# Impact of Women's Health Initiative Study on Attitude and Acceptance of Hormone Replacement Therapy in Thai Women Attending Menopause Clinics

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**Objective:** To assess the attitude and acceptance of Thai women attending menopause clinics on hormone replacement therapy (HRT) after the Women's Health Initiative (WHI) publication.

Material and Method: A standardized questionnaire was used to assess attitude and acceptance of HRT in 1,206 women who visited menopause clinics in six hospitals between September 2005 and February 2006. Results: Of the total respondents, 92% were in the age of 40-70 years, 75% were in their peri- and post menopause, 25% were current users and the average duration of hormone use was  $5.6 \pm 5.3$  years. The women's perception of hormone benefits on osteoporosis prevention, skin improvement, and hot flashes treatment were 39.1%, 31.7%, and 28.9%, respectively. The most common concern of hormone use was malignancy. Hormone side effects were found to be the most common reason for switching hormone regimen. Of all the past users, 85% stopped HRT because they changed to another treatment regimen. Only 3.7% had been aware of the WHI, of which 43.5% were influenced by its results. The most common source of HRT information was from doctors. For the ever users, 72.3% had some knowledge about HRT.

**Conclusion:** The present survey revealed that very few women had been aware of the WHI study. Nevertheless, the prevalence of HRT current users was lower compared to a prior survey before the WHI publication. Doctors appeared to be the important source of HRT information, which may indirectly have an influence over women's attitude and acceptance on HRT.

Keywords: Menopause, HRT, Attitude, Acceptance, WHI, Thai women

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Hormone replacement therapy (HRT) has been used by peri- and postmenopausal women for more than 40 years to relieve menopausal symptoms and as a health measure to prevent fragility fracture<sup>(1)</sup>. Many

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observational studies have supported the notion that HRT decreases the incidence of coronary heart disease<sup>(2-4)</sup>. In July 2002, the Women's Health Initiative (WHI) published its first principle findings of the estrogen plus progestin trial. It concluded that the estrogen/progestin combination was associated with an increased risk of cardiovascular disease and breast cancer<sup>(5)</sup>. The results precipitated worldwide debate

and as a result, contributed to changes in guidelines of HRT<sup>(6-9)</sup>. Several studies conducted after WHI revealed changes among women's and physicians' attitude towards the use of hormone after menopause<sup>(10,11)</sup>. In the U.S., prescriptions of HRT have declined rapidly (12,13). Many women tried to stop using HRT, despite reporting not being well informed about the WHI(14). In Thailand, a survey conducted prior to the debut of WHI in 2002 demonstrated an over 50% prevalence of current hormone users in women attending several menopause clinics in Bangkok<sup>(15)</sup>. The pro's and con's of HRT after the WHI have been debated extensively among physicians in several medical conferences. Consequently, physicians and patients alike are more cautious in the use of hormones during the climacteric. The issue of HRT has appeared in the public through various media though it seems to be less prevalent compared to those in developed countries. Women seem to be more doubtful on long-term hormone safety and have probably been put into dilemmas. Hence, the objective of the present study was to assess the attitudes and acceptance of Thai women attending menopause clinics on HRT after the WHI publication.

### **Material and Method**

The present study was conducted in six hospitals including King Chulalongkorn Memorial Hospital, Ramathibodi Hospital, Maharaj Nakorn Chiang Mai Hospital, Police General Hospital, Somdej Prapinklao Hospital and Taksin Hospital after the protocol was approved by the Ethics Committee of the Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand. The questionnaires were distributed to 1,206 Thai women aged more than 35 years, willing to complete the questionnaires, who visited the menopause clinics in these hospitals from 1st September 2005 to 28th February 2006. They filled the questionnaires by themselves while waiting in the menopause clinics. The average time was 30 minutes.

The questionnaire regarded demographic characteristics and information relevant to HRT concern, perceptions of benefits and risks with HRT, hormone use, knowledge, and attitude. The questionnaires were tested for validity by three experts and reliability was tested by Chonbach Alpha (r=0.77). Data were analyzed using SPSS for Windows (Release 11.5). Descriptive statistics were used where appropriate.

# Results

Eighty percent of 1,206 questionnaires were answered completely, 20% were filled almost com-

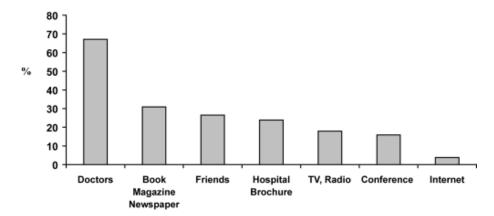
pletely. The characteristics of the studied population are shown in Table 1. Of all the studied women, 92% were in the age of 40-70 years, 75.4% were considered to be in their peri- and post menopause, 21.1% had undergone a hysterectomy and bilateral oophorectomy. The average age at menopause was  $48.9 \pm 4.9$  years. The women who had had hot flashes and vaginal dryness were 52.3% and 47.1%, respectively.

