

Knowledge, Attitude and Practice of Filipino Gynecologists on Menopausal Hormonal Therapy: Where Are We Now?*

Mary Grace M. Villafuerte, MD¹

Abstract

Objective: This study will evaluate the knowledge, attitude and practice of gynecologists towards hormonal therapy for menopausal symptoms.

Methods: A descriptive study design was carried out across the different regions of the Philippines from April to October 2018. A self-administered questionnaire was used to identify current knowledge, attitude and practice of gynecologists regarding the use of hormonal replacement therapy.

Results: A total of 369 respondents were able to complete the questionnaire. Our findings indicate that the most common indication for giving MHT are vasomotor symptoms such as hot flushes, night sweats, diaphoresis, vaginal dryness and its associated discomfort and pain during intercourse. Almost all Filipino gynecologists participating in this study are aware that MHT will improve vasomotor, urogenital symptoms, sexual dysfunction and mood. Majority of Filipino gynecologists who participated in this study agreed correctly that MHT will decrease the risk of osteoporosis and coronary artery disease. However, still majority of Filipino gynecologists do not routinely recommend/offer the use of MHT to every postmenopausal woman. On the other hand, at least half of the respondents falsely believe that MHT can decrease the risk for cognitive dysfunction, cerebrovascular disease, Parkinson's disease and vascular thrombosis.

Conclusion: The overall knowledge of Filipino gynecologist who participated in this study is lacking. Only 68% of them agreed that they have adequate knowledge about the treatment options for postmenopausal symptoms and as much as 32% of them are still not confident. Basic knowledge on menopausal symptoms and indications for hormonal therapy are known to the respondents but these knowledge does not translate to practice.

Key Words: hormone replacement therapy, menopause, postmenopause

*3rd Place, 2019 Philippine Medical Association Original Research Presentation Contest, May 15, 2019

¹Resident, Philippine Heart Center, Quezon City

INTRODUCTION

Vasomotor symptoms are the most frequently reported symptoms of women going into menopause. As such, it is the most frequent indication for starting hormonal therapy.^{1,2} Several studies have already recommended menopausal hormone therapy or MHT as an effective way to treat other menopausal symptoms, improve quality of life, alleviate the burden of disease, provide cardiovascular protection and prevent long-term complications (i.e. osteoporosis).³ Controversy and debate regarding the use of MHT started in 2002 when the Women's Health Initiative was published.⁴ Its results suggest an increased risk for cardiovascular disease, Alzheimer's disease, breast cancer, stroke, heart attack, and venous thrombosis. The risk was particularly high for heart attacks in the first year of hormone use and the risk was continued for several years thereafter.^{5,6} As a result, there was a dramatic decrease in the use of hormonal therapy exemplified by the drastic decrease in the sales of hormonal products in the market.^{7,8} Several studies have also observed significant change in the attitude of health professionals towards prescribing hormonal therapy.^{6,9,10,11,12} Among these were the study of Pedersen and colleagues (2007) on Scandinavian gynecologists (Denmark, Sweden and Norway), Moen and colleagues (2005) on Norwegian gynecologists and Meherishi and colleagues (2010) on Indian gynecologists.¹⁴

Despite the tremendous impact of the WHI trial on the practice of gynecologists in the management of menopausal patients, results of the said study remained debatable. In fact, more than fifteen years after its publications, most of its conclusions and recommendations have been reversed as a result of reinvestigation of its own data and conduct of more studies that have proven the efficacy and safety of MHT. As such, updated guidelines for MHT published by various societies including the North American Menopause Society, International Menopause Society and even the Philippine Society of Climacteric Medicine have recommended the use of MHT. Despite these numerous current publications, many health professionals involved in the care of women, particularly gynecologists, have remained cautious in prescribing hormonal therapy for their patients.

A large portion of the world's population is comprised of individuals aged 50 years old and above. Hence, one important aspect of medicine is addressing the medical complications associated with aging, menopause included. It is common knowledge that the attitude and knowledge of gynecologists (or any physician) on hormonal therapy play an important role in the decision making of a woman in her climacteric period. Fifteen years since the publication of the WHI, and in light of the recent recommendations of major organizations on the care of menopausal women, it is worthwhile to explore the current knowledge, attitude and practices of Filipino gynecologists regarding the use of MHT. Specifically, this study aimed to:

1. Identify the indications used by gynecologists in prescribing hormonal therapy (knowledge)
2. Determine the perception of gynecologists on menopausal hormonal therapy (attitude)
3. Determine the prescribing habits of gynecologists (practice)
4. Compare the knowledge, attitude and practices of gynecologists based on their age, years of practice, area of practice, subspecialty and type of practice

With this study, we aim to contribute on how to improve medical service to our aging population and in turn, improve the quality of life of women of menopausal women.

METHODOLOGY

This was descriptive study carried out across the different regions of the Philippines for six months, from April 2018 to October 2018. A questionnaire was used to identify current knowledge, attitude and practices of gynecologists regarding the use of Menopause Hormone Therapy. This study was conducted across the different regions of the Philippines involving gynecologists who were:

- (1) Fellows of the Philippine Obstetrics and Gynecology Society (POGS)
- (2) Aged 30 years old or more
- (3) Currently in the practice of obstetrics and gynecology

Physicians, both general practitioners and practicing gynecologists who were not members of POGS were excluded in the study population. Likewise, POGS fellows who have not been in the practice of OB-GYN for the past 5 years were excluded from the study.

A self-administered questionnaire, adapted from a study done by Nassar and colleagues on menopausal hormonal therapy, was used.¹² The questionnaire was altered to better cater to the population intended to be described by this study. At present, there are no available Philippine data describing the knowledge, attitude and practice of gynecologist practicing in the Philippines. Hence, the investigators chose to use the questions pertaining to the knowledge, attitude and practice after the WHI study.

The modified questionnaire contained questions covering various domains of knowledge, attitude and practices of Filipinos related to MHT. Content validity was assessed by five experts who are members of the Philippine Society for Climacteric Society and were chosen based on their contribution in the field. Each expert was requested to rate each item. The items that had a content validity index (CVI) of 0.8 (or 80% of the experts rated an item as quite or highly relevant) were accepted (see Table 1).

For the face validity, a qualitative assessment was done by ten (10) participants, who are members of POGS. Each item was reviewed, and the subjects were asked the following questions: *Did you have any difficulty understanding this question? What does the question mean to you? Is the question relevant to you?* The questionnaire was modified accordingly (see Table 2).

Lastly, test-retest reliability was assessed by administering the modified questionnaire to ten (10) participants who are members of POGS and re-administering it again within 3-7 days. It was assumed that during this period there will be no expected change in their answers. The investigator then computed for the intraclass correlation coefficient or the kappa between the test and retest results for interval/ratio or nominal variables, respectively. However, items with poor agreement and no agreement were still included because they were deemed necessary to evaluate the knowledge, attitude and practices. The poor/no agreement may be attributed to the lack of knowledge of the participants (see Table 3).

After the validation process, the final questionnaire, containing 22 items with an attached informed consent explaining the objectives of the study and ensuring anonymity of the data, was administered to the participants (Appendix B and C). The self administered questionnaire had two parts. Part 1 gathered information concerning the patient's demographic data (age, sex), year of residency completion, type of medical practice and subspecialty training. Part 2 was composed of items concerning their knowledge, practice and attitude towards MHT.

Every year, the POGS holds a postgraduate course in the different regions of the country as part of its continuing medical education for members. This became the venue for recruitment of participants for the study and the questionnaires were distributed along with informed consent.

