

# Lifestyle of Women Attending the Menopause Clinic

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## Abstract

The objective of this cross-sectional study was to investigate the lifestyle and associated factors of climacteric women attending the menopause clinic of Faculty of Medicine, Mahidol University, Bangkok, Thailand and requested to participate in this study. The sociodemographic data, menopausal status, and body mass index were recorded. Their health-related lifestyles; alcohol, coffee, and milk consumptions, cigarette smoking, and regular exercise were studied.

The results showed that a total of 1,196 climacteric women responded to a self-administered questionnaire voluntarily. The proportions of women that consumed alcohol were 16.1 percent, coffee 50.0 percent, and milk 63.1 percent. Regular exercise was practiced in 62.8 percent of them. Significant associations were found between milk consumption and educational level; alcohol /coffee consumption and menopausal status. Women from higher educational level consumed milk more than women from lower educational level. Postmenopausal women significantly consumed alcohol and coffee more than premenopausal ones.

In conclusion, more than half of women attending the menopause clinic consumed milk and exercised regularly. Alcohol consumption and cigarette smoking were not widely reported. Educational level and menopausal status were associated with differences of health-related lifestyle.

**Key words:** lifestyle, women, menopause clinic

## Introduction

Women's life expectancy is increasing together with the number of years women live after menopause and the number of women who experience menopause in Thailand. Since menopause is an important turning point for middle-aged women, the menopause tran-

sition or climacteric is commonly associated with menopausal symptoms of weight gain, increased risk of cardiovascular diseases and bone loss<sup>(1-4)</sup>. Many activities such as exercise, smoking, coffee drinking and dietary taking are more becoming among women. These lifestyles vary with age, nationality, language

and culture. However, they have influences on some diseases such as cardiovascular diseases, osteoporosis, or cancer. Moreover, weight control, healthy diet and physical activity constitute the centerpiece of lifestyle prevention programs for healthy aging<sup>(5)</sup>. Therefore, obtaining information about the women's lifestyle shall provide health care provider the preventive way for some diseases by adjusting their lifestyle. The objective of this study was to investigate the lifestyle and associated factors of women attending the menopause clinic.

### Methodology

This cross-sectional study was performed at the menopause clinic and approved by the Ethical Clearance Committee on Human Rights related to Researches involving Human Subjects, Faculty of Medicine, Ramathibodi Hospital, Mahidol University. All climacteric women who had a scheduled consultation for a first-time visit were consecutively invited to participate. The written informed consent was obtained before entering the study. A self-administered questionnaire included general and lifestyle information. The general information contained socio-demographic data, menopausal status, and body mass index. Women who their periods had ceased for more than 12 months were diagnosed as postmenopausal women and those still had regular or irregular periods were diagnosed as premenopausal women. Climacteric women included all women in both premenopausal and postmenopausal periods. The body mass index was calculated as body weight (kilogram) divided by height<sup>2</sup> (meter). The health-related lifestyle contained alcohol, coffee, and milk consumption, cigarette smoking, and regular exercise. Alcohol, coffee and milk consumptions were defined when they consumed at least 1 time per week in the last 3 months. Cigarette smoking included all current smokers regardless of the amount or frequency. Regular exercise was de-

defined when women exercise at least 2 times per week and had done for more than 3 months<sup>(5)</sup>. The authors explained all the definitions used in this study to all participants before they answered the questionnaire.

The health-related lifestyle; alcohol, coffee, and milk consumptions, cigarette smoking, and regular exercise were reported in percent and Pearson chi-square was used to test the associations between lifestyle and associated factors. All tests were considered statistically significant at  $p < 0.05$ .

### Results

A total of 1,196 climacteric women attending the menopause clinic, Faculty of Medicine, Mahidol University, responded to a set of self-administered questionnaire. Twenty-four women were not willing to participate. The baseline characteristics were not different. The mean age was 54.2, SD 5.68 years, and the average age of menopause was 50.5, SD 5.7 years. The mean body mass index was 23.6, SD 3.8 kg/m<sup>2</sup>. The percentage of women that consumed alcohol, coffee, and milk were 11.1 percent, 50.0 percent, and 63.1 percent, respectively. Only 0.08 percent smoked cigarettes. Regular exercise was practiced in 62.8 percent as shown in Table 1,2. The kinds of exercise that they engaged in were aerobic dance, ballroom dance, walking, swimming and yoga.

