tamoxifen was the most commonly used endocrine therapy drug (82.1%), followed by aromatase inhibitor (14.0%).
- 7.6% of the patients with invasive breast cancer received targeted therapy. Trastuzumab (94%) was the most commonly used drug for targeted therapy, followed by lapatinib (2.1%).
- About 13% of the 2,130 patients took complementary and alternative therapies.

V. Patient status

- 1,630 patients were followed up for their patient status. The mean duration of follow-up was 2.2 years.
- Locoregional and distant recurrences occurred in 2.0% and 2.8% of the patient cohort respectively.
- Cancer-specific mortality occurred in 0.3% of the patient cohort. The average survival time was 2.7 years after diagnosis of breast cancer.