
GYNAECOLOGY

Attitudes toward Menopause and Menopausal Hormone Therapy among Thai Women Aged 40 Years Old and Above: A hospital-based study

Pakaporn Ithiarwachkul, M.D.*,
Pongrak Boonyanurak, M.D.*

* *Department of Obstetrics and Gynecology, Phramongkutklao Hospital, Bangkok, Thailand*

ABSTRACT

Objectives: To assess attitudes and associated factors toward menopause and menopausal hormone therapy among Thai women aged 40 years old and above.

Materials and Methods: A cross-sectional observational study was conducted in Thai women aged 40 years old and above who visited the Gynecological Outpatient Department at Phramongkutklao Hospital between 1 March and 30 June 2023. A self-administrated questionnaire was used to collect the baseline characteristics and attitudes toward menopause and menopausal hormone therapy. The questionnaires were validated and confirmed for reliability (Cronbach alpha $r = 0.8$).

Results: Three hundred women were enrolled in the study. The mean of the participants' age was 54.42 ± 9.11 years. Almost two-thirds of the participants (196/300) were in post-menopausal status. Thirteen percent were current users of menopausal hormone therapy. About three-fifths of the participants agreed with "Going through menopause does not change much," (58%) and almost two-thirds agreed with "Menopausal hormone therapy is appropriate for some women," (63%). In contrast, the phrases, "I felt mentally and emotionally humiliated when menopause started" and "Menopausal hormone therapy should be avoided," had the highest disagreement rates, with 82.3% and 27.3% of participants disagreeing, respectively. The mean $\pm$ standard deviation menopause and menopausal hormone therapy attitude scores out of 30 were 19.75 ± 5.24 and 16.1 ± 3.31 , respectively. Moreover, for menopause attitudes, the participants aged 50-59 years had lower scores than younger participants ($p = 0.04$), while those who lived in rural areas had significantly higher scores than those in urban areas ($p = 0.017$).

Conclusion: The women aged 40 years old and above who visited Phramongkutklao Hospital in the present study had quite positive attitudes about menopause and menopausal hormone therapy. Age and living area were the factors associated with menopause attitude.

Keywords: menopause, menopausal hormone therapy, attitude

Correspondence to: Pakaporn Ithiarwachkul, M.D., Department of Obstetrics and Gynecology, Phramongkutklao Hospital, Bangkok 10400, Thailand. E-mail: ja_ex17@hotmail.com

Received: 29 July 2024, **Revised:** 13 December 2024, **Accepted:** 6 May 2026

ทัศนคติเกี่ยวกับวัยหมดประจำเดือนและการบำบัดด้วยฮอร์โมนในวัยหมดประจำเดือน ของสตรีไทยอายุตั้งแต่ 40 ปีขึ้นไป: การศึกษาวิจัยในโรงพยาบาล

ภคพร อิทธิอารักษ์กุล, ปองรัก บุญญานุรักษ์

บทคัดย่อ

วัตถุประสงค์: เพื่อประเมินทัศนคติและปัจจัยที่เกี่ยวข้อง เกี่ยวกับวัยหมดประจำเดือนและการบำบัดด้วยฮอร์โมนในวัยหมดประจำเดือน ของสตรีไทยอายุตั้งแต่ 40 ปีขึ้นไป

วัสดุและวิธีการ: วิจัยเป็นการศึกษาเชิงสำรวจ ศึกษาในสตรีไทยอายุ 40 ปีขึ้นไปที่มาห้องตรวจโรคผู้ป่วยนอกนรีเวชกรรม โรงพยาบาลพระมงกุฎเกล้า ระหว่าง 1 มีนาคม ถึง 30 มิถุนายน 2566 ผู้เข้าร่วมวิจัยจะได้ทำแบบสอบถามเพื่อเก็บข้อมูลพื้นฐานและทัศนคติเกี่ยวกับวัยหมดประจำเดือนและการบำบัดด้วยฮอร์โมน โดยแบบสอบถามได้รับการตรวจสอบความน่าเชื่อถือ (Cronbach alpha $r = 0.8$)

