Knowledge, attitude and practices towards menopause and hormone replacement therapy among the employees and ob-gyne patients in a tertiary hospital at Manila, Philippines*

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ABSTRACT

Background: Life expectancy of women already increased up to 75 years old, and so women will live 1/3 of their lives during the menopausal period. Medical intervention at this point of life should be regarded as an opportunity to provide and reinforce programs of preventive health care to prepare women to this stage, and so it is important to address perceptions of women regarding menopause and HRT.

Objective: To explore the knowledge, attitude and practices of Filipino women towards menopause and hormone replacement therapy

Methods: A clinical descriptive cross-sectional study was conducted from May to November 2018 among a random 250 employees and patients from Philippine General Hospital. Respondents were asked to answer a validated questionnaire regarding their knowledge, attitude and practices towards menopause and hormone replacement therapy (HRT).

Results: The average age of menopause is 48 years old. The top most common symptoms perceived were easy fatigability, mood swings, hot flushes, loss of capacity in engaging in sexual activities, and loss of sexual desire. Half of them (53%) have fair self-rating knowledge on menopause, only 30% have knowledge on HRT and more than half (131=52%) of them have no knowledge at all about HRT. Forty percent answered that they learned it from their doctors. Among the menopause patients, only 9 have taken HRT, and mostly given by a specialist in a public hospital. At least 7 in ten respondents had correct knowledge on menopause but only 14-33% had correct answer on HRT. Almost 70% of the respondents were "undecided" with the statements regarding their perception on HRT, which is consistent with the fact that they don't even know what HRT means. When asked on practices on menopause, 81% agreed that consulting a doctor for menopause is necessary, and 78% agreed that if HRT was prescribed, they would comply with it. However, only 60% had actually seen a doctor for menopausal symptoms. Only less than half of the respondents would use HRT even if it would cause them relief of symptoms and good health outcome. This is also consistent with the fact that they are not familiar with HRT and the benefits they would get from it.

Conclusion: Majority of women have fair knowledge on menopause but almost none on HRT. Women are not familiar with the benefits they would get from HRT, but there's a high percentage of women (78%) who will take HRT if prescribed by their doctors. There is a need to strengthen menopausal programs in the country to be able to fill in the gap towards knowledge on menopause and especially HRT.

Keywords: menopause, hormone replacement therapy

INTRODUCTION AND SIGNIFICANCE OF THE STUDY

According to WHO 2015, life expectancy of women already increased up to 75 years old, and so women will live 1/3 (20-30 years) of their lives during the menopausal period[1]. This is their time to enjoy retirement, and spend good time with families and friends. In order for them to maximize their non-reproductive years, it is important to make them aware of how to maintain inner wellness, enhance their quality of life, and prevent chronic diseases. Medical intervention at this point of life should be regarded as an opportunity to provide and reinforce a program of preventive health care.

The average menopausal age among Filipino women is 48-51 years old[1,2], and timing is strongly related on the age of her 1st degree relative (mother, sisters) at the time they reached menopause[1]. This could also be induced surgically

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after removal of ovaries under gynecologic indications. When a woman experience it before the age of 40, the condition is called premature ovarian insufficiency, which could be secondary to certain factors (i.e. chemotherapy, radiotherapy).

The menopause is divided into 3 phases: the premenopause, peri-menopause and the post-menopause. After absence of menses for at least 12 consecutive months, a woman is considered postmenopausal. The perimenopause is the period of climacterium marked by irregularity in a woman's previously regular periods. Prior the occurrence of this irregularities, the woman is considered premenopausal[3]. Women will have different response as they enter climacteric period[4]. They have to physically and psychologically understand the changes that happens during this period and adequate health care education on menopause may help these women prepare and enjoy their non-reproductive years.

Preventive intervention during the perimenopausal aims to prolong the period of maximal physical energy and optimal mental and social activity. A specific goal is to detect as early as possible any of the major chronic diseases, including hypertension, heart disease, diabetes mellitus, and cancer, as well as impairments of vision, hearing, and teeth. The clinician should help perimenopausal women to smoothly traverse the menopausal period of life.

MENOPAUSAL SYNDROME

The main clinical effect of estrogen decline is the onset of menopausal syndrome. It consists of vasomotor symptoms (hot flushes), atrophic changes to the genitourinary organs, psychophysiological effects and bone loss.

Vasomotor Symptoms

Hot flush is viewed as the hallmark of menopause, which corresponds to the sudden onset of reddening of the skin over the head, neck, and chest, accompanied by an increase in heart rate and a feeling of intense body heat. Studies suggest that women with hot flushes have a more narrow zone of temperature regulation, and therefore, smaller changes in core body temperature produce compensatory responses, such as shivering or flushing. Although the flush can occur in the premenopause, it is a major feature of postmenopause, peaking in the first year after the last menses, lasting in 50% of women for 4 to 5 years, but in some (as many as 25%) for longer than 5 years, and up to 15 years in 10%[4].

