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## Risk For Fall among Post Menopausal Women in Developed and Developing Countries: A Scoping Review

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### ABSTRACT

#### Objective

The population of postmenopausal women worldwide is expected to increase and they face new conditions, which can lead to fall. Worldwide prevalence rate for falling vary from 28-35% annually among older people. The aim of this study was to determine the risk factors for falls in postmenopausal women in developed and developing countries to get the big picture as prevention measures.

#### Material and Methods

Design of this study was a scoping review, following the PRISMA guideline for scoping review. Systematic searches were conducted in PubMed and Science Direct databases for the last ten years. Mention the criteria.

#### Result

Total of 2.953 studies were identified and we found 43 studies eligible to our criteria from developed and developing countries. Of the 43 studies, it consisted 22 cohort studies, 15 cross-sectional studies, and 6 intervention studies. The cohort and cross-sectional studies investigate the falls risk factors in postmenopausal women. The intervention studies discussed about assessment and screening tools to identifying risk factors in postmenopausal women.

#### Conclusion

Several risks of fall such as ageing (include medical condition, medication, and history of fall) and lifestyle were found as contributing risk fall in postmenopausal women in developed and developing country. The prevalence of falls was greater in developing countries where the risk factors for aging have the greatest contribution, than developed countries. In both countries, lifestyle and intervention program falls played an equal role in the incidence of falls in postmenopausal women. Further studies on the risk of falls in postmenopausal women in developed and developing countries needed to more detailed identify fall risk in order to obtain the best fall prevention strategy.

**Key words** fall, postmenopausal women, risk for fall, women health

## The Role of Soy Isoflavone in The Genitourinary Symptoms, Vaginal Maturation Index, and Female Sexual Function Index of Menopausal Women

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### Background:

Genitourinary symptoms were experienced less than half of all menopausal women, especially at the end of the climatic period. These symptoms are often ignored even though the progression is worsened with age after menopause. Most women refuse hormonal therapy because of the side effects. Soy isoflavone is a phytoestrogen which has estrogenic properties but has no side effects.

### Objective:

To assess the effectiveness of soy isoflavone on genitourinary symptoms, vaginal maturation index, and sexual function of menopausal women.

### Material and Methods:

This study was a quasi-experimental study with a pre-post test non-randomized between-group design. The samples were menopausal women who met the inclusion and exclusion criteria. The samples were divided into 3 groups with different interventions; control group was given placebo lubricant gel, the estradiol valerate 2 mg / day and soy isoflavone 50 mg / day. Assessment and measurement of variables were performed before the intervention and 90 days after the intervention.

### Result:

There were 45 menopausal women as the study samples. There was a difference value of the most bothersome symptoms (MBS) and the Female Sexual Function Index (FSFI) in the soy isoflavone group before and after the intervention ( $p = <0.001$ ;  $p = 0.031$ ) and there was no difference in the vaginal maturation index value in the soy isoflavone group before and after intervention ( $p = 0.079$ )

### Conclusion:

Soy isoflavone for 90 days can reduce genitourinary symptoms and improve sexual function in menopausal women without affecting the vaginal maturation index

**Key words** Phytoestrogens, Genitourinary symptoms of menopause, Menopause, Soy isoflavone, Urogenital, Vaginal atrophy

## Menopausal and Genitourinary Symptoms on Surgical Menopause Women with and without Chemotherapy in Sardjito Hospital, Indonesia

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### Background

Surgical menopause after bilateral oophorectomy procedure in young women becomes a specific problem due to its worse impacts on women's health. In developing countries, the focus of treatment is still to cure patient's primary diseases such as malignancy. Meanwhile, the effects of surgical menopause including vasomotor symptoms, psychological disorder, locomotor disability, and genitourinary problems are until now rarely assessed. There is a lack of awareness to seek medical treatment for those conditions, causing low quality of life. In addition, chemotherapeutic treatments might also lead to deleterious effects to those systems and could generate more severe symptoms.

### Objectives/Purpose

To evaluate and compare the menopausal and genitourinary symptoms in women after one year of bilateral oophorectomy, with and without chemotherapy treatment.

### Materials and methods

Subjects of the study were women with surgical menopause (one year after bilateral oophorectomy for gynecological disease), their age were less than 45 years old. Using AMS (Australasian Menopause Society) Diagnosing Menopause: Symptom Score Sheet, the subjects were asked to rank the score of vasomotor symptoms, psychological disorder, locomotor disability, and genitourinary problems (score: none = 0; mild = 1; moderate = 2; severe = 3). A score over 15 indicated estrogen deficiency, and scores of 20-50 were considered to be common in symptomatic women.

### Results

Twenty women who underwent bilateral oophorectomy for gynecological diseases one year before the interview were grouped into chemotherapy and nonchemotherapy and each group consisted of 10 subjects. The chemotherapy group showed a higher score of menopausal symptoms (16.5 vs 14.7) which showed the symptoms of estrogen deficiency but it was not statistically significant ( $p=0.676$ ). The chemotherapy group also had more mild headache symptoms ( $p=0.022$ ). For genitourinary symptoms, the non-chemotherapy group had more moderate vaginal dryness but no significant difference compared to the chemotherapy group ( $p=0.063$ ).

### Conclusion

Women with surgical menopause who received adjuvant chemotherapy might have more severe menopausal symptoms, especially mild headache (vasomotor symptom). However, regarding the genitourinary symptoms, there was no difference in women with chemotherapy compared to women without chemotherapy. Further study with more number of subjects needed to be performed.

**Key words** surgical menopause, menopausal symptoms, genitourinary symptoms, chemotherapy

## The Effect of Soy Isoflavon on Lipid Profile in Indonesian Menopausal Women

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Investigating the clinical effectiveness of phytoestrogen soy isoflavone as non-hormonal therapy for Dyslipidemia

Objective: To find the effect of soy isoflavone on Lipid Profile of Menopausal women

Methods: Quasi-experimental research with a non-randomized between-group design pre- and posttest design conducted for 12 weeks between August 2019 and November 2019. Statistical analyzes were performed using paired t-tests or Wilcoxon signed ranks tests on the same group and unpaired t- test or Mann-Whitney U test for comparison between two groups. Significance was regarded as  $p < 0.05$ .

Patients : Indonesian menopausal women aged 42 - 57 years who meet the inclusion and exclusion criteria

Interventions : 78 menopausal women were divided into two groups: 39 women received Soy Isoflavone 50 mg once daily as an intervention group and 39 others received Estradiol Valerate 2 mg once daily as a control group for 12 weeks

Main outcome Measure : Characteristics of the menopausal women including age, BMI, menopause duration, parity, serum estradiol and lipid profile as HDL, LDL and triglycerides

Result : There were no significant differences in the characteristics of the two groups based on age, BMI, duration of menopause, parity and serum estradiol levels ( $p > 0.05$ ). There was a significant HDL increased and LDL decreased in the Soy isoflavone group ( $p < 0.001$ ) and there was no significant difference in the increase in HDL scores between the two groups ( $p > 0.05$ ). There was no significant difference in the triglycerides level after giving soy isoflavone for 12 weeks ( $p = 0.502$ ).

Conclusions : Soy isoflavone for 12 weeks is equivalent to estradiol valerate in improve the lipid profile in Indonesian postmenopausal women

**Key words** Menopause, Soy Isoflavon, Lipid profile

## CORRELATION OF INTERLEUKIN-1 (IL-1) AND SERUM ESTRADIOL LEVELS IN MENOPAUSAL WOMEN, MEDAN, INDONESIA

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### ABSTRACT

#### Objectives:

This study uses a case series design to assess the correlation between interleukin-1 (IL-1) and estradiol levels in menopausal women.

#### Materials and Methods:

This research was conducted at H. Adam Malik General Hospital Medan. The study was conducted on 1 September 2019 until the samples was fulfilled. The study population was female paramedics who had not experienced menstruation during the last 12 months at H. Adam Malik General Hospital Medan. Blood extraction from the mediana cubiti vein was carried out to measure estradiol and IL-1 levels. The obtained data was assessed by the Spearman test.

#### Results:

From 38 samples in the group of menopausal women, the average serum estradiol level was  $42.28 \pm 22.86$ , and the average serum IL-1 level was  $40.84 \pm 22.89$ . There is a moderate negative correlation between estradiol and IL-1 if estradiol levels decrease, it will increase IL-1 levels.

#### Conclusion:

There is a moderate negative correlation between estradiol and IL-1. When estradiol levels decrease, IL-1 levels will increase.

Keywords: IL-1, Estradiol, Menopause

**Key words** IL-1, Estradiol, Menopause

## Comparison of Sleep Quality Among Postmenopausal Women Who Live In Senior Living Communities With Those In Private Homes

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Comparison of Sleep Quality Among Postmenopausal Women  
Who Live In Senior Living Communities With Those In Private Homes

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**Background:** Currently, the number of female elderly in Indonesia is 5.2% of the total population and the majority of them live with their spouse or family. Family is the most important social support considering that they can provide optimal health care to improve their quality of life. Furthermore, good sleep quality is an essential part of having a high quality of life. However, menopausal symptoms may have a detrimental impact on sleep quality and cause sleep disruption. Identifying other aspects like social and environmental factors concerning sleep quality in postmenopausal women may be necessary to increase the quality of life.

**Objective:** This study aimed to compare the sleep quality of postmenopausal women who live in senior living communities with those living in private homes with their spouse or family.

**Methods:** The cross-sectional study was conducted on 91 postmenopausal women (age  $68.43 \pm 11.45$ ) and divided into two groups. The Pittsburgh Sleep Quality Index (PSQI) questionnaire was used in this study to get an analysis of sleep quality. The Menopause Rating Scale (MRS) was used to collect secondary data on the menopausal symptoms in participants. Chi-square test was used to determine whether there was a statistically significant difference result between two groups.

**Results:** The prevalence of poor sleep quality in group of postmenopausal women who stay in senior living communities was 91% versus 64% in group who live in with spouse or family based on the PSQI measures. Statistical analysis showed a significant difference of sleep quality between two groups, with  $p = 0.003$ . In both groups, the use of sleep medication was almost none in the past month. Additionally, 18.18% of participants group in senior living communities suffered from severe menopausal syndrome which assessed by the MRS.

**Conclusion:** The prevalence of poor sleep quality was high among postmenopausal women, mainly in those who live in senior living communities.

**Keywords:** postmenopausal, menopausal symptoms, sleep quality, PSQI, MRS

**Key words** postmenopausal, menopausal symptoms, sleep quality, PSQI, MRS

## Impact of Perimenopausal Symptomatology on Quality of Life

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**Objectives:** The aim of the study was to determine the quality of life and its risk factors in middle-aged Mongolian women.

**Materials and methods:** A cross-sectional study were conducted among females aged between 40–65 years in the pre-, peri-, and post-menopausal status. Data was collected using a predesigned questionnaire which included general information, reproductive history, and body measurements along with standardized questionnaires such as the Menopause Rating Scale and WHOQOL-BREF. The data analysis was conducted on 351 women.

**Results:** Participant's blood pressure ( $p=0.003$ ) and body mass index (BMI) ( $p=0.02$ ) was significantly high in perimenopausal women. Sexual activity was significantly less in postmenopausal women ( $p<0.000$ ). The somato-vegetative ( $p=0.003$ ) and psychological ( $p=0.025$ ) symptoms were significantly severe in perimenopausal women. The menopausal symptom severity frequency was significantly higher in perimenopausal women ( $p=0.017$ ). Most of the participants answered well in both general quality of life and health related quality of life. However, the average of domain scores of WHOQOL-BREF was less than 80% at all menopausal stages. The menopausal symptoms (MRS total) ( $p=0.02$ ) and sexual activity per month ( $p=0.005$ ) has a significant influence on the overall quality of life. Sexuality had a significantly negative effect on psychological health ( $p=0.03$ ). The age, occupation, menopausal stage, MRS-somatovegetative symptoms had a significant effect on health-related quality of life ( $p<0.05$ ).

**Conclusion:** In conclusion, menopausal symptoms and sexuality have a significant effect on the quality of life in middle-aged Mongolian women. This however needs confirmation in other, better-designed clinical studies.

**Key words** Menopause; perimenopause; quality of life; MRS; WHOQOL-BREF

## Adverse Effects of Hypovitaminosis D on Postmenopausal Metabolic Profile

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**Introduction:** The high prevalence of vitamin D hypovitaminosis is associated with the emergence of various metabolic diseases in the postmenopausal period. Decreased levels of the estrogen in postmenopausal women contribute to the decrease of serum vitamin D levels and the increased prevalence of metabolic diseases.

**Methods:** This was an observational analytic study with a cross-sectional design to analyze the relationship between serum 25(OH)D levels and metabolic syndrome in postmenopausal women. The subjects were postmenopausal women who worked at Dr. Hasan Sadikin General Hospital Bandung. They met the inclusion criteria (n=102).

Examination of serum 25(OH)D levels and measurements of each component of the metabolic syndrome were performed on each research subjects. This study was conducted in Dr. Hasan Sadikin General Hospital Bandung from August to November 2020.

**Results:** In this study, the prevalence of metabolic syndrome of the study population was 45.1% having diabetes and 94.1% having hypovitaminosis D (<20 ng/mL). The mean serum 25(OH)D level in the metabolic syndrome group was  $11.12 \pm 10.15$  ng/mL that was significantly lower than the group without metabolic syndrome as many as  $13.57 \pm 11.15$  (p<0.05). Measurements with the ROC curve showed that postmenopausal women who had levels of 25(OH)D 10.3 ng/mL had 2.32 higher risk of developing metabolic syndrome compared to those with levels of 25(OH)D >10.3 ng. /mL. There was a negative relationship between abdominal circumference and fasting glucose levels with 25(OH)D levels.

**Conclusion:** Hypovitaminosis D is associated with an increased risk of metabolic syndrome, central obesity, and increased fasting blood sugar levels in postmenopausal women.

**Key words** hypovitaminosis D; metabolic syndrome; obesity; postmenopausal

## Challenges in the Management of Menopause During the Pandemic – Australasian Perspective

Sonia Davison  
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This presentation will discuss the impact of the COVID pandemic on medical practice in Australasia, in the context of a series of lockdowns and a COVID elimination strategy from March 2020 until the present time. The swift transition to Telehealth enabled ongoing care of women from mid-life and beyond, however this was associated with many technological and logistical challenges for health practitioners. The adoption of e-scripts allowed paperless prescription of medications, however menopausal hormone therapy shortages compounded the challenges for patients, pharmacists and practitioners. Mental health issues in women increased, eventuating in long waiting lists for psychology and psychiatry services. Public mammography screening programs were interrupted by lockdowns and patient reluctance to attend imaging facilities. Women were unable to access exercise facilities for the maintenance of general, mental and bone health.

Home-schooling of children and university students, plus the care of elderly parents further compounded the challenges faced by women around the time of the menopause.

**Key words** Menopausal Management, Australia

## Challenges in the Management of Menopause During the Pandemic

Atul Munshi  
Indian Menopause Society  
Munshi Hospital

“COVID-19 is not likely to be a significant additional risk to menopausal women per se, but menopause is a time women begin to have increased risk for heart disease and type 2 diabetes, once they lose the protective effects of estrogen. These co-morbidities definitely increase risk for women who may contract COVID-19.

Here is a short summary of effect of covid during menopause and challenges we face in management.

The points to ponder:

- Ignorance / non acceptance of severity (denial mode)
- Incidence higher in menopausal age - low immunity, comorbidities
- Loss of protective role of estrogen
- 3 delays - delay in diagnosis, delay in treatment, delay in follow-up
- Overall neglect of elderly female patients in family
- Management principles in elderly
  - o Tele medicine - home isolation and treatment
  - o Timely hospitalization - oxygen in proper treatment including treatment of complication
  - o Post covid complication - psychological problems, mucormycosis and thromboembolism
- United we can fight the pandemic specially for the menopausal patients

**Key words** covid

## MHT and osteoporosis in postmenopausal Korean women

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Korean Society of Medical Biochemistry and Molecular Biology

Korean Society of Circulation

Korean Society of Lipidology and Atherosclerosis

North American Menopause Society

International Menopause Society

European Menopause and Andropause Society

Osteoporosis is the most common metabolic bone disease and estrogen deficiency plays a key role in the pathogenesis of postmenopausal osteoporosis. Estrogen therapy prevents bone loss and fragility fractures in postmenopausal women.

Ethnic/racial differences in osteoporosis and fracture are well known. Five studies on MHT and osteoporosis from Korea would be shared with you. In brief, bone loss associated with activated bone turnover is evident during the menopausal transition, and combination oral contraceptives might prevent BMD decrease and suppress bone turnover markers in perimenopausal women. Three studies on combination therapy of MHT and bisphosphonate in postmenopausal women with low BMD would be followed. One-year of oral alendronate in combination with MHT did not make difference in BMD compared with MHT alone. Bone turnover markers, however, were more suppressed. Adding oral alendronate into the ongoing MHT for one year also did not yield statistically significant difference in BMD, but bone resorption, but not bone formation, marker was decreased. In contrast, adding intravenous pamidronate added into the ongoing MHT increased spine BMD with bone resorption maker unaltered. Finally, the effects of MHT using percutaneous estradiol gel and micronized progesterone in patient with hip fracture will be presented. Compared with risedronate, MHT for four years showed comparable results on fracture recurrence and death.

**Key words** MHT

## **Challenges in the Management of Menopause during the Pandemic – Pakistan Perspective**

Rubina Hussain  
Ziauddin University  
Pakistan Menopause Society

The global pandemic of novel Corona virus disease in 2019 has transformed Pakistan's healthcare. It has been a time of great challenge regarding the management of women especially going through peri-menopause and post menopausal with associated medical co-morbidities. Menopause became a neglected part of healthcare system during the phase of the pandemic. Use of telemedicine and social media made it possible to provide face to face discussions with these patients who had access to it. This unprecedented crises taught us extraordinary lessons. We hope things will improve soon after the vaccination covers the population.

**Key words** Menopause, Corona virus, Telemedicine

## Japan Guidelines for Menopause Practice: Office Gynecology Guideline & Menopausal Hormone Therapy Guideline

Masakazu Terauchi  
Tokyo Medical and Dental University  
Japan Society of Obstetrics and Gynecology

We have two guidelines frequently referred to in daily menopause practice in Japan: Office Gynecology Guideline revised in 2020 and Menopausal Hormone Therapy Guideline revised in 2017. Among the many topics described in 2016 IMS Recommendations, I would like to focus on some in which it is different from our guidelines.

### (1) Cardiovascular disease

“To initiate MHT beyond age 60 years” itself does not seem to be discouraged in IMS Recommendations. However, in general, it is not encouraged to newly start MHT in women aged >60 years or >10 years since menopause in our MHT Guideline.

### (2) Coagulation, venous thromboembolism disease and MHT

In IMS Recommendations, transdermal ET does not seem to be contraindicated in women with history of VTE, whereas in our MHT Guideline, even transdermal ET is contraindicated in women who have history of VTE.

### (3) Breast cancer

IMS recommends that annual mammograms should be proposed in case of high breast density in women using MHT, because “[c]ombined MHT can increase breast density, which complicates screening and increases mammography frequency.” We screen for breast cancer in women receiving MHT annually anyway, according to our MHT Guideline.

### (4) Complementary therapies, non-pharmacological and lifestyle interventions

CAM are not regulated by health agencies worldwide according to IMS Recommendations, whereas “Kampo” (Japanese herbal medicine) is approved and regulated by the health agency in Japan. We were qualified to prescribe both MHT and Kampo medicine, which has been proved to be effective in some patients.

### (5) Postmenopausal vulvovaginal atrophy

In IMS Recommendations, it is written that “[t]reatment [for VVA] should be started early, before irrevocable atrophic changes have occurred, and needs to be continued to maintain the benefits, suggesting the use of local HT for VVA for the whole life. However, we treat who complains, in principle.

Also, a couple of additional indications for MHT are mentioned in our MHT Guideline, such as burning mouth syndrome and pretreatment before POP surgery. Furthermore, some women at risk can be considered as candidates for MHT according to our MHT Guideline, such as history of endometriosis, well-controlled hypertension, well-controlled diabetes, cervical cancer survivors, endometrial cancer survivors, and ovarian cancer survivors.

**Key words** Office Gynecology Guideline

## Challenges in the Management of Menopause during the Pandemic – Japan Perspective

Masakazu Terauchi  
Tokyo Medical and Dental University  
Japan Society of Obstetrics and Gynecology

In the midst of the pandemic, management of menopause has a variety of challenges. Among them, I would like to focus on the benefits and risks of menopausal hormone therapy (MHT).

It has been reported that men are more vulnerable to COVID-19 than women across the globe (Okpechi 2021 Aging Dis). Moreover, according to a recent report from China, postmenopausal women were more vulnerable to the pandemic than premenopausal ones (Ding 2021 Clin Infect Dis). These findings imply that MHT could be used as a treatment for COVID-19. According to Okpechi et al., two clinical trials were under way: Estrogen Patch for COVID-19 Symptoms (NCT04359329) and Progesterone for the Treatment of COVID-19 in Hospitalized Men (NCT04365127). The results of the latter were recently published, in which it was shown that men assigned to standard of care (SOC) plus progesterone (P4) had significantly higher probability of improvement or discharge than those who were assigned to SOC alone, suggesting that P4 may represent a safe and effective approach for treatment in hypoxemic men with moderate to severe COVID-19 (Ghandehari 2021 Chest). The mechanism(s) of the protective effects of P4 are not yet elucidated, but an animal study once showed that P4 protects the lungs of mice against edema and alveolitis induced by influenza virus inoculation, thus increasing their survival rate (Hall 2016 PLoS Pathogens). P4 are supposed to induce the differentiation of Th17 cells, which could be involved in pulmonary epithelium repair.

Although MHT shows some promise in the treatment of COVID-19, it should be noted that patients suffering from the disease are at high risk of venous thromboembolism, which MHT also poses a risk. Spanish Menopause Society issued Recommendations as early as in May 2020, which said that women confirmed or suspected of COVID-19 and using MHT should stop systemic MHT and receive therapeutic low molecular weight heparin (Maturitas 2020).

The possible protective effects of MHT against the pandemic and the increased risk of VTE in the COVID-19 cases who are receiving MHT should be both taken into account in our daily clinical practice.

**Key words** menopausal management, pandemic

## Challenges in the management of menopause during The Pandemic–Thailand Perspective

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COVID-19 Pandemic has caused impacts on menopausal healthcare management in Thailand since early 2020. The patients have to limit themselves for hospital visit due to COVID-19 infection phobia. These affect many hospitals and healthcare centers, both in the rural and urban areas to provide alternative accesses to healthcare services such as telephone remedication and telemedicine nationwide including home visits in certain areas. These new methods of health care services need information technology literacy causing stress to menopausal and postmenopausal women. Younger family members play an important role for this assistance, both at the beginning of the program application and also for long term maintenance. Hospitals, doctors and healthcare personnels are considered as high risk persons for infection if contacted.

Emerging problems commonly recognized during this pandemic among menopausal women include: markedly overdiagnosed new hypertension as a result of chronic stress from infection phobia or at the screening point of the waiting areas for vaccination. Limiting access for exercises in certain areas (public parks, fitness, swimming pool, outdoors) causing glucose intolerance or uncontrolled diabetes in the previously well controlled patients. Increased in body mass index from limitation of personal exercise habits might also affect osteo-arthritic knee pain. Many psychological problems have been increased such as chronic fatigue syndrome from work-from-home in limited working space and chronic environmental stress, depressed mood or depression due to chronic anxiety and infection phobia, insomnia and sleep problems, etc. Social media (daily updated news on COVID-19 statistics, both globally and locally) also has impacts on emotion and social activity which can cause social deprivation, lack of family members contact and socializing with friends, both at workplaces and also with neighbors. Loss of loved or known persons or family members. Also, many menopausal women know that they are high risk for complications or death if infected.

Some popular alternative medicine such as Thai traditional herbal medication are widely used nationwide to prevent or alleviate the severity of infection. One of the popular traditional herbal medicine is “Kariyat” [*Andrographis paniculata* (Burm. f.) Nees] which the main active substance is andrographolide and has been previously and popularly used for common cold or influenza prevention and treatment, available in fresh herbal leaves or sachet or capsule are personally used in daily life for this purpose. This was also officially used as a complementary medicine for infected cases by the government in Thailand together with available anti-viral regimens. Many vaccines are inoculated for the purpose of raising immunity for COVID-19, but with a slow rate and limitation of access. Older population from >50 or >60 years or with certain underlying diseases such as hypertension, diabetes, chronic kidney diseases, etc., has the priority for inoculation. This vaccination program is expected to cover the majority of the country target population by the end of this year. Data from

Thailand shows that female (perimenopausal and postmenopausal) healthcare personnels are at higher risk of infection than in male personnels.

Financial problems in many menopausal and postmenopausal women are becoming more serious and more prominent as the pandemic lasts longer. All the previously mentioned conditions inevitably cause decreased overall quality of life in Thai menopausal women during this Pandemic period.

**Key words** pandemic

## Challenges in the Management of Menopause During the Pandemic – Mongolian Perspective

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Mongolian National University of Medical Sciences (MNUMS)

COVID-19 Current figures as of 9th September 2021

Population: 3,340,944

New daily cases (7-day average): 3' 488(↑20.3%), 807 cases per 100' 000, peak and rising

Total confirmed cases: 256' 807, recovered 224' 274

Total coronavirus related death: 1060 (↑9.4%)

Immunization: 1st dose - 95.1%, 2nd dose - 89.2%, Third dose 9.74%

Objectives: To identify challenges faced by women and health care services during the pandemic, report measurements taken in the managing of menopause among Mongolian women.

Review: The pre-existing inequalities in the health sector and in health status have increased women's vulnerability to the COVID-19 pandemic. It has had a devastating impact on women, in particular those that are poor, elderly, with disability, a migrant, or herders. Health-related inequalities are linked to socio-economic status, geography, gender and ethnicity. There is a difference in access between rural and urban populations, with women in rural areas struggling more. Compared to men, more women are working on the front lines and fighting against the coronavirus pandemic. Women make up 81.9% of all health workers in Mongolia. As of 15 December 2020, 41 health workers in Mongolia have been infected with COVID-19. During the COVID-19 pandemic, health workers carry more risks, with low salary and incentives as well as excessive workload. Medical professionals had to deal with rising COVID admissions, number of deaths, speed of transmission, lack of PPE and the staff's own for themselves, family, and patients.

Female patients also experienced challenges brought on by the pandemic, which include limited access to services and medicine due to the long-lasting restriction of movement, as well as a medical personnel shortage caused by the re-distribution of medical staff to COVID units. Additionally, maternal mortality increased by 27.8% during the pandemic period in comparison to the past 3 years.

Misunderstanding of the COVID-19 vaccines caused by limited access to information/mis-information resulted in a cessation of previously prescribed MHT, contraceptive pills and regular medication due to fears of side-effects and/or complications when vaccination is undergone in combination with prescribed medication. Approved COVID-19 test centres are few and far between and this, combined with the costly PCR and rapid tests, resulted in difficulty ceasing the spread of infection. We have, and continue to adapt our approach to the management of menopausal women in the light of the pandemic. This includes: provision of lifestyle guidance to manage menopausal symptoms during the pandemic; assessment and organisation of contraceptive pill supply, remote prescription of HRT through direct contacts with pharmacies; and evaluation of patients' health conditions using self-reporting questionnaires, mobile applications, wearables and video/teleconsultations. 1 in 4 patients are now treated/managed remotely. We also provide advice IF anxiety or depression occurs, as

well as warning patients of intimate partner violence (WHO calculates this to occur in 30% of families) and providing a designated numerical helpline if needed. Currently, we approach the situation by regular communication with as many patients as possible, by predicting, planning and establishing multi-disciplinary team management. Collaboration is key. Our aim: professional development with use of technology (eg. establishing platforms to manage patients remotely) to increase efficiency of patient treatment and follow-up after observation of their needs.

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**Key words** COVID-19

## Challenges in the Management of Menopause during the Pandemic – Sri Lanka Perspective

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Sri Lanka is an island in the Indian Ocean with 21.5 million population of which 12% is over the age of 60 years. Sri Lanka has the highest life expectancy in South Asia with females living up to 78 years, which is higher than the life expectancy for males. Like most other Asian countries, the age of menopause among Sri Lankan women is 51 years. One of the important health issues that Sri Lanka faces today is the high prevalence of non-communicable diseases among the aging population of which more than 60% are women.

Like most Asian neighbors, Sri Lanka is going through a very difficult period due to the Covid pandemic and as a result of diversion of resources, all routine medical work has been cancelled except the management of cancers and life-saving procedures. Most of the routine clinics including menopause clinics, screening programs and hospital appointments have been cancelled. In this backdrop, the menopause management has become a huge challenge for a developing country like Sri Lanka. Almost 50% of our national income has been spent for Covid-related expenses including vaccinations. As we all know, isolations, lockdowns and quarantine curfews have an impact on health of menopausal women. Lack of exercises, limited exposure to sunlight and disruption of routines has contributed to physical and emotional symptoms which have become more prominent during this pandemic. Lack of exercises and sedentary life styles lead to obesity, vasomotor symptoms, osteoporosis, poorly controlled diabetes and hyperlipidemia. Additionally, the Vitamin D deficiency associated with osteoporosis and musculoskeletal dysfunction are contributing to poor immune response.

Social isolation and lockdowns have a negative effect on interpersonal relationships and cause the feeling of insecurity in all aspects of life. The increase of cases of insomnia, memory loss, forgetfulness and even depression has been reported. Meantime, the loss of income and reduced social support are likely to complicate the social and health issues.

Nearly all Sri Lankans are covered by public health care services at grass root level. Public health staff are trained to tackle the menopause-related issues and to refer when it is necessary. Urgent referrals are entertained by Out Patients Departments in government hospitals and the General Practitioners are working around the clock. Several professional organizations are maintaining hotlines and web pages to provide advice and information to health workers and clients. The Ministry of Health has taken every step to provide essential medications, family planning services and vaccinations at grass root level with the support of public health staff.

**Key words** Sri Lanka, menopausal management

## IHD in South Asian Women

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South Asia is home to nearly one-fourth of world population,. It is estimated that there are about 250 million postmenopausal women in the region, and they have many Non Communicable Diseases common to them. Ischemic heart disease (IHD) is the leading cause of death of women worldwide, and the prevalence and mortality is higher in South Asian women. Women have atypical symptoms, and microvascular dysfunction is common, and hence many are diagnosed late.

There is an increased female predisposition to IHD, and many invasive procedures lead to higher vascular complications. Relative Risk of mortality from IHD in South Asian women is higher than in men, and much higher than in men and women of other ethnicities.. Risk factors associated with IHD like obesity, diabetes, dyslipidemia are higher in South Asian women. Metabolic Syndrome, Low physical activity, urbanization, dietary habits contribute to increasing incidence of IHD in them. Although there is genetic predisposition, targeting many modifiable factors would reduce the incidence and mortality from IHD in South Asian women.

**Key words** IHD

### Features of national menopause guideline in South Korea

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In South Korea, the Korean society of menopause has published menopausal hormone therapy (MHT) guidelines, and the most updated version was in 2020. It's contents are about specific consideration for menopausal women (examinations required prior to MHT, MHT for women in menopausal transition), benefits of MHT (vasomotor symptoms and quality of life, urogenital atrophy and sexual dysfunction), risk management of MHT (coronary artery disease, cerebral stroke, venous thromboembolism, breast cancer, other cancers in menopausal women), and other related disease (depression, osteoporosis, sarcopenia, gallbladder disease and migrane). Tibolone and tissue-selective estrogen complex (TSEC) are described additionally. The guideline was consensus of experts on menopause in Korea, and Asian or Korean specific data was reflected if possible.

**Key words** MHT

## Menopause Management - Are We Still Behind the Curve?

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We have an aging population in the Asia Pacific and women have 30 years of life after transitioning through menopause. It is important that they stay happy and healthy at menopause and beyond!

Although menopause hormone therapy is the most effective treatment options for menopause symptoms, physicians are often hesitant to prescribe them if their patients already have risk factors for deep vein thrombosis, stroke, heart disease and breast cancers, as hormones may potentially add to those risks. We are constantly trying to find new treatment options that may least increase risks of these health issues. Smoking, obesity and inactivity consistently increase risks of all of these medical conditions. Unfortunately, there is just not enough political or financial will to put a stop to these even though evidence linking smoking and obesity to poor health and death are abundant. Despite having that knowledge, the tobacco, fast food and sugar drinks industries continue to grow. Children across Asia Pacific are rapidly becoming victims of these poor decisions.

We would not have such an uphill struggle if we are able to rewind the clock and start healthcare from young. If children were educated and supported to eat wisely and develop healthy habits from young, they would be much better candidates at midlife should they require treatments to improve their quality of life.

So even if we are not policy makers, or influencers of health boards and governmental decisions, we are able to educate our communities, a woman at a time, to do better for their children. Health and happiness at menopause and beyond must start at birth!

**Key words** Menopause Management

## PCOS, Midlife and Covid - A Lethal Cocktail

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COVID-19 was initially identified as a Severe Acute Respiratory Syndrome caused by the coronavirus 2 (SARS-CoV-2) but progressively has been demonstrated to be a systemic disease with vascular, cardiac, kidney, gastrointestinal, and central nervous system complications. This multi organ involvement is due to the expression of ACE2 receptors present in various organs, to which the virus attaches, causes endothelial damage and alters immune response.

Studies comparing Covid affected patients with controls have demonstrated that the male sex is associated with a 1.6-fold increased risk for non-ICU hospitalization, a threefold increased risk of ICU admission, and 1.7-fold increased risk of mortality after adjustment for confounding factors.

Recently, it has been shown that androgens facilitate the entry of the SARS-COV-2 Virus in lung epithelial cells partly explaining the clinical observation of higher COVID-19 morbidity and mortality in men. ACE2 receptors are widely distributed throughout the body with higher expression and activity related to severe COVID-19. Sex-based differences of these receptors and regulation of ACE2 in various organs, might contribute to different clinical manifestations in men and women.

It is known that women and men differ in their immune response to infection. Recent studies have reported that male patients had higher plasma levels of innate immune cytokines along with more robust induction of non-classical monocytes, whilst female patients have significantly more robust T-cell activation than male patients during SARS-CoV-2 infection. Overall, immune responses against SARS-CoV-2 also appear to differ between men and women.

Obesity is usually accompanied by comorbidities including Type 2 Diabetes, Hypertension, Cardiovascular Disease, Renal disease etc. which affect the severity of any infection. Since adipose tissue has a higher expression of ACE2 receptors, there is a prolonged presence of the Corona virus, leading to a greater exposure and increased risk of severe disease. Obesity is also associated with chronic inflammation, abnormal cytokine activation, alongwith dysfunction of inherent immunity leading to a worse prognosis in those infected. This is true even for the obese PCOS woman who has a pro-inflammatory disorder, which increase her risk of severe Covid-19 infection alongwith increased hypercoagulability, both increasing the risk of thrombosis and leading to increased morbidity and mortality.

The recently published guidelines by the European Society of Endocrinology for the endocrine phenotype of the Covid-19 pandemic have suggested that patients with endocrine disorders should be considered as high priority for vaccinations especially those individuals with Diabetes and Obesity. PCOS is an endocrine problem which is also positively associated with both Diabetes and Obesity deserves equal attention.

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Hence in PCOS women who are hyperandrogenic, 80 % being obese, many Insulin Resistant, Covid-19 infection could be a lethal combination.

**Key words** PCOS

## MHT: What's New

Jyothi Unni

Ageing is a global trend with an estimated 962 million aged over 60. The Asia Pacific region is experiencing ageing at an accelerated pace.

The age at menopause has remained relatively constant at 51 years. Many countries in Asia and the Western Pacific region have reported the mean age of menopause between 46 and 49 years. This means that these women may have to live a few years longer with the consequences of estrogen deprivation.

Over the last couple of decades, the pendulum of Menopausal Hormone Therapy (MHT) has been swinging to and fro. What has not changed is that it is the most effective treatment option for vasomotor symptoms.

Using the lowest effective dose for the required duration is what most organisations are recommending now.

Several studies have looked at the timing hypothesis and it is quite clear that the benefits of MHT outweigh the risks, if it is commenced within 10 years of menopause or before the age of 60. This is particularly of relevance in relation to Cardiovascular risk.

Less androgenic progestogens, such as Dydrogesterone or Micronised Progesterone continue to provide endometrial protection with less adverse effects on the lipid profile and the breast. The LNG IUS is another good option.

There has been much controversy and debate about the use of Testosterone for women. It is known to be effective for the treatment of female sexual dysfunction. However as preparations for women are not available in several countries, use has been limited. Recently, there has been advice that the preparations available for men can be used but in doses which are physiological for women.

The Tissue Selective Estrogen Complex (TSEC) is showing promise. It is the combination of a selective estrogen receptor modulator (SERM) Bazedoxifene (BZA) with Conjugated equine estrogen (CEE). The intention is to provide the efficacy of both components with fewer adverse effects. The rationale is that the tissue selective activity will come from the blended activity of both agents. Safety and efficacy studies showed that the ideal combination would be 20 mg of BZA with 0.45 mg of CEE. The TSEC treats menopausal symptoms and prevents bone loss without stimulating the endometrium. There is more amenorrhoea and less breast pain. Adverse effects are mild and perhaps it will replace estrogen as Menopausal Hormone Therapy. It has already been approved for use in some countries.

Ospemifene is a third generation SERM which has been approved for oral use for the treatment of Dyspareunia. It has no adverse effects on the breast and endometrium. The risk of breast cancer is dose and duration dependent and there is no difference in mortality risk. Stroke risk can be reduced by using low dose and ultra low dose formulations and non-oral routes of therapy.

Our aim should be to help women make informed choices by keeping abreast of the data. We should individualise treatment and offer them the full range of effective choices.

**Key words**

## Menopause treatment: Recent concerns and new developments

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### Introduction.

Since the first Women's Health Initiative (WHI) publication on Estrogen plus Progestin therapy (EPT) in 2002, the associated breast cancer risks of MHT (Menopausal Hormone Therapy) has become the main focus of research, particularly on the effects of different progestogens used. The results of both laboratory and clinical trials during the past decade support the safety of natural progesterone use for MHT. However, a recent British publication (Lancet, August 29, 2019) expressed different opinions on the breast cancer risk of MHT. Moreover, long-term effects of MHT reported by the WHI group (JAMA 2020) surprised both MHT users and providers. In order to avoid the breast cancer risk of MHT, an alternative treatment for menopause with oral neurokinin 3 receptor (NK3R) antagonist has been newly developed. Recent concerns.

The British report indicated that both E+P and E only used for more than one year might have increased breast cancer risk. These results were different from those of WHI. In contrast to previous E3N cohort and other studies, the British study also reported that all kinds of progestogens including natural progesterone used for MHT might cause an increased breast cancer risks.

The long-term effects of MHT from the WHI study indicated that up to 19 years after having stopped taking the pills: (1). Women who use CEE+MPA after menopause still have a 29% increased risk of developing breast cancer. (2). Women on CEE alone for seven years had a 23% lower risk of developing breast cancer and 44% less likely to die of breast cancer.

### New Developments.

NK3R antagonist (MLE4901) for treatment of hot flushes was evaluated by a randomized control trial (Lancet, 2017). This new treatment did not cause any effects on the estrogen level and showed promising results with improvement of menopausal symptoms.

### Commentary

(1). The British study had some limitations in that data were mostly from observational studies and included mostly the users of old regimens of MPA or NETA. The study provided new information about MHT risk of breast cancer. This should be taken in the context of the overall benefits obtained from using MHT, including symptom control and improving QOL as well as the bone and CV benefits associated with MHT use. (2). That MHT may have long-term effects on breast cancer after 20 years should be recognized. (3). Many postmenopausal Asian women suffered from menopausal symptoms. Treatment with a NK3R antagonist could be practice changing as it safely and effectively relieves hot flush symptoms without estrogen exposure.

### Conclusions

The recent publications of breast cancer risk and its long-term effects regarding MHT have brought up new concerns. The new treatment with NK3R antagonist is promising. However, it needs to be further studied.

**Key words** Menopause treatment

## The Evolution of Menopause Hormone Therapy

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Menopause Hormone Therapy (MHT) had its origins in Germany in 1886 when the injection of ovarian tissue treated menopausal symptoms. This treatment was soon followed by oral bovine ovarian tissues in which patients experienced a dramatic improvement in sexual functions. However, the treatment was ineffective when it was switched to non-ovarian tissue.

