

Health Background

Body Mass Index / Obesity

About one-third of the subjects were overweight (BMI=23.0-24.9) or obese (BMI \geq 25). More than 50% of the subjects had ideal body weight (BMI=18.5-22.9) and 11% of the subjects were underweight (BMI<18.5) (Figure 11).

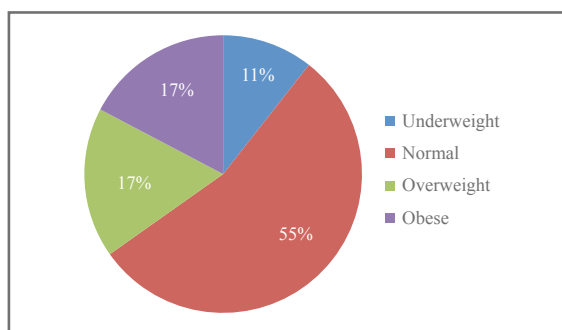


Figure 11. Body mass index (BMI) of the subjects

Obesity or overweight after menopause

Obesity or overweight was observed in 44% of postmenopausal women compared to 27% in premenopausal women (Figure 12).

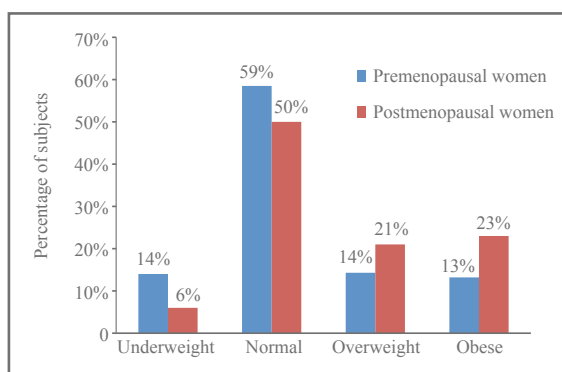


Figure 12. Obese or overweight by menopausal status

Bra size and cup size

Twenty-eight percent of the subjects had bra size of 32 inches or smaller (Figure 13). Among them, majority of the subjects (94%) had either cup A or B. For those with bra size of 34 inches and over, 75% of them had either cup A or B (Figure 14).

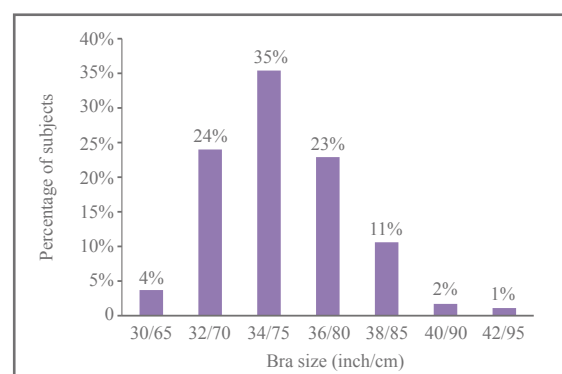


Figure 13. Bra size of the subjects

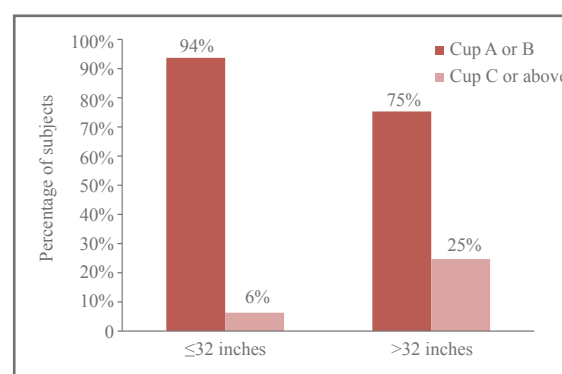


Figure 14. Bra size and cup size of the subjects

Significant past health and history of previous breast disease or tumours

Sixty-three percent enjoyed good past health. Twenty five percent of the subjects had history of tumours, among which 37% were malignant tumours. The majority of malignant tumours were breast cancer (20%), followed by thyroid cancer(5%), tongue cancer(1%), stomach cancer(1%), nasopharyngeal carcinoma(1%), ovary cancer(1%), colon cancer(1%), lymphoma(1%), medullary cancer(1%) and

過往健康狀況

體重指數(BMI) / 肥胖

接近三份一參加者的體重指數為超重 (BMI水平=23.0–24.9) 或肥胖 (BMI≥25)，逾50%參加者體重理想水平內 (BMI=18.5–22.9)，亦有約11%參加者體重過輕 (BMI<18.5) (圖11)。

