

ORIGINAL ARTICLE

## Investigating Menopausal Symptoms and Healthcare-Seeking Practices Among Midlife Women in Malaysia.

Rara Merinda Puspitasari\*, Azizatul Munirah Zaini, Zaswiza Mohamad Noor.

*Faculty of Pharmacy and Health Sciences, Royal College of Medicine Perak, Universiti Kuala Lumpur, Malaysia.*

### Corresponding Author

Rara Merinda Puspitasari

Faculty of Pharmacy and Health Sciences, Royal College of Medicine Perak, Universiti Kuala Lumpur, No 3 Jalan Greentown Ipoh, Perak, Malaysia.

Email: [raramerinda@unikl.edu.my](mailto:raramerinda@unikl.edu.my)

Submitted: 18/11/2024. Revised edition: 06/01/2025. Accepted: 23/03/2025. Published online: 01/06/2025.

### Abstract

**Background:** Menopause is a natural biological process marked by the cessation of menstruation and a decline in oestrogen levels, often accompanied by various physical and psychological symptoms. The experience of menopause can differ across populations due to cultural and dietary factors. However, effective management of menopausal symptoms is crucial for improving quality of life. **Objective:** This study aims to assess the prevalence and severity of menopausal symptoms among midlife Malaysian women and to explore their healthcare-seeking practices.

**Research Method:** A cross-sectional, survey-based study was conducted among 300 Malaysian women aged 40-60, residing in Ipoh, Perak. A non-probability sampling method using combination of purposive and snowball sampling was used to recruit the study participants. A structured online questionnaire was used to assess demographic information, severity of menopausal symptoms, and the management approaches adopted. Data were analysed using descriptive statistics via SPSS software. **Results:** In this study, most respondents (39.0%) reported that their menopausal symptoms caused mild problems, while 35.7% experienced moderate problems, and 13.0% experienced severe to complete problems. The most common symptoms included joint pain (74%), mood swings (72.3%), and forgetfulness (70%). Only 12.7% of respondents reported using any treatment for menopause, with Hormone Replacement Therapy (HRT) being the most common (20 out of 39 respondents). Approximately 34.7% of respondents sought medical consultation for their symptoms. **Conclusion:** The study highlights that a significant number of Malaysian women experience mild to moderate menopausal symptoms, with physical and psychosocial issues being the most common. Despite the prevalence of symptoms, only a small proportion of women sought treatment. These findings emphasise the need for increased awareness and healthcare support to improve the quality of life for menopausal women. Future research should investigate cultural and societal factors influencing treatment-seeking behaviour.

**Keywords:** *Malaysian women, Menopausal symptoms, Menopause.*

## Introduction

Menopause is a significant transitional phase in a woman's life, characterised by the cessation of menstrual periods and a decrease in reproductive hormones, notably oestrogen. This natural biological process, which commonly occurs between the ages of 45 and 55, is frequently accompanied by a range of physical, emotional, and psychological symptoms that might vary in severity, intensity and impact on daily living [1,2]. Inadequate management of common symptoms such as hot flashes, mood swings, vaginal dryness, nocturnal sweats, and joint pain, can significantly affect woman's quality of life [3].

In Malaysia, the menopausal experience is influenced by a distinct interaction of cultural, dietary, and healthcare traditions. According to some studies, menopausal symptoms among Malaysian women are less intense in comparison to those in Western countries. Specifically, there is a higher occurrence of musculoskeletal complaints rather than vasomotor symptoms such as hot flashes [4,5]. However, there was a tendency for the women to have more of the atypical symptoms such as tiredness and reduced concentration level [6].

Effective management of menopausal symptoms is crucial for improving quality of life throughout these physiological changes, with treatment options ranging from lifestyle modification to medicinal treatments. Mild symptoms can typically be alleviated by adopting lifestyle modifications such as practicing a well-balanced diet, engaging in regular physical activity, managing stress, and using complementary therapies like herbal supplements, including phytoestrogens found in soy products. However, the effectiveness of these strategies requires more investigation [7]. For moderate to severe vasomotor symptoms, more targeted treatments such as Hormone Replacement Therapy (HRT) are often required. HRT, which includes the administration of oestrogen or a combination of oestrogen and progesterone, is highly efficient in alleviating severe symptoms such as hot flashes

and night sweats. Additionally, it provides advantages such as the prevention of osteoporosis and the maintenance of cardiovascular health [8,9].

In Malaysia, the management of menopausal symptoms is often impacted by cultural perceptions and healthcare resources. A significant number of women opt to address their symptoms using traditional or herbal therapies instead of seeking medical intervention [10,11]. The objectives of this study are to explore the variety and severity of menopausal symptoms experienced reported by midlife Malaysian women, as well as the factors influencing their treatment-seeking behaviour. This study will provide insights into improving menopausal women's quality of life by better understanding their symptomatology and management options.

## Methods

### *Study location and study design*

This survey-based study targeted respondents residing in Ipoh, the capital city of Perak, a state located in the northern region of Peninsular Malaysia. The study utilized a cross-sectional design for data collection, with participants completing an online questionnaire.

### *Study Participants and Sample size calculation*

Malaysian women aged 40-60 years, from various ethnicities (Malay, Indian, Chinese, indigenous, and others), were invited to participate in the study. The inclusion criteria encompassed women with menopause status, while women with a history of surgical, chemical, or other menopause-inducing conditions, as well as those who had experienced premature menopause, were excluded. The minimum sample size was calculated using a 95% confidence level, a population proportion of 20.5% (the percentage of women aged 40-64 years in Malaysia)[12], and a 5% margin of error, yielding a requirement of 242 participants. However, we successfully recruited 300 participants for this study.

### *Data collection method*

A non-probability sampling method that combines purposive and snowball sampling was used to recruit the study participants. A structured questionnaire was provided in Google Forms and distributed online. Respondents were invited to participate through a link to the questionnaire posted on various social media platforms such as Facebook, Twitter, WhatsApp for 4 months. The form included a cover letter and informed consent. No incentives were offered to responders. The data were used for scientific purposes, and their confidentiality was guaranteed.

### *Questionnaire*

This study used self-administered questionnaire, which consists of three parts:

1. Socio-demographic details of respondents: This section collects the socio-demographic information of the participants.
2. Menopausal symptoms: This section contains 29 statements designed to assess the severity of menopause symptoms experienced by the respondents. The total score ranges from 0 to 87, with responses graded on a Likert scale, 0 (not at all), 1 (quite a bit), 2 (a little bit) and 3 (extremely). The severity of symptoms is categorised as follows: 'no problem' ( $\leq 4$ ), 'mild problems' (4-22), 'moderate problems' (23-43), 'severe problems' (44-82), and 'complete problems' ( $\geq 82$ ).
3. Management of menopause: This section addresses the approaches used by respondents to manage menopause symptoms. The responses were analysed using descriptive statistics.

To ensure the validity of the questionnaire, a validity test and pilot study were conducted. Two expert teams reviewed and critiqued the questionnaire for content validation. The Content Validity Index (CVI) was calculated, with all questions achieving a score greater than 0.80/1.00, thereby meeting the required standard. Additionally, a pilot study for the questionnaire

reliability test was conducted with 30 participants. The Cronbach's Alpha values was 0.916, indicating good reliability.

### *Ethical consideration*

Prior to participation, all participants provided informed consent for the study. The researchers adhere to the principles of the Declaration of Helsinki (the Helsinki Declaration of 1975), which emphasise the principles of justice, beneficence, and respect for persons are used to ensure that all processes are kept confidential and private. Personal details remain confidential and accessible only to authorised study personnel.

### *Data Analysis*

The data was analysed using the Statistical Package for Social Science (SPSS) version 20.0 (SPSS Inc, Chicago, IL). Descriptive analyses were used to illustrate demographic characteristics and analyse the study parameters. All variables were categorised as categorical and were provided as absolute numbers with percentage values.

## **Results**

### *Respondents' characteristics*

A total of 300 responses collected via Google Forms that met the inclusion criteria were included in the data analysis. Table 1 summaries the socio-demographic characteristics of the respondents. The majority were Malay, accounting for 73.3% of the total sample. Approximately 69% of respondents had attained a higher level of education, with 73.3% having no educational background in health sciences, medicine, or non-health sciences. Additionally, most respondents belonged to the M40 income group (RM 4,360 – RM 9,619), and 45.3% resided in urban areas.

### *Menopausal symptoms*

Menopausal symptoms were assessed using 29 questions, as detailed in Table 2. These questions aimed to evaluate the severity of menopausal symptoms experienced by midlife women. The total score from the questionnaire ranged from 0 to 87, with 0 representing the absence of symptoms and 87 indicating the most severe symptoms. Scores below 4 were categorized as indicating no significant problems, scores from 4 to 20 were considered to reflect mild problems, scores from 21 to 42 were classified as moderate problems, scores from 43 to 82 were regarded as severe problems, and scores exceeding 82 were categorized as complete problems [13].

As shown in Table 3, the majority of respondents reported mild menopausal problems with menopausal symptoms (39.0%), followed by moderate problems (35.7%), severe problems (12.3%), no problems (12.3%), and only 1.0% of respondents reported complete problems. These findings suggest a relatively low incidence of severe menopausal symptoms among Malaysian women.

The most commonly reported menopausal symptoms among respondents included pain or stiffness in joints and muscles (74%), mood swings (72.3%), forgetfulness (70%), difficulties concentrating (62.3%), easy weight gain (69%), easily feeling tired/fatigue (68.7%), frequent headaches (64.3%), increased irritability (64.3%), and hot flashes (61.7%). The severity of these symptoms ranged from mild to extremely significant.

Additionally, over half of the participants reported symptoms such as breast pain (56.7%), vaginal dryness (56.4%), heart discomfort (55.0%), and symptoms related to sleep disturbances, including night sweats (59.0%), difficulty falling asleep and staying asleep (54.0% and 57.7%), and waking up early (55%). Psychological symptoms, such as being more depressed and anxious, were also reported by 59.3%

of the respondents. Urinary incontinence was reported by 59.3% of respondents. Other urinary symptoms, reported by less than half of the respondents, included pain when urinating (39.3%), burning during urination (38.3%), and difficulty urinating (41.3%).

### *Menopause management*

The management of menopause assessed in this study is outlined in Table 4. We specifically focused on the management of menopausal symptoms using interventions such as Hormone Replacement Therapy (HRT) and the consumption of supplements, vitamins, or herbs. A total of 120 respondents (40.3%) reported not using any treatment to manage their menopausal symptoms, while 39 respondents (12.7%) reported using some form of treatment. Of these 39 respondents, 20 had taken HRT, while 9 had used supplements, vitamins, herbs, or traditional medications. Additionally, 104 respondents (34.7%) consulted a physician during menopause, while 55 (18.3%) did not seek medical consultation. Meanwhile, 141 respondents (47.0%) reported not experiencing any menopausal symptoms.

## **Discussion**

### *Menopausal symptoms*

A study involving midlife women attending a primary health clinic in Malaysia found that, women usually experience at least one menopause symptom with joint pain, menstrual changes, and hot flashes being the most frequent symptoms [14]. In our study, the five most commonly reported menopausal symptoms (69-74%) were mood swings, forgetfulness, joint or muscle pain or stiffness, fatigue, and weight gain, highlighting the physical and psychological burden of menopause. These findings are consistent with other studies conducted in Malaysia, which also identified joint and muscle discomfort, followed by fatigue, as the most prevalent menopausal symptoms [15,16]. Similarly, a systematic review in Malaysia

confirmed that although there is a wide variation in the reported prevalence of menopausal symptoms, physical symptoms are the most common, followed by psychological, vasomotor, and sexual symptoms [10].

Notably, sleep disturbances, including night sweats (59%) and difficulty falling or staying asleep (54%–57.7%), were prevalent, indicating the significant impact of menopause on overall well-being. Psychological symptoms, such as increased anxiety (59.3%) and depression, highlight the mental health dimension of menopause, which often remains under-addressed. A holistic approach combining medical, psychological, and lifestyle interventions is recommended, especially for managing psychological and sleep-related symptoms.

Low oestrogen levels in menopausal women were found to contribute to vaginal issues among our respondents, including vaginal dryness (56.4%), vaginal itchiness (47.7%), and vaginal infections (32.7%). These findings are consistent with another study among Malaysian women, where 40.3% of women reported vaginal dryness and 34.1% reported sexual issues [15]. However, this study did not include questions related to sexual issues, as they are considered a sensitive issue in Asian culture. Additionally, this study did not measure participants' lipid profiles, even though menopause may impact lipid metabolism. Lipid abnormalities are highly prevalent among menopausal women, with the late menopause group exhibiting the highest incidence of elevated serum triglyceride levels [17].

While vasomotor symptoms such as hot flushes, sweating, and vaginal dryness were observed in this study, their prevalence was slightly lower compared to physical and psychosocial problems. Similarly, a study conducted at a menopause clinic in Kuala Lumpur found that vasomotor symptoms, particularly hot flushes (characterised by intense heat in the face, neck, and chest), were common among Malaysian menopausal

women [17]. It is also consistent with several studies which reported that Asian women tend to experience more musculoskeletal symptoms, while Western women report higher rates of vasomotor symptoms [18,19]. It has been suggested that the higher consumption of soy-based foods among Asian women, compared to Caucasian women, may explain the lower incidence of vasomotor symptoms, although this hypothesis has not been conclusively proven [4,5].

Women experiencing hot flushes during menopause often report a significant reduction in quality of life, which is paradoxically associated with decreased productivity [17]. A study in Malaysia reported that 52% of women indicated that menopausal symptoms impacted their quality of life, though only 2.7% being severely affected [15]. In our study, only 12% of study participant has no problems with menopausal symptoms while the other have mild problems (39.0%), moderate (35.7%), severe (12.0%) and complete problems (1.0%). It can be concluded menopause had an impact on the quality of life for around half of the study participants. These findings underscore the multifaceted nature of menopausal symptoms, affecting physical, emotional, and psychological health.

#### *Menopause management*

The findings revealed that menopausal symptoms varied in severity, with the majority of respondents experiencing mild to moderate symptoms. These results suggest that while most women encounter menopausal symptoms, the severity remains relatively manageable for the majority. a portion of respondents reported no menopausal symptoms, which could be due to differences in perception, reporting bias, or variations in the menopausal transition.

Several treatments are available to alleviate menopausal symptoms, including hormone replacement therapy (HRT), vaginal oestrogen, low-dose antidepressants, gabapentin, clonidine, and medications for preventing osteoporosis.

Complementary and alternative therapies are also available to relieve bothersome menopausal symptoms [20,21, 22]. According to the Asian Menopause Survey, the most common reasons for women seeking treatment were sleeplessness, followed by hot flushes, headaches/migraines, and mood changes [23]. Manoharan et al. (2023) found that in Malaysia, women preferred doctors at public and private clinics over medical specialists. The most commonly prescribed treatments were vitamins, massage, and traditional medicine, with HRT being the least prescribed [24].

Previous research has shown that using complementary and preventive therapies, along with effective management strategies, can improve the quality of life for menopausal women. Effective management of menopausal symptoms may also contribute to the prevention of chronic conditions [25]. In many Asian cultures, postmenopausal symptoms are often overlooked or treated with herbal or natural remedies due to the perception of menopause as a natural process. This perception is compounded by a general lack of knowledge about treatment options, HRT, and the associated health risks [23].

Despite the significant prevalence of menopausal symptoms, this study highlights a gap in treatment uptake. Many respondents reported not using any treatment, while only a small group utilised management strategies, including HRT and supplements, vitamins, or herbs. Although menopausal symptoms are commonly experienced, only a small percentage of women are severely affected. Nevertheless, many women hesitate to seek treatment for their symptoms [26]. Some women sought medical consultations, but others avoided professional help professional guidance, possibly due to stigma, lack of awareness, or fear of side effects. These findings suggest the need to address barriers to treatments to ensure better care and symptom management.

In this study, 24.5% of respondents (39 women) with severe menopausal symptoms reported using medication to manage their symptoms. This figure is lower than that found in another study, which revealed that 59% of Asian women did not seek treatment for postmenopausal symptoms [23]. Only a small proportion of our respondents (12.7%) reported using treatment, either through HRT or alternative methods such as supplements, vitamins, or complementary Chinese medicine. This may be due to the fact that most respondents experienced only mild to moderate symptoms.

Another study conducted in Malaysia yielded similar results, with the majority of women (75.2%) not seeking treatment for their symptoms. Of the 24.8% who did seek treatment, only 20.3% used HRT. They found no significant association between treatment-seeking behaviour and factors such as ethnicity, age, parity, marital status, or occupational status. Women who believed that their quality of life was impacted by menopausal symptoms were more likely to seek treatment [15]. However, this study did not assess the association between treatment-seeking behaviour and patient characteristics. Future research should explore the factors influencing treatment-seeking behaviour and the long-term health implications of untreated menopausal symptoms.

Our findings suggest that menopause awareness programs should address both physical and mental health aspects. Healthcare providers must discuss menopause during consultations to improve symptom recognition and treatment uptake, while educational campaigns can reduce stigma around treatments like HRT. Integrating menopause care into primary healthcare is crucial, including routine symptom screening, counseling services, and peer support groups. Training healthcare professionals to manage menopausal symptoms effectively is also essential.

## **Study limitations**

Some limitations of this study include the exclusion of specific subgroups and the lack of objective clinical assessment. Women with surgical, chemical, or premature menopause were excluded, limiting insights into these groups' experiences and healthcare practices. Additionally, the study relied solely on self-administered questionnaires, which provided only subjective assessments of symptom severity. Moreover, we did not include questions related to the duration of menopausal symptoms, which may have introduced recall bias, as individuals often struggle to accurately remember past events. Furthermore, potential confounding factors, such as mental health conditions, comorbidities, and family support systems, were not thoroughly assessed.

## **Conclusion**

This study provides valuable insights into the prevalence and severity of menopausal symptoms among Malaysian middle-aged women. The majority of respondents (39.0%) reported mild to moderate symptoms, with only a small percentage suffering from severe (12.3%) or complete problems (1.0%). Physical and psychosocial symptoms were more common than vasomotor symptoms like hot flashes.

The management of menopausal symptoms remains an area of concern, as only a minority of respondents reported seeking treatment, either through HRT or alternative methods such as supplements and herbal remedies. These findings emphasise the importance of healthcare support and education for women experiencing menopausal symptoms to improve their quality of life and prevent potential long-term health issues. Overall, recommended initiatives include educational campaigns for women to raise awareness about menopause symptoms and available treatment options, as well as better access to menopause-related healthcare services. Healthcare professionals also play a key role in

providing guidance, early intervention, and tailored management strategies for menopausal symptoms.

Future study should include diverse menopausal subgroups, incorporate objective clinical assessments, and consider potential confounding factors to provide a more comprehensive understanding of menopausal symptoms and healthcare-seeking behaviour. Additionally, research should focus on exploring the underlying cultural and societal factors that influence treatment-seeking behaviour, with the objective of developing more effective interventions and support systems for menopausal women in diverse populations.

## **Acknowledgement**

The authors would like to thank all the participants for their participation in this study.

## **Authors' contribution**

RMP was responsible for the concept, design, and intellectual content, while AMZ was responsible for data collection. RMP and AMZ contributed to questionnaire development, data analysis and interpretation, and writing the manuscript. ZMN was responsible for reviewing, editing and finalising the manuscript.

## **Conflicts of interest**

The authors declare no conflicts of interest related to this study.

## **Funding**

This study did not receive funding from any institutions.

Table 1. Respondents' Characteristic

<b>Questionnaire item</b>	<b>∑N=300</b>	<b>%</b>
<b>Age</b>		
40-44	62	20.7
45-49	81	27.0
50-54	75	25.0
55-60	82	27.3
<b>Marital status</b>		
Unmarried	17	5.7
Married	256	85.3
Widowed	17	5.7
Divorced	10	3.3
<b>Highest level of education</b>		
No formal education	7	2.3
Primary education	8	2.7
Secondary education	78	26.0
Higher education	207	69.0
<b>Educational background</b>		
Related to health science/medical	23	7.7
Non-health science	57	19.0
Not applicable	220	73.3
<b>Occupation</b>		
Working (full time)	209	69.7
Working (part-time)	15	5.0
Housewife	50	16.7
Retired	26	8.7
<b>Family income</b>		
B40 (less than RM 4,360)	81	27.0
M40 (RM 4,360 – RM 9,619)	154	51.3
T20 (More than RM 9,619)	65	21.7
<b>Ethnicity</b>		
Malay	284	94.7
Chinese	9	3.0
Indian	7	2.3
<b>Residence</b>		
Urban	136	45.3
Suburban	114	38.0
Rural	50	16.7
<b>Social status</b>		
Heavy smoker	5	1.7
Occasionally smoker	6	2.0
Heavy alcohol intake	4	1.3
Occasionally alcohol intake	2	0.7
Not applicable	283	94.3

Table 2. Menopausal Symptoms

	<b>Questionnaire item</b>	<b>Not at all n (%)</b>	<b>A little bit n (%)</b>	<b>Quite a bit n (%)</b>	<b>Extremely n (%)</b>
Vasomotor	Hot flashes in upper body (face, neck or chest)	115 (38.3)	119 (39.7)	47 (15.7)	19 (6.3)
	Excessive sweats	110 (36.7)	114 (38.0)	60 (20.0)	16 (5.3)
	Night sweats	123 (41.0)	111 (37.0)	49 (16.3)	17 (5.7)
<i>Physical</i>	Breast pain	130 (43.3)	115 (38.3)	49 (16.3)	6 (2.0)
	Gain weight easily	93 (31.0)	132 (44.0)	67 (22.3)	8 (2.7)
	Easily feeling tired/ fatigue	94 (31.3)	110 (36.7)	77 (25.7)	19 (6.3)
	Pain or stiffness in joints and muscle	78 (26.0)	132 (44.0)	74 (24.7)	16 (5.3)
	Having headache frequently	107 (35.7)	117 (39.0)	63 (21.0)	13 (4.3)
	Constipation	151 (50.3)	94 (31.3)	46 (15.3)	9 (3.0)
	Diarrhoea	176 (58.7)	82 (27.3)	37 (12.3)	5 (1.7)
	Indigestion	158 (52.7)	95 (31.7)	42 (14.0)	5 (1.7)
<i>Genitourinary problems</i>	Vaginal dryness	131 (43.6)	101 (33.7)	56 (18.7)	12 (4.0)
	Abnormal vaginal discharge (changes in colour)	154 (51.3)	102 (34.0)	36 (12.0)	8 (2.7)
	Vaginal infection	202 (67.3)	62 (21.0)	29 (9.7)	6 (2.0)
	Vaginal itching	157 (52.3)	95 (31.7)	38 (12.7)	10 (3.3)
	Feeling pain when urinating	182 (60.7)	78 (26.0)	35 (11.7)	5 (1.7)
	Feeling burning when urinating	185 (61.7)	74 (24.7)	37 (12.3)	4 (1.3)
	Feeling difficult to urinate	176 (58.7)	83 (27.7)	37 (12.3)	4 (1.3)
	Urinary incontinence	122 (40.7)	107 (35.7)	62 (20.7)	9 (3.0)

<i>Sleep problems</i>	Difficulty in falling asleep	138 (46.0)	96 (32.0)	54 (18.0)	12 (4.0)
	Difficulty staying asleep	127 (42.3)	106 (35.3)	51 (17.0)	16 (5.3)
	Waking up early	135 (45.0)	96 (32.0)	53 (17.7)	16 (5.3)
	Heart discomfort	135 (45.0)	106 (35.3)	53 (17.7)	6 (2.0)
<i>Psychosocial</i>	More depressed	122 (40.7)	109 (36.3)	62 (20.7)	7 (2.3)
	More irritable	107 (35.7)	111 (37.0)	70 (23.3)	12 (4.0)
	More anxious	122 (40.7)	110 (36.3)	57 (18.7)	11 (3.7)
	Having mood swing	83 (27.7)	146 (48.7)	59 (19.7)	12 (4.0)
	Difficult or unable to concentrate	113 (37.7)	124 (41.3)	55 (18.3)	8 (2.7)
	Become forgetful	90 (30.0)	125 (41.7)	68 (22.7)	17 (5.7)

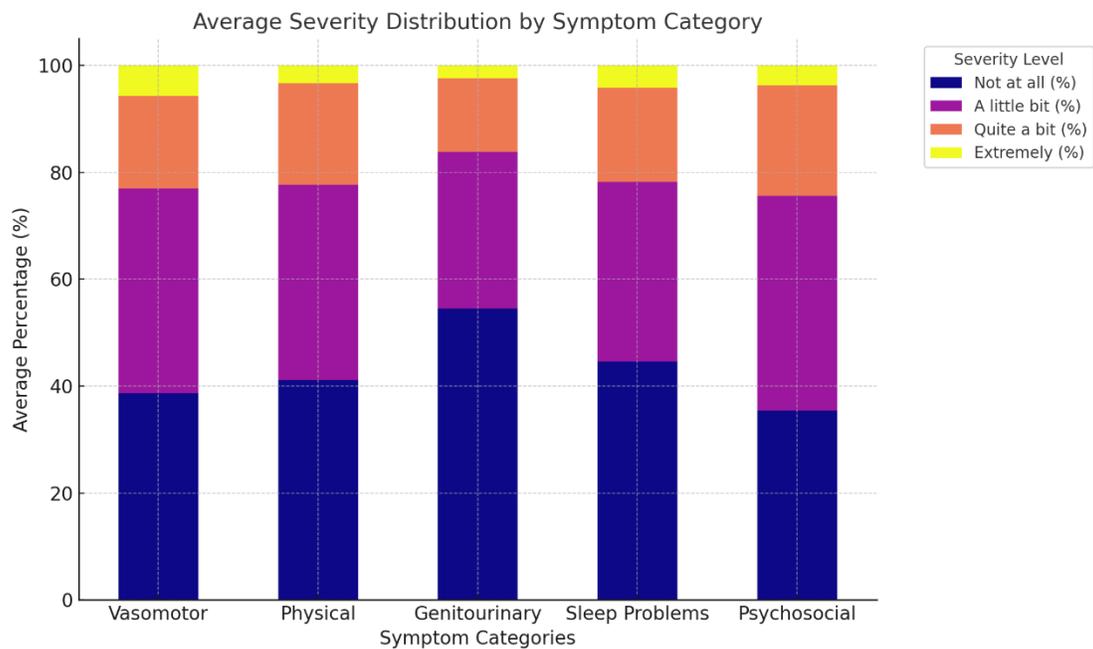


Figure 1. The summary of menopause symptoms distribution across the five symptom categories

Table 3. Level of Symptoms

Level of Symptom	$\Sigma N=300$	%
No problem	37	12.3
Mild problems	117	39.0
Moderate problems	107	35.7
Severe problems	36	12.0
Complete problems	3	1.0

Table 4. Management of Menopause

No	Question	Options	n (%)
1	Is there any treatment do/did you currently use to manage the symptoms related to menopause?	Yes	39 (12.7)
		No	120 (40.3)
		I do not experience with any symptoms	141 (47.0)
2	What treatment do/did you take to manage the symptoms related to menopause? (you can choose more than one)	HRT (Hormone Replacement Therapy)	20 (6.7)
		Others (Supplements, Vitamin and Herbs/traditional medication)	19 (6.3)
		Not applicable	261 (87.0)
3	Do/did you consult to a doctor during menopause or when having symptoms related to menopause?	Yes	104 (34.7)
		No	55 (18.3)
		I do not experience with any symptoms	141 (47.0)
4	Do/did you take HRT to manage your menopausal symptoms?	Yes, I am currently on HRT	11 (3.7)
		Yes, I have taken HRT but not currently	12 (4.0)
		No, I do not and have never taken HRT	227 (92.3)

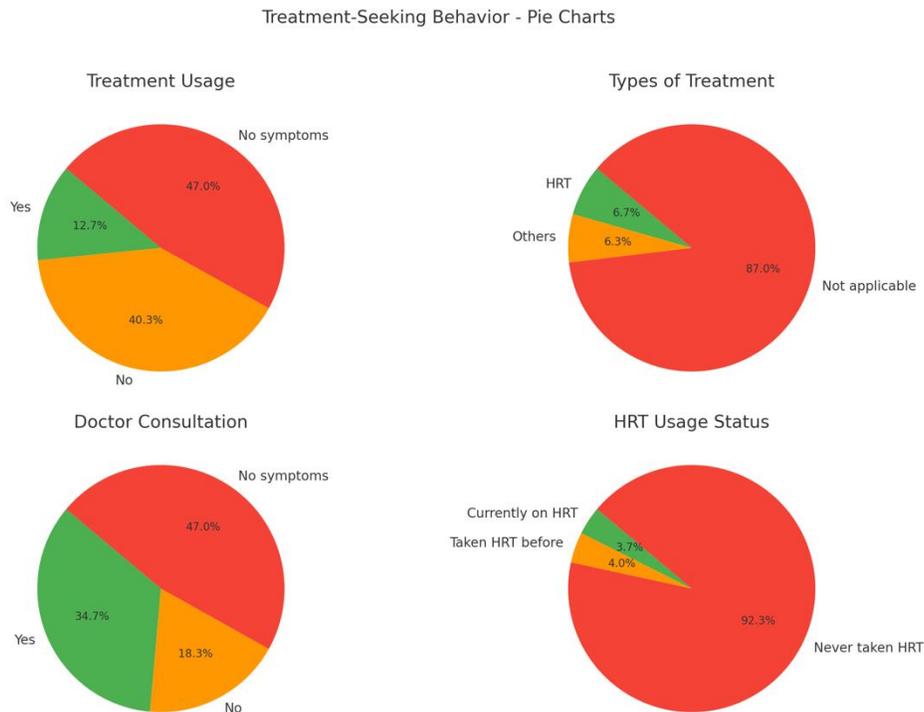


Figure 2. Summary of menopause treatment seeking behaviors

## References

- [1]. Alazawa ZFR, Barrouq DMS, Irshaidat T, Ayassrah NES. A cross-sectional study for assessment of menopausal symptoms and coping strategies among Jordanian women of 40-60 years age group. *Int J Reprod Contracept Obstet Gynecol*. 2023 Dec 29;13(1):6–13.
- [2]. El Khoudary SR, Greendale G, Crawford SL, Avis NE, Brooks MM, Thurston RC, et al. The menopause transition and women's health at midlife: A progress report from the Study of Women's Health across the Nation (SWAN). Vol. 26, *Menopause*. Lippincott Williams and Wilkins; 2019. p. 1213–27.
- [3]. Avis NE, Crawford SL, Greendale G, Bromberger JT, Everson-Rose SA, Gold EB, et al. Duration of menopausal vasomotor symptoms over the menopause transition. *JAMA Intern Med*. 2015 Apr 1;175(4):531–9.
- [4]. Lethaby A, Marjoribanks J, Kronenberg F, Roberts H, Eden J, Brown J. Phytoestrogens

- for menopausal vasomotor symptoms. Vol. 2013, Cochrane Database of Systematic Reviews. John Wiley and Sons Ltd; 2013.
- [5]. Reed SD, Lampe JW, Qu C, Gundersen G, Fuller S, Copeland WK, et al. Self-reported menopausal symptoms in a racially diverse population and soy food consumption. *Maturitas*. 2013 Jun;75(2):152–8.
- [6]. Dhillon HK, Singh HJ, Shuib R, Hamid AM, Mahmood NMZN. Prevalence of menopausal symptoms in women in Kelantan, Malaysia. *Maturitas*. 2006 Jun 20;54(3):213–21.
- [7]. Messina M. Soy foods, isoflavones, and the health of postmenopausal women. In: *American Journal of Clinical Nutrition*. American Society for Nutrition; 2014.
- [8]. Hickey M, Elliott J, Davison SL. Hormone replacement therapy. *BMJ (Online)*. 2012 Feb 25;344(7845):44–9.
- [9]. Santen RJ, Allred DC, Ardoin SP, Archer DF, Boyd N, Braunstein GD, et al. Postmenopausal hormone therapy: An endocrine society scientific statement. *Journal of Clinical Endocrinology and Metabolism*. 2010;95(7):s1–66.
- [10]. Abdullah B, Moize B, Aznil Ismail B, Zamri M, Farhah Mohd Nasir N. Prevalence of menopausal symptoms, its effect to quality of life among Malaysian women and their treatment seeking behaviour.
- [11]. Ohn Mar S, Malhi F, Syed Rahim SH, Chua CT, Sidhu SS, Sandheep S. Use of alternative medications for menopause-related symptoms in three major ethnic groups of Ipoh, Perak, Malaysia. In: *Asia-Pacific Journal of Public Health*. SAGE Publications Inc.; 2015. p. 19S–25S.
- [12]. Department of Statistics Malaysia. [https://open.dosm.gov.my/data-catalogue/population\\_malaysia](https://open.dosm.gov.my/data-catalogue/population_malaysia). 2021 [cited 2021 Jan 1]. Malaysia at a Glance. Available from: [https://open.dosm.gov.my/data-catalogue/population\\_malaysia](https://open.dosm.gov.my/data-catalogue/population_malaysia)
- [13]. Mazhar SB, Rasheed S. Menopause Rating Scale (MRS): A simple tool for assessment of Climacteric symptoms in Pakistani women. *Ann Pak Inst Med Sci*. 2009;5(3):158–61.
- [14]. Manoharan A, Zainal MMHM, Chin BH, Ming KW, Asmuee Z, Salamon N, et al. Health-Seeking Behaviors and Treatments Received for Menopause Symptoms: A Questionnaire Survey among Midlife Women Attending Primary Healthcare Clinics in Malaysia. *J Menopausal Med*. 2023;29(3):119.
- [15]. Abdullah B, Moize B, Aznil Ismail B, Zamri M, Farhah Mohd Nasir N. Prevalence of menopausal symptoms, its effect to quality of life among Malaysian women and their

- treatment seeking behaviour. *Med J Malaysia*. 2017;72(2):94–9.
- [16]. Syed Alwi SAR, Lee PY, Awi I, Mallik PS, Md Haizal MN. The menopausal experience among indigenous women of Sarawak, Malaysia. *Climacteric*. 2009 Dec;12(6):548–56.
- [17]. P Damodaran RSSZOPNMP. Profile of a Menopause Clinic in an Urban Population in Malaysia. *Singapore Med J*. 2000;41(9):431–5.
- [18]. Islam MR, Gartoulla P, Bell RJ, Fradkin P, Davis SR. Prevalence of menopausal symptoms in Asian midlife women: A systematic review. Vol. 18, *Climacteric*. Informa Healthcare; 2015. p. 157–76.
- [19]. Huang KE. Menopause perspectives and treatment of Asian women. *Semin Reprod Med*. 2010;28(5):396–403.
- [20]. Nachtigall LE, Baber RJ, Barentsen R, Durand N, Panay N, Pitkin J, et al. Complementary and Hormonal Therapy for Vasomotor Symptom Relief: A Conservative Clinical Approach. *Journal of Obstetrics and Gynaecology Canada*. 2006;28(4):279–89.
- [21]. Tauqeer Hussain Mallhi, Yusra Habib Khan AHK, Qaisar Mahmood, Syed Haroon Khalid, Mohammad Saleem. Managing Hot Flushes in Menopausal Women: A Review. *Journal of the College of Physicians and Surgeons Pakistan*. 2018;28(6):460–5.
- [22]. Mintziori G, Lambrinoudaki I, Goulis DG, Ceausu I, Depypere H, Erel CT, et al. EMAS position statement: Non-hormonal management of menopausal vasomotor symptoms. *Maturitas*. 2015 Jul 1;81(3):410–3.
- [23]. Huang KE, Xu L, I NN, Jaisamrarn U. The Asian Menopause Survey: Knowledge, perceptions, hormone treatment and sexual function. *Maturitas*. 2010 Mar;65(3):276–83.
- [24]. Manoharan A, Zainal MMHM, Chin BH, Ming KW, Asmuee Z, Salamon N, et al. Health-Seeking Behaviors and Treatments Received for Menopause Symptoms: A Questionnaire Survey among Midlife Women Attending Primary Healthcare Clinics in Malaysia. *J Menopausal Med*. 2023;29(3):119.
- [25]. Kwak EK, Park HS, Kang NM. Menopause Knowledge, Attitude, Symptom and Management among Midlife Employed Women. *J Menopausal Med*. 2014;20(3):118–25.
- [26]. Abdullah B, Moize B, Aznil Ismail B, Zamri M, Farhah Mohd Nasir N. Prevalence of menopausal symptoms, its effect to quality of life among Malaysian women and their treatment seeking behaviour.