In 1889, Dr. Charles Edward, the Father of Endocrinology, injected himself with guinea pig and dog testicles' extract and claimed that he rejuvenated himself, and opined that these extracts might have the same result on women. Thus began the seed for the commercialization of sex hormone therapy. In the 1890s, Merck produced Ovariin in powder-and-pill form from cow ovaries that successfully treated symptoms of menopause.

In 1993, the first ET (estrogen therapy), Emmenin, produced from the urine of pregnant women, was sold. Being too costly to produce, in 1994, Premarin made from pregnant horse urine replaced it. During the 1940s-1950s, several books and publications suggested estrogen therapy for menopausal disorders, hence promoting a steady increase in the use of ET, doubling or tripling its use from the 1960s to mid-1970s.

In 1975, the reports of increased endometrial cancer in estrogen users resulted in a dramatic decline in estrogen sales. In the mid-1980s, it was discovered that the addition of progestin would prevent endometrial cancer, and initiated the birth of EPT (estrogen progestogen therapy) and a revival in menopause hormone therapy use. Evidence in the 1984 NIH Consensus Development Conference on Osteoporosis declared estrogens as the best way to prevent bone loss. Over the years, hormone therapy became a popular treatment. Premarin continued to rise in popularity, becoming the top prescribed drug in 1992. It was recommended to treat menopausal symptoms and provide long-term protection against osteoporosis and related fractures, heart disease, and even Alzheimer's disease.

Until 2002, HRT was the standard care for menopause management. Following the release of the initial results of the WHI trial, perception changed. HRT use plummeted and has remained low, prompting strong interest in alternative treatments, which none provide the range of benefits across multiple organ systems offered by estrogen.

In 2004, the results of ET were more positive, but it received little attention due to the damage done in 2002. MHT replaced the term HRT because of the fear of the word HRT among women. Subsequently, treatment guidelines were revised time and again to recommend hormone therapy at safer dosages, regimes, duration, time of initiation, route of administration, and types of estrogens and progestogens.

Twenty years after WHI, the perception of MHT benefits/risks is still distorted; therefore, its use is often avoided, leading to unnecessary distress. Following the WHI report, many clinicians had not received adequate training to feel comfortable prescribing MHT, consequently the use of MHT dropped significantly. The fear of MHT among women, and misunderstanding of the risks/benefits, along with lack of appropriate education among providers, had led to underutilization, unnecessary

suffering, and excess chronic diseases and mortality in postmenopausal women over the past two decades.

**Key words** HRT

## Maintaining Wellness in Perimenopause and beyond

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Recent years, population aging has become one of the major challenges of the globe. World Health Organization is celebrating the decade 2020–2030 as the “Decade of Healthy Aging”. Women are given adequate care from birth through reproductive time, but none or little pay attention during over 40–60 years old. In 2008, the Stages of Reproductive Aging Workshop (STRAW) staging system was developed based upon data from multiple longitudinal cohort studies. It is considered the gold standard for characterizing reproductive aging from the reproductive years through menopause and includes criteria for the reproductive years, the menopausal transition, perimenopause, final menstrual period (FMP), and postmenopause based upon bleeding patterns, endocrine findings, and symptoms. The menopausal transition and postmenopause are further subdivided into “early” and “late” stages. Although the STRAW system has been used primarily for women’s health research, it may be helpful in the clinical setting for patients and clinicians to assess fertility potential, contraceptive needs, and potential need for hormone therapy. The hallmark symptom of the menopausal transition/perimenopause and early postmenopausal years is the hot flash. Women may experience a number of other symptoms including vaginal dryness, sleep disturbance, depression, joint pain and memory loss. Long-term consequences of estrogen deficiency – Ovarian estradiol production and secretion decreases and stops altogether, however the ovary continues to secrete testosterone. Healthcare providers (HCP) should address these ongoing and upcoming changes prior to feelings of confusion or fear among their female patients. Hormone therapy has been shown in double-blind RCTs to relieve hot flashes and is approved as first-line therapy for relief of menopause symptoms in appropriate candidates. Approach indication include Prevention of bone loss, Premature hypoestrogenism, Genitourinary symptoms. Hormone therapy or other medications to alleviate vasomotor symptoms. First line treatment for vulvovaginal dryness is lubricants and moisturizers. Introital dyspareunia may be

treated with topical lidocaine. When additional treatment is needed or preferred for vulvovaginal symptoms, low-dose vaginal estrogen therapy (ET) is a well-established therapy with demonstrated efficacy and safety.

Osteoporosis, which is especially prevalent among older postmenopausal women, increases the risk of fractures. Hip and spine fractures are associated with particularly high morbidity and mortality in this population. The most common risk factors for osteoporotic fracture are advanced age, low bone mineral density, and previous fracture as an adult. The ASCVD Risk Estimator Plus helps clinicians implement guideline-recommended risk equations to facilitate clinician-patient discussion and support decision making to optimize care and lower risk for atherosclerotic cardiovascular disease (ASCVD). Cochrane meta analysis of 19 RCTs published in 2015 showed consistent results of reduced CHD risk when HT is initiated among early postmenopausal women.

In conclusion, as menopause is a vulnerable stage of women' s health, health management at menopause includes patient education, treatment of menopausal symptoms with hormone or non hormone therapy, prevention and management of chronic disease and promote healthy lifestyle. As each woman is unique, holistic and individualized approach and management is highly recommended.

**Key words** Perimenopause

## Features of National Menopause Guidelines in Indonesia

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Guidelines are meant to aid the clinician in decision making. “Working with what you have, where you are, and not with what you wish for” is the principle each one of us follow in clinical practice to give the best to patients. Many guidelines from each institution in the management of menopause, including from IMS (International Menopause Society) and Indonesian Society of Menopause (Perkumpulan Menopause Indonesia). By comparing the two guidelines, there are some similarities or differences in the management of postmenopausal women. First, in physical activity, IMS has recommendations for adjusting diet patterns and lifestyle modifications including socializing and being physically/mentally active in improving the quality of life of postmenopausal women. IMS has more complex guidelines in lifestyle recommendations for menopausal women. Second, before giving Hormonal Therapy (HT), the guidelines also said that patients need to get consent, complete and correct information related to the use of HT. Both of guidelines stated that the use of hormone therapy at the IMS and Indonesian Society of Menopause are carried out with various considerations, clear indication and examination including if menopause symptoms have interfered with the quality of life of postmenopausal women. Giving hormone therapy itself focuses on which organs are affected or disturbed or are individual because each body is different. Third, in contrast with IMS, Indonesian Society of Menopause stated that the use of additional hormone replacement therapy (phytoestrogen) is quite necessary in postmenopausal women and has been proven from various studies while the IMS recommendation this additional therapy still has limited evidence. Fourth, Indonesian Society of Menopause also stated hormone therapy is basically unnecessary in Central Nervous System aspect because supportive psychotherapy, self-help groups, cognitive behavioral therapy (CBT) and practicing a healthy lifestyle are things that need to be done. Fifth, nutritional recommendations/additional supplements are very well explained in Indonesian Society of Menopause for example the intake of omega 3, calcium, and vitamin D3, or various herbal plants to prevent osteoporosis, skin disorder, or vulvovaginal atrophy while IMS more focused on drug therapy.

**Key words** Menopause, Guidelines, Hormonal Therapy

## Menopause in Indonesia (During COVID-19 Pandemic Era)

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On March 11, 2020, the WHO declared COVID-19 a global pandemic. In Indonesia, from 3 January 2020 to 24 September 2021, there have been 4,204,116 confirmed cases of COVID-19 with 141,258 deaths, reported to WHO. The National data of COVID-19 positive cases in Indonesia showed that older people (>45 years old) was at the 3rd and 4th rank. The mortality prevalence was increased with age. There were significant mortality percentage in 46-59 years old group with 35.9%, and >60 years old group with 48.7%. The cured prevalence was low with 22.2% (46-59 yo) and 9.8% (>60 yo). Despite the stabilization in COVID-19 cases and hospitalizations, experts aren't convinced yet that the current surge has peaked. There are studies that report that a the menopausal status increases the risk of severe infection and mortality in people with Covid-19. In this pandemic, feelings of insecurity in all aspects of life, from the collective to the individual perspective, from the daily functioning of the society to changes in interpersonal relationships, social isolation, and lockdown that have been implemented since then have adverse effects on our mental health. The pandemic exacerbates typical symptoms of the menopausal transition and postmenopausal period, therefore we must consider the management of the countless complaints these women have during such difficult times. Considering that the menopausal transition is characterized by estrogen fluctuations or hypoestrogenism, leading to uncomfortable symptoms like hot flashes, recent memory loss, forgetfulness, loss of concentration, and sleep disturbances, understanding the role of estrogen in adverse circumstances as the pandemic should be considered. Under stressful conditions as the current COVID-19 pandemic, Hormonal Therapy (HT) for eligible symptomatic women can have additional benefits for mood, cognition, and quality of life. The concern about use of hormonal therapy in Covid-19 positive patients is based on the knowledge that some patients develop increased clotting, a risk which is associated with oral estrogens. Continue the HT for menopausal women with COVID-19, consider the risk of death from COVID-19 for women >50 years taking HRT has been shown to reduce by more than 50% and estrogen is known to improve the way cells that fight infections work and can increase the number of these cells.

Since there are evidences that transdermal hormone therapy does not increase clotting risk or phytoestrogens (Isoflavones 50 - 150 mg/day) has cardioprotective and anti-thromboembolic profiles, it can be considered.

**Key words** Menopause, COVID-19, Hormonal Therapy, Transdermal Hormone, Phytoestrogen

## Menopausal women are at risk from COVID-19 & the possible role of female hormone

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There had been three coronavirus outbreaks in this century, and the male mortality rate is constantly higher than that of female. Channappanavar et al. proved this phenomenon through animal experiment. In this study, enhanced susceptibility of male mice to SARS-CoV was associated with elevated virus titers, enhanced vascular leakage, and alveolar edema in lung tissue. These changes resulted in depletion of inflammatory monocyte macrophages protecting mice from lethal SARS. Additionally, treating female mice with ovariectomy or an estrogen receptor antagonist increased mortality, indicating a protective effect for estrogen receptor signaling in mice infected with SARS-CoV.

Scully et al. gathered data from several countries to examine the effect of biological sex on COVID-19 outcomes, adult men of all ages are at higher risk of serious complications, and fatality 1.7 times higher than female. However, these differences according to biological sex decreased with increasing age.

Ding et al. analyzed the effects of menstrual status and sex hormones on SARS-CoV2 infection. In non-menopausal patients, milder severity and better outcomes were observed compared with age-matched men. Although, in menopausal women, no significant differences of severity and clinical outcomes from age-matched males were observed. In this study, menopausal patients had longer hospitalization durations than non-menopausal patients, even after taking age and severity into account. Moreover, AMH & estradiol levels were negatively correlated with severity of infection. In addition, estradiol level revealed negative correlation with immunity- and inflammation-related cytokines including complement 3, IL-2R, IL-6, IL-8, & TNF- $\alpha$ . Summarizing the results of this study, menopause status is an independent risk factor for female COVID-19 patients. AMH and estradiol levels are potential protective factors against COVID-19, and these factors are negatively correlated with COVID-19 severity.

Costeira et al. developed a smartphone application to study COVID symptoms. Through this, they gathered self-reported information related to COVID-19 symptoms. Post-menopausal women had a higher rate of predicted COVID-19, and corresponding range of symptoms. Women taking combined oral contraceptive pill exhibited lower rate of predicted COVID-19, and reduced frequency of symptoms. These population also showed significantly lower rate of hospitalization. On the other hand, women using hormone replacement therapy revealed increased rate of predicted COVID-19. However, the methods used for HRT vary between individuals that these results should be interpreted with caution. There was no significantly increased rate of hospitalization in this population. The researchers concluded that estrogen will have a protective effect against COVID-19, given the positive association between predicted COVID-19 and menopausal status, and a negative association with oral contraceptives use.

There is still insufficient evidence as to whether the sex difference provoke any difference in immune response to COVID-19. Some theoretical possibilities are suggested by combining existing studies. SARS-CoV-2 virus penetrates host cells via

ACE2 & TMPRSS2. The expression of ACE2 is downregulated by estrogen, and higher expression in the lungs of males compared with females were observed. These results suggest that men may be more susceptible to SARS-CoV2 virus infection. TMPRSS2 is regulated by androgen receptor signaling. These facts implicate that sex-biased expression of ACE2 & TMPRSS2 can affect SARS-CoV-2 susceptibility. Early defense mechanism against virus is composed of innate sensing of viruses, production of interferons, and activation of the inflammasome. In this process, estrogen can initiate the differentiation from monocytes into inflammatory dendritic cells. As a result, female sex may be associated with a shorter duration of viral detection. In the next stage of immune reaction, female express higher antibody responses to viral infection and vaccination, and these sex differences contribute to adaptive immune response. These sex-different responses of inflammation and tissue repair in the resolution of viral infection would also be applied to COVID-19. Further clinical studies are needed to verify the actual effect and mechanism on COVID-19.

As various adverse effects that HRT can cause have been identified, the demand for safer HRT is increasing. In this situation, HRT using transdermal estrogen and micronized progesterone would be favorable considering the lower risk of venous thrombo-embolism or cardiovascular disease.

In conclusion, both sex and age are crucial factors contributing to the transcriptional signatures of immune components. Menopausal women are at greater risk from COVID-19 infection, and more precaution is needed in the prevention and treatment of COVID-19 in these women. The efficacy of HRT for preventing or managing COVID-19 should be evaluated through further studies.

**Key words** COVID-19

## Endometrial Safety with different Progestogens in MHT

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The University of Sydney

The endometrium is exquisitely sensitive to sex hormones. In a typical ovulatory cycle estrogen induces proliferation of endometrial glands, stroma and vasculature and activation of progesterone receptors. Ovulation leads to secretion of progesterone from the corpus luteum and consequent differentiation and secretory change in the endometrium with suppression of estrogen receptors.

It has been demonstrated that, in anovulatory cycles, unopposed estrogen production gives rise to endometrial hyperplasia and eventually endometrial cancer.

Data from the early days of HRT in post-menopausal women has confirmed that unopposed exogenous estrogens will exert the same undesirable changes in the endometrium.

Progestogens, either body identical or synthetic, may be administered as a part of HRT in women with an intact uterus to minimize any risk of hyperplastic change.

Various clinical trials, observational studies and systematic reviews over the past 60 years have shown that progestogens must be administered in an appropriate dose and for an appropriate duration of time for endometrial protection to be achieved.

Depending on the specific progestogen chosen, progestational effects will vary and appropriate doses will need to be used to address this issue.

In general, synthetic progestins have been shown to exert a greater progestational effect than body identical progesterone.

Two observational studies have reported an increased risk of endometrial cancer associated with the use of micronized progesterone in CCMHT. Possible confounders include compliance, inappropriate dosing regimens and variable absorption.

Body identical estrogen and progesterone should still be first choice therapy for most post-menopausal women. However, currently recommended doses of progesterone, whilst usually satisfactory for low dose estrogen therapy may need to be increased when higher estrogen doses are used.

For all users of combined MHT, surveillance, particularly in the presence of bleeding, is essential.

**Key words** MHT

## Influence of Menopause on Metabolic Syndrome

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The incidences of Metabolic Syndrome (MS) among postmenopausal women (32–55%) were found to be increased in the world. It is more prevalent in men than the age matched premenopausal women. However, after menopause the prevalence is markedly increased among women than men particularly after the age of 55. The metabolic syndrome is a cluster of risk factors including central obesity, glucose intolerance, dyslipidemia, and hypertension that increase the risk for cardiovascular disease (CVD) and type 2 diabetes mellitus. In addition each component of MS is closely associated with breast cancer and nonalcoholic fatty liver disease at postmenopausal age. Changing hormonal milieu with low oestrogen level and alteration of its ratio with testosterone has been implicated as a causal factor for the emergence of MS at menopausal transition. Besides menopausal hormonal changes, aging also plays a role in clustering of cardio-vascular risk factors. However, studies have reported the association of postmenopausal status independent of normal aging with an increased risk of the MS. Most studies have demonstrated increased risk of cardiovascular disease after natural menopause. The incidence of cardiovascular disease and MS further increases in patients with premature menopause or those who underwent surgeries that result in menopause. Yet the question of whether menopause is an independent risk factor for CVD has not been answered. The relative importances of factors that influence cardiovascular risk in postmenopausal women are largely unknown. Alterations in lipid metabolism with oestrogen deficiency are thought to be a substantial component of CVD risk in postmenopausal women, but there are also direct effects of oestrogen deficiency on body fat distribution (central obesity), insulin action, the arterial wall, and fibrinolysis that may influence cardiovascular and diabetic risk. Increased testosterone and decreased sex hormone binding globulins levels are strongly associated with MS and cardiovascular risk in menopause. Menopausal transition is associated with increase in abdominal adiposity, independent of the effect of age and total body adiposity. The transition from pre to postmenopause is associated with a shift toward a more atherogenic lipid profile, with increased low density lipoprotein and triglycerides levels, and reduced high density lipoproteins. A significant increase in the prevalence of plaque and intima-media thickening arises 5–8 years after menopause. Hypertension is a major risk factor for CVD in menopause. Hypertension may accelerate the formation atherosclerosis after menopause. Increased endothelin and activation of renin-angiotensin system have been proposed to play a role in post menopausal hypertension. Abdominal obesity is closely associated with increased insulin resistance, compensatory hyperinsulinemia, and increased risk of type 2 diabetes, independent of an individual's total body fat content. It is likely that timing of the initiation of hormone replacement therapy and status of cardiovascular health determines the protective effect of hormone therapy against CVD.

**Key words** Metabolic Syndrome

## Lifecycle approach for the management of non-communicable diseases (NCD) in postmenopausal women

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Menopausal transition and its aftermath mark a period of increased health risks in women, leading to increased morbidity, mortality and NCDs. Changes associated with ageing and declining levels of estrogen both contribute to the escalated risk of NCD in older women.

The main risk factors for NCD include genetic, environmental, behavioural and lifestyle factors, factors associated with medical conditions and socio-demographic factors. These risk factors operate throughout a woman's lifecycle, though at different degrees in the different stages of life. The most common NCD such as obesity, diabetes, hypertension, metabolic syndrome, cardiovascular disease, osteoporosis, malignancies and dementia have identified risk factors spanning foetal stage to adulthood. Few examples of genetic predisposition to NCDs include the identification of calpain 10 and transcription factor 7-like 2 for diabetes, mutations in leptin genes, genes for adipose beta-3 receptors, glucocorticoid receptor, and Na-K-ATPase, SNP in FTO gene causing obesity and mutations in several genes, eg. A $\beta$  precursor protein, presenilin 1, and presenilin 2 linked to dementia. Epigenetic changes mostly occurring prenatally and early postnatal life are associated with either nutritional imbalance or exposures to harmful environmental agents, eg. endocrine disrupting chemicals. The risk factors in childhood and adolescence are usually linked to unhealthy behavior or lifestyle, and are likely to continue during their adulthood.

The prevention of postmenopausal NCD is optimally achieved by addressing the risk factors at the appropriate points of intervention during the life course, especially during prenatal period, infancy, childhood and adolescence, to continue throughout adulthood. Earlier intervention has a better impact on improving functional capacity and responses to new challenges. The most effective preventative strategies include prevention of exposure to conditions predisposing to epigenetic changes, adopting healthy lifestyles, and promoting positive attitudes. Thus adopting a lifecycle approach will optimize the prevention and management of NCD in postmenopausal women.

**Key words** NCD

## The Effect of Pittsburgh Sleep Quality Index (PSQI) Score on Administration Melatonin in Perimenopause Women

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**Objective:** The period of perimenopause will cause changes that cause some symptoms in women. Poor sleep is becoming more common among perimenopausal women concern with the menopause transition. Melatonin has been shown to synchronize circadian rhythms, and improve sleep onset, duration, and quality. Melatonin offers alternative treatments for pharmaceutical therapy currently available for sleep disorders with far fewer side effects.

**Methods:** This study uses an experimental analytic study with Case Control design to determine the effect of melatonin administration on sleep quality perimenopausal women based on PSQI and compare the results of PSQI before and after treatment. This research was conducted at the Department of Obstetrics and Gynecology, H. Adam Malik General Hospital, Medan. The study population was all perimenopausal women who met the inclusion and exclusion criteria. This research was conducted from February to March 2020 with a sample of 25 people.

**Result:** The results of the study showed differences in case and control characteristics based on age, BMI, diastolic blood pressure, education and occupation ( $p = 0.769$ ;  $p = 0.061$ ;  $p = 0.210$ ;  $p = 0.304$ ;  $p = 1.00$ ). While based on systolic blood pressure and parity there were differences between the case and control groups ( $p = 0.037$ ;  $p = 0.03$ ). After receiving melatonin, the mean PSQI score of samples by age was  $2.38 \pm 1.75$  in the 45-50 year age group from  $8.24 \pm 2.59$ ;  $3.17 \pm 1.34$  in the group with No College education of  $8.89 \pm 2.56$ ;  $3.0 \pm 1.32$  in the non-working occupation group of  $8.38 \pm 2.22$  and  $3.50 \pm 1.73$  in the primiparous group of  $9.50 \pm 4.12$ . From the analysis results obtained a value of  $P < 0.001$ . PSQI scores in the control group by age were  $4.0 \pm 1.0$  in the age group  $> 50$  years from  $8.0 \pm 1.0$ ;  $2.17 \pm 1.62$  in the group with tertiary education from  $5.83 \pm 1.69$ ;  $2.56 \pm 1.67$  in the non-working group of  $6.44 \pm 1.51$  and  $2.31 \pm 1.6$  in the multipara group of  $6.0 \pm 1.58$ . From the analysis results obtained a value of  $P < 0.001$ . This also showed a significant difference in the PSQI score in the control group. significant differences in PSQI values in the control group and melatonin group in the case group before getting melatonin ( $p < 0.001$ ), whereas after administering melatonin, no difference in PSQI score was found in the groups that received melatonin and the control group ( $p = 0.657$ )

**Conclusion:** Based on this study there are differences in PSQI scores in the case group before and after the administration of melatonin, in the control group who did not get melatonin and the difference in PSQI scores in the case group and the control group before treatment, but there were no differences in PSQI score in the case and control groups after treatment.

**Key words** Perimenopause, Melatonin, PSQI

## Challenges in the Management of Menopause During the Pandemic – Taiwan Region Perspective

Kuochung Lan

Kaohsiung Chang Gung Memorial Hospital

In Taiwan region, from last year to May this year, when the pandemic started, the control and management were actually good.

The treatment of all menopause or perimenopausal patients is actually no different from the past

It's a pity that there has been an outbreak of the pandemic since May. Of course, with my current report, the pandemic has started in a relatively stable period.

We follow our Ministry health and welfare crucial policies to fight against cov-19.

In general, we divide to three part. including treatment technology, infection control and medical treatment energy.

If we narrow down on CHALLENGES IN THE MANAGEMENT OF MENOPAUSE DURING THE PANDEMIC.

One is the Diagnostic examination, treatment and patient follow-up in menopausal women in Taiwan region. And another is Cov19 vaccine related issues.

We use the telemedicine communicate with patient and doctors, and further using Public and patient advocacy for remote telemedicine purpose. Beside we follow up the Taiwan region CDC to provide the correct information about the vaccine safety and contraindication.

**Key words** treatment, pandemic

## Optimal Dosage of Estrogen for MHT

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Despite previous reports have suggested it might be some specific progestins in the regimen of MHT that increased the risk of breast cancer, long-term estrogen exposure alone might increase breast cancer risk has been reported in some studies. It is not known whether use of lower dosages of estrogen will be less likely to increase the risk of breast cancer but high dose of estrogen can increase the breast density as demonstrated in mammography.

Lower doses of estrogen appear to be as effective as the most commonly prescribed doses for relief of vasomotor symptom after menopause and may allow more patients to obtain the benefits of MHT. Although Recent studies have suggested transdermally administered estrogen has little or no effect in elevating prothrombotic substances, but the result is dose depended. The use of transdermal MHT containing low doses of oestrogen was proved safer and not associated with an increased risk of stroke. Garcia-Perez et al. reported similar efficacy of low and standard doses of transdermal estradiol in controlling bone turnover in postmenopausal women. Low dose estrogen and calcium have an additive effect on bone resorption in older women. Lower doses of CEE/MPA were also reported to be effective in relief patient from vaginal atrophy and protecting the endometrium.

Women taking low dosages of estrogens are less likely to have unacceptable side effects and potential harm caused by standard dosages of estrogen with progestin may be prevented by use of lower estrogen doses. Start MHT with lower doses, and titrate up to relieve symptoms if necessary. The intention, dose and regimen of HRT need to be individualized, based on the principle of choosing the lowest appropriate dose in relation to the severity of symptoms and the time and menopause age.

**Key words** estrogen, dosagen

## Treatment of menopausal symptoms following breast and gynaecological cancer

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FIGO  
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### Premature Ovarian Insufficiency

Problems often arise when Premature Ovarian Insufficiency (POI) occurs following treatment for cancer with radiotherapy, chemotherapy or surgery. POI occurs because of the decline in the number of primordial follicles in the ovary which is caused by chemotherapy and radiotherapy. Ovarian function can resume post treatment in some women and this depends on the type of treatment and the age of the woman. Younger women are less likely to experience POI than older women.

POI has adverse effects on general health particularly bone and cardiovascular health. Data suggest that osteoporosis and subsequent fracture is more common in untreated POI. Also the incidence of heart disease is increased in those coming through menopause earlier.

POI may present with menopause symptoms such as vasomotor symptoms, vaginal dryness, mood changes etc.

### Breast Cancer:

Most breast cancers in post -menopausal women are hormone receptor positive and carry a good prognosis when diagnosed early. They may be cured by surgery and the chance of recurrence decreased by administration of the Selective Oestrogen Receptor Molecule, tamoxifen or aromatase inhibitors.

Systemic HRT is contraindicated in women who have had receptor positive breast cancer although it is likely that vaginal oestrogen can be used safely as absorption is very small and levels of oestrogen do not rise out of the post-menopausal range. There are data to suggest that prolonged use of HRT increases the incidence of breast cancer in women but the 2 trials of HRT in women after breast cancer were stopped early because of fears of increasing numbers of recurrences with HRT as compared to placebo.

Alternatives to HRT for hot flushing includes gabapentin, SSRIs/ SNRIs and in the future, probably NKB Receptor antagonists. A small proportion of women opt to continue HRT and the type of progestogen may be important. Natural progesterone potentially has the least impact on breast tissue and dydrogesterone may be reasonably safe. Women on aromatase inhibitors should not be given HRT of any sort but consideration given to changing the woman to tamoxifen.

Breast cancer may also occur in pre-menopausal women when chemotherapy is more often required as the tumours are more often hormone receptor negative. Also for hormone dependent cancers, treatment with GnRH agonists may be administered that leads to menopausal side effects. HRT can be prescribed where the tumours are hormone receptor negative

Postmenopausal women will often be prescribed tamoxifen which can cause vasomotor symptoms but is less likely to be associated with Vaginal atrophy. Alternatives to HRT are usually prescribed and tamoxifen stopped if symptoms are particularly bad.

### Uterine Cancers

Squamous cell cancer of the cervix is not hormone dependent and HRT should be prescribed to all women with menopausal symptoms and those with POI following surgery

or radiotherapy. Adenocarcinoma maybe hormone dependent and so consideration given as for endometrial cancer.

Endometrial cancer is most common in postmenopausal women and is usually diagnosed early and treated surgically. There is little evidence but most consider that it is reasonable to use HRT in those following early stage cancers after a 1-2 year interval although in advanced disease it is probably best avoided.

### Ovarian Cancer

Ovarian cancer is complex because of the different types. Serous cancer has oestrogen receptors and generally HRT should be avoided. There is some evidence that it will marginally increase the incidence of serous cancers although its relationship with other types of epithelial, ovarian cancer is unclear. Germ cell tumours occur in young women and are not hormone sensitive and hormone replacement is thus recommended for those with POI.

For all cancers, discussion should take place with the oncologist caring for the woman in order that a coherent message is given to them and thus prevent divergence of opinion regarding ongoing treatment.

**Key words** treatment, cancer

## **Difference between Pakistan Menopause Society guidelines and the International Menopause Society guidelines**

Sumbul Sohali  
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Pakistan is the 5th most populous country with a population of 225.2 million in South Asia. It is a low-income country with a female population of 48.54%. The age of menopause is  $47 \pm 5$  years. The average lifespan of a Pakistani woman is 68.2 years and 1/3rd of their lives would be spent in menopause, yet it is considered a natural and inevitable event. The average literacy rate of Pakistani women is 28%. Menopause is still a neglected segment of our healthcare, along with cultural influences, serve as a protective factor against menopausal symptoms. Women still shy away from seeking healthcare as traditional and conservative nature of our society poses as a help seeking barrier. Studies conducted in Pakistan found the incidence of vasomotor symptoms as 42%, and most of these symptoms were mild. Menopausal hormone therapy is considered the most effective treatment for vasomotor symptoms. Genitourinary symptoms are reported as 34%. Pakistan has an elderly growing population living with dementia. Prevalence of osteoporosis amongst women in Pakistan is 7.2 million. Barriers to treatment is cost of diagnosis and treatment. Asian women perceive menopause as a symbol of freedom. Educating our women through social support groups is important to help create awareness and community support.

**Key words** post menopausal symptoms, menopause hormone therapy

## Perimenopausal Dermatological changes in Women

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Perimenopause is a period where estrogen levels in women is waning. This results in the changes in the skin such as decrease in moisture, decreased skin thickness and collagen content, decreased in elasticity, decreased wound healing, impaired skin barrier function, hair loss, etc. The change in the skin properties in peri- and post-menopausal women leading to various dermatological conditions arising as a result. In this talk, we will look at the clinical presentation of eczema, hair and nails issues, urticaria as well pigmentary issues and their management.

**Key words** Perimenopause

## Menopause and Hormonal Therapy: the Role of Phytoestrogens As an Adjuvant Treatment for Menopausal Symptoms

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Menopause is characterized by a decrease in estrogen, which triggers the uncomfortable symptoms of hot flashes, night sweats, sleep disturbances, and vaginal dryness. Among these menopausal symptoms, hot flashes are reported by many women to be the most bothersome. The symptoms of menopause as a result of decreasing estrogen levels can significantly affect quality of life. While hormone replacement therapy (HRT) effectively reduces vasomotor symptoms associated with the decrease of estrogen levels during menopause, results of the Women's Health Initiative (WHI) trial indicated that the benefits of HRT did not outweigh the risk, as estrogen alone would increase risks of stroke and venous thromboembolism (VTE), and together with progestin could incur additional risks of causing breast cancer and heart attack. As a result, the role of HRT has been limited to treat postmenopausal symptoms at minimal dose and duration, and more efficacious and better tolerated alternatives to decrease menopausal symptoms are still being sought.

Phytoestrogens are plant compounds with estrogen-like properties. The two major classes of phytoestrogens are isoflavones and lignans; soybeans are rich in isoflavones, and lignans are found in flaxseed, whole grains, legumes, fruits, and vegetables. The chemical structures of isoflavones and lignans are similar to that of estradiol, and these compounds appear to exert an estrogenic or antiestrogenic effect depending on the circulating estrogen level.

There is much interest in the use of phytoestrogens to treat menopausal symptoms, in part because vasomotor symptoms are much less frequently experienced by Asian women than by women in America or Europe, and because the Asian diet being rich in phytoestrogens may be a contributing factor

Study results have been inconclusive and no consensus on their utility has been reached. Conflicting data may be due to multiple factors including variations in studies' inclusion criteria, types and dosages of consumed phytoestrogens, the lack of appropriate study controls, control for the consumption of phytoestrogens from other sources, and differences in the outcome measures used.

In an RCT with 376 healthy postmenopausal women with an intact uterus, long-term treatment (up to 5 years) with soy phytoestrogens (150 mg of isoflavones per day) was associated with a significantly higher occurrence of endometrial hyperplasia than with placebo (3.37% vs. 0%), although no cases of malignancy were detected by endometrial histology from biopsies. However, no impact has been shown of soy isoflavones on endometrial proliferation in other clinical studies. Also of some concern is the potential anti-thyroid/goitrogenic effect of soy, especially in an iodine-deficient environment, and possible exacerbation of autoimmune thyroid disease with high soy intake. However, this appears unlikely at dietary levels.

**Key words** Menopausal Symptom, Hormone Therapy, Phytoestrogen

## Guidelines of the Philippine Society of Climacteric Medicine

Corazon Zaida N. Gamilla  
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Philippine Society for Gynecologic Endoscopy (PSGE) Specialty Board

The primary objective of menopausal health care should be enhancement of quality of life. Menopausal hormone therapy (MHT) has beneficial effects on the health-related quality of life in women with climacteric symptoms. As approved by the U.S. Food and Drug Administration, the use of MHT has four indications: (1) vasomotor symptoms, (2) prevention of bone loss, (3) premature hypoestrogenism, and (4) alleviation of genitourinary symptoms. History-taking in menopausal women should be directed to potential indications and contraindications for MHT.

Annual medical consultations should be encouraged in women taking MHT for continuous evaluation of risks and benefits. This includes physical examination, update of medical history, relevant laboratory and imaging investigations and a discussion on lifestyle. The most common indication for MHT is vasomotor symptoms. The routine use of MHT for primary prevention of chronic disease such as coronary heart disease, osteoporosis, cognitive function and dementia is not currently recommended.

Initiation of MHT in relation to proximity to menopause has strong impact in long-term health outcomes and should be started when menopausal symptoms occur during the perimenopause. MHT likewise should not be started in women more than 60 years old or more than 10 years from menopause. There is no mandatory limit to how long MHT should be taken. However, discontinuation of MHT is associated with increased risk of cardiac death and fatal stroke in the first year after cessation of use.

### MHT and Vulvovaginal Atrophy

Vaginal estrogen therapy is the most effective treatment option for menopausal women with vulvovaginal symptoms only. This requires long-term treatment as symptoms can recur on cessation of therapy. Progesterone is generally not indicated with low-dose vaginal estrogen therapy for the protection of the endometrium.

### MHT and Cancer

Women should be reassured that the possible risk of breast and ovarian cancer associated with MHT is small and the risk increase only after more than 10 years of use. MHT is also associated with a significant reduction in the risk of colorectal cancer incidence and mortality.

### MHT and Cardiovascular Disease

MHT may be cardioprotective if started around the time of menopause and less than 10 years since menopause onset. MHT has positive effects on the lipid profile and other components of the metabolic syndrome which are risk factors for cardiovascular disease. It is not, however, recommended for primary or secondary prevention of coronary heart disease.

### MHT and Central Nervous System

MHT initiated around the time of menopause or by younger postmenopausal women is associated with a reduced risk of Alzheimer disease. It may also have positive effects on hormone-related depression during the menopausal transition and enhance the response of postmenopausal women with major depressive disorder to antidepressants. Its use also has beneficial effects on verbal memory and may provide long-term protection against cognitive impairment. Women should be reassured that the risk of stroke with MHT use is small and occurred mostly in older women.

### MHT and Urogynecology

MHT remains the most effective therapy for vaginal atrophy-related urogenital symptoms of dryness, pruritus, dyspareunia and urinary urgency. Vaginal estrogen therapy improves urge urinary incontinence and reduces the risk of recurrent urinary tract infection in women with vulvovaginal atrophy.

### MHT and Osteoporosis

MHT is recommended as first-line therapy for preventing bone loss and fractures in postmenopausal women in the age group 50–60 years. For women > 60 years, the initiation of standard dose MHT is not recommended for the sole purpose of the prevention of fractures. Postmenopausal women should be screened for osteoporosis to identify those women with low bone mineral density. Postmenopausal women should take 800–1000 mg elemental calcium per day and 600–800 IU of vitamin D supplementation.

**Key words** MHT, Guidelines

## **Challenges in menopausal management during the Pandemic – Philippine Perspective**

Corazon Zaida N. Gamilla  
Asia Pacific Menopause Federation

The Philippines had been affected by increasing cases of Covid cases over 18 months which had affected health care- Menopause age is with a mean of 48 years old. In the first years of the pandemic the elderly had been the cited predominantly as mortalities. Also greatly affected was the APMF recommendations of lifestyle and exercise. During lockdowns, the population that could not accessed food are the seniors and they were not allowed to go out their homes so exercise practices were challenged. Other medical issues were the access to telemedicine and availability of Medicines curtailed due to lockdown, depression and anxiety worsened as there were lack of socialization and religious activities which were their source of human connectivity and spiritual upliftment. As there were challenges there were also positive measures brought by family dynamics that somehow balanced these challenges.

**Key words** challenges, menopausal management, pandemic

## WHI, where are we now 20 years on?

Susan Davis

Alfred Hospital Melbourne Cabrini Medical Centre

The Women's Health Initiative (WHI) study informed us that oral conjugated equine oestrogen (CEE) alone or with progestin (P) is associated with a reduce risks of fracture, diabetes and colon cancer and an increased risk of venous thromboembolic events. We also learned from the study that oestrogen-only therapy is not associated with increased breast cancer risk, and may protect against myocardial infarction. The clinical lessons from WHI are: that women who have surgical menopause before the age of 45 are at reduced risk of premature mortality with oestrogen replacement therapy and that CEE with MPA for a median of 5.6 years or CEE only for a median of 7.2 years was not associated with ran increased risk of all-cause, cardiovascular death, or cancer mortality during a cumulative follow-up of 18 years.

So where does this leave us?

Many women in the community, and many doctors, have not moved on from the initial fear that was engendered by the early publications from WHO. A generation of doctors have absolutely no idea how to manage menopause. Women have turned to either unproven or what are known to be ineffective therapies, or suffer symptoms and untreated. However, the good news is that there are women who are starting to complain about the lack of interest in midlife health and are starting to seek out menopausal hormone therapy (MHT). Concurrently there has been a resurgence of interest in research into the menopause with new studies demonstrating how many women are severely affected and the negative effects of menopausal symptoms on wellbeing and work ability. There are new approaches to treating menopause in the pipeline including estetrol (E4) as a novel estrogen and nonhormonal therapies for vasomotor symptoms that target the neurokinin 3B receptor in the brain.

But of great importance is ensuring awareness of the health consequences of the menopause. Research indicates women do not understand how the menopause impacts subsequent health, with estrogen deprivation after menopause causing bone loss, cardiometabolic changes, and central weight gain. Communicating these effects, along with the importance of postmenopausal physical activity and good nutrition, treating cardiometabolic risk factors such as hypertension and hyperlipidemia, preventing bone loss and the benefits and risk of MHT remain major challenges for clinicians working in midlife women's health.

**Key words** WHI

## Features of National Menopause Guidelines in Malaysia

Ng Beng Kwang

Universiti Kebangsaan Malaysia Medical Centre

Malaysia is a multiethnic and multicultural society. The main ethnic groups are the native Malays as well as large populations of Chinese and Indians. It is evident to anyone who has visited the country that the ethnicities retain their religions, customs and way of life. Life expectancy of Malaysian population has increased with improved health care and amenities. Recent statistics have projected that between 2020 and 2040, the percentage of elderly Malaysians will increase from 7% to 14%, numerically exceeding 7 million people. We currently have 3.23 million people aged 60 and above. There are many international guidelines available, but most of the recommendations are essentially similar with regards to the benefits/risks ratio of Menopausal Hormone Therapy. Although some significant differences do exist regarding the dosage, duration, route of administration and the formulation, however the important point to remember is that one treatment cannot fit all women. Menopausal hormone therapy remained the main stay of treatment and it is the most effective treatment for vasomotor symptoms associated with menopause.

**Key words** Guidelines, Malaysia

## Challenges in the Management of Menopause During the Pandemic – Malaysia Perspective

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The COVID-19 pandemic has imposed knock-on effect on healthcare worldwide. Since the first reported infection in 2019, there has been rapid but variable diffusion of the virus among many countries. Till date, looking at the worldwide data, there were total of 226 million cases with 4 million deaths. Malaysia is not exempted from this pandemic. There were a total of 2 million cases, with 23k death reported thus far. 18 million of Malaysia's adult population have been fully vaccinated so far, which is around 57% of the population, with at least 67% who have completed their 1st dose vaccinations. We conducted a short survey regarding the impact of COVID-19 pandemic on the usual medical practice, specifically for menopause-related patients. There were a total of 178 respondents. From our survey, this pandemic does lead to changes in clinical practice, such as reduction in the number of patients' appointment as well as increasing popularity of telehealth consultation. Working hours were also affected due to involvement in COVID-related commitments. Other related issues during the pandemic include reduction in operating hours, clinic sessions and patients' load. Adaptation towards the pandemic includes strict adherence to SOP and guidelines, encouraging vaccinations, reducing unnecessary clinic visits and non-emergency surgeries.

**Key words** Challenges, COVID-19, Malaysia