Of the total respondents, 67.3% had known about HRT. The sources of information about HRT are shown in Figure 1. The most common source of information was from doctors. The women's perception of hormone benefits on osteoporosis prevention, skin improvement, and hot flashes treatment were 39.1%, 31.7%, and 28.9%, respectively (Fig. 2). The most common concern of hormone use was malignancy, of which

**Table 1.** Characteristics of studied population (n = 1,206)

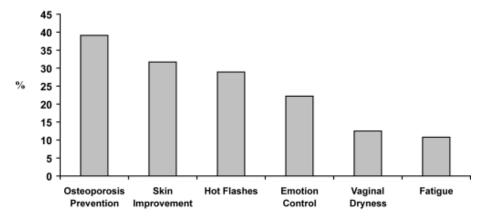
	Mean $\pm$ SD	%
Age (years)	51.9 <u>+</u> 7.62	
Body mass index (kg/m <sup>2</sup> )	$23.7 \pm 3.5$	
Menopausal status		
Premenopause		24.6
Perimenopause		11.3
Postmenopause		64.1
Age at menopause (years)	$48.9 \pm 4.9$	
Surgical menopause		21.1
Marital status		
Single		17.0
Married		67.0
Divorced/Separated		8.0
Widow		8.0
Educational status		
No formal education		1.0
Elementary level		20.4
High school		17.8
College		12.4
Bachelor's degree		36.4
Higher level		12.0
Occupation		
Government service &		42.9
state enterprise		
Employee		20.4
Entrepreneur		5.0
Trader		7.7
Farmer		2.4
Housewife		9.8

Premenopause = women with regular menstrual cycle Perimenopause = women with irregular menstrual cycle Postmenopause = women with no menstrual cycle  $\geq 1$  year Surgical menopause = hysterectomy with bilateral oophorectomy



**Fig. 1** Sources of hormone replacement therapy information\* (n = 800)

\* The respondents could answer more than one choice



**Fig. 2** The women's perception of hormone replacement benefits\* (n = 650) \* The respondents could answer more than one choice

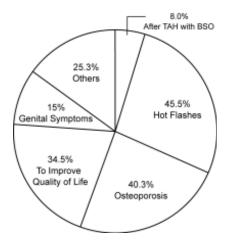
52% of the studied population feared of breast cancer. Concern in weight gain was found in 6.3%.

Although 43.1% of respondents were hormone ever users, only 25% were found to be current users. The average duration of HRT use in ever users was  $5.6 \pm 5.3$  years. The reasons for initiation of HRT are shown in Fig. 3. Hot flashes and osteoporosis were found to be the most common indications. The reasons for hormone discontinuation in past users are shown in Fig. 4, of which 39.9% stopped using HRT due to its side effects. The side effects, which caused hormone discontinuation, included breast pain, headache, and vaginal bleeding (Fig 5). In the ever user group (43.1%), 56.1% had never changed to other type/regimen. Of those who changed hormone regimen, 86.4% changed 1-3 times. The reasons for switching

types of hormones were its side effects (44.8%), fear of breast cancer (24.2%) and concern for hormone accumulation (12.1%) (Fig. 6).

Only 3.7% of the respondents were aware of the WHI. The results of the WHI had influenced their decision on hormone use in 43.5%. The perception that HRT may be associated with an increased risk breast cancer, endometrial cancer, coronary heart disease, venous thromboembolism (VTE) and probably decreased risk of colon cancer are shown in Fig. 7, 8, 9, 10 and 11, respectively.

The respondents were also evaluated for general knowledge on HRT. This revealed that 23.8% had a very good knowledge and 44.9% had some knowledge. For the ever users, 72.3% had some knowledge about HRT.