ผลการศึกษา: ผู้เข้าร่วมวิจัย 300 คน อายุเฉลี่ย 54.42 ± 9.11 ปี เกือบสองในสาม (196/300) อยู่ในระยะหลังหมดประจำเดือน ร้อยละ 13.27 ใช้การรักษาด้วยฮอร์โมนในวัยหมดประจำเดือนอยู่ ประมาณสามในห้าของผู้เข้าร่วมวิจัย เห็นด้วยกับ “การเข้าสู่วัยหมดประจำเดือนไม่ได้เปลี่ยนแปลงชีวิตมากนัก” (ร้อยละ 58) และเกือบสองในสาม เห็นด้วยกับ “การรักษาด้วยฮอร์โมนในวัยหมดประจำเดือนเหมาะสำหรับผู้หญิงบางคน” (ร้อยละ 63) ในทางตรงกันข้าม “การเข้าสู่วัยหมดประจำเดือนทำให้รู้สึกอับอาย” และ “ควรหลีกเลี่ยงการใช้ฮอร์โมนในวัยหมดประจำเดือน” มีร้อยละไม่เห็นด้วยสูงสุด คือ ร้อยละ 82.3 และ ร้อยละ 27.3 ตามลำดับ คะแนนทัศนคติเกี่ยวกับวัยหมดประจำเดือนและการบำบัดด้วยฮอร์โมนในวัยหมดประจำเดือนเฉลี่ย $\pm$ ส่วนเบี่ยงเบนมาตรฐาน จากคะแนนเต็ม 30 คะแนน ได้เท่ากับ 19.75 ± 5.24 และ 16.1 ± 3.31 ตามลำดับ โดยสำหรับวัยหมดประจำเดือน ในสตรีอายุ 50-59 ปี มีคะแนนต่ำกว่าสตรีที่อายุน้อยกว่า ($p = 0.004$) ในขณะที่ผู้ที่อยู่ต่างจังหวัดมีคะแนนมากกว่าผู้ที่อยู่กรุงเทพฯ อย่างมีนัยสำคัญทางสถิติ ($p = 0.017$)

สรุป: สตรีไทยอายุตั้งแต่ 40 ปีขึ้นไปที่มาโรงพยาบาลพระมงกุฎเกล้า มีทัศนคติที่ค่อนข้างดีเกี่ยวกับวัยหมดประจำเดือนและการบำบัดด้วยฮอร์โมนในวัยหมดประจำเดือน อายุและพื้นที่อาศัยเป็นปัจจัยที่เกี่ยวข้องกับทัศนคติเกี่ยวกับวัยหมดประจำเดือน

คำสำคัญ: วัยหมดประจำเดือน, การรักษาด้วยฮอร์โมนในวัยหมดประจำเดือน, ทัศนคติ

Introduction

Menopause is a term defined in Thai by the Ministry of Public Health as a transition period in which many physical and mental changes occur. It refers to a natural period of life in which ovarian function decreases until reproduction ends. There is little variation in the age of menopause across races. Menopause generally occurs between the ages of 43-52 years. Studies in Thai people have found that menopause lasts approximately 49.5 years⁽¹⁾. Natural menopause is diagnosed based on retrospective clinical data as a time point beginning with missed periods for at least 12 months. Surgical menopause refers to surgical removal of both ovaries with or without the uterus. Menopause does not require laboratory testing. Follicle-stimulating hormone and estradiol tests are only performed in premature menopausal patients or patients who have other symptoms and are suspected of having diseases similar to those in women who are menopause. In addition, in women who have premature menopause, further examination is required to find the cause⁽²⁾.

Menopausal health problems that can be found in the early stages include menopausal symptoms, including irritability, fatigue, depression, hot flashes, night sweats, headaches, memory loss, weight gain, insomnia, joint and muscle pain, palpitations, mood swings, constipation, difficult urination, and decreased libido, etc. Long-term health problems caused by ovarian failure can lead to many complications that have become a public health problem at the national level. These diseases, including coronary artery disease, myocardial infarction, and osteoporosis⁽³⁾ are caused by a lack of estrogen and can be prevented and treated by giving estrogen therapy.

