

香港乳癌資料庫簡報

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編者的話

本期簡報旨在補充《香港乳癌資料庫第四號報告》的數據分析，探討年齡對本港乳癌個案的影響。香港乳癌基金會將根據分析結果，繼續努力為不同年齡患者或康復者加強支援服務。

年齡對本港乳癌個案的影響

前言

乳癌是全球女性最常患的癌症，歐洲和北美洲共12%女性患乳癌¹。香港所有新註冊的癌症（女性）病例中，24.1%為乳癌。乳癌的患病率在不同年齡層都在頭五位之內，使到乳癌成為本港女性頭五位的癌症之一。各年齡層的相對患病率為：(1) 20-44歲有36.3%（首位），(2) 45-64歲有32.8%（首位），(3) 65-74歲有16.7%（第三位），(4) 75歲或以上有10.7（第三位）。乳癌病發率由40歲開始明顯上升，

由（30歲以下的）每2,783人有1人患病，增至（75歲以下）每20人有1人患病。²

香港乳癌患者數目持續穩定上升，或與香港女性多年來的西化生活習慣有關；有指生活習慣和荷爾蒙相關的因素都與病例增加有關。可是，目前並沒有數據分析去評估不同年齡層女性患乳癌的風險。

研究對象及方法

《香港乳癌資料庫第四號報告》記錄了由2008至2012年期間在公立和私家醫院/診所收集共7,241名患者資料。這份簡報以患者最初確診年齡去分析她們的高危因素、病例特徵和確診對心理的影響。患者以確診年齡分為三個組別：40歲以下，40-70歲，70歲以上；並以卡方檢驗（Chi-square test）測試不同年齡組別在各項變數的分別。

結果

在香港乳癌資料庫7,241名患者中，40歲以下有1,013名（14.0%），40-70歲有5,771名（79.7%），70歲以上有369名（5.1%），其餘88名（1.2%）未報歲數。乳癌的高危因素在年輕患者中（40歲以下）十分普遍，她們普遍出現缺乏運動（85.4%）、處於高度精神壓力狀態（46.0%）及攝取大量肉類/乳類製品（20.3%）等與生活習慣有關的高危因素。

在年輕患者中常見的荷爾蒙相關高危因素包括從未生育（43.4%）、從未餵哺母乳（74.6%）及提早初經（19.5%）。較年長的兩組患者（40-70歲及70歲以上）則較多出現超重/肥胖（38.1%）。（見表一）

表一：患者罹患乳癌十個常見的高危因素

高危因素	整體 (%)	40歲以下 (%)	40-70歲 (%)	70歲以上 (%)	P值
缺乏運動 (每週<3小時)	74.9	85.4	74.1	58.6	<0.001*
從未餵哺母乳	67.8	74.6	69.0	28.8	<0.001*
高度精神壓力 (多於一半生活時間)	37.0	46.0	37.0	10.5	<0.001*
超重/肥胖 (BMI高於23)	36.2	23.9	38.2	38.1	<0.001*
沒有生育	21.2	43.4	18.3	10.8	<0.001*
有家族乳癌病史	15.0	17.6	14.7	11.0	0.006*
攝取大量肉類/ 乳類製品	13.9	20.3	13.2	8.3	0.001*
提早初經 (<12歲)	13.4	19.5	13.0	1.7	0.001*
使用荷爾蒙補充劑 (N=3,522)	11.5	N/A	12.5	4.3	0.001*

*有明顯關係：P值少於0.05

較年長的患者明顯較少接受定期乳檢：包括乳房自我檢查 (8.6%) 和臨床乳房檢查 (14.9%) (見表二)。

表二：患者定期乳房檢查習慣比率

方法	整體 (%)	40歲以下 (%)	40-70歲 (%)	70歲以上 (%)	P值
自我檢查	21.8	22.6	22.5	8.6	<0.001*
由醫護人員進行 臨床檢查	44.4	48.1	45.6	14.9	<0.001*
乳房X光造影	N/A	N/A	25.5	N/A	N/A

*有明顯關係：P值少於0.05

與40-70歲的組別 (73.7%) 比較，年輕患者 (76.6%) 被確診早期癌症的百分率明顯較高，可是年輕患者的腫瘤特性都較惡，包括腫瘤分級較高 (第3級) (45.2%)，較多出現淋巴血管入侵現象 (40.8%)、屬腫瘤多灶性 (15.3%)、第二型類表皮生長因子受體呈陽性 (28.7%) 及屬三陰性 (缺乏內分泌受體) (13.0%) (見表三)。