Genitourinary syndrome of menopause (GSM)

Vaginal atrophy is accompanied by vaginitis, pruritus, dyspareunia, and stenosis. The vagina loses collagen, adipose tissue, and the ability to retain water. As the vaginal walls shrink, the rugae flatten and disappear. As a result, the vaginal surface is left friable, prone to bleeding with minimal trauma. Dyspareunia, sometimes with postcoital bleeding, is the inevitable consequence of a severely atrophied vagina and scanty lubrication. Urethritis with dysuria, urgency incontinence, and urinary frequency, on the other hand are further results of mucosal thinning of the urethra and bladder. According to 2017 NAMS hormone therapy position statement, estrogen therapy is the most effective treatment for GSM. Low dose vaginal estrogen preparations are effective and generally safe treatments for vulvovaginal atrophy (VVA), and include creams, tablets, rings. Use of vaginal estrogen also showed decreased incidence of incontinence, overactive bladder and recurrent UTI[5].

Bone loss

Bone remodeling, resorption and formation of bone, increases when estrogen levels decline. Beyond age 30, trabecular resorption begins to exceed formation by about 0.7% per year. Bone loss accelerates after menopause as up to 5% of trabecular bone and 1-1.5% of total bone mass loss occurs per year in the first years after menopause. For the first 20 years following cessation of menses, postmenopause-related bone loss results in a 50% reduction in trabecular bone and a 30% reduction in cortical bone. 75% or more of the bone loss that occurs in women during the first 15 years after menopause is due to estrogen deficiency rather than to aging itself[4].

Prevalence of symptoms in different regions

In two studies from United Arab Emirates and North East Scotland, both showed that hot flash was the most reported symptom[6,7].

From the local studies available, headache and irritability were the most common among 1015 Filipina aged – 40-55 years old according to the Jalbuena (1991). Another local study from Delos Santos (2001) comprising 274 women, showed that hot flash was the most common menopausal symptom, which is similar with the other literatures. On the other hand, the most recent published study among 360 Filipina, aged 40-56 years old from Calimbas et al (2017), joint and muscular discomforts (65-75%) were the most prevalent symptoms[1].

HEALTH-SEEKING BEHAVIOR

It is the onset of subjective symptoms why women seek medical treatment. In Italy, 1,023 menopausal women, answered vasomotor symptoms (associated with annoying sleep disturbances) was the main reason (80%) they seek medical treatment[9]. Another study among 1000 women from The Asian Menopause Survey (2009), showed that sleeplessness was the main reason for seeking

treatment. From the same study, most of the women felt reduction in sexual function but 90% of respondents did not seek treatment for it[10]. In general, women seek consult depending on impact of their menopausal symptoms in their daily lives and some of the symptoms are not bothersome enough to necessitate consult and treatment.

PERCEPTION TOWARDS MENOPAUSE

Women have different perceptions on menopause. Some women perceive it as a good thing because they don't need to worry for their monthly menses, however, some women look at it negatively as it decreases their womanhood. In a study of Pathak 2017, majority of women have negative outlook on menopause considering it as a loss of youth, end of sexual life and higher susceptibility towards health problems[11].

PERCEPTION ON MHT

From the Asia Menopause Survey including China, Malaysia, Taiwan, Thailand and Hong Kong, majority did not opt for HRT because of the risks (breast cancer and side effects), and some women opted for natural remedies. From another study in Europe, it revealed that while 83% of women appear to be well-informed regarding the issues, 40-50% reported having negative feelings towards HRT, despite the high prevalence of postmenopausal syndrome[10].

On the other hand, a study by Minfang Tao et al (2011), showed that although there are clear hazards associated with long-term HT use, many women view HT favorably for climacteric symptom relief. Positive views on HT included climacteric symptom control, prevention of osteoporosis and a perceived improvement in quality of life, while negative factors reported included concerns about potential harmful effects, particularly cancer risks[12].

HORMONE REPLACEMENT THERAPY

Hormone replacement therapy (HT) remains the most effective treatment for vasomotor symptoms (VMS), and genitourinary syndrome of menopause (GSM) and has been shown to prevent bone loss and fracture. The risks of HT differ depending on type, dose, duration of use, route of administration, timing of initiation, and whether a progestogen is used. Treatment should be individualized to identify the most appropriate HT type using the best available evidence to maximize benefits and minimize the risks, with periodic reevaluation of the benefits and risks of continuing or discontinuing HT[5].

For women aged younger than 60 years or who are within 10 years of menopause onset and have no contraindications, the benefit-risk ratio is most favorable for treatment of bothersome VMS and for those at elevated risk for bone loss or fracture. For women who initiate HT more than 10 or 20 years from menopause onset or are 60 years or older, the benefit-risk ratio appears less favorable because of the greater absolute risk of coronary heart disease, stroke, venous thromboembolism, and dementia[5].

Hormone therapy is approved by FDA for four indicaitons: bothersome VMS, prevention of bone loss, hypoestrogenism caused by hypogonadism, castration, or POI; and genitourinary symptoms. And according to 2017 NAMS hormone therapy position statement, HT is an approved first line treatment for relief of menopausal symptoms in appropriate candidates[5].

Contraindications to HT include unexplained vaginal bleeding, severe active liver disease, prior estrogen-sensitive breast or endometrial cancer, coronary artery disease (CHD), stroke, dementia, personal history of inherited high risk of thromboembolic disease, porphyria cutanea tarda, or hypertriglyceridemia, with concern that endometriosis might reactivate, migraine headaches may worsen, or leiomyomas may grow[5].

Potential risks of HT for women aged younger than 60 years or who are within 10 years of menopause onset include the rare risk of breast cancer with combined EPT, endometrial hyperplasia and cancer with inadequately opposed estrogen, VTE, and biliary issues. Additional risks include stroke, and dementia[5].