In 2002, the Women's Health Initiative (WHI) published the first main results of a study looking at the use of conjugated equine estrogen-plus medroxyprogesterone acetate, summarizing that the use of estrogen and progestin together is associated with an increased risk of cardiovascular disease and breast cancer but useful in reducing the risk of bone

fractures and colon cancer⁽³⁾. This led to a sharp decline in hormone therapy in the United States⁽³⁾. However, further analysis later indicated that the risk of cardiovascular disease is likely related to the duration of use. Therefore, the above hormones should be used within the appropriate period⁽⁴⁾.

There are advantages to using menopausal hormone therapy but there also have side effects. However, new forms of menopausal hormone therapy are also being used, and there are more recommendations for use from experts. This makes the use of menopausal hormone therapy safer. Providing accurate and appropriate information about menopause and menopausal hormone therapy can help pre-menopausal and menopausal women cope with the changes in life. Social and family support may play a role in minimizing loneliness and depression over time. The attitudes of women in today's era may be changing. The researcher, therefore, decided to conduct a survey to assess the perceptions and the attitudes toward menopause and menopausal hormone therapy in women who visited the Gynecological Outpatient Department, Phramongkutklao Hospital, including associated factors as secondary objective, to develop educational programs and conduct appropriate consultations.

Materials and Methods

This cross-sectional observational study was conducted and approved by the IRB, Royal Thai Army (No. R175q/65). Any 40-year-old Thai women and above who visited the Gynecological Outpatient Department at Phramongkutklao Hospital between 1 March 2023 and 30 June 2023 were randomly selected. Those who had history of psychosis or were unable to communicate fluently in Thai were all excluded. The subjects had received explanations about the purpose, rationale, and method of conducting the research study before participation. After information and consent, the participants were requested to complete self-administrated questionnaires about attitudes toward menopause

and menopausal hormone therapy. Baseline characteristics were collected, including demographics, obstetric and gynecological history, menopausal hormone therapy usage, reproductive status, and prior information to assess the factors associated with attitudes. The sample size was calculated by referring to a desired level of precision. The formula for infinite populations by Cochran, 1977⁽⁵⁾ was used, and the sample size was calculated based on the study of Chaikittisilpa et al⁽⁶⁾. The sample size was determined to be at least 289 participants. However, 5% was added to the total number to compensate for potential drop-outs during participation throughout the study. Therefore, 11 additional participants were added, thereby resulting in a sample size of 300.

Questionnaires about attitudes

There were two attitude questionnaires: 1) Attitudes about menopause (6 positive attitude questions and 9 negative attitude questions), and 2) Attitudes about menopausal hormone therapy (6 positive attitude questions and 9 negative attitude questions) adapted from Golam; study participants' attitudes toward menopause⁽⁷⁾ and Smail; study participants' menopausal hormone therapy (MHT) knowledge⁽⁸⁾. The responses to the questions were "agree", "disagree", and "not sure". The Index of Item Objective Congruence (IOC) was used to evaluate content validity, alignment of the attitude test, and the objectives. Three expert gynecologists working in the Reproductive Medicine Unit, Department of Obstetrics and Gynecology, Phramongkutklao Hospital, conducted the evaluation of instrument quality. They reviewed all questions and text to ensure they are appropriate for the study topic, readable, clear, and comprehensive. The IOC value equals 1, which means that the test has content validity and is aligned with the objectives to reflect attitudes toward menopause and menopausal hormone therapy. A pilot study was performed in 29 menopausal women attending the Gynecological Outpatient Department at Phramongkutklao Hospital before the study was

conducted. The questionnaire was adjusted based on participants' feedback on clarity level of understandability. Cronbach's alpha coefficient was used to evaluate the reliability of the questionnaires. A reliability index of 0.8 was found, meaning that the attitude test is reliable. Responses to the positive attitude questions were scored as 2 for "agree", 1 for "not sure", and 0 for "disagree." And the responses to the negative attitude questions were scored as 0 for "agree", 1 for "not sure", and 2 for "disagree." For interpretation, scores of > 15 indicated a positive attitude, 15 indicated a neutral attitude, and < 15 indicated a negative attitude.