A minimum of 369 subjects was required for this study based on a level of significance of 5%, a prevalence of 40%¹³ with a desired width of confidence interval of 10%, as noted from the reference article by Pedersen et al, 2007.¹⁴

Descriptive statistics was used to summarize the general and clinical characteristics of the participants. Frequency and proportion was used for nominal variables, median and range for ordinal variables, and mean and standard deviation for interval/ratio variables. All valid data were included in the analysis. Missing variables were neither replaced nor estimated. Null hypothesis was rejected at 0.05 α -level of significance. STATA 15.0 was used for data analysis.

RESULTS

A total of 369 respondents were able to complete the questionnaire. Data for analysis were available for almost all of the variables at 97.56 to 100 percent. A stark majority of participants were female (95%), had an age more than 40 years (79%), and were married (73%). Most were practicing both obstetrics and gynecology (99%). More than half obtained an OB-Gyne degree in 2000 to 2018 (57%), were in private practice (55%), had more than ten years of medical experience (72%), and had a subspecialty (60%). The three most common subspecialties were ultrasound (37%), gynecologic oncology (17%) and maternal and fetal medicine (15%). About half of the participants were from the National Capital Region (29%) and Region 6 (21%). Table 4 summarizes the demographic characteristics of the respondents.

Knowledge

Around two for every three respondents (66%) did not routinely recommend MHT for every post-menopausal woman seen in their practice and only offers MHT upon the request of the patient (80%). However, almost all recommended the use of MHT as treatment of vasomotor symptoms such as hot flushes, night sweats, and diaphoresis (95%) and as treatment of vaginal dryness-associated discomfort and pain during intercourse (92%). Still, a majority of respondents recommended the use of MHT for prevention of cardiac accidents such as coronary artery disease (68%), for prevention and treatment of osteoporosis (86%), for treatment of mood changes and emotional lability (84%), and treatment for decrease in libido (80%). About half of the respondents preferred estrogen and progesterone as the first choice of MHT for patients with intact uteri and low risk for cardiovascular events while 73% preferred Tibolone for patients at high risk for cardiovascular events. A vast majority of respondents believed that MHT improves vasomotor symptoms (99%), urogenital symptoms (98%), sexual dysfunction (94%) and mood (93%). About 6-9 in 10 participants also believed that MHT decreases the risk of osteoporosis (93%), cognitive dysfunction (87%), coronary artery disease (77%), cerebrovascular disease (70%), dyslipidemia (65%), Parkinson's disease (65%), and osteoarthritis (62%). However, only 50% believed that MHT decreases the risk of vascular thrombosis while 42% believed that MHT actually increases the risk. On the effect of MHT on breast cancer, there appeared to be no distinct agreement as to whether MHT increases the risk (42%), decreases the risk (30%), or no effect on breast cancer at all (28%). Table 5 summarizes the respondents' knowledge on menopause management.

Attitude

Eight to nine in ten obstetrician-gynecologists agreed that MHT relieved postmenopausal symptoms (97%), improved the quality of life of patients (93%), believed that MHT is an integral part in the care of postmenopausal women (88%), and can prevent chronic disorders such as heart disease, osteoporosis, and cognitive SAD

impairment (87%). On the belief that the respondent had adequate knowledge on treatment options for postmenopausal symptoms, 68% agreed they had adequate knowledge, 2% disagreed, while a third was uncertain. Majority of the respondents will either use MHT or prescribe MHT to his wife/mother/sister (80%) while a diminutive 2% will neither use nor prescribe MHT. Table 6 summarizes the attitudes of respondents towards menopause management.

Practice

Thirty eight percent (38%) of obstetrician-gynecologists had less than six menopausal patients consulting them in the past six months, 37% had six to twelve consults, while a quarter had more than twelve consults. For the past six months, 52% of obstetrician-gynecologists was able to advise MHT to less than 6 menopausal patients, 37% to 6-12 menopausal patients and 12% to more than 12 menopausal patients. During this same period, 60% of obstetrician-gynecologists was able to prescribe MHT to less than 6 menopausal patients, 32% to 6-12 menopausal patients and 8% to more than 12 menopausal patients.

Majority of the respondents screened their patients for menopausal symptoms (76%), discussed symptoms with patients (86%), and offered MHT to women who had bilateral salpingo-oophorectomy (67%). Furthermore, half of the respondents offered MHT only to postmenopausal women within ten years of menopause while a third offered MHT only to those below 60 years old. About 72% would refer patients to another subspecialty for treatment of menopausal symptoms while 28% will not refer their patients. Majority would counsel the patients regarding the possible risks or side effects of MHT but only 33% routinely did the counselling. Similarly, a third reported that they always presented facts about the different forms of MHT to patients and allowed them to participate in decision-making regarding which MHT to choose. Lastly, only 33% would prescribe MHT for a duration of five years and around 29% would also continue the prescription for as long as the drug is tolerated by the patient. Table 7 summarizes the practice of respondents towards menopause management.

DISCUSSION

A larger portion of the world's population is comprised of individuals aged 50 years old and above. As life expectancy rises, more and more women are experiencing the potential long term consequences of menopause. As such, many researches are made to give optimal care for women in pre-menopausal and menopausal years. These studies show that MHT can have significant benefits in women experiencing menopausal symptoms, yet the use of MHT are not common in menopausal patients including Filipino. In a multicenter study done in Latin America shows that only 12.5% of women aged 45-59 use MHT.¹⁵

Our findings indicate that the most common indication for giving MHT are vasomotor symptoms (95%) such as hot flushes, night sweats and diaphoresis, vaginal dryness (92%) and its associated discomfort and pain during intercourse. Menopausal symptoms are observed across nations and experienced by all races, but the prevalence varies across different regions. Hot flushes and night sweats are the most common menopausal symptoms experienced in Caucasian population and similar to the Caucasian population, hot flushes is the most common (56.7%) complain of menopausal Filipino women as shown by the study presented by Gonzaga during the First Consensus Meeting on Menopause in the East Asian Region. However, it was followed by irritability (49.8%), nervousness (47.3%), palpitation (46.8%) and headache (45.9%). Night sweats occur in 44.6% making it only the 6th most common complaint of Filipino menopausal women.¹⁶ Aside from vasomotor and urogenital symptoms, other indications for giving MHT are prevention and treatment of osteoporosis (86%), for mood changes and emotional lability (84%), decrease in libido (80%) and as per patient's request (80%). These findings indicate that vast majority of Filipino gynecologist participating in this study are familiar with the indications and benefits of HRT described in medical literatures and practice guidelines.

Almost all Filipino gynecologists participating in this study were aware that MHT will improve vasomotor (99%) and urogenital (98%) symptoms, sexual dysfunction (94%) and mood (93%). However, despite the overwhelming percentage of Filipino gynecologists believing that MHT relieves menopausal symptoms (97%) and improves quality of life (93%), only 76% of them screen their patients

and only 88% believed that MHT is an integral part in the care of menopausal women. In fact, majority (66%) of Filipino gynecologists do not routinely recommend/offer the use of MHT to every postmenopausal woman.

The knowledge and attitude of gynecologists on hormonal therapy play an important role in the decision making of a woman in her climacteric period. The Philippine Society of Climacteric Medicine, North American Menopause Society and International Menopause Society, among others, have updated clinical practice guidelines for the use of MHT. However, not all gynecologists are knowledgeable on the pre-treatment investigation, the regimen to use and the surveillance needed for MHT. Only 68% of Filipino gynecologists participating in this study agreed that they have adequate knowledge about the treatment options for postmenopausal symptoms (12% strongly agreed and 56% agreed), and as much as 32% of them are still not confident about their knowledge on menopausal treatment. Moreover, although 86% of Filipino gynecologists participating in this study discuss menopausal symptoms with their patients, not all of them advise or prescribe MHT. Majority (75%) of the respondents have 12 or less menopausal patients for the past 6 months (38% with less than 6 and 37% with 6-12 menopausal patients). Of the 25% of Filipino gynecologists who have more than 12 menopausal patients, only 12% was able to advise MHT. And among these 25%, only 8% was able to prescribe MHT to their patients. This indicates that not all menopausal patients were advised on MHT and that not all menopausal patients advised on MHT were given prescription for MHT. In fact, most (72%) of the Filipino gynecologists participating in this study will tend to refer their patients to another subspecialty for the treatment of menopausal symptoms.