HRT and QUALITY OF LIFE

Maintaining quality of life is a fundamental aspect of good health care. There are evidences suggesting that the improvement of QoL in HRT- treated women cannot be totally ascribed to effects on vasomotor symptoms as it also improves psychological function in asymptomatic women[9]. The Women's International Study of long Duration of Oestrogen after the Menopause (WISDOM) showed that combined HRT started many years after menopause is associated with significant improvements in vasomotor symptoms, sexual function, sleep disturbance, aching joints and muscles, insomnia, and vaginal dryness[13].

Women's Health Institute (WHI) Study

In 1991, The National Institutes of Health launched the WHI program in response to concerns about unanswered questions of importance to women's health. The trials were designed to test whether hormone therapy would prevent coronary heart disease, and whether the benefits would outweigh the risks, when given for several years to generally healthy postmenopausal women aged 50-79. The primary outcome for benefit was coronary heart disease, and the main outcome for harm was breast cancer[14].

The first paper which came from the WHI was published in the JAMA on July 17, 2002, which paper

concluded that the estrogen-progestin arm, specifically the conjugated equine estogen-medroxyprogesterone acetate arm, was stopped prematurely after 5.2 years (it was aimed to run for 8 years) of the WHI because of a 26% increase in the risk of breast cancer anda 22% increase in the risk of the cardiovascular events. These were increases in relative risk, not an increase in incidence. A risk is something that may or may not happen; a 26% increase in the risk of breast cancer after more than 5 years in, in absolute terms, is actually equivalent to <0.1% per year.

After release of these studies, various organizations recommended against the use of HT for disease prevention and encouraged practitioners to limit treatment to shorter, small doses for symptomatic treatment of menopausal symptoms in women less than 60 years old. In the face of the various findings, the expert committees re-evaluated the guidelines for the use of HRT. Many studies evaluated the impact of the WHI results in prescribing and usage of HRT[15]. The 2017 hormone therapy position statement of The North American Menopause Society concluded the following important statements to help guide the physicians in the decision-making: The risks of HT differ depending on type, dose, duration of use, route of administration, timing of initiation, and whether a progestogen is used. Treatment should be individualized to identify the most appropriate HT type, dose, formulation, route of administration, and duration of use, using the best available evidence to maximize benefits and minimize risks, with periodic reevaluation of the benefits and risks of continuing or discontinuing HT.

OPERATIONAL DEFINITIONS

1. Menopause - period of hypoestrogenic state due to loss of ovarian activity that naturally comes with aging, and defined as complete cessation of menstruation for 12 months.

2. Climacteric - The phase in the aging of women marking the transition from the reproductive phase to the non-reproductive state

3. Menopause Hormonal Treatment (MHT) - government-approved treatments for relief of menopausal symptoms, also called previously as hormone replacement therapy (HRT)

4. Vasomotor symptoms of menopause (VMS) - vasomotor symptoms are usually described as night sweats, hot flashes, and flushes

5. Genitourinary symptoms of menopause (GSM) - include burning and irritation of reproductive organs and structures; dryness, discomfort, or pain with intercourse; and urinary urgency, dysuria, and recurrent infections, due to hypoestrogenic state in women.

OBJECTIVE

To explore the knowledge, attitude and practices of Filipino women towards menopause and hormone replacement therapy

Specific Objective

1. To determine the knowledge of women towards menopause and HRT
2. To determine the attitude of women towards menopause and HRT
3. To determine the practices of women towards menopause and HRT
4. To determine factors that may influence the patients to use HRT

STUDY DESIGN

This is a descriptive cross-sectional prospective study.

METHODOLOGY

A descriptive cross-sectional study was conducted from May–October 2018 among a random sample of 250 women comprised by the employees and OB-GYN out-patient (OPD) patients aged 40-60 years old from the Philippine General Hospital (PGH). A validated questionnaire was administered through face-to-face interviews within the PGH premises. All participants signed an informed consent which were given by the primary investigator prior to answering the survey.

Sample Size

Computation based on knowledge and attitude towards menopause

A minimum of 250 subjects were required for this study based on a level of significance of 6%, and attitude of patients towards menopause with a desired margin of error of 5%, as noted from the reference article by Hamid, 2014[6].

Sample size formula[2]:

$$n \geq \frac{Z^2_{1-\alpha/2} \times P \times (1-P)}{d^2}$$

Legend:
n = minimum sample size
P = proportion of women's knowledge and attitude towards menopause/HRT

d = margin of error (width of confidence interval) = 0.06
$Z_{1-\alpha/2}$ = 1.96

RECRUITMENT

Recruitment was done by the primary investigator and/or the research assistant thru random sampling who has been provided by The Department of OB-GYN.

SURVEY PROPER

Descriptive statistics were used to summarize the clinical characteristics of the patients. Frequency and proportion were used for nominal variables, median and range for ordinal variables, and mean and SD for interval/ratio variables. For content validity, Item-level content validity index (I-CVI) were used to determine the accepted item using the proportion of experts who agreed either quite or highly relevant. Face validity were performed qualitatively. Test-retest reliability were analyzed either through kappa or ICC, depending on the scale of measurement. If the final tool is a reflective type of index, Cronbach's alpha will be determined. All valid data were included in the analysis. Missing variables were neither replaced nor estimated. Null hypothesis were rejected at 0.05 α-level of significance. STATA 15.0 was used for data analysis.