Definition of variables

Adapted from the Stages of Reproductive Aging Workshop (STRAW) Park City, Utah, July, 2001⁽⁹⁾

- Reproductive refers to a state where menstruation remains regular or may sometimes be missed but will not disappear for more than 3 months (Stages -5, -4, -3).
- Perimenopause refers to the period near menopause and post-menopause, starting from irregular menstruation with an absence of 3 months or more (Stages -2, -1).
- Post-menopause occurs after menstruation has been missed for at least 12 months (Stages +1, +2).

Statistical analysis

The statistical analysis was performed using the Statistical Packages for the Social Sciences (Version 23.0) for Windows (SPSS Inc, Chicago, IL, USA). The statistics used in this analysis were for continuous data, using t-test and F-test. In the case of normal distribution, mean $\pm$ standard deviation (SD) was used. And when the data were not normally distributed, median, minimum, and maximum were used. Univariable and multivariable analysis used multiple linear regression to display the associated factors. P value < 0.05 was considered as statistically significant.

Results

A total of three hundred women participated in the study, with a mean $\pm$ SD age of 54.42 ± 9.11 years. The majority (65.3%) were post-menopausal, and most (90.7%) did not use hormone therapy. Only 13.2% were current users of menopausal hormone therapy, while 51.3% reported having prior information about it. Detailed baseline characteristics are summarized in Table 1.

Participants generally held positive attitudes

toward menopause and menopausal hormone therapy. The statement “Going through menopause does not change much,” had the highest agreement (58%), while the negative statement “I felt mentally and emotionally humiliated at the time of menopause” had the highest disagreement (82.3%). Regarding menopausal hormone therapy, 63% agreed it was appropriate for some women, while 54.3% agreed it could replace hormone deficiency during menopause. Further details are in Fig. 1 and 2.

Table 1. Baseline characteristics (n = 300).

	n	%		n	%
Age (years old)			15,000 - 40,000	123	41.00
40 - 49	101	33.67	> 40,000	89	29.67
50 - 59	116	38.67	Underlying disease		
≥ 60	83	27.67	No	154	51.33
mean $\pm$ SD	54.42 $\pm$ 9.11		Yes	146	48.67
BMI (kg/m ²)			Hypertension		
< 18.5	10	3.33	No	217	72.33
18.5 - 22.9	112	37.33	Yes	83	27.67
23 - 24.9	53	17.67	Reproductive status		
25 - 29.9	92	30.67	Reproductive	79	26.33
≥ 30	33	11.00	Perimenopause	25	8.33
mean $\pm$ SD	24.67 $\pm$ 4.30		Postmenopause	196	65.33
Education			Surgery		
none - primary	63	21.00	Never	254	84.67
secondary	109	36.33	Post TAH	16	5.33
$\geq$ bachelor	128	42.67	Post BSO	3	1.00
Living area			Post TAH BSO	18	6.00
Bangkok - Perimeter	114	38.00	Others	9	3.00
Others	186	62.00	History of contraceptive use		
Occupation			No	175	58.33
No	72	24.00	Yes	125	41.67
Government/state enterprise	77	25.67	History of MHT use (only menopause, n = 196)		
Employee/freelance	91	30.33	Never	147	75.00
Business	46	15.33	Ever used	23	11.73
Others	14	4.67	Currently used	26	13.27
Marital status			Prior information regarding menopause		
Single	44	14.67	No	146	48.67
Married	198	66.00	Yes	154	51.33
Divorce	23	7.67	Hormonal use (including contraception)		
Widow	35	11.67	No	272	90.66
Income (Baht)			Yes	28	9.33
< 15,000	88	29.33			

SD: standard deviation, TAH : total abdominal hysterectomy, BSO: bilateral salpingo-oophorectomy, MHT: menopausal hormone therapy