Majority of Filipino gynecologists who participated in this study agreed correctly that MHT will decrease the risk of osteoporosis (93%) and coronary artery disease (77%). Based on the 2016 IMS Recommendations, MHT is the most appropriate management for fracture prevention in the early menopause and that MHT (combined therapy regimen) is cardioprotective. However, the use of MHT, solely for primary prevention of coronary heart disease for women more than 60 years old is no longer recommended.¹⁷

On the other hand, at least half of the respondents falsely believe that MHT can decrease the risk for cognitive dysfunction, cerebrovascular disease, Parkinson's disease and vascular thrombosis (87%, 70%, 65% and 50% respectively). Based on the three-arm trial done in women below 60 years old, cognitive function is neither harmed nor improved by MHT.¹⁸ This was similar to the follow-up analyses done 7 years from the termination of the WHI study wherein menopausal patients were exposed to 0.625 mg/day of CEE, with or without continuous MPA. However, some studies would show that there is reduced risk for Alzheimer's disease and dementia when MHT initiated during mid-life.¹⁷ In the same way, MHT is not a treatment option for dementia. Once symptoms are already evident initiation of MHT does not have any benefit on cognitive function nor it does not slow down the disease progression.¹⁷

Similar finding was observed for cerebrovascular and Parkinson's disease. Based on the 13-year follow-up data from the WHI, MHT administration in women less than 60 years old and/or less than 10 years since menopause has no effect on the risk of stroke. This trend was similarly observed with MHT on the risk for Parkinson's disease.¹⁷

Administration of oral estrogen therapy is contraindicated for women with history of venous thromboembolism. Still, half of the respondents believe that MHT decreases the risk for vascular thrombosis. Forty two percent of the respondents were correct that the risk for thromboembolism increases with MHT, especially if given to women more than 60 years old. As such, transdermal estrogen therapy is the first line of treatment for obese women with menopausal symptoms.¹⁷

Data on the risk of breast cancer development for patients on MHT are varied and the use of MHT in women more than 50 years old is a complex issue. In this study, the respondents have varied answer. Thirty percent (30%) believed that MHT decreases the risk of breast cancer, 28% said that MHT has no effect on breast cancer development and the remaining 40% of them believed that MHT increases risk for breast cancer. Studies have shown that there is only small risk of breast cancer attributable to MHT and the said risk would progressively decline after the discontinuation of the medications. The increase risk of breast cancer is primarily associated with synthetic

progesterone added to estrogen (MPA + CEE). However, the risk is lower if micronized progesterone or dydrogesterone will be used.¹⁷

More than half of the respondents (62%) believed that MHT decreased the risk of osteoarthritis. Although there is no clear association between the risk of osteoarthritis and long-term estrogen exposure, studies have shown that cartilage degradation and need for joint replacement surgery are reduced in patients receiving hormonal treatment.¹⁷

Women who underwent bilateral oophorectomy will experience similar symptoms as that of women who had natural menopause. As such, screening, treatment and surveillance for surgically menopause patients should be similar to those who underwent natural menopause. Of the Filipino gynecologists participating in this study, only 67% offer MHT to women who already has surgical menopause. Aside from the above mentioned benefits, estrogen therapy initiated at the time of surgery (oophorectomy) may have short-term cognitive benefit.¹⁷

In a multinational study done in Latin America by Dankers and colleagues (2016), they observed that most gynecologists were supportive of personal use of MHT. This was similar our findings. Eighty percent of Filipino gynecologists participating in this study will use MHT for themselves or for their partners/mother/sister for the male gynecologists. Only 2% disagreed on personal MHT use. A higher percentage of personal use was recorder in Germany (97%) and in US and Europe (92%) but lower in Scandinavia (68% - 74%).^{14,19,20} These difference on the rate of personal use of MHT may suggest that not all physicians accept the reliability of the results of the WHI. This study shows that despite the high percentage of personal use for MHT, this does not translate to clinical practice. Of the 25% of respondents with more than 12 menopausal patients, only a third of them (8% of the total number of respondents) was able to prescribe MHT. In a study done in Latin America, they identified that the main reason for the low rate of MHT use is the lack of medical prescription.¹⁵ And we all know that the use of MHT by menopausal women are strongly influenced by how their physicians counsel them. In the same way, the attitude of gynecologists (or any physician) towards MHT is greatly influenced by their knowledge and the social, cultural and economic settings in which they live.

There were no strict and mandatory rule on the use of MHT but data from recent studies, including the WHI study, suggest that MHT can be safely given up to 5 years in a healthy woman less than 60 years old. The dosage of MHT should be the lowest effective dose so as to minimize the unwanted side effects and maximize its benefits. This study shows that aside from the symptomatology, the primary factors that were considered in giving MHT are age and years of menopause. Half of the respondents will offer MHT only if within 10 years of menopause and 33% of the respondents will only offer MHT to postmenopausal women below 60 years old. A third of the respondents respond in agreement with the recommendation of a 5-year duration of MHT while 29% of them will give MHT as long as the drug is tolerated by the patient. Lastly, patients should be well-informed and is an active participant in the decision making of MHT use.

Factor analysis showed that there is no significant difference in the knowledge and attitude of Filipino gynecologist. Age, years of practice, area of practice, type of practice, and subspecialty, did not affect the knowledge and attitude of Filipino gynecologist. The only significant factors (age and length of practice) was on magnitude of practice, that is, Filipino gynecologists aged more than 50 years and practicing for more than 10 years had greater magnitude of practice (i.e. in terms of number of patients, advice on MHT made, and prescription of MHT in the past six months) as compared to those aged 30-50 years and had 5-10 years of practice. This was similar to the correlation found by Danckers and colleagues (2016) between doctor's age and prescription behavior. The correlation was expected since longer duration of practice will translate to more patients and more experience with using MHT. On the other hand, no significant difference was seen on the magnitude of practice based on areas of practice, subspecialties, and types of medical practice.

CONCLUSION AND RECOMMENDATION

The overall knowledge of Filipino gynecologist who participated in this study was lacking. Only 68% of them agreed that they have adequate knowledge about the treatment options for postmenopausal symptoms (12% strongly agreed and 56% agreed), and as much as 32% of them were still not confident. Only 76% of the respondents screen their patients for menopausal symptoms and 72%

of the respondents will refer their patients to subspecialty clinic to address menopausal complaints. If these menopausal symptoms are not asked during a consult, fewer women will be screened for the long-term consequences of menopause and fewer women will receive the benefits of MHT. Lastly, only a third of the respondents will routinely counsel their patients on risk and side effects of MHT.

Basic knowledge on menopausal symptoms and indications for hormonal therapy are known to the respondents but these knowledge does not translate to practice. As was mentioned, only a third of the 25% of respondents (8% of the total number of respondents) with more than 12 menopausal patients for the past 6 months was able to prescribe MHT. The unfamiliarity with the timing of initiation, type of medication (estrogen only, combined estrogen and progesterone, tibolone, etc.), dosage, manner of administration (oral, dermal, vaginal) and duration of treatment may be the significant factors influencing the low rate of MHT prescription. Further research may explore these factors.