INFORMED CONSENT

Respondents signed a consent form prior to answering the questionnaire. The primary physician or the research assistant was present to entertain some questions from the respondents regarding he questionnaire.

Inclusion Criteria

1. 40-60 years old with consent to participate in the study.
2. Patient from the Out-Patient Department of OB-GYN, UP-PGH or employee of PGH.

Exclusion Criteria

1. Women who will refuse to be part of the study.

RESULTS

Socio-Demographic factors

We surveyed 250 respondents with the age of 40-60 years old. More than half of the respondents were married (73.6%), and had attained secondary level of education (68.4%), were housewives (66%), and had monthly incomes below P 10,000 (78%) (Table 4). There were 37/14% who finished college and there were only 3 among them who finished postgraduate course (Table 1).

Table 1. Demographic profile of respondents (n = 250)

	Total (n=250)	Pre-menopause (n=109)	Peri-menopause (n=34)	Post-menopause (n=107)
	Frequency (%); Median (Range)			
Age	48 (40 – 60)	43 (40 – 50)	48 (42 – 60)	57 (40 – 60)
Marital status				
Single	35 (14)	27 (24.77) 27 (24.77)	5 (14.71) 5 (14.71)	3 (2.8)
Married	184 (73.6)	72 (66.06)	25 (73.53)	87 (81.31)
Divorced/Separated	14 (5.6)	3 (2.75)	3 (8.82)	8 (7.48)
Widowed	13 (5.2)	4 (3.67)	0 (0)	9 (8.41)
With common-law partner	4 (1.6)	3 (2.75)	1 (2.94)	0 (0)
Level of education				
Primary	2 (0.8)	0 (0)	1 (2.94)	1 (0.93)
Elementary	37 (14.8)	13 (11.93)	6 (17.65)	18 (16.82)
Secondary	171 (68.4)	81 (74.31)	19 (55.88)	71 (66.36)
College	37 (14.8)	12 (11.01)	8 (23.53)	17 (15.89)
Postgraduate	3 (1.2)	3 (2.75)	0 (0)	0 (0)
PHD or higher	0	0	0	0
Occupation				
Housewife	165 (66)	70 (64.22)	17 (50)	78 (72.9)
Student	4 (1.6)	1 (0.92)	0 (0)	3 (2.8)
Unemployed	17 (6.8)	8 (7.34)	2 (5.88)	7 (6.54)
Employed	63 (25.2)	30 (27.52)	15 (44.12)	18 (16.82)
Retired	1 (0.4)	0 (0)	0 (0)	1 (0.93)
Monthly income, Php				
<10,000	195 (78)	93 (85.32)	23 (67.65)	79 (73.83)
10,000 - 20,000	44 (17.6)	10 (9.17)	9 (26.47)	25 (23.36)
20,000 - 50,000	9 (3.6)	4 (3.67)	2 (5.88)	3 (2.8)
>50,000	2 (0.8)	2 (1.83)	0 (0)	0 (0)

Table 4. Knowledge on menopause of respondents (n = 250)

	Total (n=250)	Pre-menopause (n=109)	Peri-menopause (n=34)	Post-menopause (n=107)
	Answered correctly (%)			
1. It is a cessation of menses	**239 (95.6)**	102 (93.58)	32 (94.12)	105 (98.13)
2. Estrogen declines during menopause	**215 (86)**	89 (81.65)	30 (88.24)	96 (89.72)
3. Women without ovaries are the same as menopause	**205 (82)**	84 (77.06)	31 (91.18)	90 (84.11)
4. Menopause causes osteoporosis	**175 (70)**	72 (66.06)	25 (73.53)	78 (72.9)
5. Hot flush is observed even before menopause	162 (64.8)	73 (66.97)	21 (61.76)	68 (63.55)
6. Skin wrinkling occurs during menopause	153 (61.2)	69 (63.3)	18 (52.94)	66 (61.68)
7. Vaginal dryness occurs during menopause	158 (63.2)	75 (68.81)	21 (61.76)	62 (57.94)
8. Menopause increases risk of cardiovascular disease	115 (46)	43 (39.45)	17 (50)	55 (51.4)
9. Post-menopausal bleeding is abnormal	114 (45.6)	57 (52.29)	11 (32.35)	46 (42.99)
10. Engaging in recreational activities and physical exercises are beneficial practices?	108 (43.2)	47 (43.12)	16 (47.06)	45 (42.06)

Menstrual profile

Nearly half of them were either pre-menopause (n=143/57%) or menopause (n=107/42.8%), which was a good distribution since this study also wants to know the information gap that can be addressed in the future among those who have not yet entered menopause (Table 2). The average of menopause among the respondents was 48 years old, which is similar to the 2 local studies 20 years ago by Dr. Jalbuena, and a year ago by Dr. Calimbas.

The top most common symptoms (Table 3) perceived from the menopause group were easy fatigability (89%), mood swings (81%) hot flushes (79%), loss of capacity in engaging in sexual activities (79%), and loss of sexual desire (73%). Note that most of the symptoms were related sexual dysfunction, though hot flushes which is the hallmark of menopause was also included.

Majority of them perceived that they have good to very good health (76%), and those who answers with a "not so good health" increases as they reach menopause (Table 2). Half of them (53%) have fair self-rating knowledge on menopause, but 30% (72/250) have little knowledge on HR and almost half (131=52%) of all the respondents have no knowledge at all about HRT. 40% answered that they learned it from their doctors.