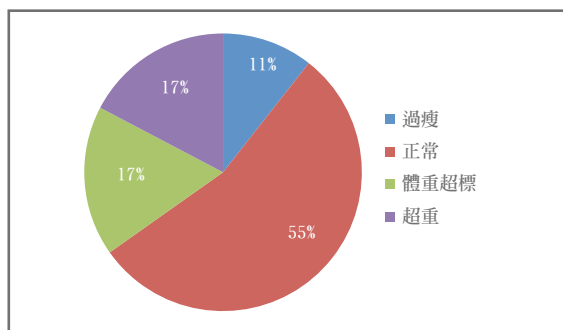


圖11. 參加者的體重指數(BMI)

更年期後體重肥胖或超重

44%步入更年期的參加者屬體重屬肥胖或超重，相比之下更年期前組別的婦女中，只有27%屬體重肥胖或超重 (圖12)。

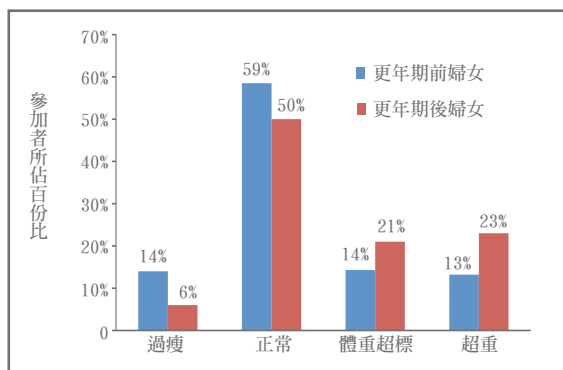


圖12. 更年期前後婦女組別的體重指標

胸圍尺寸與罩杯尺碼

28%的參加者，胸圍尺寸在32吋或以下 (圖13)。在這個組別中，大多數人 (94%) 的罩杯尺碼是A或B。至於胸圍尺碼在34吋或以上的參加者，只有75%罩杯尺碼是A或B (圖14)。

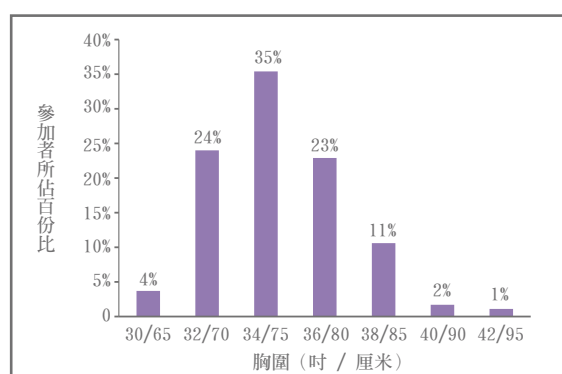


圖13. 參加者的胸圍尺寸分佈

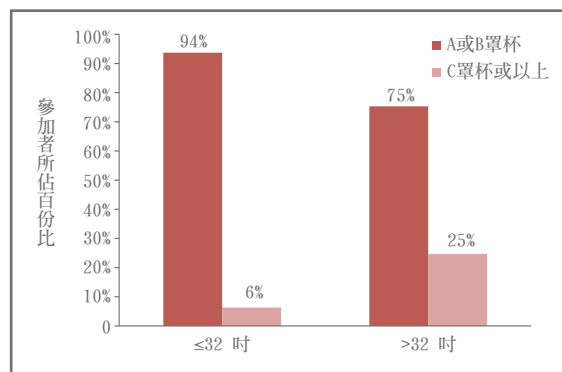


圖14. 參加者的胸圍尺寸與罩杯尺碼

過往健康狀況、乳房或腫瘤病史

63%參加者過往健康狀況理想，25%曾有腫瘤病史，其中37%為惡性腫瘤。主要的惡性腫瘤為乳癌 (20%)、甲狀腺癌 (5%)、舌癌 (1%)、胃癌 (1%)、鼻咽癌 (1%)、卵巢癌 (1%)、腸癌 (1%)，淋巴瘤 (1%) 及髓質瘤 (1%) 及沒有詳細資料 (68%)。約17%參加者曾患其他乳房疾病，種類包括纖維乳腺瘤 (33%)、囊變性纖維瘤 (5%)、乳頭狀瘤 (3%)、

unreported(68%). Other previous breast diseases were reported in 17% of the subjects; the types of other previous breast diseases were fibroadenoma (33%), fibrocystic disease(5%), papilloma(3%), papillomatosis(1%), atypia(2%), other benign tumours(10%) and unreported(48%) (Table 3).