**Fig. 3** The reasons for hormone replacement therapy initiation\* (n = 499)

\* The respondents could answer more than one choice

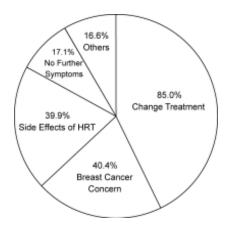
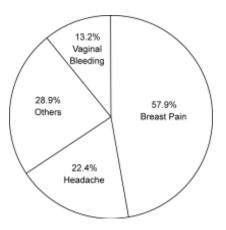


Fig. 4 The reasons for stopping hormone replacement therapy in past users\* (n = 193)

\* The respondents could answer more than one choice



**Fig. 5** The side effects which caused hormone discontinuation\* (n = 76)

\* The respondents could answer more than one choice

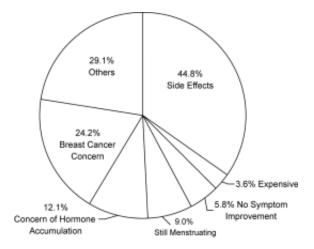


Fig. 6 The reasons to switch type of hormone\* (n = 223) \* The respondents could answer more than one choice

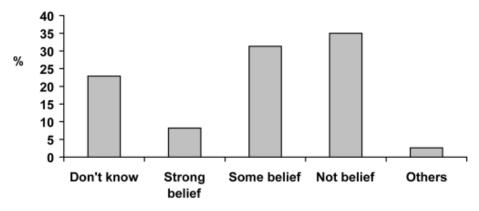


Fig. 7 Perception of the association of HRT and breast cancer (n = 1053)

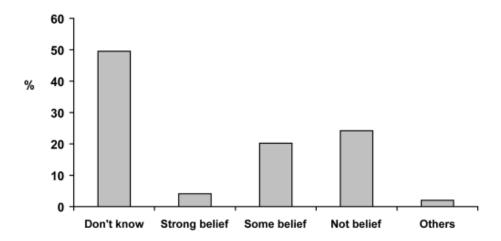


Fig. 8 Perception of the association of HRT and endometrial cancer (n = 1047)

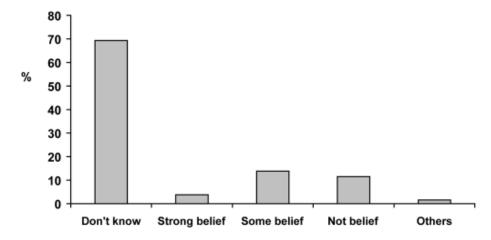


Fig. 9 Perception of the association of HRT and coronary heart disease (n = 1052)

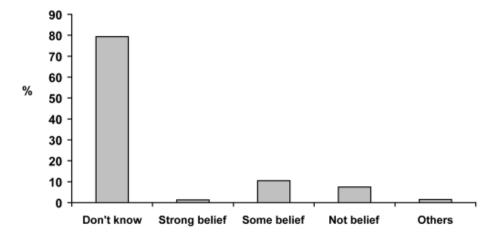


Fig. 10 Perception of the association of HRT and venous thromboembolism (n = 1052)

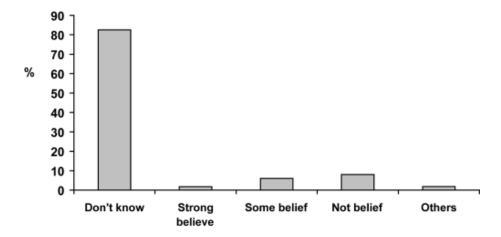


Fig. 11 Perception of the association of HRT and colon cancer (n = 1052)

#### **Discussion**

The present hospital-based study revealed that only 25% of menopause clinic visitors were current hormone users. The prior hospital-based study that was conducted prior to the WHI debut, between January and March 2002, showed that more than 50% were current users(15). Ettinger, et al revealed that the WHI results might have certain influence on Western women's decision in the use of HRT as it was found that most of them tried to stop using the hormone<sup>(14)</sup>. In a Swedish community, women perceived HRT as more risky and less beneficial after the WHI. The decrease in prevalence of hormone users is correlated with pronounced changes in the attitudes towards HRT(11). The hormone discontinuation increased almost immediately, from 2.5% at baseline to 13.8% after the results of the WHI in the United States (13). This shows that the WHI study may have a great impact on post menopausal hormone replacement users worldwide. The present study only implies the impact of the WHI on hormone users who visited menopause clinics in Thailand.

Though most of the studied participants perceived that the use of HRT might associate with breast cancer risk, many of them were not aware of its relationship with endometrial cancer, coronary heart disease, VTE, and colon cancer. This is because most of the respondents did not know about the WHI results. Only 3.7% of the women had been aware of the WHI study. The most common source of HRT information was from doctors. This implies that the WHI study may have a greater influence on doctors than the general population due to the former being in

more proximity to medical information more than lay persons.

The common reasons for hormone initiation in the present study were hot flashes and osteoporosis. The reasons for hormone discontinuation were cancer concern and hormone's side effects. These findings were similar to the prior study that was conducted prior to the WHI<sup>(15)</sup>.