Statistical associations were found between milk consumption and educational level, alcohol /coffee consumptions and menopausal status as shown in Table 3. Women with higher education consumed milk more than women with lower education. Postmenopausal women significantly consumed alcohol and coffee more than premenopausal women. There were no associations between marital status, body mass index and lifestyle differences.

### Discussion

Since lifestyle changes at menopause are impor-

**Table 1** General characteristics (n = 1,196 women)

Characteristics	Number (%)
Age mean, SD (years)	54.2, 5.7
Age of menopause, mean, SD (years)	50.5, 5.7
Marital status	
single	180 (15.0)
married	844 (70.6)
widowed	107 (9.0)
divorced	65 (5.4)
<b>Educational level</b>	
primary school	174 (14.6)
high school	840 (70.2)
diploma	115 (9.6)
graduated	67 (5.6)
<b>Occupation</b>	
government service	513 (42.9)
housewife	410 (34.3)
business	140 (11.7)
employee	133 (11.1)
<b>Body mass index (kg/m<sup>2</sup>)</b>	
< 18.5	128 (10.7)
18.5 - 24.9	704 (58.9)
≥ 25.0	364 (30.4)
body mass index (kg/m <sup>2</sup> ), mean, SD	23.6, 3.8
<b>Menopausal status</b>	
premenopause	678 (56.7)
postmenopause	518 (43.3)

tant and effective for preventive health<sup>(6,7)</sup>. It is necessary that health care providers are aware of women's lifestyle during climacteric period and able to encourage and support for healthier lifestyle optimally. The current study demonstrated that women attending the menopause clinic, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand became aware of their health. More than half of them consumed milk and exercised regularly and only one woman was a current smoker. It might be explained that women in this study were in the group that seek medical advice and live in the central area of Thailand. The results of this study did not include all Thai women and did not intend to yield results for generalization. This, however, remains to be studied further in other populations of women in Thailand.

With increasing globalization, nutritional knowledge and effects of exercise on osteoporosis and cardiovascular diseases have been propagated rapidly. The idea of calcium intake from food and dairy products are important for bone health is promoted via newspapers and all kinds of media. In non-western society, dairy products are not the main source of calcium and middle-aged women have an inadequate calcium intake<sup>(8)</sup>. On the other hand, most vitamins and mineral intakes including dairy products are regu-

**Table 2** Lifestyle of women attending the menopause clinic (n = 1,196 women)

Lifestyle	Number (%) of consumption/practice		
	Total	Premenopause	Postmenopause
Milk drinking	753 (63.1)	431 (63.7)	322 (62.3)
Coffee taking	597 (50.0)	301 (44.5)	296 (57.3)
Alcohol drinking	132 (11.1)	62 (9.0)	70 (13.4)
Cigarette smoking	1 (0.08)	0	1 (0.08)
Regular exercise	749 (62.8)	439 (65.0)	310 (59.6)

**Table 3** Lifestyle and associated factors (n = 1,196 women)

Factors	Milk	Coffee (% of consumption)	Alcohol	Exercise (% of practice)
<b>Educational level</b>				
primary school	57.1	43.1	10.1	58.9
high school	61.8	51.8	15.7	58.4
diploma	60.6	50.9	14.9	66.3
graduated	68.1*	52.7	8.9	65.7
<b>Marital status</b>				
single	60.1	51.4	12.7	64.9
married	62.9	50.5	11.1	62.6
widowed	64.5	43.0	9.3	63.6
divorced	70.8	53.8	10.8	58.5
<b>Menopausal status</b>				
premenopause	63.7	44.5	9.0	35.0
postmenopause	62.3	57.3*	13.4*	41.4
<b>Body mass index (kg/m<sup>2</sup>)</b>				
< 18.5	71.4	42.9	4.8	52.4
18.5-24.9	65.7	48.9	11.4	63.3
≥ 25	59.1	52.1	11.8	58.8

\**p* < 0.05

larly consumed in western country<sup>(9)</sup>. Beside the cultural factor, milk consumption is influenced by education<sup>(8)</sup> and that was confirmed by the result of this study.