This study recommends that further study be made to explore the level of understanding of Filipino gynecologist on menopause and MHT. A more detailed questionnaire on the different aspects of MHT (timing of initiation, type of medication (estrogen only, combined estrogen and progesterone, tibolone, etc.), dosage, manner of administration (oral, dermal, vaginal) and duration of treatment) may be administered to properly assess the adequacy of knowledge of Filipino gynecologist. In the same way, it may also be necessary to know the knowledge, attitude and practices of physicians in training on MHT. Since administration of MHT is not limited to practicing gynecologists, data on KAP of all physicians can also be gathered. The local data on these data were published last 1996 by Gonzaga and no recent data was found on literature. Administration of this questionnaire to all physicians may differentiate the KAP of gynecologists from other specialist. If future researches will yield the same trend, results can be used to improve the academic and training program of different institution. In effect, results of researches such as this can improve service delivery to menopausal women and be able alleviate symptoms and improve their quality of life.

Table 1. Content validity among experts (n = 5)

Items	Item Relevance Rating				I-CVI	Decision
	Not Relevant	Somewh at Relevant	Quite Relevant	Highly Relevan t		
	Frequency (%)					
Question 1a	0	0	0	5 (100)	1.00	Accepted
Question 1b	0	0	0	5 (100)	1.00	Accepted
Question 1c	0	0	0	5 (100)	1.00	Accepted
Question 1d	0	0	0	5 (100)	1.00	Accepted
Question 1e	0	0	0	5 (100)	1.00	Accepted
Question 1f	0	0	0	5 (100)	1.00	Accepted
Question 1g	0	0	1 (20)	4 (80)	1.00	Accepted
Question 2	0	0	0	5 (100)	1.00	Accepted
Question 3	0	0	0	5 (100)	1.00	Accepted
Question 4a	0	0	0	5 (100)	1.00	Accepted
Question 4b	0	0	0	5 (100)	1.00	Accepted
Question 4c	0	0	0	5 (100)	1.00	Accepted
Question 4d	0	0	0	5 (100)	1.00	Accepted
Question 4e	0	0	0	5 (100)	1.00	Accepted
Question 4f	0	0	0	5 (100)	1.00	Accepted
Question 4g	0	0	0	5 (100)	1.00	Accepted
Question 5a	0	0	0	5 (100)	1.00	Accepted
Question 5b	0	0	0	5 (100)	1.00	Accepted
Question 5c	0	0	0	5 (100)	1.00	Accepted
Question 5d	0	0	0	5 (100)	1.00	Accepted
Question 6	0	0	0	5 (100)	1.00	Accepted
Question 7	0	0	0	5 (100)	1.00	Accepted
Question 8	0	0	0	5 (100)	1.00	Accepted
Question 9	0	0	2 (40)	3 (60)	1.00	Accepted
Question 10	0	0	2 (40)	3 (60)	1.00	Accepted
Question 11	0	0	1 (20)	4 (80)	1.00	Accepted
Question 12	0	0	1 (20)	4 (80)	1.00	Accepted
Question 13	0	0	0	5 (100)	1.00	Accepted
Question 14	0	0	0	5 (100)	1.00	Accepted
Question 15	0	0	1 (20)	4 (80)	1.00	Accepted
Question 16	0	0	0	5 (100)	1.00	Accepted
Question 17	0	0	1 (20)	4 (100)	1.00	Accepted
Question 18	0	0	0	5 (100)	1.00	Accepted
Question 19	0	0	0	5 (100)	1.00	Accepted
Question 20	0	0	0	5 (100)	1.00	Accepted

Table 2. Face validity (n = 10)

	Difficulty in understanding Frequency (%)	Major Comments
Question 1a	1 (10)	1. If given routinely to all postmenopausal women 2. The question is an inquiry concerning my routine MHT practices depending on the symptoms presented by my patient 3. The question is focused on the physician's recommendation to use MHT and yet there is a choice of per request by the patient; an objective indication vs subjective assessment by the patient
Question 1b	1 (10)	1. Two suggested "to include vasomotor symptoms like night swats, hot flushes" 2. The question is an inquiry concerning my routine MHT practices depending on the symptoms presented by my patient
Question 1c	1 (10)	1. Treatment for vaginal dryness 2. The question is an inquiry concerning my routine MHT practices depending on the symptoms presented by my patient 3. It only signifies discomfort. Women oftentimes complain of pain. Maybe a pain scale would be better for further description
Question 1d	1 (10)	1. The question is an inquiry concerning my routine MHT practices depending on the symptoms presented by my patient 2. Need to qualify cardiac accidents
Question 1e	0	The question is an inquiry concerning my routine MHT practices depending on the symptoms presented by my patient
Question 1f	0	The question is an inquiry concerning my routine MHT practices depending on the symptoms presented by my patient
Question 1g	0	I think whether or not the patient requests MHT due to decreased libido, the symptoms should be ask by the doctor
Question 1h	0	No modification required
Question 2	1 (10)	1. It is testing my knowledge on the proper MHT to give / prescribe. It is an inquiry concerning my preference of treatment 2. might need to specify low and high risk

	Difficulty in understanding Frequency (%)	Major Comments
Question 3	1 (10)	Two suggested "to qualify or specify low and high risk"
Question 4a	0	1. Suggest to include specific symptoms for vasomotor symptoms 2. This is checking whether I am aware of the different side effects / risks of therapy. / should the exact therapy (i.e. estrogen, tibolone, E-P) be specified as they may have different side effects (or their effects are not all the same?) 3. By experience, the effects of MHT especially on improvement is not ABSOLUTE (as in simply saying improved). Maybe you could sub categorize improvement into a rating scale
Question 4b	1 (10)	1. Suggest to include specific symptoms for urogenital symptoms 2. This is checking whether I am aware of the different side effects / risks of therapy. / should the exact therapy (i.e. estrogen, tibolone, E-P) be specified as they may have different side effects (or their effects are not all the same?) 3. Urogenital symptoms are all encompassing terminology. Need to better qualify this statement
Question 4c	1 (10)	1. This is checking whether I am aware of the different side effects / risks of therapy. / should the exact therapy (i.e. estrogen, tibolone, E-P) be specified as they may have different side effects (or their effects are not all the same?) 2. Need to qualify mood
Question 4d	1 (10)	1. This is checking whether I am aware of the different side effects / risks of therapy. / should the exact therapy (i.e. estrogen, tibolone, E-P) be specified as they may have different side effects (or their effects are not all the same?) 2. Qualify sexual dysfunction
Question 5a	0	This is checking whether I am aware of the different side effects / risks of therapy. / should the exact therapy (i.e. estrogen, tibolone, E-P) be specified as they may have different side effects (or their effects are not all the same?)

	Difficulty in understanding Frequency (%)	Major Comments
Question 5b	0	1. This is checking whether I am aware of the different side effects / risks of therapy. / should the exact therapy (i.e. estrogen, tibolone, E-P) be specified as they may have different side effects (or their effects are not all the same?) 2. I find the question a bit confusing. I suggest to modify a bit e.g. based on your current knowledge, what are the effects of MHT on the following conditions.
Question 5c	0	1. This is checking whether I am aware of the different side effects / risks of therapy. / should the exact therapy (i.e. estrogen, tibolone, E-P) be specified as they may have different side effects (or their effects are not all the same?) 2. I find the question a bit confusing. I suggest to modify a bit e.g. based on your current knowledge, what are the effects of MHT on the following conditions.
Question 5d	0	1. This is checking whether I am aware of the different side effects / risks of therapy. / should the exact therapy (i.e. estrogen, tibolone, E-P) be specified as they may have different side effects (or their effects are not all the same?) 2. I find the question a bit confusing. I suggest to modify a bit e.g. based on your current knowledge, what are the effects of MHT on the following conditions.
Question 5e	0	1. This is checking whether I am aware of the different side effects / risks of therapy. / should the exact therapy (i.e. estrogen, tibolone, E-P) be specified as they may have different side effects (or their effects are not all the same?) 2. I find the question a bit confusing. I suggest to modify a bit e.g. based on your current knowledge, what are the effects of MHT on the following conditions.
Question 5f	0	1. This is checking whether I am aware of the different side effects / risks of therapy. / should the exact therapy (i.e. estrogen, tibolone, E-P) be specified as they may have different side effects (or their effects are not all the same?)

	Difficulty in understanding Frequency (%)	Major Comments
		2. I find the question a bit confusing. I suggest to modify a bit e.g. based on your current knowledge, what are the effects of MHT on the following conditions.
Question 5g	0	1. This is checking whether I am aware of the different side effects / risks of therapy. / should the exact therapy (i.e. estrogen, tibolone, E-P) be specified as they may have different side effects (or their effects are not all the same?) 2. I find the question a bit confusing. I suggest to modify a bit e.g. based on your current knowledge, what are the effects of MHT on the following conditions.
Question 5h	0	1. This is checking whether I am aware of the different side effects / risks of therapy. / should the exact therapy (i.e. estrogen, tibolone, E-P) be specified as they may have different side effects (or their effects are not all the same?) 2. I find the question a bit confusing. I suggest to modify a bit e.g. based on your current knowledge, what are the effects of MHT on the following conditions.
Question 5i	0	1. This is checking whether I am aware of the different side effects / risks of therapy. / should the exact therapy (i.e. estrogen, tibolone, E-P) be specified as they may have different side effects (or their effects are not all the same?) 2. I find the question a bit confusing. I suggest to modify a bit e.g. based on your current knowledge, what are the effects of MHT on the following conditions.
Question 6	0	The questions are to evaluate my belief concerning practices with MHT towards patients and myself
Question 7	0	The questions are to evaluate my belief concerning practices with MHT towards patients and myself
Question 8	0	The questions are to evaluate my belief concerning practices with MHT towards patients and myself

	Difficulty in understanding Frequency (%)	Major Comments
Question 9	0	The questions are to evaluate my belief concerning practices with MHT towards patients and myself
Question 10	1 (10)	1. The questions are to evaluate my belief concerning practices with MHT towards patients and myself 2. Please qualify WHICH chronic disorder?
Question 11	0	The questions are to evaluate my belief concerning practices with MHT towards patients and myself
Question 12	0	1. These questions ask about the specific practice points and frequency of practicing these / Although the questions are relevant, I would like to suggest that the orders of asking these are arranged in this sequence: 18 - 15 - 16 - 17 - 12 - 13 - 14 2. How many menopausal patients have sought consultation
Question 13	0	1. These questions ask about the specific practice points and frequency of practicing these / Although the questions are relevant, I would like to suggest that the orders of asking these are arranged in this sequence: 18 - 15 - 16 - 17 - 12 - 13 - 14 2. For me, questions 13 and 14 are the same 3. Frequency by which I have advised MHT tho the menopausal patients who have sought consultation
Question 14	0	1. Could it be possible to state the difference of sometimes and often? Like sometimes 30-40% of my patients or often 70-80% of the time 2. These questions ask about the specific practice points and frequency of practicing these / Although the questions are relevant, I would like to suggest that the orders of asking these are arranged in this sequence: 18 - 15 - 16 - 17 - 12 - 13 - 14 3. For me, questions 13 and 14 are the same 4. Frequency by which I have prescribed MHT tho the menopausal patients who have sought consultation
Question 15	1 (10)	1. These questions ask about the specific practice points and frequency of practicing

Difficulty in understanding		Major Comments
Frequency (%)		
Question 16	0	these / Although the questions are relevant, I would like to suggest that the orders of asking these are arranged in this sequence: 18 - 15 - 16 - 17 - 12 - 13 - 14
		2. Does screening means ALL types of screening for ALL menopausal patients? Or should this be centered on the chief complaint they present with to the doctor?
Question 17	1 (10)	1. Could it be possible to state the difference of sometimes and often? Like sometimes 30-40% of my patients or often 70-80% of the time
		2. These questions ask about the specific practice points and frequency of practicing these / Although the questions are relevant, I would like to suggest that the orders of asking these are arranged in this sequence: 18 - 15 - 16 - 17 - 12 - 13 - 14
Question 18	0	3. Frequency by which I discuss three symptoms they sought consultation with
		1. Could it be possible to state the difference of sometimes and often? Like sometimes 30-40% of my patients or often 70-80% of the time
Question 19	0	2. These questions ask about the specific practice points and frequency of practicing these / Although the questions are relevant, I would like to suggest that the orders of asking these are arranged in this sequence: 18 - 15 - 16 - 17 - 12 - 13 - 14
		3. Frequency by which I discuss the benefits of MHT and offer it to those who have undergone the said procedure
Question 18	0	1. These questions ask about the specific practice points and frequency of practicing these / Although the questions are relevant, I would like to suggest that the orders of asking these are arranged in this sequence: 18 - 15 - 16 - 17 - 12 - 13 - 14
		2. For the first option, do you mean all MENOPAUSAL women?
Question 19	0	3. Frequency by which I offer MHT to menopausal women based on age groups
		1. Could it be possible to state the difference of sometimes and often? Like sometimes 30-40% of my patients or often 70-80% of

	Difficulty in understanding Frequency (%)	Major Comments
		the time 2. These questions ask about my practices 3. Frequency by which I refer my patients to other specialist for treatment of menopausal symptoms. Connotes I do not know how to manage menopausal women and/or I simply do not have the time explaining the intricacies of menopausal symptoms
Question 20	0	1. Could it be possible to state the difference of sometimes and often? Like sometimes 30-40% of my patients or often 70-80% of the time 2. These questions ask about my practices 3. Frequency by which I advise patients on risks or side effects of MHT
Question 21	0	1. Could it be possible to state the difference of sometimes and often? Like sometimes 30-40% of my patients or often 70-80% of the time 2. These questions ask about my practices 3. Frequency by which I encourage participation of patients in the best MHT suited for her after explain the different forms of MHT
Question 22	0	1. Could it be possible to state the difference of sometimes and often? Like sometimes 30-40% of my patients or often 70-80% of the time 2. These questions ask about my practices 3. Length of time I prescribe MHT.

Table 3. Reliability analysis of the forward translated questionnaire, test-retest analysis

	Observed Agreement	Expected Agreement	Kappa Coefficient	Interpretation	P-value
Question 1a	90%	74%	0.615	Substantial agreement	0.018
Question 1b	100%	100%	-	Perfect agreement	
Question 1c	100%	82%	1.000	Perfect agreement	<0.001
Question 1d	60%	50%	0.200	Poor agreement	0.245
Question 1e	70%	54%	0.348	Fair agreement	0.123
Question 1f	90%	54%	0.783	Substantial agreement	0.006
Question 1g	100%	50%	1.00	Perfect agreement	<0.001
Question 1h	80%	50%	0.600	Moderate agreement	0.029
Question 2	70%	48%	0.423	Moderate agreement	0.033
Question 3	90%	55%	0.778	Substantial agreement	0.001
Question 4a	90%	90%	0	No agreement	-
Question 4b	90%	90%	0	No agreement	-
Question 4c	80%	81%	-0.053	No agreement	0.637
Question 4d	80%	73%	0.259	Fair agreement	0.125
Question 5a	70%	46%	0.444	Moderate agreement	0.010
Question 5b	90%	90%	0	No agreement	-
Question 5c	100%	68%	1.000	Perfect agreement	0.001
Question 5d	90%	73%	0.630	Substantial agreement	0.003
Question 5e	70%	33%	0.552	Moderate agreement	0.003
Question 5f	30%	38%	-0.129	No agreement	0.735
Question 5g	80%	41%	0.661	Substantial agreement	0.004
Question 5h	70%	50%	0.400	Fair agreement	0.098
Question 5i	80%	48%	0.615	Substantial agreement	0.018
Question 6	70%	42%	0.483	Moderate agreement	0.022
Question 7	70%	58%	0.286	Fair agreement	0.098

