

Impact of opportunistic screening on Breast Cancer in Hong Kong

乳房普查對香港乳癌狀況的影響

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香港推行乳房普查計劃後乳癌期數之改變

| 期數 | 80年代 | 10年代 |
|------|------|------|
| 0期 | <1% | 11% |
| I期 | <10% | 31% |
| II期 | 50% | 43% |
| III期 | 30% | 13% |
| IV期 | 10% | 2% |





- A non-government initiative; operated by the HKBCF since 2007
- The first of its kind comprehensive breast cancer-specific data collection & monitoring system
- Near 10,000 cases collected
- Public access to data analysis published in Annual report and bulletin



Data from Hong Kong Breast Cancer Registry

Higher rates of early stage cancer in screen-detected cases

| Cancer Stage | Overall % | Self detected % | Screen detected % | |
|-----------------|--------------|--------------------|----------------------|--|
| 0 | 11 | 8 38 | 28 68 | |
| 1 | 31 | 30 | 40 | |
| II | 43 | 45 | 26 | |
| III | 13 | 15 | 5 | |
| IV | 2 | 2 | 1 | |

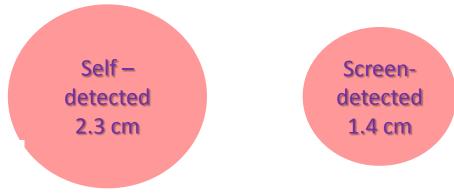
- •70% of the screen-detected cancers were early stage
- significantly higher rate of self-detected cancers were advanced stage



Data from Hong Kong Breast Cancer Registry Screening Helps Detect Breast Cancer Early

Screening Habit

- Women of older ages, with lower level of education or residing in low-income districts showed lower rates of breast screening.
- Only 13 % of breast cancer cases were detected through routine breast cancer screening
- 87% were detected by patients by chance; 93% felt painless lumps.
- Size of self-detected tumour is 50% bigger





乳癌的比較 - 普查與自我偵測的分別

(香港乳癌資料庫第四號報告數據)

| 腫瘤/治療特點 | 乳房x光造影 偵測的癌症 | 自我偵測的癌症 | P值 |
|---------------------|---------------------|---------------|---------|
| | Screen- detected | Self-detected | P-value |
| 中值尺寸(厘米) | 1.4 | 2.3 | <0.001 |
| Median size(cm) | | | |
| 乳房保留手術比率 | 53.7% | 35.0% | <0.001 |
| Breast-conserving | | | |
| surgery - rate | | | |
| 陰性淋巴結比率 | 82.3% | 57.0% | <0.001 |
| Negative nodal rate | | | |
| 化療比率 | 40.3% | 74.9% | <0.001 |
| Chemotherapy rate | | | |



普查偵測的癌症

- 早期癌症佔多數
- 腫瘤較細小
- 較少淋巴結入侵
- 較多採用乳房保留手術
- 較少採用其他癌症相關的治療如化療

乳癌普查計劃

• 婦女應有權知道普查的好處和壞處

· 當婦女做了明智的決定後,應當向婦女提供適當的服務



Free Breast Screening Program

- Support women with low income or financial difficulties to get screened for breast cancer for free
- Our study showed patients living in low-income districts had low screening rates

To date, 4000+ women were subsidised to have screening (and diagnosis when necessary).





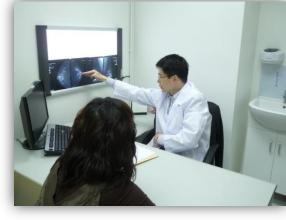


BHC service

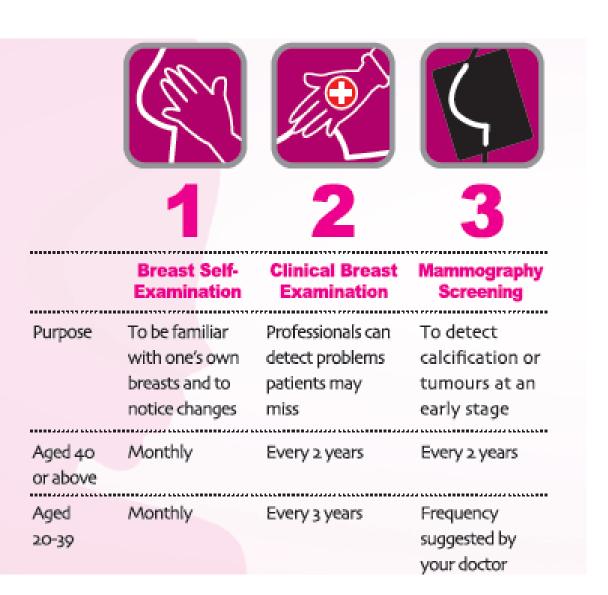
- CBE
- MMG
- Nurse to call for result
- BI-RADS system
 - 0: arrange US
 - 1 or 2: arrange next screening
 - 3: arrange follow up scan
 - 4 or 5: doctor consultation session
- biopsy (FNA or core biopsy)