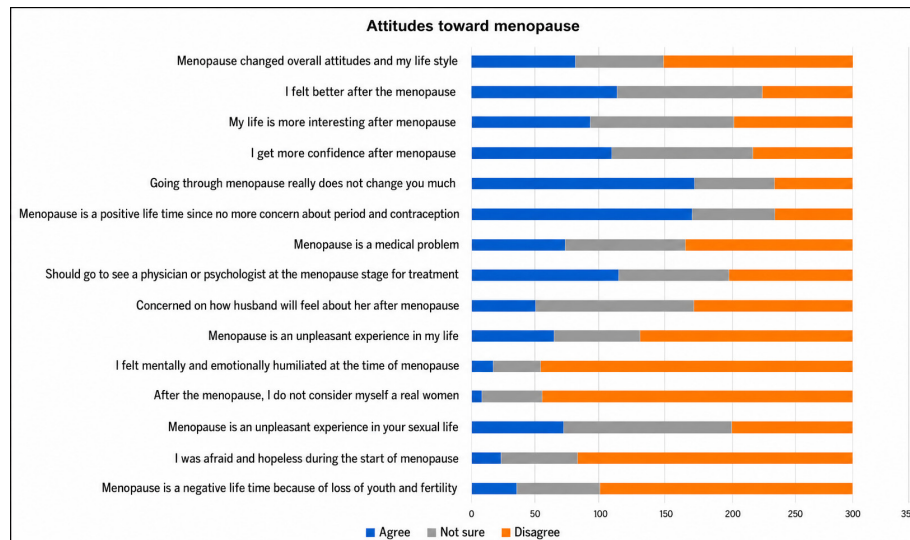


Fig. 1. Number of participants that answer of menopause attitudes questionnaires in each item.

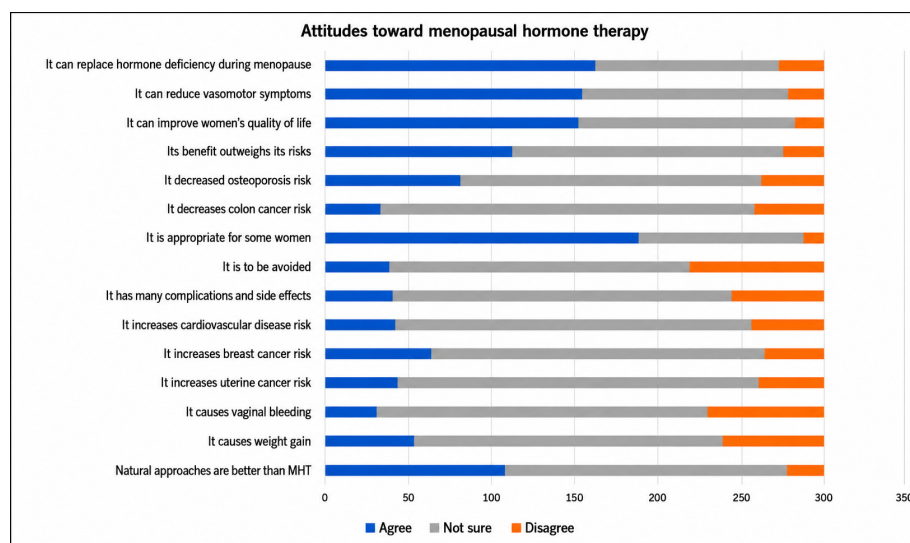


Fig. 2. Number of participants that answer of menopausal hormone therapy attitudes questionnaires in each item.

The means $\pm$ SD of the menopause attitude score was 19.75 ± 5.24 , and the means $\pm$ SD of the menopausal hormone therapy scores was 16.10 ± 3.31 , indicating generally positive attitudes as shown in Table 2. Significant factors affecting attitudes included age and living area. Participants aged 60 years old and above had higher menopause attitude scores compared to younger groups ($p < 0.001$).

Women living outside Bangkok scored higher on menopause attitudes than those in Bangkok ($p = 0.021$). For menopausal hormone therapy, participants with prior information scored significantly higher than those who had not received information ($p = 0.001$), as did those expressing a desire to use hormone therapy ($p = 0.003$). Other factors showed no significant differences (Table 3).

Table 2. Menopause and menopausal hormone therapy attitude score.

	Menopause attitude	MHT attitude
mean ± SD	19.75 ± 5.24	16.10 ± 3.31
min - max	6 - 30	6 - 28
95%CI	19.15, 20.35	15.72, 16.47

MHT: menopausal hormone therapy, SD: standard deviation, CI: confidence interval

Table 3. Associated factors for menopause and menopausal hormone therapy attitude.

