AWARENESS OF MENOPAUSE AND STRATEGIES TO COPE WITH MENOPAUSAL SYMPTOMS OF THE WOMEN AGED BETWEEN 40 AND 65 WHO CONSULTED TO A TERTIARY CARE HOSPITAL

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Abstract
This study aimed to investigate the awareness of menopause and strategıes to cope wıth menopausal symptoms of the women aged between 40 and 65 who consulted to a tertiary care hospital and among those who were postmenopausal, to measure the severity of symptoms and to determine the strategies and choice of resources to cope with menopausal symptoms. From a total of 292 women 272 (93%) were available to participate in the study. A questionnaire and the Menopause Rating Scale (MRS) was during face-to-face interviews. The mean age was 50.1±6.5 years. The mean total MRS score of non-menopausal women was 16.6±8.9. The mean scores: 6.2±3.5 for somatic subscale, 6.5±3.7 for psychological subscale and 3.8±2.7 for urogenital subscale. The most common menopausal symptom was physical and mental exhaustion (84.0%). Severe menopausal symptoms were identified in 79 (46.7%) women completing the MRS scale. The women with an average monthly income of 2000 TL or less and chronic illness had a higher frequency of severe menopausal symptoms. The most commonly preferred coping strategy was visit to a medical doctor or a healthcare center (n=103, 60.9%). In order to raise awareness about menopause, structured education programs should be prepared and implemented.
Keywords: Menopause, climacteric, MRS.

ÜÇÜNCÜ BASAMAK BİR HASTANEYE BAŞVURAN 40-65 YAŞ ARALIĞINDAKİ KADINLARDA MENOPOZ FARKINDALIĞI ve SEMPTOMLARI ile BAŞ ETME YÖNTEMLERİ
Çalışmada, üçüncü basamak bir hastaneye başvuran 40-65 yaş aralığındaki kadınlarda menopoz farkındalığını, menopoza girenlerde semptom şiddetini ölçmek ve semptomlarla başa çıkma yöntemleri ile yöntem seçiminde başvurdukları kaynakları belirlemek amaçlanmıştır. Başvuran 292 kadının 272'sine (%93) ulaşıldı. Katılımcılara bir anket ve Menopoz Semptomlarını Değerlendirme Ölçeği (MRS) yüz yüze uygulandı. Yaş ortalaması 50,1±6,5'dir. Kadınların MRS'den aldıkları toplam puan ortalaması 16,6±8,9'dur. Ölçeğin alt boyut puan ortalamaları: somatik alt boyut için 6,2±3,5, psikolojik alt boyut için 6,5±3,7 ve ürogenital alt boyutunda 3,8±2,7'dir. Çalışma grubunda en çok görülen menopoz semptomları; fiziksel ve zihinsel yorgunluk (%84,0)'tur. MRS uygulanan kadınların 79'unda (%46,7) ciddi menopozal semptom olduğu saptanmıştır. Ortalama aylık geliri 2000 TL veya altında olan ve kronik hastalığı olan kadınların şiddetli menopoz semptomları sıklığı daha yüksektir. En çok tercih edilen başa çıkma yöntemi, doktora/sağlık kuruluşuna başvurma 103(%60,9)'dır. Menopoz hakkında farkındalığı arttırmak için yapılandırılmış eğitim programları hazırlanmalı ve uygulanmalıdır.
Anahtar Kelimeler: Menopoz, klimakterik, MRS.