Only 9 (7%) among the menopause respondents have taken HRT. Their age at menopause were 32-50 years old. Three of them were given HRT at the same year they experienced menopause, and there was one patient given 10 years after menopause. And most of them were prescribed by a specialist in the public hospital. However, indication, length of taking HRT and reason why they stopped it were not indicated.

Knowledge on Menopause and HRT

The range of menopause age they know is 32-60 years old, with mean average of 50 years old. It includes the cases of primary ovarian insufficiency hence the earlier age. This was asked so that clinician would know that there would be patients in the pre/peri menopausal age which are not yet concerned on reaching menopause especially those who expect it to come a little later in life.

At least seven in ten respondents both menopause and pre-menopause had correct knowledge of (1) what menopause means, (2) that estrogen is decreased during menopause, (3) that women without ovaries would experience the same symptoms as menopause, and (4) menopause may cause osteoporosis and bone weakness (Table 4). However, only 53 (21%) of the respondents claimed that they know HRT and only 4 of them (which were all in the menopause group) had heard about the WHI study.

On the other hand, less than half (14-33%) of the respondents were able to answer the questions on HRT correctly (Table 5), which is consistent to their self-assessment of poor to no knowledge on HRT.

Attitudes/ Perception on menopause

More than half of the respondents agreed to the

Table 2. Menstrual and HRT profile of respondents (n = 250)

	Total (n=250)	Pre-menopause (n=109)	Peri-menopause (n=34)	Post-menopause (n=107)
	Frequency (%); Median (Range)			
Age as of last period, years [n=104]	48 (32 – 57)	-	-	48 (32 – 57)
HRT user [n=125]	9 (7.2)	0	0	9 (10.11)
Age used HRT [n=9]	48 (35 – 53)	-	-	48 (35 – 53)
HRT prescriber [n=10]				
General practitioner	0	0	0	0
Specialist	9 (90)	0	0	9 (90)
HRT prescriber clinic [n=10]				
Private/Clinic	0	0	0	0
Government clinic/Hospital	10 (100)	0	0	10 (100)
General health perception				
Very good	96 (38.4)	49 (44.95)	10 (29.41)	37 (34.58)
Good	95 (38)	36 (33.03)	15 (44.12)	44 (41.12)
Not so good	58 (23.2)	23 (21.1)	9 (26.47)	26 (24.3)
Bad	1 (0.4)	1 (0.92)	0 (0)	0 (0)
Age of menopausal onset (perceived answer), years	50 (32 – 60)	50 (40 – 60)	50 (40 – 57)	47 (32 – 60)
Self rating on knowledge about menopause				
Very good	10 (4)	3 (2.75)	4 (11.76)	3 (2.8)
Good	19 (7.6)	6 (5.5)	2 (5.88)	11 (10.28)
Fair	134 (53.6)	59 (54.13)	16 (47.06)	59 (55.14)
Little knowledge	74 (29.6)	30 (27.52)	10 (29.41)	34 (31.78)
No knowledge on menopause	13 (5.2)	11 (10.09)	2 (5.88)	0 (0)
Self rating on knowledge about HRT				
Very good	3 (1.2)	2 (1.83)	0 (0)	1 (0.93)
Good	7 (2.8)	3 (2.75)	0 (0)	4 (3.74)
Fair	37 (14.8)	15 (13.76)	5 (14.71)	17 (15.89)
Little knowledge	72 (28.8)	27 (24.77)	13 (38.24)	32 (29.91)
No knowledge on menopause	131 (52.4)	62 (56.88)	16 (47.06)	53 (49.53)
HRT influencer				
Media	9 (3.6)	5 (4.59)	1 (2.94)	3 (2.8)
Physician/health care personnel	98 (39.2)	38 (34.86)	13 (38.24)	47 (43.93)
Work and social contact	7 (2.8)	4 (3.67)	2 (5.88)	1 (0.93)

following statements, that menopause is (1) *Normal na pangyayari, hindi problema,* (2) *Nagpapahiwatig ng pagkawala ng pagkabata* (3) *Pagkaramdam ng pagkabata kung bumalik ang regla* (4) *Nagiging mainitin ang ulo at irritable* (5) *Nababawasan ang pagnanais makipagtalik, and* (6) *Ang menopause ay maaaring magdulot ng mapaminsalang kahihinatnan kung hindi gagamutin* (Table 6).

Attitudes/ Perception on HRT

For all items, more than half of the respondents were "undecided" (60-70%) with the statements, which is also consistent with the fact that they don't even know what HRT is (Table 7).

Practices on Menopause

When asked on practices on menopause, 81.2% agreed that consulting a doctor for menopause is necessary, and 78% agreed that if HRT was prescribed, they would comply with it. When asked whether they had been examined physically for menopause, 73.2% answered yes, and that 65.6% reported to attempt pursuing healthier lifestyles. However, only 60.8% had actually seen a doctor for menopausal symptoms (Table 8).