Advocating Breast Cancer Screening



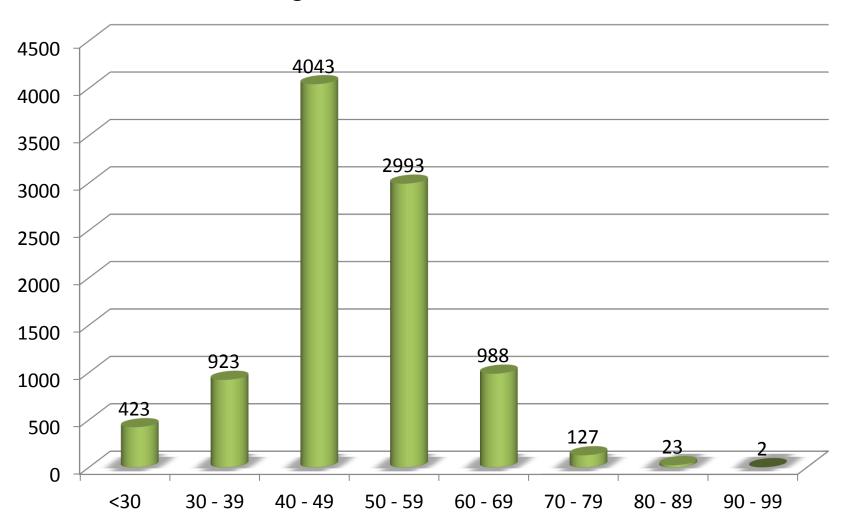




Have provided around 10,000 screenings since its inauguration in May 2011



Age Distribution of All cases





IMAGING DIAGNOSIS BY BI-RADS

May 2011-March 2013

| | MMG | USG | |
|----|------|------|--|
| 0 | 261 | 4 | |
| 1 | 3196 | 1453 | |
| 2 | 3193 | 1483 | |
| 3 | 684 | 1336 | |
| 4A | 88 | 213 | |
| 4B | 61 | 59 | |
| 4C | 62 | 52 | |
| 5 | 62 | 74 | |
| 6 | 4 | 2 | |
| | 7611 | 4676 | |

MMG 4-6 =277/7611=3.6%, USG 4-6= 8.6%



165 people diagnosed with breast cancer

 Detection rate: 1.73% (much higher than the overseas average of 0.5%)



Background

Subsidized by Hong Kong Jockey Club Charity Trust

- Established in May 2011
- Service
 - CBE by nurse
 - MMG +/- US (radiologist partners)

41%

Doctor consultation (biopsy, counselling, referral for treatment)

Paid

Free

Paid vs free



Detection of cancer

| | Come with symptom | asymptomatic cases | Total |
|---|-------------------|--------------------|--------|
| Number "screened" 5/2011 – 31/3/2013 | 2482 | 7068 | 9550 |
| Number of cancer detected | 123 | 42 | 165 |
| Cancer detection rate | 4.9% | 0.59% | 1.73 % |
| Stage 0 | 3 (2.7%) | 7 (22%) | 10 |
| I | 28 (25%) | 11 (34%) | 39 |
| II | 52 (47%) | 8 (25%) | 60 |
| III | 25 (23%) | 2 (6%) | 27 |
| IV | 3 (2.7%) | | 3 |
| No operation done | | 4 | 4 |
| Newly Diagnosis | | | 22 |



Symptomatic cases

- Unmet demand
 - Dubious symptom
 - Cannot afford private health care
 - Wait too long in public system
- Free access (without referral)
- Affordable (price % lower than current private market)
- Fast diagnosis
 - Time to MMG result disclosure: 2-7 days

教育

於公司、團體、學校及社區 舉辦乳健教育講座,提高防範 乳癌的認識和鼓勵養成定期檢 查乳房的習慣







Breast Health Education

May-11 to Mar-13

計劃開展至今,乳健中心曾接觸超過110個團體,舉辦了148 場教育活動,活動遍佈香港16個地區,已接觸超過28,233名婦女。

| 港島區 | 活動數量 | 九龍區 | 活動數量 | 新界區 | 活動數量 |
|-----|------|-------|------|-----|------|
| 中西區 | 23 | 九龍城 區 | 4 | 葵青區 | 5 |
| 灣仔區 | 6 | 油尖旺區 | 20 | 沙田區 | 10 |
| 東區 | 26 | 深水埗區 | 22 | 大埔區 | 2 |
| 南區 | 4 | 黃大仙區 | 7 | 元朗區 | 5 |
| | | 觀塘區 | 6 | 屯門區 | 4 |
| | | | | 西貢區 | 2 |
| | | | | 離島區 | 2 |
| 總計 | 59 | 總計 | 59 | 總計 | 30 |



Summary(1)

- Focused centre on breast health, providing education, screening and diagnostic assessment
- Successful in raising awareness of public. Women with dubious symptoms came for breast check and prevalent cancers in the community were therefore detected, giving a 1.73 % cancer detection rate
- Bridging service gap between public and private medical system



Summary(2)

- Affordable price for women and free for economically disadvantaged women
- Quality assured program. Recruiting experienced mammography service provider according to guidelines of HK College of Radiology
- Organized program. Trained breast nurses explain findings to clients, refer those that need assessment according to protocol, instruct breast self exam, conduct clinical breast exam. Arrange recall for regular screening



Summary(3)

- Women with suspected cancer underwent diagnostic assessment at Breast Health Centre, thus shorten waiting time in public hospital system
- Women with confirmed cancer are referred back to public hospital system or doctors of their own choice
- Screening activity are audited and reported