	Menopause attitude		MHT attitude	
	mean ± SD	p value	mean ± SD	p value
Age (years old)		< 0.001		0.041
40 - 49	19.39 ± 4.97		15.88 ± 3.26	
50 - 59	18.66 ± 5.45		16.68 ± 3.16	
≥ 60	21.71 ± 4.74		15.54 ± 3.49	
BMI (kg/m ²)		0.280		0.652
< 18.5	19.80 ± 5.14		15.7 ± 2.11	
18.5-22.9	20.19 ± 5.31		15.79 ± 3.27	
23-24.9	18.58 ± 5.74		16.26 ± 3.62	
25-29.9	20.21 ± 4.96		16.18 ± 3.40	
≥ 30	18.85 ± 4.85		16.73 ± 3.01	
Education		0.954		0.083
none - primary	19.65 ± 5.15		15.95 ± 2.70	
secondary	19.87 ± 4.95		15.62 ± 3.16	
≥ bachelor	19.70 ± 5.55		16.57 ± 3.65	
Living area		0.021		0.078
Bangkok - Perimeter	18.86 ± 4.97		16.53 ± 3.05	
Others	20.30 ± 5.34		15.83 ± 3.44	
Occupation		0.190		0.609
No	20.87 ± 4.98		15.93 ± 3.44	
Government/state enterprise	19.51 ± 5.21		16.18 ± 3.58	
Employee/freelance	19.21 ± 5.13		15.96 ± 2.96	
Business	20.00 ± 5.57		16.72 ± 3.50	
Others	18.00 ± 5.84		15.36 ± 2.65	
Marital status		0.382		0.430
Single	20.43 ± 6.26		16.39 ± 3.67	
Married	19.37 ± 5.10		16.17 ± 3.22	
Divorce	20.30 ± 4.66		15.04 ± 2.64	
Widow	20.66 ± 4.94		16.03 ± 3.74	

Table 3. Associated factors for Menopause and Menopausal hormone therapy attitude. (Cont.)

	Menopause attitude		MHT attitude	
	mean $\pm$ SD	p value	Mean $\pm$ SD	p value
Number of Children		0.165		0.061
0	19.61 $\pm$ 5.11		16.16 $\pm$ 3.21	
1	20.22 $\pm$ 5.39		17.04 $\pm$ 4.14	
2	20.25 $\pm$ 5.20		15.51 $\pm$ 3.04	
≥ 3	17.97 $\pm$ 5.44		16.19 $\pm$ 2.69	
Family type		0.236		0.515
Single	19.95 $\pm$ 5.22		16.17 $\pm$ 3.44	
Extended	19.11 $\pm$ 5.30		15.88 $\pm$ 2.86	
Underlying disease		0.126		0.367
No	19.30 $\pm$ 5.33		15.93 $\pm$ 3.30	
Yes	20.23 $\pm$ 5.11		16.27 $\pm$ 3.32	
Hypertension		0.003		0.094
No	19.26 $\pm$ 5.52		15.90 $\pm$ 3.44	
Yes	21.04 $\pm$ 4.19		16.61 $\pm$ 2.91	
Reproductive status		0.071		0.544
Reproductive	19.35 $\pm$ 5.22		15.75 $\pm$ 2.97	
Perimenopause	17.76 $\pm$ 5.02		16.12 $\pm$ 3.37	
Postmenopause	20.16 $\pm$ 5.23		16.23 $\pm$ 3.43	
History of contraceptive use		0.951		0.998
No	19.77 $\pm$ 5.24		16.10 $\pm$ 3.37	
Yes	19.73 $\pm$ 5.26		16.10 $\pm$ 3.23	
History of MHT use		0.181		0.007
Never	19.97 $\pm$ 5.21		15.87 $\pm$ 3.26	
Ever used	19.26 $\pm$ 5.54		16.48 $\pm$ 3.85	
Currently use	18.04 $\pm$ 5.11		17.96 $\pm$ 2.71	
Prior information regarding menopause		0.800		0.001
No	19.83 $\pm$ 5.10		15.46 $\pm$ 2.98	
Yes	19.68 $\pm$ 5.39		16.70 $\pm$ 3.50	
Information from doctor		0.769		0.015
No	19.80 $\pm$ 5.27		15.83 $\pm$ 3.12	
Yes	19.59 $\pm$ 5.17		16.91 $\pm$ 3.75	
Hormonal used (including contraception)		< 0.001		< 0.001
Don't want to use	20.47 $\pm$ 4.90		15.68 $\pm$ 3.31	
Current used	18.11 $\pm$ 5.06		17.71 $\pm$ 2.76	
Want to use	16.75 $\pm$ 6.05		17.40 $\pm$ 3.00	