In conclusion, the present study showed that the attitude on HRT of Thai women who visited menopause clinics has changed since WHI publication. Half of them discontinued HRT, which implied that doctors' attitude might have a significant influence over the patients' decision on hormone usage.

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ผลกระทบของ Women's Health Initiative study ต<sup>่</sup>อทัศนคติและความยอมรับของสตรีไทยในคลินิก วัยหมดระดูต<sup>่</sup>อการใช<sup>้</sup>ฮอร์โมนทดแทน

สุกัญญา ชัยกิตติศิลป์, มยุรี จิรภิญโญ, สมศักดิ์ เชาว์วิศิษฐ์เสรี, วีรวัฒน์ วิภาตวิทย์, โซ่สกุล บุณยะวิโรจน์, บัญชา กรรณล้วน, กระเษียร ปัญญาคำเลิศ, อรรณพ ใจสำราญ, นิมิต เตชไกรชนะ

**วัตถุประสงค**์: เพื่อศึกษาถึงทัศนคติและความยอมรับของสตรีไทยในคลินิกวัยหมดระดูต<sup>่</sup>อการใช<sup>้</sup>ฮอร์โมนทดแทน ภายหลังการศึกษาของ Women's Health Initiative

วัสดุและวิธีการ: ใช้แบบสอบถามมาตรฐานสำรวจทัศนคติและความยอมรับต<sup>่</sup>อการใช้ฮอร์โมนทดแทนของสตรีไทย ที่มารับบริการ ที่คลินิกวัยหมดระดูในโรงพยาบาล 6 แห*่*ง ระหว<sup>่</sup>างเดือนกันยายน พ.ศ. 2548 ถึง เดือนกุมภาพันธ์ พ.ศ. 2549 จำนวน 1,206 ราย

ผลการศึกษา: ร้อยละ 92 ของผู้ตอบแบบสอบถาม มีอายุระหว่าง 40-70 ปี โดยที่ร้อยละ 75 อยู่ในวัยใกล้หมดระดู และวัยหลังหมดระดู ร้อยละ 25 เป็นผู้ที่กำลังได้รับฮอร์โมนทดแทน ระยะเวลาเฉลี่ยของการใช้ฮอร์โมนทดแทนประมาณ 5.6 ± 5.3 ปี ผู้ที่รับรู้ว่าฮอร์โมนทดแทนมีประโยชน์สำหรับป้องกันภาวะกระดูกพรุนร้อยละ 39.1 ช่วยให้ผิวหนังดีขึ้น ร้อยละ 31.7 และรักษาอาการร้อนวูบวาบร้อยละ 28.9 ความเสี่ยงของการใช้ฮอร์โมนที่กังวลมากที่สุดคือการเกิดมะเร็ง ฤทธิ์ข้างเคียงที่ไม่พึงประสงค์ของการใช้ฮอร์โมนเป็นสาเหตุของการเปลี่ยนชนิดของฮอร์โมนบ่อยที่สุด ในผู้ที่หยุด ใช้ฮอร์โมนแล้วร้อยละ 85 หยุดใช้ฮอร์โมนเนื่องจากเปลี่ยนวิธีการรักษาเป็นวิธีอื่นแทน มีเพียงร้อยละ 3.7 ของผู้ตอบ แบบสอบถามเท่านั้นที่รู้จักการศึกษาของ Women's Health Initiative และร้อยละ 43.5 ของสตรีกลุ่มนี้ได้รับอิทธิพลจาก ผลของการศึกษานี้ สตรีที่ตอบแบบสอบถามได้รับข้อมูลเกี่ยวกับฮอร์โมนทดแทนจากแพทย์มากที่สุด และร้อยละ 72.3 ของสตรีที่เคยใช้ฮอร์โมนทดแทนมีความรู้เกี่ยวกับฮอร์โมนทดแทน

สรุป: การศึกษานี้พบว่ามีสตรีไทยจำนวนน้อยที่รู้จักผลของการศึกษา Women's Health Initiative แต่อย่างไรก็ตาม ผู้ที่กำลังใช้ฮอร์โมนทดแทนอยู่มีจำนวนน้อยกว่าการศึกษาที่ทำก่อนผลการศึกษา Women's Health Initiative ถูก เผยแพร แพทย์เป็นแหล่งข้อมูลเกี่ยวกับฮอร์โมนทดแทนที่สำคัญของสตรีส่วนใหญ่จึงอาจมีผลทางอ้อมต่อทัศนคติ และการยอมรับต่อฮอร์โมนทดแทนของสตรีไทยที่มาตรวจในคลินิกวัยหมดระดู