The benefits of exercise can be demonstrated on many systems. The most frequently mentioned effect of exercise is reduction in cardiovascular morbidity and mortality, but positive effects on the musculoskeletal system and quality of life have been shown as well<sup>(10)</sup>. A systematic review in 2007 showed that weighted exercises can help in maintaining bone mineral density in postmenopausal women and increasing bone mineral density of the spine and hip in women with osteopenia and osteoporosis<sup>(11)</sup>. Unfortunately, only half of women in this study were being physically active. The possible explanations for the low rate of regular exercise in these women are lack

of awareness of health crisis after menopause and inability to engage in regular exercise<sup>(12)</sup>. Therefore, nurses and health care providers should encourage all climacteric women actively to seek health-improving behavior: regular exercise, and should provide them with accurate, accessible and effective exercise prescriptions as relevant to women's daily life.

In Thailand, nurses and other health care providers are in a particularly good position to inform and advise climacteric or middle-aged women in daily practice. A diet rich in calcium, vitamin D, protein and phytoestrogen, maintain a healthy body mass index, a sufficient exposure to sunlight, daily physical activity with a preference for weight-bearing exercise, avoiding smoking and excessive alcohol should be recommended. These simple changes for a healthy lifestyle can prevent or slow down bone loss and car-

diovascular diseases, which are related to estrogen deficiency in postmenopausal women.

### Conclusion

More than half of women attending the menopause clinic consumed milk and exercised regularly. Alcohol consumption and cigarette smoking were not widely practiced. Educational level and menopausal status were associated with differences of health-related lifestyle. Consequently, to meet the best interest for climacteric or middle-aged women, it is important that the nurses and health care providers should counsel these women about the healthy lifestyle in everyday practice.

### Acknowledgements

*The authors would like to thank all participants who generously donated their time and participated in this study.*

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**บทคัดย่อ**      **วิถีชีวิตของสตรีที่มารับบริการในคลินิกวัยทอง**

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วารสารวิชาการสาธารณสุข 2552; 18:172-7.

การศึกษาแบบตัดขวางครั้งนี้มีวัตถุประสงค์ เพื่อศึกษาวิถีชีวิตและปัจจัยที่เกี่ยวข้องของสตรีที่มารับบริการในคลินิกวัยทองโรงพยาบาลรามาธิบดี มหาวิทยาลัยมหิดล กรุงเทพมหานคร โดยเก็บข้อมูลเกี่ยวกับข้อมูลส่วนบุคคล ระยะเวลาการหมดประจำเดือน ค่าดัชนีมวลกาย การดื่มแอลกอฮอล์ กาแฟและนม การสูบบุหรี่ รวมทั้งการออกกำลังกาย กลุ่มตัวอย่างเป็นสตรีวัยทองจำนวน 1,196 คน ที่ตอบแบบสอบถามด้วยความสมัครใจ การศึกษาพบว่า กลุ่มตัวอย่างดื่มแอลกอฮอล์ กาแฟและนม ร้อยละ 11.1, 50.0 และ 63.1 ตามลำดับ โดยมีการออกกำลังกายสม่ำเสมอ ร้อยละ 62.8 โดยพบความสัมพันธ์ระหว่างการบริโภคนมกับระดับการศึกษา และการบริโภคแอลกอฮอล์ กาแฟกับภาวะการหมดประจำเดือน พบว่าสตรีวัยหมดประจำเดือนที่มีระดับการศึกษาสูงกว่า จะบริโภคนมมากกว่าสตรีวัยทองที่มีระดับการศึกษาต่ำกว่า และสตรีที่หมดประจำเดือนไปแล้ว บริโภคแอลกอฮอล์ และกาแฟมากกว่าสตรีในระยะก่อนหมดประจำเดือนอย่างมีนัยสำคัญทางสถิติ ผลการศึกษาสรุปได้ว่าสตรีวัยทองที่มารับบริการในคลินิกวัยทองมากกว่าครึ่งนิยมดื่มนมและออกกำลังกายสม่ำเสมอ เพียงเล็กน้อย ระดับการศึกษาและระยะเวลาการหมดประจำเดือนที่แตกต่างกันส่งผลให้มีวิถีชีวิตที่แตกต่างกัน

**คำสำคัญ:**      **วิถีชีวิต, สตรี, คลินิกวัยทอง**