Practices on HRT

For health promotion or prevention purposes, less than half of the respondents would use HRT even if it

Table 3. Current Menopausal symptoms

	Peri-menopause (n=34)	Post-menopause (n=107)
Hot flushes	27 (79.41%)	85 (79.44%)
Night sweats	8 (23.53)	54 (50.47)
Mood swings	29 (85.29%)	87 (81.31%)
Depression	12 (35.29)	63 (58.88)
Feeling more tired than usual	28 (82.35%)	96 (89.72%)
Sexual dysfunction	14 (41.18)	85 (79.44%)
Loss of sexual desire	16 (47.06)	79 (73.83)
Dypareunia	12 (35.29)	67 (62.62)
Vaginal dryness	11 (32.35)	68 (63.55)
Recurrent urinary tract infection	5 (14.71)	49 (45.79)
Leak of urine when coughing	15 (44.12)	66 (61.68)
Difficulty sleeping	10 (29.41)	67 (62.62)
Joint pains	13 (38.24)	61 (57.01)
Difficulty concentrating	4 (11.76)	60 (56.07)
Breast pain	14 (41.18)	59 (55.14)

Table 5. Knowledge on HRT of respondents (n = 250)

	Total (n=250)	Pre-menopause (n=109)	Peri-menopause (n=34)	Post-menopause (n=107)
	Answered correctly (%)			
1. Are you aware of HRT	53 (21.2)	25 (22.94)	7 (20.59)	21 (19.63)
2. Are you aware of WHI study?	4 (1.6)	0	0	4 (3.74)
3. HRT prevents osteoporosis	84 (33.6)	30 (27.52)	15 (44.12)	39 (36.45)
4. HRT improves the mood	74 (29.6)	26 (23.85)	8 (23.53)	40 (37.38)
5. HRT improves hot flushes	65 (26)	27 (24.77)	8 (23.53)	30 (28.04)
6. HRT Improves energy level	47 (18.8)	21 (19.27)	5 (14.71)	21 (19.63)
7. HRT improves memory	47 (18.8)	20 (18.35)	7 (20.59)	20 (18.69)
8. HRT protects from heart disease	52 (20.8)	24 (22.02)	8 (23.53)	20 (18.69)
9. HRT improves vaginal dryness	43 (17.2)	15 (13.76)	6 (17.65)	22 (20.56)
10. HRT helps you look younger	35 (14)	13 (11.93)	7 (20.59)	15 (14.02)

Table 6. Attitude towards menopause of respondents (n = 250)

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
	Frequency (%)				
1. It is a normal event in life	8 (3.2)	10 (4)	38 (15.2)	174 (69.6)	20 (8)
2. It is perceived as loss of youth	8 (3.2)	11 (4.4)	33 (13.2)	184 (73.6)	14 (5.6)
3. It is perceived as loss of physical beauty	9 (3.6)	22 (8.8)	91 (36.4)	112 (44.8)	16 (6.4)
4. General well-being is affected	9 (3.6)	30 (12)	91 (36.4)	108 (43.2)	12 (4.8)
5. Generally a problem/ burden	6 (2.4)	38 (15.2)	78 (31.2)	117 (46.8)	11 (4.4)
6. Generally a problem/ burden	7 (2.8)	35 (14)	84 (33.6)	113 (45.2)	11 (4.4)
7. Heathy lifestyle is needed during this stage	2 (0.8)	26 (10.4)	77 (30.8)	129 (51.6)	16 (6.4)

Table 7. Attitude towards HRT use of respondents (n = 250)

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
	Frequency (%)				
1. HRT is a good solution, if you have symptoms	0 (0)	13 (5.2)	**175 (70)**	53 (21.2)	9 (3.6)
2. HRT is appropriate for some women	3 (1.2)	13 (5.2)	**162 (64.8)**	66 (26.4)	6 (2.4)
3. HRT is to be avoided	3 (1.2)	24 (9.6)	**165 (66)**	52 (20.8)	6 (2.4)
4. HRT is good for preventing age-related health problems	6 (2.4)	10 (4)	**149 (59.6)**	52 (20.8)	33 (13.2)
5. HRT has many complications and side effects	4 (1.6)	8 (3.2)	**155 (62)**	48 (19.2)	35 (14)
6. Natural approaches are better than HRT	7 (2.8)	7 (2.8)	**143 (57.2)**	54 (21.6)	39 (15.6)

Table 8. Practices on menopause of respondents (n = 250)

	Total (n=250)	Pre-menopause (n=109)	Peri-menopause (n=34)	Post-menopause (n=107)
	Frequency (%)			
1. Did you consult a physician at the onset of menopause?	203 (81.2)	95 (87.16)	22 (64.71)	86 (80.37)
2. Do you consult for the menopausal symptoms you experience?	152 (60.8)	66 (60.55)	23 (67.65)	63 (58.88)
3. Have you undergone any physical examination or diagnostics during menopause	183 (73.2)	84 (77.06)	24 (70.59)	75 (70.09)
4. Are you trying to engage in favorable activities starting menopause?	164 (65.6)	69 (63.3)	24 (70.59)	71 (66.36)
5. If you will be prescribed with HRT, are you going to take it?	195 (78)	95 (87.16)	23 (67.65)	77 (71.96)

would cause them relief of symptoms and good health outcome. This is also consistent with the fact that they are not familiar with HRT and the benefits they would get from it. And it is also consistent within the menopausal and the premenopausal group (Table 9).