表三：患者癌腫瘤特性(入侵性乳癌)

	整體 (%)	40歲以下 (%)	40-70歲 (%)	70歲以上 (%)	P值
癌症期數					
早期 (I至IIB期)	74.3	76.6	73.7	78.5	<0.001*
後期 (IIIA至IV期)	14.8	11.0	15.4	16.0	<0.001*
腫瘤大小					
≤ 2.0cm	50.1	55.7	51.7	46.3	0.025*
>2.0cm	48.1	44.3	48.3	53.7	0.025*
分級					
第1級	18.1	12.7	18.3	27.8	<0.001*
第2級	44.8	42.1	44.9	49.0	<0.001*
第3級	37.2	45.2	36.8	23.2	<0.001*
淋巴血管入侵	34.6	40.8	34.0	27.8	<0.001*
腫瘤多灶性	11.2	15.3	10.8	7.1	<0.001*
腫瘤多中心性	3.1	3.2	3.2	0.7	0.065
雌激素受體 — 呈陽性	75.4	74.3	75.0	83.7	0.003*
黃體素受體 — 呈陽性	62.9	61.6	62.6	71.2	0.010*
第二型類表皮生長因子受體 — 呈陽性	27.7	28.7	27.5	27.3	0.012*
三陰性	12.7	13.0	12.7	7.5	0.012*
陽性淋巴結	41.1	39.7	41.8	32.5	0.006*

*有明顯關係：p值<0.05

治療方面，較年輕患者明顯較多接受乳房保留手術(45.3%)和化學治療(68.3%)。較年長患者則明顯較多接受內分泌治療(76.2%)，但較少採納另類療法(15.2%)、放射治療(34.9%)和靶向治療(1.5%)。(見表四)

表四：乳癌患者治療方法

治療方式	整體 (%)	40歲以下 (%)	40-70歲 (%)	70歲以上 (%)	P值
乳房保留手術	37.2	45.3	37.0	18.9	<0.001*
全乳切除手術	53.4	34.4	54.9	80.4	<0.001*
全乳切除手術及 乳房重建手術	9.4	20.3	8.1	0.6	<0.001*
化學治療	62.0	68.3	66.3	9.0	<0.001*
放射治療	64.1	67.8	65.4	34.9	<0.001*
內分泌治療	67.5	61.3	67.9	76.2	<0.001*
靶向治療	6.6	7.2	6.8	1.5	<0.001*
另類療法 ⁺	45.8	41.8	47.9	15.2	<0.001*

*有明顯關係：P值少於0.05 ⁺另類療法包括服用中藥、健康補充產品等等。

乳癌對不同年齡組別患者的心理影響各異。年輕患者中能平靜接受確診乳癌的比率較低(16.2%)，且較多會經常憂慮乳癌復發(12.3%)。乳癌對較年長患者的負面影響則表現在較多年長患者對自我形象變得負面(73.7%)，而且較少對人生觀有正面的轉變(27.5%)。(見表五)

表五：乳癌為患者帶來的心理影響

治療方式	整體 (%)	40歲以下 (%)	40-70歲 (%)	70歲以上 (%)	P值
平靜接受確診	21.5	16.2	21.1	46.1	<0.001*
憂慮復發程度(經常)	11.8	12.3	12.0	4.7	<0.001*
人生觀的轉變(正面)	53.0	62.9	52.8	27.5	<0.001*
自我形象改變(負面)	54.2	51.3	53.7	73.7	<0.001*

*有明顯關係：P值少於0.05

啟示：

研究結果顯示不同年齡組別患者的乳癌特徵明顯有別。較年輕女性患者較多遇到罹患乳癌的高危因素，她們的腫瘤特性都較惡，而且也較憂慮乳癌復發而嚴重影響她們的生活質素³⁻⁵。年長女性患者腫瘤則較大，故我們鼓勵較年長女性應做定期乳房健康檢查。為了提高乳癌康復者的生活質素，必須計劃和推展「年齡貼身支援服務」，以配合年輕和年長患者組群的不同需要⁶。

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香港乳癌資料庫簡報

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Editor's message

This issue intends to complement the sub-analysis of the "Hong Kong Breast Cancer Registry Report No.4" on the age groups analysis of the breast cancer patients in Hong Kong. With the findings, the Hong Kong Breast Cancer Foundation will continue its efforts to extend support service for breast cancer patients / survivors in different age groups.