Family history of breast cancer

Study showed a woman with one affected first-degree relative (mother or sister) has two-fold the risk of breast cancer of a woman with no family history of the disease. The risk will further elevate if two or more relatives are affected.³¹⁻³²

Almost one-fifth of the subjects reported having family members affected by breast cancer. Among these, 74% were first degree relatives including mother or sister but no father or brother (Table 3).

Table 3. Past health information of the subjects

	Relative Percentage (%)
Significant past health	
Good past health	63%
Minor problem	34%
Major problem	3%
History of tumours	
Yes	25%
No	75%
Type of previous malignant tumours	
Breast cancer	20%
Thyroid cancer	5%
Tongue cancer	1%
Stomach cancer	1%
Nasopharyneal carcinoma	1%
Ovary cancer	1%
Colon cancer	1%
Lymphoma	1%
Medullary cancer	1%
Unreported	68%
Previous breast disease	
Yes	17%
No	83%

Type of other previous breast disease*

Fibroadenoma	33%
Fibocystic disease	5%
Papilloma	3%
Papillomatosis	1%
Atypia	2%
Other benign tumour	10%
Unreported	48%

Family history of breast cancer

No	81%
Yes*	19%
Mother	30%
Sister	44%
Father	0%
Brother	0%
Maternal side (non FDR)	21%
Paternal side (non FDR)	12%

Note: * = percentages add to more than 100% because respondents could be checked more than one response
non FDR: non First degree relative

Age at menarche

Early menarche is a known risk factor for breast cancer.³³⁻³⁴ With reference to the established cut-off for age at menarche³⁵, early menarche was defined as <12 years of age, whereas average or late menarche was defined as 12 years or older. In our subject cohort, the median age at menarche was 13 years and the earliest age was 8 years. Using 12 years of age as cut-off age for increased risk of breast cancer, 17% of the subjects had early menarche, whereas 83% had menarche started at 12 years and older (Figure 15).

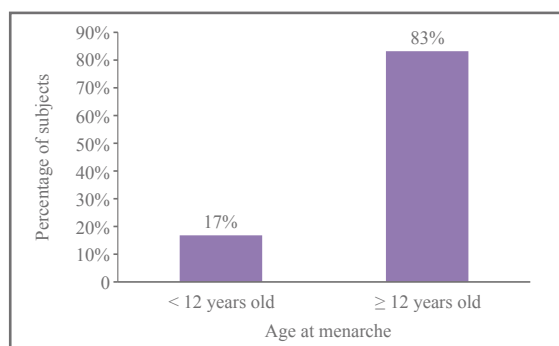


Figure 15. Percentage of the subjects with early menarche

乳頭狀瘤病 (1%)、異常增生 (2%)、其他良性腫瘤 (10%) 及沒有詳細資料 (48%) (圖3)。

乳癌家族病史

研究發現，女士如有一名直系親屬(母親或姊妹)有乳癌病史，則其本身患乳癌的風險會較沒乳癌家族病史的女士高出一倍。如有一個或以上家族成員曾患乳癌，則其本身患乳癌的風險亦會再增加。³¹⁻³²

接近五分之一的參加者的家族中曾有成員患乳癌。在此組別中，74%乳癌直系親屬病史均是母親或姊妹，其父親或兄弟有乳癌病史所佔百分比均為0 (表3)。

表3. 參加者的過往健康狀況

	所佔百分比 (%)
過往健康狀況	
良好	63%
小問題	34%
大問題	3%
過往腫瘤病歷	
有	25%
否	75%
過往惡性腫瘤類別	
乳癌	20%
甲狀腺癌	5%
舌癌	1%
胃癌	1%
鼻咽癌	1%
卵巢癌	1%
腸癌	1%
淋巴癌	1%
髓質癌	1%
沒有詳細資料	68%
乳房病史	
有	17%
否	83%