DISCUSSION

Among the respondents, 43.6% were pre-menopause, 13.6% were peri-menopause and 42.8% were post-menopause. The respondents were grouped according to their menopausal status to check the differences of how each group perceive menopause and HRT. The average age of menopause was 48 years old, which was also similar with previous literatures cited, and more importantly, the average age has not changed from the previous local studies done in 1994.[2] Among the menopausal group, only 10% (9/107) had a history of taking HRT and were all prescribed by REI specialist in the government hospital. This may reflect two things, the resident (non-specialty) doctors in the hospital have not been giving it or there are just very small portion of patients who agreed to receive HRT. Moreover, there is a good local (unpublished) study done last year evaluating our country's gynecologists' knowledge, attitude, and practice towards HRT by Villanueva and Estrella, 2018. 369 gynecologists responded and according to the results, there is lacking knowledge from the Filipino gynecologists on the pre-treatment investigation, the regimen to use and the surveillance needed for MHT. Although 68% of them agreed that they have adequate knowledge about the treatment options for postmenopausal symptoms. 32% of them are still not confident with this matter[16].

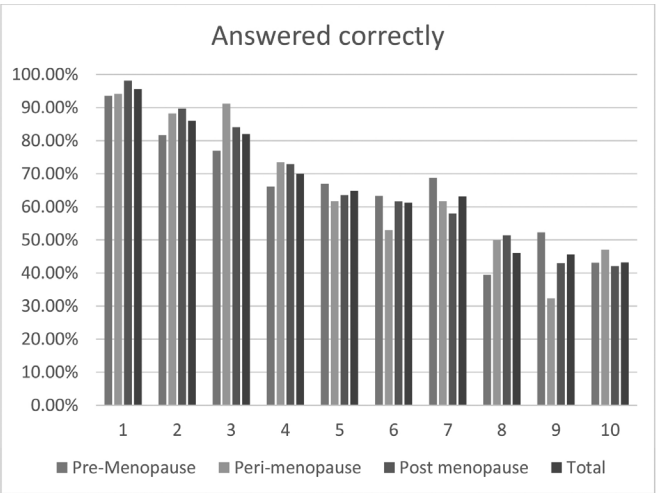
When asked about the patients' self-rating knowledge, majority of the women in the 3 groups consider themselves of having fair knowledge on menopause, while more than half of them have no knowledge on HRT at all. When asked about their main HRT influencer, 86% of the respondents learned HRT from their physicians. For the current perceived menopausal symptoms, top three symptoms from the peri-menopausal group were mood swings, feeling tired than usual, and hot flushes. These were also similar with the menopausal group with the

Table 9. Factors that influence or would influence the decision to use HRT

	Total (n=250)	Pre-menopause (n=109)	Peri-menopause (n=34)	Post-menopause (n=107)
	Frequency (%)			
1. Physician recommends it	92 (36.8)	37 (33.94)	11 (32.35)	44 (41.12)
2. Effective to relieve menopausal symptoms	81 (32.4)	33 (30.28)	10 (29.41)	38 (35.51)
3. Would stop hot flushes	70 (28)	26 (23.85)	11 (32.35)	33 (30.84)
4. Would stop recurrent urinary tract infection	60 (24)	23 (21.1)	10 (29.41)	27 (25.23)
5. Would stop urinary frequency	52 (20.8)	17 (15.6)	9 (26.47)	26 (24.3)
6. Would maintain young-looking skin	54 (21.6)	21 (19.27)	11 (32.35)	22 (20.56)
7. Would prevent heart disease	50 (20)	24 (22.02)	6 (17.65)	20 (18.69)
8. Would maintain vaginal moisture	52 (20.8)	25 (22.94)	8 (23.53)	19 (17.76)
9. Would prevent bone fractures	46 (18.4)	20 (18.35)	5 (14.71)	21 (19.63)
10. Would prevent osteoporosis	48 (19.2)	22 (20.18)	6 (17.65)	20 (18.69)
11. Would not cause cancer	47 (18.8)	22 (20.18)	8 (23.53)	17 (15.89)
12. Would have to be taken for more than a year	50 (20)	21 (19.27)	8 (23.53)	21 (19.63)
13. Would require frequent checkups	56 (22.4)	23 (21.1)	8 (23.53)	25 (23.36)
14. Friends or relatives take it without problems	33 (13.2)	13 (11.93)	6 (17.65)	14 (13.08)
15. Concern for cost	42 (16.8)	23 (21.1)	5 (14.71)	14 (13.08)
16. Presence of medical conditions	23 (9.2)	11 (10.09)	3 (8.82)	9 (8.41)

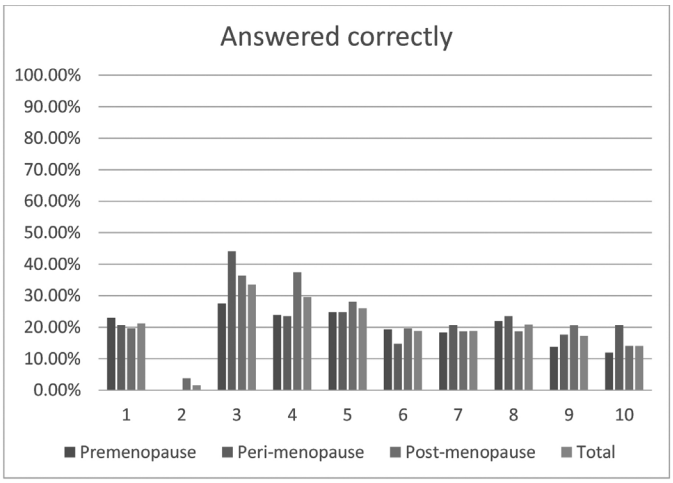
addition of sexual dysfunction. The sexual dysfunction has a high prevalence among the sexual problems in the menopausal group, which includes sexual dysfunction (79%), loss of sexual desire (73%), dyspareunia (62%) and vaginal dryness (63%). Hypoestrogenism or age could be one of the reasons, but more importantly, clinicians dealing with menopause should be aware that these are common menopausal symptoms the need to manage as well.