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Geliş tarihi / Received : *11.10.2019,* ***Kabul Tarihi / Accepted:*** *14.12.2019*

Nasıl Atıf Yaparım / How to Cite: *İkiışık H, Turan G, Kutay F, Karamanlı DC, Güven E, Özdemir E, et al. Awareness of Menopause and Strategies to Cope with Menopausal Symptoms of The Women Aged Between 40 and 65 Who Consulted to a Tertiary Care Hospital. ESTUDAM Public Health Journal. 2020;5(1):10-21.*

Introduction

In women, the climacteric is the phase that occurs after the period of sexual maturity as part of the ageing process. Menopause is the most significant change that women experience during the climacteric phase (1-3). Menopause is defined as the final cessation of menstruation secondary to the loss of ovarian function (4). The average age of menopause has been reported as 50 -51 years in the western countries and 48 years in Turkey (5,6). With the increased life expectancy at birth for women, women in Turkey spend one-third of their lives in menopause (7). During menopause, hormonal, physical and emotional changes occur in women due to estrogen depletion (2). The effects of this physiological condition include vaginal and urinary changes, thinning of the bones, behavior changes, increased body fat content around the waist and low desire for sexual activity (8). While the symptoms of menopause vary from woman to woman, 100 different symptoms of menopause have been described including hot flushes, night sweats, sleep disturbance, headache, loss of interest in sexual activity, fatigue, irritability, nervousness (9,10). Many factors may affect women's knowledge and beliefs about menopause including social status, education, and physical and emotional well-being (11,12). Most women do not have adequate information on this phase of life. Increased awareness of the symptoms and complications of menopause was reported to be associated with improved tolerability of complications and increased likelihood of preventing severe and irreversible consequences with appropriate therapies (13,14).

Women use a variety of coping strategies to relieve the discomfort and manage physical symptoms of menopause. Hormone replacement therapy (HRT) as medical treatment is used by only 10% of women globally and by 12.3% of women in Turkey (15). Women also use alternative medicine in an effort to cope to alleviate uncomfortable symptoms of menopause (16).

This study aimed to investigate the awareness of menopause in women from 40 to 65 years of age admitting to a tertiary care hospital and among those who were postmenopausal, to measure the severity of symptoms and to determine the strategies and choice of resources to cope with menopausal symptoms.

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Material and Method

The study sample consisted of 292 women aged between 40 and 65 who visited the gynecology and obstetrics outpatient clinic of a tertiary care hospital between January 9 and 15, 2019. From the targeted sample, 272 women (93%) could be reached and were included in the study. Women who were using or have used hormone replacement therapy (HRT) and women who underwent Total Abdominal Hysterectomy and Bilateral Salpingo-oophorectomy (TAH+BSO) surgery with cessation of menstrual cycle were excluded. Data were collected through administration of a questionnaire during face-to-face interviews following informing of the women about the nature and scope of the study by the investigators and obtaining informed consent.

The study questionnaire which developed by researchers consisted of four sections. The first section comprised of 12 questions to identify certain sociodemographic characteristics of the participants. The second section consisted of 18 statements derived from the relevant literature to determine awareness of menopause among participants. For each statement, the

participants marked true or false. Each correct answer to these statements was scored 1 point and each wrong answer was scored 0 point. In the third section, the Menopause Rating Scale (MRS) was used to determine the presence and measure the severity of menopausal symptoms (17). The MRS was developed by *Berlin Center* for *Epidemiology* and *Health Research* (18) and the reliability and validity of the Turkish version of the MRS was demonstrated in 2009 by Metintaş et al. (19). The MRS is used to evaluate the condition of the women within the previous month and consists of 11 items that are graded on a 5-point Likert scale. It is divided into three subscales addressing somatic, psychological and urogenital symptoms. Somatic subscale includes vasomotor symptoms, cardiac complaints, sleeping problems and muscle and joint problems (items 1,2,3 and 11). Psychological subscale includes depressive mood, irritability, anxiety and physical and mental exhaustion (items 4,5,6 and 7). Urogenital subscale includes sexual problems, bladder problems and vaginal dryness (items 8,9 and 10). Scores for each subscale vary from 0 to 16 points for both somatic and psychological symptoms and 0 to 12 points for urogenital symptoms. The composite score is the sum of the three subscale scores. Total possible score varies from 0 to 44 points and higher scores from each of the three subscales and a higher total score indicate greater severity of the symptoms. Scores equal to or above 9 points for somatic subscale, 7 points for psychological subscale, 4 points for urogenital subscale, and 17 points for total score were considered to indicate the presence of severe menopausal symptoms (20). The 40-65 year-old women admitted to the outpatient clinic were included in the study. The MRS was not performed for women who reported having regular menstruation. The final section of the questionnaire consisted of statements reflecting the strategies to cope with menopausal complaints reported by the participants. Respondents could choose more than one statement appropriate for them. Resources used by the participants to obtain information on coping strategies to help them cope with their symptoms were also evaluated.