曾患其他乳房疾病類別*

纖維乳腺瘤	33%
囊變性纖維瘤	5%
乳頭狀瘤	3%
乳頭狀瘤病	1%
異常增生	2%
其他良性腫瘤	10%
沒有詳細資料	48%

乳癌家族病史

否	81%
有*	19%
母親	30%
姊妹	44%
父親	0%
兄弟	0%
母方親戚 (非直系親屬)	21%
父方親戚 (非直系親屬)	12%

備註* = 因參加者可作多於一個選擇，故百分比高於100%

月經開始年齡

月經開始年齡愈早，患乳癌的風險亦相對提高。³³⁻³⁴ 以年齡劃分月經時間屬是否正常，過早或延遲³⁵，初經提早的定義為12歲之前，而平均初經或初經年齡延遲的定義，則為12歲或以後。資料庫的參加者中，首次月經年齡中位數是13歲，最早者則為8歲。以12歲初經作為乳癌患病風險增加的分界線，17%參加者屬初經提早，餘下的83%則於12歲或之後首次來經 (圖15)。

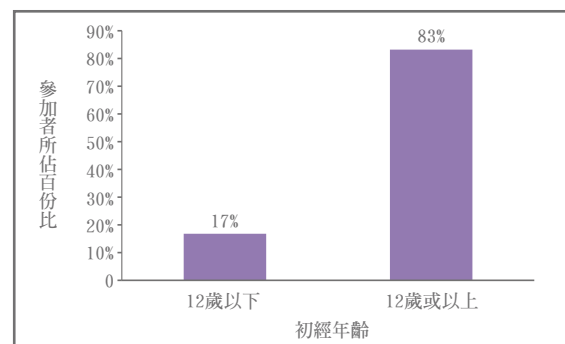


圖15. 參加者月經開始年齡

Age at menopause

Late menopause increases the risk of breast cancer.³⁶ Women of the same age and childbearing have a lower risk of breast cancer when they are menopausal compared to those who are still menstruating.³⁷

The median age at menopause was 50 years in this cohort, with age range from 34 to 60 years. Using 55 years of age as cut-off for increased risk of breast cancer, 8% of the subject had late menopause (Figure 16). Forty-four percent of the subjects aged 55 or below had menopause induced by surgery or drugs whereas 23% of the subjects above aged 55 had menopause induced by surgery or drugs (Figure 17).

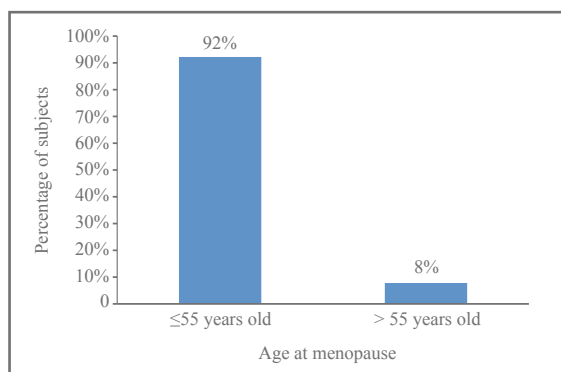


Figure 16. Percentage distribution of the subjects with late menopause

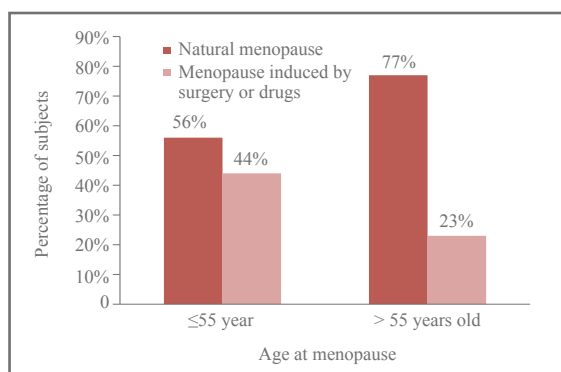


Figure 17. Percentage distribution of the types of menopause among menopausal women

Reproductive history

Age at first live birth and number of live births

Late age at first full-term birth is also a well-known elevated risk for breast cancer.^{36,38} It is well known that pregnancy induces the differentiation of breast tissue, which results in a long-term reduction in breast cancer risk, particularly among women who have completed their full-term pregnancy.³⁹ Increasing number of livebirths has been found to be associated with reduction of risk for breast cancer.⁴⁰

Twenty-one percent of the women were nulliparous. Seventy-two percent of the subjects gave first live birth at younger age (<35 years old), whereas 7% gave first live birth at older age (≥35 years old) (Figure 18).