For the knowledge on menopause, 250 respondents were asked to answer 10 questions with yes or no (Figure 1). Majority of them got the correct answer on basic questions however, more than half of the respondents got wrong answers for the common effects of menopause. Same goes with the assessment of their knowledge on HRT (Figure 2), wherein an average of 20-30% of the respondents only had the correct answers. The lack of knowledge of these common effects of menopause is also reflective of the need to educate patients more about this matter. Regarding the perception towards menopause, majority of them agreed that it is just a normal life event and healthy life style is needed during this stage, however, most of them also agreed to the negative effects of menopause such as loss of youth and physical beauty, menopause affects general well-being, and that menopause is a problem. This point should also be considered by the clinicians, as some women might need psychosocial support as they enter menopausal period. With respect to the attitude of the respondents towards HRT, 50-70% of the respondents were undecided of the statements asked. This is reflective of their poor self-rating knowledge of HRT from the earlier part. For the questions regarding the practices of menopause, 80% of the postmenopausal group consulted their physician after having reached the menopausal period, and 63% of them consulted for their menopausal symptoms. Seventy percent of them underwent physical examinations or diagnostics during menopause, 66% of them are trying to engage in healthy activities, and more importantly, a great percentage of 72% agreed that they are willing to take HRT if prescribed by their doctors. This paper also would like to determine the factors that would influence them to use HRT (Figure 3), but the number of respondents that would consider using HRT did not even reach half of the population. Nonetheless, the top reasons that will make them use HRT were the following: if physician would recommend it, if it is effective to relieve menopausal symptoms and if it would stop hot flushes.



1. It is a cessation of menses
2. Estrogen declines during menopause
3. Women without ovaries are the same as menopause
4. Menopause causes osteoporosis
5. Hot flush is observed even before menopause
6. Skin wrinkling occurs during menopause
7. Vaginal dryness occurs during menopause
8. Menopause increases risk of cardiovascular disease
9. Post-menopausal bleeding is abnormal
10. Engaging in recreational activities and physical exercises are beneficial practices?

Figure 1. Knowledge on menopause



Questions
1. Are you aware of HRT
2. Are you aware of WHI study?
3. HRT prevents osteoporosis
4. HRT improves the mood
5. HRT improves hot flushes
6. HRT Improves energy level
7. HRT improves memory
8. HRT protects from heart disease
9. HRT improves vaginal dryness
10. HRT helps you look younger

Figure 2. Knowledge on HRT

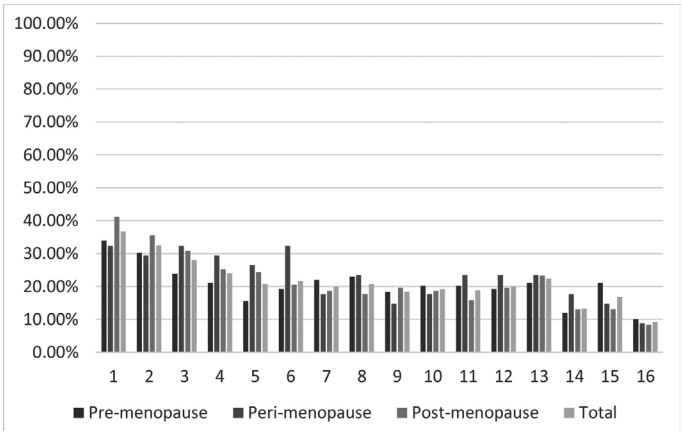


Figure 3. Factors that would influence the decision to use HRT

CONCLUSION

The average age of menopause has not changed which is 48 years old. Knowing that the life expectancy of the women has increased to 75 years old, it is really valuable to come up with strategies on how to educate our women to maximize their non-reproductive years. After almost 2 decades, the knowledge on menopause has not increased significantly, referring to the 2 good local studies done last 1994 by Dr Jalbuena, and 2001 by Dr delos Santos which were similarly concluding that less than half of the respondents were knowledgeable of menopause. Moreover, the knowledge on MHT was just little or none at all. Only 20% of the respondents (53) claimed that they know HRT. Less than half (14-33%) of the respondents were able to answer the questions on HRT correctly, which was consistent to their self-assessment of poor to no knowledge on MHT. The top most common symptoms perceived from the menopause group were easy fatigability (89%), mood swings (81%), hot flushes (79%), loss of capacity in engaging in sexual activities (79%), and loss of sexual desire (73%).

The fair knowledge of Filipino women towards menopause in this study reflects a good background of the society and their doctors regarding menopause but NOT on HRT. The very low percentage of women using HRT in this study may reflect the limited knowledge of their physicians in counseling and prescribing HRT. These results might be very useful on how physicians would counsel the menopausal women to fill in the gap between their knowledge, attitude and practices towards menopause and HRT. This study hopes increase the awareness of the clinicians on the perceptions of the patients towards menopause and MHT, as they will be their initial source of education. Due to different symptoms that the patients experience, the clinicians should also extend their effort on asking regarding their menopausal symptoms and provide remedies. ■

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