Impact of breast cancer by age in Hong Kong

Introduction

Breast cancer is the most common type of cancer among women in the world, affecting 12% of all women in Europe and North America¹. In Hong Kong, 24.1% of all new registered cancer cases among women is breast cancer. The prevalence of breast cancer in the different age groups also puts it within the top five among cancer types. The relative frequency is: (1) 36.3% (Rank first) in Age 20-44 group; (2) 32.8% (Rank first) in Age 45-64 group; (3) 16.7% (Rank third) in Age 65-74 group and (4) 10.7% (Rank third) in Age 75 and over. And there is a significant

increase in the risk of having breast cancer after age 40 from 1 per 2783 people (Age<30) to 1 per 20 people (Age<75).²

The steady increase of breast cancer cases may be related to the westernization of lifestyles experienced by women in Hong Kong over the decades. Both lifestyle and hormone-related factors have been proposed to explain the rising trend. However, there is currently no quantitative analysis on breast cancer risk assessment for women in different age groups.

Subjects & Methods

The "Hong Kong Breast Cancer Registry Report No.4" covered a cohort of 7,241 patients recruited from both public and private hospitals/clinics from 2008 to 2012. A sub-analysis on the cancer characteristics, psychosocial impact of treatment and risk factors of the patients with respect to the patient's age at initial diagnosis of breast cancer was performed. Patient's age at diagnosis was categorized into three groups: <40, 40-70, and >70 years. The Chi-square test was used to compare age groups with respect to variables.

Results

Of the 7,241 breast cancer patients registered with the Hong Kong Breast Cancer Registry, 1,013 patients (14.0%) were aged <40, 5,771 (79.7%) were aged 40-70, and 369 (5.1%) were aged >70 and 88 (1.2%) were of unknown age. Risk factors of breast cancer were found to be prevalent in young patients (age <40). Lifestyle-related risk factors such as lack of exercise (85.4%), high level of stress (46.0%) and dairy/meat-rich diets (20.3%) were prevalent in young patients. Hormone exposure factors prevailing among young patients included the absence of childbirth (43.4%) and breastfeeding experience (74.6%) or early menarche (19.5%). In the older patient group (Age 40-70 and >70), overweight/obesity was common (38.1%). (Table 1)

Table 1: Prevalent risk factors of breast cancer among patients

Risk factor	Overall (%)	Age <40 (%)	Age 40-70 (%)	Age >70 (%)	P-Value
Lack of exercise (<3 hours per week)	74.9	85.4	74.1	58.6	<0.001*
No experience of breastfeeding	67.8	74.6	69.0	28.8	<0.001*
High level of stress	37.0	46.0	37.0	10.5	<0.001*
Overweight / Obesity (BMI>23)	36.2	23.9	38.2	38.1	<0.001*
No childbirth	21.2	43.4	18.3	10.8	<0.001*
Family history of breast cancer	15.0	17.6	14.7	11.0	0.006*
Dairy / Meat rich diet	13.9	20.3	13.2	8.3	0.001*
Menarche before age 12	13.4	19.5	13.0	1.7	0.001*
Use of hormone therapy (N=3,522)	11.5	N/A	12.5	4.3	0.001*

*Significant difference as P<0.05

Older patients were significantly less likely to have regular breast examinations; including breast self-examination (8.6%) and clinical breast examination (14.9%) (Table 2).

Table 2: Regular breast examination of the patients

Method	Overall (%)	Age <40 (%)	Age 40-70 (%)	Age >70 (%)	P-Value
Breast self-examination	21.8	22.6	22.5	8.6	<0.001*
Clinical breast examination	44.4	48.1	45.6	14.9	<0.001*
Mammography screening	N/A	N/A	25.5	N/A	N/A

*Significant difference as P<0.05

There was a significantly higher percentage of young patients who were diagnosed at early cancer stage in comparison with the patients of the age 40-70 group (76.6% versus 73.7%), however, tumors in young patients usually exhibited more aggressive features including higher nuclear grade (Grade 3) of tumors (45.2%), presence of lymphovascular invasion (40.8%), presence of multifocality (15.3%), higher expression of epidermal growth factor receptor 2 (HER2) (28.7%), and triple negative disease (absence of endocrine receptors) (13.0%) (Table 3).