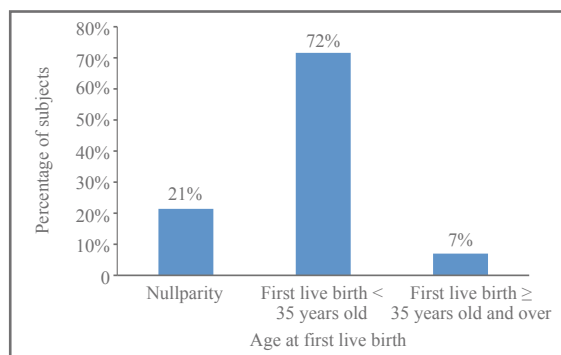


Figure 18. Nulliparity and reproductive age of the subjects

The median number of childbirths was 2 for those women with first live birth before age of 35 compared to median of 1 childbirth for those who gave first live birth at age 35 and older (Figure 19).

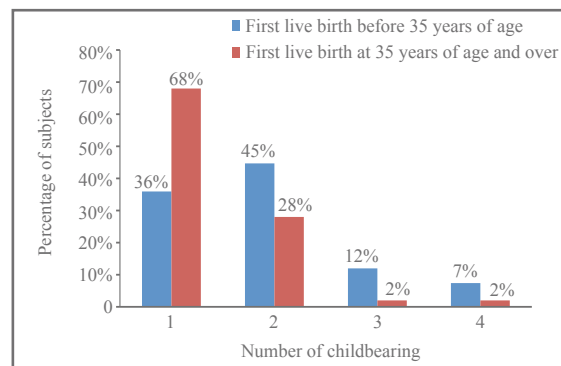


Figure 19. First live birth age by number of child bearing

更年期年齡

更年期年齡愈遲，患乳癌的風險亦相對提高。³⁶ 更年期婦女較相同年齡及相同生育紀錄、但仍未開始更年期的婦女，有較低的乳癌風險。³⁷

參加者中，更年期的年齡中位數是50歲，範圍介乎34至60歲。以55歲作為更年期年齡分界線（遲收經者乳癌風險增加），8%參加者屬延遲收經（圖16）。44%在55歲或以下的參加者因手術或藥物等因素導致停經，與之相比，在55歲以後才出現更年期的參加者中，有23%是因此停經（圖17）。

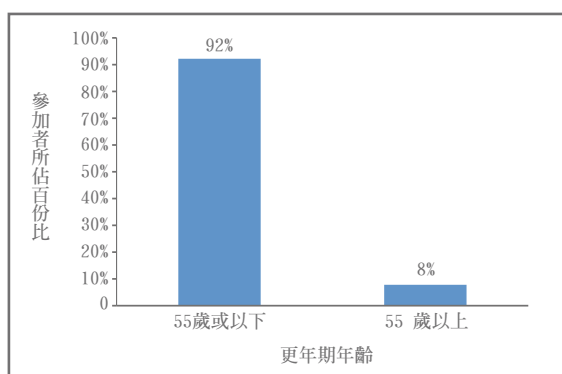


圖16. 參加者更年期年齡分佈

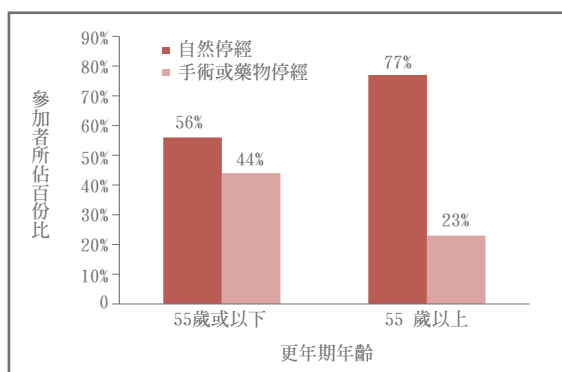


圖17. 更年期婦女收經模式比率

生育紀錄

首次生育年齡及生育數目

生育年齡推遲，是其中一個眾所周知的乳癌高危因素。^{36,38} 懷孕期間，乳房組織產生變化，這些變化可保護乳房減少受癌症威脅，尤其當婦女完成整個懷孕及生育過程。³⁹ 因此，研究亦發現女性生育次數增加，可令患乳癌的風險下降。⁴⁰