MHT: menopausal hormone therapy, SD: standard deviation

Independent t-test, oneway ANOVA, significant if $p < 0.05$

Multivariable analysis confirmed significant associations. For menopause attitudes, participants aged 50-59 years scored 1.98 points lower than those younger age group ($p = 0.04$), while those living outside Bangkok scored 1.55 points higher than

those living in Bangkok ($p = 0.017$). For menopausal hormone therapy attitudes, participants who expressed interest in using hormone therapy scored 1.62 points higher than those uninterested ($p = 0.003$). Full details are available in Table 4.

Table 4. Multivariable analysis for menopause and menopausal hormone therapy attitude.

	Menopause attitude		MHT attitude	
	Adjusted coefficient (95%CI)	p value	Adjusted coefficient (95%CI)	p value
Age (years old)				
40 - 49	ref.		ref.	
50 - 59	-1.98 (-3.86 , -0.10)	0.040	0.61 (-0.29 , 1.52)	0.185
≥ 60	0.25 (-2.07 , 2.57)	0.829	-0.65 (-1.68 , 0.38)	0.217
Living area				
Bangkok - Perimeter	ref.		ref.	
Others	1.55 (0.28 , 2.82)	0.017	-0.04 (-0.85 , 0.77)	0.923
Number of Children				
0	ref.		ref.	
1	1.32 (-0.33 , 2.97)	0.116	0.37 (-0.69 , 1.42)	0.496
2	0.64 (-0.77 , 2.05)	0.374	-0.78 (-1.66 , 0.09)	0.078
≥ 3	-1.14 (-3.18 , 0.91)	0.275	0.13 (-1.16 , 1.42)	0.840
History of MHT use				
Never	ref.		ref.	
Ever used	-0.97 (-3.17 , 1.24)	0.389	0.22 (-1.24 , 1.68)	0.767
Currently use	0.16 (-5.11 , 5.43)	0.951	2.28 (-1.08 , 5.64)	0.182
Hormonal use (including contraception)				
Don't want to use	ref.		ref.	
Current use	-2.22 (-7.21 , 2.76)	0.381	-0.57 (-3.83 , 2.70)	0.733
Want to use	-3.02 (-4.75 , -1.29)	0.001	1.62 (0.54 , 2.71)	0.003

Adjusted for age, living area, number of children, history of MHT use, hormonal use (including contraception).

MHT: menopausal hormone therapy, CI: confidence interval

Multiple linear regression, significant if $p < 0.05$

Discussion

The study found that, on average, the participants held positive attitudes toward both menopause and menopausal hormone therapy. However, some participants expressed negative attitudes that could potentially impact their quality of life and relationships with partners. For instance, certain participants agreed that menopause negatively affected their sexual life and reported feelings of hopelessness upon the onset of menopause. Given these findings, it is crucial for

healthcare providers to assess patients' attitudes and provide more comprehensive information about menopause to help prevent future issues. This is especially important for women aged 50-59 years, who exhibited significantly lower scores on attitudes toward menopause compared to other age groups. Healthcare professionals should ensure that all peri- and post-menopausal women, particularly those in this age group, receive adequate counseling about this natural phase of life.

The differences in the study results may be influenced by several factors, including the different age groups, study regions, cultural contexts⁽¹⁰⁾, and the time periods during which the studies were conducted and the clinical settings in which they were carried out. These factors can impact participants' attitudes, knowledge, and perceptions about menopause and menopausal hormone therapy. For comparison, a previous study by Alshogran⁽¹¹⁾ conducted among pre-menopausal women in Jordan found generally negative attitudes toward menopause. In contrast, the current study in Thailand revealed more positive attitudes on average, which may be attributed to differences in the study populations, mostly post-menopausal women, and the cultural context of the two countries.