Table 3: Cancer characteristics of the patients (Invasive breast cancer)

	Overall (%)	Age <40 (%)	Age 40-70 (%)	Age >70 (%)	P-value
Cancer stage					
Early stage (Stage I – IIB)	74.3	76.6	73.7	78.5	<0.001*
Advanced stage (Stage IIIA – IV)	14.8	11.0	15.4	16.0	<0.001*
Tumor size					
≤ 2.0cm	50.1	55.7	51.7	46.3	0.025*
>2.0cm	48.1	44.3	48.3	53.7	0.025*
Grade					
Grade 1	18.1	12.7	18.3	27.8	<0.001*
Grade 2	44.8	42.1	44.9	49.0	<0.001*
Grade 3	37.2	45.2	36.8	23.2	<0.001*
Lymphovascular invasion	34.6	40.8	34.0	27.8	<0.001*
Multifocality	11.2	15.3	10.8	7.1	<0.001*
Multicentricity	3.1	3.2	3.2	0.7	0.065
Oestrogen receptor - positive	75.4	74.3	75.0	83.7	0.003*
Progesterone receptor - positive	62.9	61.6	62.6	71.2	0.010*
HER2 - positive	27.7	28.7	27.5	27.3	0.012*
Triple Negative	12.7	13.0	12.7	7.5	0.012*
Node positive	41.1	39.7	41.8	32.5	0.006*

*Significant difference as P<0.05

On treatment, younger patients were significantly more likely to undergo breast conserving surgery (45.3%) and chemotherapy (68.3%). Older patients were significantly more likely to undergo endocrine therapy (76.2%), but less likely to undergo alternative therapy (15.2%), radiotherapy (34.9%) and targeted therapy (1.5%). (Table 4)

Table 4: Treatment of breast cancer patients

Mode of treatment	Overall (%)	Age <40 (%)	Age 40-70 (%)	Age >70 (%)	P-value
Breast conserving surgery	37.2	45.3	37.0	18.9	<0.001*
Mastectomy	53.4	34.4	54.9	80.4	<0.001*
Mastectomy & Reconstruction	9.4	20.3	8.1	0.6	<0.001*
Chemotherapy	62.0	68.3	66.3	9.0	<0.001*
Radiotherapy	64.1	67.8	65.4	34.9	<0.001*
Endocrine therapy	67.5	61.3	67.9	76.2	<0.001*
Targeted therapy	6.6	7.2	6.8	1.5	<0.001*
Alternative therapy [†]	45.8	41.8	47.9	15.2	<0.001*

*Significant difference as P<0.05

†Alternative therapy includes resorting to Chinese medicine, taking health food / supplement etc.

Psychological impact of breast cancer on patients differed in patients of different age groups. Young patients were less likely to accept the diagnoses calmly (16.2%) and were more likely to fear the recurrence of breast cancer (12.3%). Negative impact of breast cancer was observed in older patients who had higher level of negative change in self-image (73.7%) but lower level of positive change in the outlook on life (27.5%). (Table 5)

Table 5: Treatment of breast cancer patients

	Overall (%)	Age <40 (%)	Age 40-70 (%)	Age >70 (%)	P-value
Accept with calmness	21.5	16.2	21.1	46.1	<0.001*
Worry about recurrence (Always)	11.8	12.3	12.0	4.7	<0.001*
Outlook on life (Positive)	53.0	62.9	52.8	27.5	<0.001*
Change in self-image (Negative)	54.2	51.3	53.7	73.7	<0.001*

*Significant difference as $P < 0.05$

Implications

The study has shown propounding differences in breast cancer of patients with different age groups. Younger women encountered more prevalent risk factors of breast cancer and experienced more aggressive cancer with fear of disease recurrence, which could profoundly influence quality of life in young patients³⁻⁵. Older women should be encouraged to have regular breast health checks as more elderly patients were found to have significantly larger size of tumour at diagnosis. Planning and implementation of age-specific support services must be tailored to reflect the unique differences demonstrated by age and to enhance quality of life outcomes for survivors of breast cancer, both young and old⁶.

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