參加者中，21%從未懷孕及生育。72%的參加者在較年輕時首次生育（<35歲），而7%首次生育的年齡較遲（≥35歲）（圖18）。

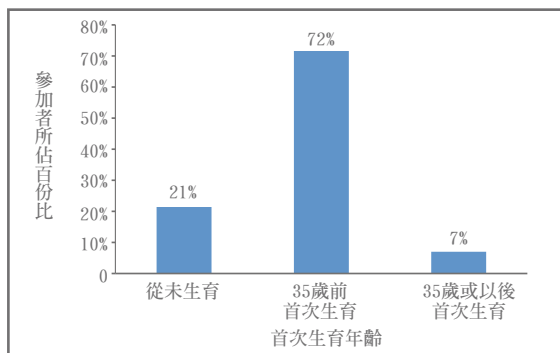


圖18. 參加者首次生育年齡分佈

35歲前首次生育的參加者，子女數目中位數為2個；與之相比，35歲後首次生育的參加者，子女數目中位數為1個（圖19）。

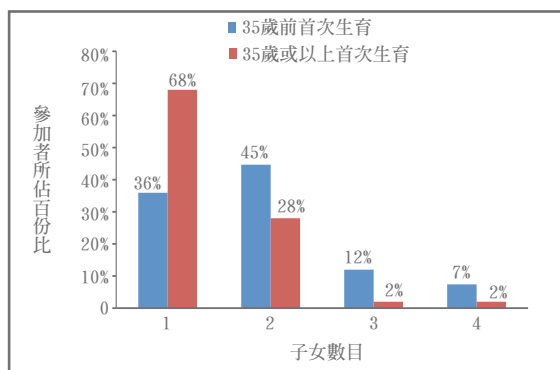


圖19. 首次生育年齡(以參加者子女數目劃分)

Breast Feeding

Thirty-six percent of the subjects had breast feeding with mean duration of 5.3 months (Figure 20) .

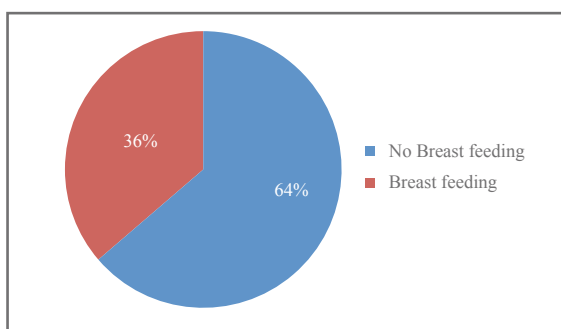


Figure 20. Breast feeding

Use of oral contraceptives

The use of oral contraceptives (OC) as exogenous hormones is shown to be related to increased risk of breast cancer in current and recent users, but the excess risk is insignificant after stopping use for 10 years or more.³⁷

The use of OC was reported in 38% of the subjects with a mean duration of 8.7 years (16% OC use for < 5 years; 12% OC use for 5-10 years and 10% OC use for > 10 years), whereas 62% was non-users (Figure 21).

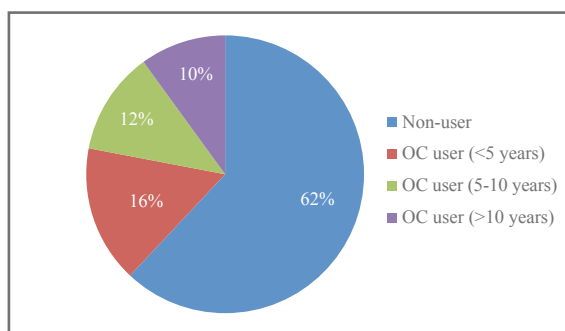


Figure 21. Use of oral contraceptives (OC)

Use of hormone replacement therapy (HRT)

Both Women's Health Initiatives (WHI) in the United States and the Million Women Study in United Kingdom conducted in 2001 showed increased risk of breast cancer with HRT users compared to non-users by 1- to 2-fold. Subsequent to the WHI study, HRT user in US dropped from 61 million to 21 million, and in the following year, breast cancer incidence dropped for the first time in the last 3 decades by 6.7%.⁴¹⁻⁴³

An international collaborative study has shown that prolonged use of HRT is associated with increase in breast cancer risk. The relative risk was increased by 35% for women who had used HRT for 5 years or longer compared to the non-user group.³⁷ However, the prevalence of the use of HRT may vary from country to country. In Singapore only about 6% of women were on HRT compared with 21% of women in Sweden⁴⁴⁻⁴⁵.

Use of HRT after menopause was reported in 14% of the subjects (Figure 22) with mean duration of HRT use of 3.5 years.