Concerning menopausal hormone therapy, the previous study of Chaikittisilpa et al in Thailand⁽⁶⁾ showed that women's perceptions of hormone benefits were osteoporosis prevention (39.1%) and hot flash treatment (28.9%). In the study, the participants thought that menopausal hormone therapy could replace hormones during menopause (54.3%) and reduce vasomotor symptoms (51.3%), while only 13% thought of decreased osteoporosis risks. One possible reason for the differences in perceptions of menopausal hormone therapy between the current study and Chaikittisilpa et al's study⁽⁶⁾ is the varying clinical settings. In Chaikittisilpa et al's study, participants may have been seen in a specialized menopause clinic where there is a focused approach to menopause-related care. This setting likely provided patients with more targeted and comprehensive information about menopause and available treatments, which could have shaped their attitudes toward menopausal hormone therapy. On the other hand, in the current study, conducted in a general gynecology clinic, might have involved patients who were less informed or had more generalized concerns about menopause, which could have led to a different perception of the benefits of menopausal hormone therapy.

Additionally, the time period during which each

study was conducted could have contributed to changes in perceptions and practices related to menopausal hormone therapy. Overtime, there has been evolving awareness of menopause and menopausal hormone therapy, as well as shifts in medical guidelines and public understanding^(3,4). For example, more recent studies may reflect increased awareness of the potential benefits of menopausal hormone therapy for alleviating vasomotor symptoms, such as hot flashes, and improving overall quality of life, which might explain why participants in the current study emphasized these aspects of menopausal hormone therapy. In contrast, Chaikittisilpa et al's study⁽⁶⁾ may have been conducted during a period when the primary focus was on osteoporosis prevention, which could have influenced participants' perceptions of menopausal hormone therapy's benefits at that time.

In the study, women living in rural areas had more positive attitudes toward menopause than those living in urban areas with statistical significance. On the contrary, in a previous study by Golam⁽⁷⁾ in Bangladesh, women who lived in urban areas had increased knowledge and positive attitudes about menopause compared to women who lived in rural areas. This difference possibly due to different cultures in the sample and different questionnaires for evaluation. However, the further study should be conducted in this aspect.

For Thailand in 2005, Taechakraichana⁽¹²⁾ conducted a study and found that more than half of the participants considered menopause a natural transition requiring treatment and 53.9% were current hormone replacement therapy users. In the present study, however, only one-third of participants held the opinion that menopausal women should see a physician or psychologist for treatment at the menopause (38.3%) with a smaller proportion of 13.3% used hormone replacement therapy, reflecting potentially more conservative or evolving perceptions. The attitudes of women in the current era may be changing as the differences in results have shown. The difference in attitudes may reflect increased

access to information, shifts in societal perspectives, where natural aging is less medicalized, and concerns over hormone replacement therapy safety stemming from global research.

Although this cross-sectional observational study aimed to evaluate attitudes toward menopause and menopausal hormone therapy in pre-, peri-, and post-menopausal women, together with studying other factors affecting attitudes. There were limitations in the study. First, the questionnaires had few items for evaluating some attitudes. Future studies should involve the development of questionnaires with more items covering all details of each attitude. Second, the results can represent only hospital-based populations. This is the importance bias that causes the results cannot refer to general Thai women. Last, the attitude test used in the study contained agree- not sure- and disagree questions in which the response of “not sure” had no effects on the scores. Other types of questions, such as multiple-choice or essay examinations, would be preferable. Future studies should include larger, more diverse populations. Future studies should also follow-up on participants for a longer period of time to study the long-term attitudes of menopausal status and menopausal hormone therapy.

Conclusion

Women aged 40 years old and above who visited the Gynecological Outpatient Department at Phramongkutklao Hospital in the present study had quite positive attitudes about menopause with associated factors were living area and age. The attitudes about menopausal hormone therapy in this group were nearly mid-range. For clinical applications, the information can be used to develop educational programs and conduct appropriate consultations for women in this age group.

Potential conflicts of interest

The authors declare no conflicts of interest.

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