Question 8	60%	49%	0.216	Fair agreement	0.110
Question 9	50%	48%	0.039	Poor agreement	0.433
Question 10	60%	38%	0.355	Fair agreement	0.020
Question 11	80%	38%	0.677	Substantial agreement	0.002
Question 12	100%	82%	1.000	Perfect agreement	<0.001
Question 13	90%	90%	0	No agreement	-
Question 14	90%	90%	0	No agreement	-
Question 15	80%	40%	0.667	Substantial agreement	0.001
Question 16	80%	38%	0.677	Substantial agreement	0.002
Question 17	40%	28%	0.167	No agreement	0.178
Question 18	60%	33%	0.403	Fair agreement	0.030
Question 19	70%	60%	0.250	Fair agreement	0.163
Question 20	80%	34%	0.697	Substantial agreement	0.001
Question 21	80%	33%	0.702	Substantial agreement	0.001
Question 22	80%	17%	0.759	Substantial agreement	<0.001

Kappa statistic interpretation according to Landis and Koch: ≤ 0 , none; 0.01 to 0.20, poor; 0.21 to 0.40, fair; 0.41 to 0.60, moderate; 0.61 to 0.80, substantial; Above 0.81, Almost perfect

The formula for kappa coefficient is: $\frac{p_o - p_e}{1 - p_e}$ where:

p_o is the actual observed agreement, and;

p_e is the expected agreement.

Table 4. Demographic Characteristics

Variables	Frequency (%)
Sex	
Male	19 (5.15)
Female	350 (94.85)
Age group	
30-35	20 (5.42)
36-40	58 (15.72)
41-45	78 (21.14)
46-50	65 (17.62)
>50	148 (40.11)
Marital status (n=368)	
Single	78 (21.20)
Married	267 (72.55)
Widowed	15 (4.08)
Separated	8 (2.17)
OB-Gyne Degree Year (n=306)	
1958-1969	3 (0.98)
1970-1979	7 (2.29)
1980-1989	31 (10.13)
1990-1999	90 (29.41)
2000-2009	114 (37.25)
2010-2018	61 (19.93)
Medical Practice	
Private practice only	202 (54.74)
Government practice	83 (22.49)
University or academe	12 (3.25)
Practicing in an institution accredited for OB-Gyne training	72 (19.51)
Medical Experience	
5-10 Years	105 (28.46)
>10 Years	264 (71.54)
Subspecialty	
No	260 (40.46)
Yes	109 (59.54)
Specific subspecialty (n=109)	
Family planning	1 (0.92)
Gynecologic oncology	18 (16.51)
IDS	3 (2.75)
Pediatric gynecology	0
Minimally invasive surgery	10 (9.17)
REI	6 (5.50)
Trophoblastic Diseases	12 (11.01)
Ultrasound	40 (36.70)
Urogynecology	2 (1.83)
Maternal and Fetal Medicine	16 (14.68)
Multiple subspecialty	1 (0.92)
Practicing (n=368)	
Only OB	0
Only Gyne	5 (1.36)
Both OB and Gyne	363 (98.64)
Area of Practice	
Region 1	20 (5.42)
Region 2	9 (2.44)
Region 3	27 (7.32)
Region 4A	57 (15.45)
Region 4B	0
Region 5	2 (0.54)
Region 6	77 (20.87)
Region 7	18 (4.88)
Region 8	5 (1.36)
Region 9	0
Region 10	17 (4.61)
Region 11	17 (4.61)
Region 12	11 (2.98)
Region 13	0
NCR	107 (29.00)
CAR	2 (0.54)
ARMM	0

Table 5. Knowledge towards menopause management

Variables	Frequency (%)
Q1a (Routinely recommends MHT for every postmenopausal women) (n=368)	
No	243 (66.03)
Yes	125 (33.97)
Q1b (Treatment of vasomotor symptoms)	
No	18 (4.88)
Yes	351 (95.12)
Q1c (Treatment of vaginal dryness discomfort and pain during intercourse)	
No	30 (8.13)
Yes	339 (91.87)
Q1d (Prevention of cardiac accidents)	
No	117 (31.71)
Yes	252 (68.29)
Q1e (Prevention and treatment of osteoporosis)	
No	50 (13.55)
Yes	319 (86.45)
Q1f (Treatment of mood changes and emotional lability)	
No	58 (15.72)
Yes	311 (84.28)
Q1g (Treatment for decrease in libido)	
No	74 (20.05)
Yes	295 (79.95)
Q1h (Offers MHT as per request by the patient) (n=368)	
No	75 (20.38)
Yes	293 (79.62)
Q2 (First choice for low risk CVE)	
Estrogen alone	37 (10.03)
Estrogen and progesterone	184 (49.86)
Tibolone	137 (37.13)
Others	11 (2.98)
Q3 (First choice for high risk CVE)	
Estrogen alone	15 (4.08)
Estrogen and progesterone	58 (15.76)
Tibolone	268 (72.83)
Others	27 (7.34)
Q4a (Effect of MHT on vasomotor symptoms) (n=368)	
Worsen	1 (0.27)
No effect	1 (0.27)
Improved	366 (99.46)
Q4b (Effect of MHT on urogenital symptoms)	
Worsen	7 (1.90)
No effect	1 (0.27)
Improved	361 (97.83)

Table 5. Knowledge towards menopause management

Variables	Frequency (%)
Q4c (Effect of MHT on mood)	
Worsen	23 (6.23)
No effect	2 (0.54)
Improved	344 (93.22)
Q4d (Effect of MHT on sexual dysfunction) (n=368)	19 (5.16)
Worsen	2 (0.54)
No effect	347 (94.29)
Improved	
Q5a (Effect of MHT on breast cancer)	
No effect	103 (27.91)
Decreased risk	111 (30.08)
Increased risk	155 (42.01)
Q5b (Effect of MHT on osteoporosis) (n=368)	
No effect	14 (3.80)
Decreased risk	344 (93.48)
Increased risk	10 (2.72)
Q5c (Effect of MHT on cognitive dysfunction)	
No effect	36 (9.76)
Decreased risk	320 (86.72)
Increased risk	13 (3.52)
Q5d (Effect of MHT on coronary artery disease)	19 (5.15)
No effect	285 (77.24)
Decreased risk	65 (17.62)
Increased risk	
Q5e (Effect of MHT on vascular thrombosis) (n=367)	29 (7.90)
No effect	185 (50.41)
Decreased risk	153 (41.69)
Increased risk	
Q5f (Effect of MHT on dyslipidemia)	
No effect	59 (15.99)
Decreased risk	240 (65.04)
Increased risk	70 (18.97)
Q5g (Effect of MHT on cerebrovascular disease)	44 (11.92)
No effect	257 (69.65)
Decreased risk	68 (18.43)
Increased risk	
Q5h (Effect of MHT on Parkinson's disease)	
No effect	114 (30.89)
Decreased risk	240 (65.04)
Increased risk	15 (4.07)
Q5i (Effect of MHT on osteoarthritis)	
No effect	130 (35.23)
Decreased risk	229 (62.06)
Increased risk	10 (2.71)