IBM SPSS Statistics Base 22.0 software was used to analyze the study data. Data were provided as mean ± standard deviation (SD) and percentage. ANOVA and chi-square tests were employed to compare continuous and categorical variables. A p value less than 0.05 was considered statistically significant.

Ethics Committee approval for the study was obtained from İstanbul Medeniyet University Göztepe Research and Training Hospital, Ethics Committee for Clinical Trials (Decision No: 2018/0523).

Results

Of 272 eligible women, 19 were excluded because of having hormone replacement therapy and 3 were excluded due to undergoing TAH+BSO. Remaining 250 (91.9%) women were included in the analyses. Participants were women between the ages of 40 and 65 with a mean age of 50.1±6.5 years. Selected sociodemographics of the participants are shown in Table 1.

Table 1: Selected sociodemographic characteristics of study participants.

Sociodemographic Characteristics (n=250)		n	%
Age groups (years)	40-44	57	22,8
	45-49	68	27,2
	50-54	57	22,8
	55-59	41	16,4
	60-65	27	10,8
Education level	Illiterate	12	4,8
	Primary school graduate	51	20,4
	Middle school graduate	30	12,0
	High school graduate	62	24,8
	University graduate	95	38,0
Marital status	Married	188	75,2
	Single	32	12,8
	Divorced/Widowed	30	12
Average monthly income	Less than 2000 TL	64	25,6
	2001-5000 TL	142	56,8
	5001 TL or higher	44	17,6
BMI classification	Underweight	4	1,6
	Normal	123	49,2
	Overweight	77	30,8
	Obese	46	18,4
Presence of chronic illness	Yes	100	40,0
	No	150	60,0
Prior delivery	Yes	214	85,6
	No	36	14,4
Menstrual cycle	Regular every month	81	32.4
	Irregular within the last 1 year	52	20.8
	None within the last 1 year	48	19.2
	None within the last 5 years	69	27.6
	Total	**250**	**100**

The Menopause Rating Scale (MRS)

The MRS was not administered to women reporting regular menstrual cycles (n=81). Remaining 169 women had a mean age of 52.4 ±5.9 years and a mean total MRS score of 16.6±8.9. The mean scores for each subscale were as follows: 6.2±3.5 for somatic subscale, 6.5±3.7 for psychological subscale and 3.8±2.7 for urogenital subscale. The most common menopausal symptoms reported by the study sample were physical and mental exhaustion (84.0%), hot flushes (82.2%) and irritability and nervousness (82.2%). Severe menopausal symptoms were identified in 79 (46.7%) women completing the MRS scale. There were 46 (27.2%) women with severe somatic symptoms, 79 (46.7%) with severe psychological symptoms and 78 (46.2%) with severe urogenital symptoms.

The scores for all subscales and total MRS score of the women in the age group of 45-49 years indicated that severe menopausal symptoms were less common in this age group compared to women in other age groups. The women in the age group of 45-49 years showed the least frequency of severe somatic symptoms (p=0.03). The women with an average monthly income of 2000 TL or less had a higher frequency of severe menopausal symptoms as evidenced by their higher MRS subscale (p=0.04; p=0.05 ve p=0.01) and total scores (p=0.008). The frequency of severe menopausal symptoms was higher among the women with any chronic illness than those without chronic illnesses as shown by higher MRS subscale and total scores in the former (p<0.001). While severe menopausal symptoms were less common among single women versus divorced/widowed

women, marital status was not associated with a significant difference in MRS subscale and total scores (p>0.05). Based on MRS two subscale and total scores (p=0.01), illiterate women showed a higher frequency of severe symptoms in comparison to the women from other education levels. