

Prevalence of menopausal symptoms, its effect on quality of life among Malaysian women and their treatment seeking behaviour

Bahiyah Abdullah, MObsGyn^{1,2}, Burhanuddin Moize, MBBS¹, Badrul Aznil Ismail, MBBS¹, Madihah Zamri, MBBS¹, Najihah Farhah Mohd Nasir, MBBS¹

¹Discipline of Obstetrics and Gynaecology, Faculty of Medicine, Universiti Teknologi MARA (UiTM), Selangor, Malaysia, ²Maternofetal and Embryo (MatE) Research Group, Health and Wellbeing CoRe, Universiti Teknologi MARA (UiTM), Shah Alam, Selangor, Malaysia

ABSTRACT

Introduction: This study aimed to determine the prevalence of menopausal symptoms, its effect to the quality of life and their treatment seeking behaviour in a multiracial community in Malaysia.

Methods: This is a cross-sectional study involving postmenopausal women in Klang Valley, Malaysia. Data was obtained by face-to-face interview using standardised questionnaires on sociodemographic data, Menopause Rating Scale questionnaire, effect to quality of life and treatment sought.

Results: A total of 258 women, including Malays (82%), Indians (14.1%) and Chinese (3.9%) were recruited. The median age was 58 (range 45-86) years old. Joint and muscular discomfort (73.3%) and fatigue (59.3%) were the most prevalent symptoms. Significant association with ethnicity were demonstrated with Malays was found to have 3.1 times higher incidence of sexual problems than Indians, (Odds Ratio (OR) 3.103; 95%CI 1.209, 7.967) and Indian had 2.6 times higher incidence of irritability compared to Malays (OR 2.598; 95%CI 1.126, 5.992). Fifty-two percent of women felt that menopausal symptoms affected their quality of life but there were only 2.7% who were severely affected. There were 24.8% of women who sought treatment and only 20.3% of those who took hormone replacement therapy. There was no significant association found between their treatment seeking behaviour in association with ethnicity, age, parity, marital and occupational status.

Conclusion: Menopausal symptoms were prevalent among menopausal women, although only a small group of women who were severely affected. There was a lack of tendency in seeking treatment for menopausal symptoms among the women.

KEY WORDS:

Menopausal symptoms, quality of life, treatment seeking behaviour

INTRODUCTION

Menopause, according to the World Health Organization (WHO) is defined as permanent cessation of menstruation resulting from physiological changes involving the loss of ovarian follicular activity. Natural menopause is established after 12 consecutive months of amenorrhea for which there is no other obvious physiological or pathological cause.¹

Menopause may occur within a wide range of age, as early as 40s to late 50s. Globally, the average menopausal age is around 51 years old and in Malaysia, the mean menopausal age is 50.7 years old.²

Oestrogen depletion during menopause leads to occurrence of symptoms among women that may affect their quality of life. This includes vasomotor symptoms (e.g. hot flushes, night sweats), psychological symptoms (mood swings, anxiety, depression), musculoskeletal aches (bony and joint ache), difficulty sleeping and urogenital symptoms (vaginal dryness, dyspareunia, urinary frequency and urgency).^{3,4}

Previous epidemiological studies that looked into prevalence of menopausal symptoms reported different prevalence in different populations. Population based studies among Caucasians reported a higher prevalence of menopausal symptoms ranging from 40% to 60%, as compared to Asian population that ranged between 10% and 40%.⁵⁻⁷ Higher prevalence of musculoskeletal aches and fatigue were reported among Asian women while hot flushes, night sweats, mood swings and psychological symptoms, although present, were to a lesser extent of severity compared to Caucasian women.^{3,8-10} Among Malaysian women, it was previously reported that 27% of menopausal women were very much affected by menopause while 30% claimed to have mild symptoms.¹¹

Various management strategies for postmenopausal symptoms are available in order to alleviate the symptoms and to increase the quality of life during the menopausal phase. These include lifestyle changes, hormonal treatment, non-hormonal treatment and various complementary therapies including the use of traditional herbs and natural

products. Nonetheless, there was paucity of studies on the treatment seeking behaviour among menopausal women, particularly in Malaysia. Furthermore, with more information on the safety and effectiveness of hormone replacement therapy were published, there is a possibility of a better acceptance of this treatment among postmenopausal women. Hence, it was interesting to study not only the prevalence of the menopausal symptoms and effect to the quality of life, but their treatment seeking behaviour as well. Therefore, this study aimed to look at the prevalence of menopausal symptoms among Malaysian women in Klang Valley, its effect to their quality of life and their treatment seeking behaviour.

MATERIALS AND METHODS

This was a cross-sectional study that involved postmenopausal women who lived in Klang Valley, Malaysia.

Sample size estimation for this study was calculated based on the published data by Rahman et al. (2010) who reported the prevalence of the most common menopausal symptoms was 80.1%.¹² By taking confidence limit as 5% and 95% confidence level, using EpiInfo software, the sample size estimation was 245.

The inclusion criteria for this study were women who had already attained menopause (Definition of menopause: Women who have no more menses for more than 12 months). There was no age limitation for inclusion into the study. The study information leaflets were distributed in public area in Klang Valley. Informed consents were taken from women who agreed to participate.

Data was collected by face-to-face interview in Malay language by trained interviewers using standardised questionnaire (Appendix 1). The interviewers were trained by the first author to use similar way of interviewing and to be able to explain should any respondents were unclear of any questions. Questionnaire was divided into three parts:

The first part consists of the socio demographic details of the participants were obtained. This included their age, race, occupational status, parity, marital status and age of onset of menopause.

The second part of the questionnaire was the Menopause Rating Scale (MRS) questionnaire. This is a validated, self-administered instrument which has been widely used in many clinical and epidemiological studies, particularly in research on the aetiology of menopausal symptoms and to assess the severity of menopausal symptoms.¹³ In view of the lack of validated translated Malay version of this questionnaire, face-to-face interview in Malay language were done instead of self-administered by the respondents. This was to avoid reporting bias due to most of the participants who could not understand the questions in English. One question was added to assess on the effect of menopausal symptoms to their quality of life by assessment using a Likert scale of 1 (not affected), 2 (mildly affected), 3 (moderately affected), 4 (severely affected) and 5 (very severely affected).

The third part is a question on the type of treatment that the women had sought (if any) for their menopausal symptoms. The data was then entered and analysed using Statistical Package for Social Science (SPSS) version 20.0 (SPSS Inc, Chicago, IL). All the independent variables were classified into categorical and is presented in the form of absolute number and their corresponding percentages values. Fisher exact test, Chi-square test and simple logistic regression test were used.

The chi square test of goodness of fit was assessed by Hosmer-Lemeshow test. The Cox and Snell R Squared test was performed to assess the percentage explained by the independent variable to the outcome. The significant level was set at 0.05.

RESULTS

A total of 258 women were recruited in this study. Table I shows the socio demographic details of the respondents.

Table II shows the prevalence and severity of menopausal symptoms among the respondents. The most reported symptoms were joint and muscular discomfort followed by fatigue. Initial analysis indicated a statistically significant association between sexual problems, heart discomfort, sleep problems and irritability with either race and/or marital status. However, there was no significant association found between all the menopausal symptoms with parity, occupational status and onset of menopause. (Table III)

A logistic regression analysis was conducted. There were two statistically significant relationship demonstrated. Malays were found to have 3.1 times higher incidence of sexual problems than Indians, [Odds Ratio (OR) 3.103 95%CI (1.209,7.967)] however no significant differences were demonstrated with Chinese. The goodness of fit of the model was assessed by Hosmer and Lemeshow test ($p=0.769$).

Indian had 2.6 times higher incidence of irritability compared to Malays [OR 2.598 95%CI (1.126,5.992)] and no significant differences demonstrated with Chinese. The goodness of fit of the model was assessed by Hosmer and Lemeshow test ($p=0.406$). Based on Cox and Snell R Square Analysis, sexual problems and irritability were explained by only 7.9% and 5.9% respectively, by race. There were other factors that contributed to the presence of sexual problems and irritability that were not considered in this study.

Table IV demonstrated that slightly more than half of the women (135, 52.3%) felt that menopausal symptoms affected their quality of life (QoL). However, out of this group of women, only 7 (2.7%) women were severely affected.

There were only 64 (24.8%) women who took some form of treatment to address their menopausal symptoms. Chi-squared analysis compared the treatment seeking behaviour between women who felt affected by the menopausal symptoms (135 women) and those who did not (123 women), demonstrated a significant association between presence of effect to quality of life with the treatment seeking behaviour ($p=0.006$). In other words, women who felt affected by the

Table I: Socio demographic details of the respondents

Variables	Total, N=258
Age (in years), median (range)	58 (45-86)
Race, n (%)	
Malay	211 (81.8)
Chinese	10 (3.9)
Indian	37 (14.3)
Parity, n (%)	
Nullipara	12 (4.7)
Primipara	16 (6.2)
Multipara	137 (53.1)
Grandmultipara	93 (36.0)
Marital status, n (%)	
Single	8 (3.1)
Married	162 (62.8)
Widow/Divorcee	88 (34.1)
Occupation, n (%)	
Unemployed/ Retiree	201 (77.9)
Non-professional worker	32 (12.4)
Professional worker	22 (8.5)
Self employed	3 (1.2)
Onset of menopause (years old), n (%)	
36-40	12 (4.7)
41-45	34 (13.2)
46-50	94 (36.3)
51-55	103 (39.9)
56-60	14 (5.5)
61-65	1 (0.4)
Mean age of onset of menopause, (years old)	49.9 ± 4.27 SD
Duration of menopause (years), median (range)	8 (1-46)

Table II: Prevalence and severity of menopausal symptoms

Symptoms	None Freq(%)	Mild Freq(%)	Moderate Freq(%)	Severe Freq(%)	Very severe, Freq(%)
Joint and muscular discomfort	69(26.7)	56(21.7)	96(37.2)	32(12.4)	5(1.9)
Fatigue	105(40.7)	69(26.7)	76(29.5)	8(3.1)	0(0.0)
Irritability	109(42.2)	61(23.6)	71(27.5)	17(6.6)	0(0.0)
Hot flushes, sweating	116(45.0)	41(15.9)	73(28.3)	24(9.3)	4(1.6)
Sleep problems	118(45.7)	43(16.7)	77(29.8)	17(6.6)	3(1.2)
Anxiety	137(53.1)	64(24.8)	47(18.2)	10(3.9)	0(0.0)
Depressive mood	143(55.4)	60(23.3)	48(18.6)	7(2.7)	0(0.0)
Heart discomfort	145(56.2)	49(19.0)	55(21.3)	9(3.5)	0(0.0)
Vaginal dryness	154(59.7)	74(28.7)	24 (9.3)	6(2.3)	0(0.0)
Sexual problems	170(65.9)	61(23.6)	26(10.1)	1(0.4)	0(0.0)
Bladder problem	194(75.2)	29(11.2)	30 (11.6)	5 (1.9)	0(0.0)

Table III: The associations between menopausal symptoms and patients' demographic

Symptoms	Race p-value	Parity p-value	Marital status p-value	Occupational status p-value	Age of onset of menopause p-value
Joint and muscular discomfort	0.463	0.528	0.615	0.452	0.180
Physical and mental exhaustion (fatigue)	0.550	0.527	0.266	0.087	0.071
Irritability	0.048*	0.073	0.401	0.490	0.386
Hot flushes, sweating	0.966	0.369	0.697	0.712	0.718
Sleep problems	0.586	0.424	0.025*	0.101	0.756
Anxiety	0.586	0.712	0.154	0.339	0.105
Depressive mood	0.141	0.406	0.154	0.116	0.683
Heart discomfort	0.003*	0.541	0.623	0.529	0.958
Vaginal dryness	0.065	0.672	0.739	0.745	0.319
Sexual problems	0.032*	0.052	0.038*	0.708	0.681
Bladder problem	0.276	0.712	0.379	0.146	0.931

Fisher exact test *p<0.05 = statistically significant

Table IV: Overall impact of menopausal symptoms to the women's quality of life

Impact on QOL	Frequency, n (%)
None	123 (47.6)
Mild	60 (23.3)
Moderate	68 (26.4)
Severe	7 (2.7)
Very severe	0 (0.0)

Table V: The prevalence of types of treatment used

Treatment	(Total, N=64). Freq, n(%)
Vitamins	26 (40.6)
^b Jamu/'Akar kayu'/Traditional herbs	14 (21.9)
Hormones	13 (20.3)
Massage	12 (18.7)
Evening primrose oil (EPO)	11 (17.2)
Vaginal lubricant cream	5 (7.8)
Exercise	3 (4.7)
Counselling	1 (1.6)

a Some women used more than one type of treatment

b 'Jamu' is various products marketed based on traditional herbs and 'akar kayu' is various types of traditional herbs (self-prepared) that are commonly used among Malaysian women

menopausal symptoms took some form of treatment more than those whom the quality of life were not affected. Nonetheless no significant association between treatment seeking behaviour and race ($p=0.243$), age group ($p=0.328$), parity ($p=0.365$), marital status ($p=0.681$) and occupational status ($p=0.422$).

Table V demonstrated the prevalence of type of treatments by the women in this study. Consumption of multivitamins (40.6%) was found to be the most prevalent treatment option opted by the women. There was only one-fifth of them who chose to take hormone replacement therapy. Eighteen women (28.1%) took more than one type of treatment.

DISCUSSION

This study found the mean age of onset of menopause among the respondents was 49.9 ± 4.27 (SD) years old, similar with previous studies done in different states in Malaysia and its neighbouring country, Singapore.¹⁴⁻¹⁷

The Asian Menopause survey reported a very high percentage of women (>90%) experienced some form of postmenopausal symptoms.¹⁸ The most prevalent symptoms in this study were joint and muscular discomfort (73.3%), in agreement with findings in previous studies in this region.^{12,14-16} This was followed by fatigue. Vasomotor symptoms particularly hot flushes typically described as a sudden feeling of intense heat in the face, neck and chest and may be accompanied by skin flushing was experienced by 55% of women in this study, slightly higher prevalent than previously reported within the range of 17-53%.^{12,14-16}

The trend of predominant musculoskeletal symptoms among menopausal Asian women, in contrast with the Western women who experienced more vasomotor symptoms had been documented in literature.^{19,20} The full understanding on

the variations of menopausal symptoms between ethnicity remained elusive. Although lack of oestrogen leading to multiple musculoskeletal changes including osteoporosis, sarcopenia and muscle weakness that may result to muscle and joint ache is known,²¹ however the cultural differences in perception of bother, coping mechanism and physiological differences that may contribute to the differences have yet to be explained. Higher soy-based diet intake among Asian women than the Caucasian women was hypothesized as the reason of lesser vasomotor symptoms however this was not scientifically proven.^{22,23}

Vaginal dryness, a symptom due to long term consequences of oestrogen deficiency in the genital tract, was experienced by 40.3% of the women in this study and 34.1% of the women had experienced sexual problems. Unfortunately, this study did not explore the underlying factors that contribute to their sexual problems. The potential causes include dyspareunia, poor lubrication, loss of sexual desire, and the spouse's health status and ageing itself. Nonetheless, despite being an important issue and not uncommon, reduced sexual function was not commonly brought up into discussion as a bothersome menopausal symptom potentially due to embarrassment.¹⁹

Bladder symptoms such as dysuria, recurrent urinary tract infection and bladder irritability are known consequences of long term hypo-oestrogenism. In this study, there was almost a quarter (24.8%) of women suffered from this problem which falls into the range of reported prevalence in previous studies, 13-40%.^{12,14}

This study demonstrated that ethnicity influenced certain menopausal symptoms. Malay women were found to have 3.1 times higher sexual problems than Indian women and Indian women were 2.6 times higher irritability than Malay women. Despite these associations, ethnicity could only

explain the presence of sexual problems and irritability by only 7.9% and 5.9% respectively. Therefore, there could be multitude of other reasons contributing to the development of the symptoms among women. There were no significant differences found in other menopausal symptoms. Some researchers have postulated that ethnicity has significant impact to menopausal symptoms, however there is still paucity of knowledge to explain this.²⁴

Upon assessing the effect of these menopausal symptoms to their quality of life, 52.4% of the women felt it affected their quality of life. However only 2.7% of them felt it severely affected them. If comparison were made with menopausal European women, Malaysian women seemed to be less affected by the menopausal symptoms as 63% European women rated their menopausal symptoms as being severe.²⁵ It is still unclear whether this huge discrepancy is due to the true less prevalent or less severe symptoms of menopause among Asian women or the differences in the way women perceive and cope with the symptoms.

Majority of the women (75.2%) did not seek for any treatment for their symptoms. It is expected that women who felt that their quality of life were affected by the menopausal symptoms would seek treatment compared to women who were not affected. Nonetheless, there was no significant association between treatment seeking behaviour and race ($p=0.243$), age group ($p=0.328$), parity ($p=0.365$), marital status ($p=0.681$) and occupational status ($p=0.422$).

It is essential to have further studies to look into the reason for this behaviour. It is of less concern if the women are able to accept menopausal symptoms as part of natural aging process without negative impact to quality of life. However, it is unjust to deprive those women with bothersome menopausal symptoms from various options of management and treatment that they could seek to improve their quality of life. For instance, out of 104 women in this study who had vaginal dryness, only 38% of them sought treatment, while treatment such as local oestrogen therapy is available to address their problem effectively.

Most women who sought treatment in this study used multivitamins. Many of them perceived that it improved their menopausal symptoms and general wellbeing, despite lack of scientific evidence to support its direct benefit in improving menopausal symptoms. There were only 20.3% used hormone replacement therapy (HRT), similar with findings in the Asian Menopause survey, where they found only 19% received HRT. They also found that 54% of their respondents are aware of HRT, despite the fact that 38% of them were unable to mention any associated benefits.¹⁸ In Europe, more women are aware of the option of HRT (52-73%) as treatment for menopausal symptoms, but this number is far below in Malaysia.^{17,25,26}

The Asian Menopause Survey reported that many women (37%) used natural or herbal treatment¹⁸ and in this study 21.9% women used those as well. The trend of better acceptance towards herbal / natural remedies was potentially due to inaccurate information on HRT. The stigma that HRT causes breast cancer leads to refusal of HRT uptake as one of

solution for these women's menopausal symptoms.²⁵ They might not aware that through screening and use of HRT in carefully selected patients, its benefits, particularly in its effectiveness in managing the menopausal symptoms, outweigh its risks.

There are several limitations in this study. The distribution of respondents did not represent the general distribution of races in Malaysian community because no attempt was made to recruit the respondents according to the racial distribution. There was no age limit set for recruitment of sample and there was no further enquiry to identify whether they had natural menopause or surgical menopause. Menopause rating scale (MRS) questionnaire that were used in this study was not validated in Malay language, however to reduce the reporting bias a standardised Malay translation were used by the interviewers. Lastly, the findings of this study were based on patient's ability to recall the information. Therefore, potential recall bias was unavoidable.

CONCLUSION

In conclusion, many Malaysian women experienced menopausal symptoms, particularly musculoskeletal aches and fatigue. Despite the menopausal symptoms affecting their quality of life to a certain extent, only a small group of women was severely affected. The majority of these women did not seek any treatment to alleviate the symptoms. A study to investigate the reasons of women's reluctance in seeking treatment for menopausal symptoms is required. Some menopausal symptoms (sexual problems and irritability) were demonstrated to be associated with ethnicity. However, ethnicity was only one of multiple other causal factors that contribute to presence of each menopausal symptom.

There is a need to improve awareness among the menopausal women and healthcare provider on menopausal symptoms and variety of intervention ranging from lifestyle modifications to pharmacological interventions, including hormonal/non-hormonal and complementary therapies. Healthcare providers should practise an evidence-based management in offering the best management for these women. The hope to see women embracing menopause gracefully should be upheld by everyone, rather than leaving them suffering in silence.

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