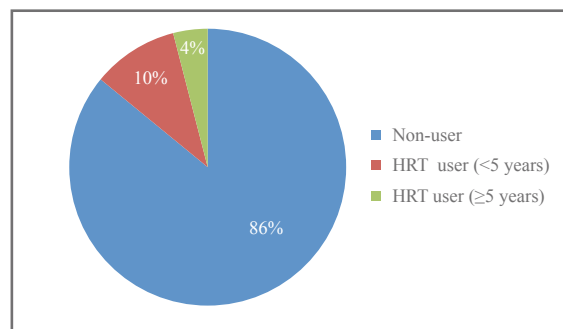


Figure 22. Use of hormone replacement therapy (HRT)

餵哺母乳

36%參加者曾餵哺母乳，餵哺期數中位數為5.3月（圖20）。

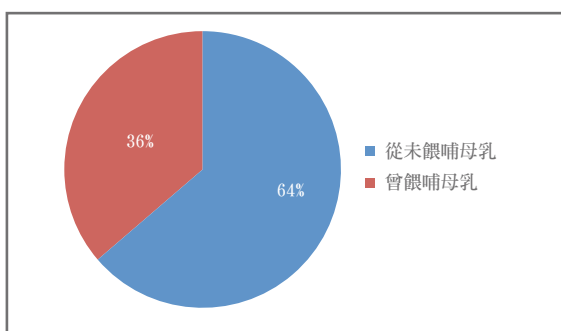


圖20. 餵哺母乳

口服避孕藥

口服避孕藥（OC）作為外在性荷爾蒙，會對正在服用或最近曾服用的女性，增加乳癌的風險，但有關風險在婦女停服避孕丸10年或以上後，便變得不明顯。³⁷

38%參加者曾使用口服避孕丸，使用時間的中位數為8.7年（16%使用時間< 5年；12%的使用時間持續5至10年；10%則持續使用10年以上），餘下的62%從未使用口服避孕丸（圖21）。

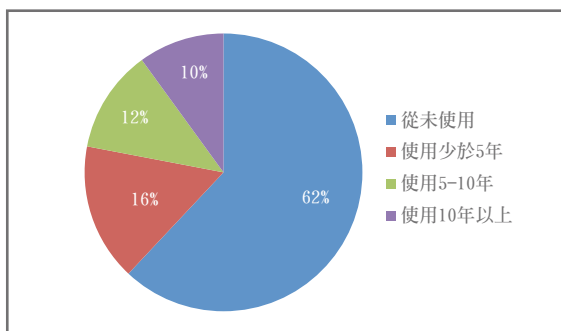


圖21. 口服避孕丸的使用概況

荷爾蒙補充治療

兩項大型研究調查於2001年進行研究調查（美國婦女健康行動（WHI）及英國一百萬婦女），研究指出荷爾蒙補充治療的使用者較非使用者患乳癌的風險高1至2倍。美國婦女健康行動（WHI）報告發表後，美國荷爾蒙補充治療的使用者由六千一百萬人大幅減少至二千一百萬人，及其後一年的乳癌發病率於30年內首次下跌6.7%。⁴¹⁻⁴³

另一份國際研究指出，荷爾蒙補充治療可增加乳癌的風險，使用有關治療的時間愈長，風險亦相對提高。連續使用荷爾蒙補充治療5年或以上，乳癌風險較從未接受此療法的婦女增加35%。³⁷不同國家對荷爾蒙補充治療的普及程度有所不同，在新加坡使用率僅6%，而在瑞典，使用率則達21%。⁴⁴⁻⁴⁵

參加者中，14%在更年期後開始使用荷爾蒙補充治療（圖22），平均的使用時間為3.5年。

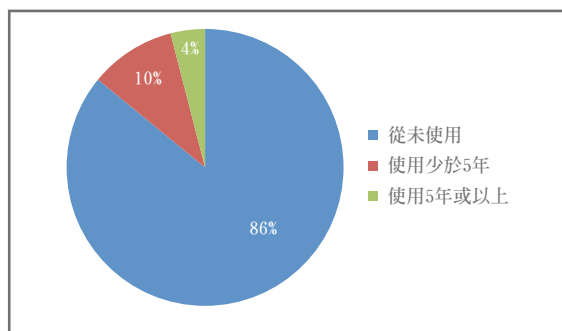


圖22. 使用荷爾蒙補充治療概況