Table 6. Attitude towards menopause management

Variables	Frequency (%)
Q6 (Belief that respondent had adequate knowledge on treatment options for postmenopausal symptoms)	46 (12.47)
Strongly agree	204 (55.28)
Agree	111 (30.08)
Neutral	7 (1.90)
Disagree	1 (0.27)
Strongly disagree	
Q7 (Belief that MHT improves quality of life of PMW) (n=368)	
Strongly agree	139 (37.77)
Agree	204 (55.43)
Neutral	24 (6.52)
Disagree	1 (0.27)
Strongly disagree	0
Q8 (Belief that MHT is an integral part in the care of PMW)	
Strongly agree	127 (34.42)
Agree	198 (53.66)
Neutral	41 (11.11)
Disagree	3 (0.81)
Strongly disagree	0
Q9 (Belief that MHT relieves postmenopausal symptoms) (n=368)	
Strongly agree	150 (40.76)
Agree	207 (56.25)
Neutral	9 (2.45)
Disagree	2 (0.54)
Strongly disagree	0
Q10 (Belief that MHT can prevent chronic disorder such as heart disease, osteoporosis, and cognitive impairment) (n=367)	
Strongly agree	119 (32.43)
Agree	201 (54.77)
Neutral	40 (10.90)
Disagree	6 (1.63)
Strongly disagree	1 (0.27)
Q11 (For females, will use MHT; For males, will prescribe MHT to his mother/wife/sister)	
Strongly agree	108 (29.27)
Agree	188 (50.95)
Neutral	65 (17.62)
Disagree	8 (2.17)
Strongly disagree	0

Table 7. Practice towards menopause management

Variables	Frequency (%)
Q12 (No. of menopausal patients in ≤ 6 months)	
Less than 6	142 (38.48)
6-12	139 (37.67)
More than 12	88 (23.85)
Q13 (No. of patients advised on MHT in ≤ 6 months)	192 (52.03)
Less than 6	133 (36.04)
6-12	44 (11.92)
More than 12	
Q14 (No. of patients prescribed with MHT in ≤ 6 months) (n=368)	
Less than 6	220 (59.78)
6-12	117 (31.79)
More than 12	31 (8.42)
Q15 (Screens for menopausal symptoms in patients)	7 (1.90)
Never	80 (21.68)
Sometimes	174 (47.15)
Most of the time	108 (29.27)
Always	
Q16 (Discusses menopausal symptoms with patient) (n=367)	
Never	3 (0.82)
Sometimes	48 (13.08)
Most of the time	195 (53.13)
Always	121 (32.97)
Q17 (Offers MHT to women who had bilateral salpingoophorectomy) (n=368)	
Never	7 (1.90)
Sometimes	114 (30.98)
Most of the time	161 (43.75)
Always	86 (23.37)
Q18 (I offer MHT to) (n=360)	
All women regardless of age	40 (11.11)
Only to PMW below 60 years old	120 (33.33)
Only to PMW below 60 years old	17 (4.72)
Only to PMW within her 10 years of menopause	181 (50.28)
Only to PMW within her 20 years of menopause	2 (0.56)
Q19 (Refers patients to another subspecialty for treatment of menopausal symptoms)	
Never	103 (27.91)
Sometimes	208 (56.37)
Most of the time	48 (13.01)
Always	10 (2.71)

Table 7. Practice towards menopause management

Variables	Frequency (%)
Q20 (Routinely counsels patients regarding the possible risks/side effects of MHT) (n=368)	
Never	4 (1.09)
Sometimes	64 (17.39)
Most of the time	180 (48.91)
Always	120 (32.61)
Q21 (Presents fact about the different forms of HRT to patients and allow her to participate in decision-making regarding which HRT to choose)	5 (1.36)
Never	65 (17.62)
Sometimes	186 (50.41)
Most of the time	113 (30.62)
Always	
Q22 (Duration of MHT prescription) (n=368)	
1 year	47 (12.77)
2 years	28 (7.61)
3 years	25 (6.79)
4 years	5 (1.36)
5 years	122 (33.15)
10 years	36 (9.78)
Continue as long as the drug is tolerated by the patient	105 (28.53)

References:

1. Belchetz PE. Hormonal treatment of postmenopausal women. *N Engl J Med*. 1994;330:1062–71.
2. Grady D, Ettinger B, Tosteson AN, Pressman A, Macer JL. Predictors of difficulty when discontinuing postmenopausal hormone therapy. *Obstet Gynecol*. 2003;102:1233–9.
3. Sood R, Faubion S, Kuhle C, Thielen J and Shuster L. Prescribing menopausal hormone therapy: an evidence-based approach. *International Journal of Women's Health* 2014;6 47–57.
4. Hersh AL, Stefanick ML, Stafford RS. National use of postmenopausal hormone therapy: annual trends and response to recent evidence. *JAMA*. 2004;291(1):47–53.
5. Whi.org. (2018). WHI - WHI Home. [online] Available at: <https://www.whi.org/SitePages/WHI%20Home.aspx> [Accessed 19 Nov. 2018].
6. Lazar FJ, Costa-Paiva L, Morais S, Pedro A, Pinto-Neto A. The attitude of gynecologists in São Paulo, Brazil 3 years after the Women's Health Initiative study. *Maturitas: The European Menopause Journal*. 56 (2007) 129–141.
7. Haas JS, Kaplan CP, Gerstenberger EP, Kerlikowske K. Changes in the use of postmenopausal hormone therapy after the publication of clinical trial results. *Ann Intern Med*. 2004;140:184–8.
8. Ettinger B, Grady D, Tosteson AN, Pressman A, Macer JL. Effect of the Women's Health Initiative on women's decisions to discontinue postmenopausal hormone therapy. *Obstet Gynecol*. 2003;102:1225–32.
9. Blumel JE, Castelo-Branco C, Chedraui PA, Binfa L, Dowlani B, Gomez MS, et al. Patients' and clinicians' attitudes after the Women's Health Initiative study. *Menopause*. 2004;11:57–61.
10. Ena G, Rozenberg S. Issues to debate on the Women's Health Initiative (WHI) study. Prescription attitudes among Belgian gynaecologists after premature discontinuation of the WHI study. *Hum Reprod*. 2003;18:2245–8.
11. Kang BM, Kim MR, Park HM, Yoon BK, Lee BS, Chung HW, et al. Attitudes of Korean clinicians to postmenopausal hormone therapy after the Women's Health Initiative study. *Menopause*. 2006;13:125–9.
12. Nassar AH, Essamad HM, Awwad JT, Khoury NG, Usta IM. Gynecologists' attitudes towards hormone therapy in the post 'Women's Health Initiative' study era. *Maturitas*. 2005;52:18–25.
13. Lentz G, Lobo R, Gershenson D and Katz V. *Comprehensive Gynecology* 6th Edition. Elsevier Inc. 2012. Philadelphia
14. Pedersen AT et al. Impact of recent studies on attitudes and use of hormone therapy among Scandinavian gynaecologists. *Acta Obstet Gynecol Scand* 2007; 86(12): 1490–5. <https://www.ncbi.nlm.nih.gov/pubmed/18027116>
15. Blümel JE, Chedraui P, Barón G, Benítez Z, Flores D, Espinoza MT, Gomez G, Collaborative Group for Research of the Climacteric in Latin America (REDLINC). A multicentric study regarding the use of hormone therapy during female mid-age (REDLINC VI), *Climacteric* 17 (2014), 433–441.
16. Gonzaga, F. Menopause - Specific situation in the Philippines. First Consensus Meeting on Menopause in the East Asian Region from <https://www.gfmer.ch/Books/bookmp/205.htm>.
17. R. J. Baber, N. Panay & A. Fenton the IMS Writing Group (2016) 2016 IMS Recommendations on women's midlife health and menopause hormone therapy, *Climacteric*, 19:2, 109–150, DOI: 10.3109/13697137.2015.1129166.
18. Gleason CE, Dowling NM, Wharton W, et al. Effects of hormone therapy on cognition and mood in recently postmenopausal women: findings from the randomized, controlled KEEPS-Cognitive and Affective Study. *PLoS Med* (2015);12:e1001833.
19. Buhling KJ, von Studnitz FS, Jantke A, Eulenburg C, Mueck AO. Use of hormone therapy by female gynecologists and female partners of male gynecologists in Germany 8 years after the Women's Health Initiative study: results of a survey. *Menopause* 19 (2012), 1088–1091.
20. Birkhäuser MH, Reinecke I. Current trends in hormone replacement therapy: perceptions and usage, *Climacteric* 11 (2008), 192–200.

APPENDIX A

Serial Number: _____

Date: _____

PART I

Instructions: Please place an [x] mark on the appropriate box next to your answer.

Sex	☐ Male	☐ Female
Age	☐ <30 years old ☐ 30-35 years old ☐ 36-40 years old	☐ 41-45 years old ☐ 46-50 years old ☐ >50 years old
Marital Status	☐ Single ☐ Married	☐ Widowed ☐ Separated
OB GYN degree obtained in (year) _____ from _____		
Describe your medical practice:		
	☐ Private practice only	
	☐ Government practice	
	☐ University / Academe	
	☐ Practicing in an institution accredited for OB-Gyn training	
Medical Experience	☐ < 5 years ☐ 5-10 years ☐ > 10 years	
Any subspecialty	☐ Yes	☐ No
If yes,	☐ Family Planning ☐ Gynecologic Oncology ☐ IDS ☐ Pediatric Gynecology ☐ Minimally Invasive Surgery	☐ REI ☐ Trophoblastic Diseases ☐ Ultrasound ☐ Urogynecology ☐ Maternal and Fetal Medicine
Do you practice?	☐ only OB ☐ only Gyne ☐ both OB and Gyne ☐ not practicing for more than 5 years now	
Area of Practice	☐ Region 1 ☐ Region 2 ☐ Region 3 ☐ Region 4A ☐ Region 4B (MIMAROPA) ☐ Region 5 ☐ Region 6 ☐ Region 7 ☐ Region 8	☐ Region 9 ☐ Region 10 ☐ Region 11 ☐ Region 12 ☐ Region 13 ☐ National Capital Region ☐ Cordillera Administrative Region ☐ Autonomous Region in Muslim Mindanao

Please check if you wish to hear the results from us:

☐ I would like to know the result of this study, kindly inform me through my:☐ Email address: _____☐ Postal address: _____

Serial Number: _____

Date: _____

PART II

Instructions: Please place an [x] mark on the appropriate box next to your answer. Select one answer for each question.

A. Your knowledge towards menopause management

1. I recommend the use of Menopause Hormone Therapy (MHT) in the following scenario/s:

a. Routinely to every postmenopausal woman	☐ Yes	☐ No
b. Treatment for vasomotor symptoms (i.e. hot flushes, night sweats, diaphoresis)	☐ Yes	☐ No
c. Treatment of vaginal dryness associated discomfort and pain during intercourse	☐ Yes	☐ No
d. Prevention of cardiac accidents (i.e. coronary artery disease, myocardial infarction)	☐ Yes	☐ No
e. Prevention and treatment of osteoporosis	☐ Yes	☐ No
f. Treatment of mood changes and emotional lability	☐ Yes	☐ No
g. Treatment for decrease in libido	☐ Yes	☐ No
h. As per request of my patient	☐ Yes	☐ No
2. My first choice of MHT for patients with intact uteri and LOW risk for cardiovascular events is

☐ estrogen alone
☐ estrogen and progesterone
☐ Tibolone
☐ others _____
3. My first choice of MHT for patients with intact uteri and HIGH risk for cardiovascular events is

☐ estrogen alone
☐ estrogen and progesterone
☐ Tibolone
☐ others _____

For Question 4,

**Worsen* refers to a state of having a more unfavorable condition, that is, from having a (relatively) better state to having a (relatively) poorer condition

**Improved* refers to a state of being better, that is, from having a (relatively) poor state to having a (relatively) better condition

4. Determine the effects of MHT on the following conditions:

	Worsen	No Effect	Improved
a. Vasomotor symptoms (i.e. hot flushes, night sweats, diaphoresis)	☐	☐	☐
b. Urogenital symptoms (i.e. vaginal dryness, dyspareunia)	☐	☐	☐
c. Mood (temporary state of mind or feeling)	☐	☐	☐
d. Sexual dysfunction (i.e. decreased in libido, dyspareunia)	☐	☐	☐
5. Based on your current knowledge, what are the effects of MHT on the following conditions:

	Decrease Risk	No effect	Increased Risk
a. Breast Cancer	☐	☐	☐
b. Osteoporosis	☐	☐	☐
c. Cognitive Dysfunction	☐	☐	☐
d. Coronary Artery Disease	☐	☐	☐
e. Vascular Thrombosis	☐	☐	☐
f. Dyslipidemia	☐	☐	☐
g. Cerebrovascular Disease	☐	☐	☐
h. Parkinson's Disease	☐	☐	☐
i. Osteoarthritis	☐	☐	☐

B. Your attitude towards menopause management

		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
6.	I have adequate knowledge about the treatment options for postmenopausal symptoms.	☐	☐	☐	☐	☐
7.	I believe that MHT improves quality of life of postmenopausal women.	☐	☐	☐	☐	☐
8.	Offering MHT is an integral part in the care of postmenopausal women.	☐	☐	☐	☐	☐
9.	I believe that MHT relieves menopausal symptoms.	☐	☐	☐	☐	☐
10.	I believe MHT can prevent chronic disorder (i.e. heart disease, osteoporosis and cognitive impairment).	☐	☐	☐	☐	☐
11.	(For females) I will use MHT. (For males) I will prescribe MHT to my mother/wife/sister.	☐	☐	☐	☐	☐

C. Your practice towards menopause management

12 For the past 6 months, I have ____ menopausal (natural and surgical) patients.

☐ less than 6 ☐ 6-12 ☐ more than 12

13 In the past 6 months, I was able to advise MHT to ____ patients.

☐ less than 6 ☐ 6-12 ☐ more than 12

14 In the past 6 months, I was able to prescribe MHT to ____ patients.

☐ less than 6 ☐ 6-12 ☐ more than 12

15 I screen my patients for menopausal symptoms ☐ Never ☐ Sometimes ☐ Most of the time ☐ Always

16 I discuss menopausal symptoms with my patients ☐ Never ☐ Sometimes ☐ Most of the time ☐ Always

17 I offer MHT to women who underwent bilateral salpingo-oophorectomy? ☐ Never ☐ Sometimes ☐ Most of the time ☐ Always

18 I offer MHT

- ☐ to all women regardless of age
☐ only to postmenopausal women below 60 years old
☐ only to postmenopausal women above 60 years old
☐ only to postmenopausal women within her 10 years of menopause
☐ only to postmenopausal women within her 20 years of menopause

19 I refer my patients to another subspecialty for treatment of menopausal symptoms ☐ Never ☐ Sometimes ☐ Most of the time ☐ Always

20 I routinely counsel my patients regarding the possible risks/side effects of MHT ☐ Never ☐ Sometimes ☐ Most of the time ☐ Always

21 During counseling, I present the facts about the different forms of HRT to the patient and allow her to participate in the decision-making regarding which HRT to choose ☐ Never ☐ Sometimes ☐ Most of the time ☐ Always

22 I prescribe MHT for _____.

- ☐ 1 year ☐ 5 years
☐ 2 years ☐ 10 years
☐ 3 years ☐ continue as long as the drug is tolerated by the patient
☐ 4 years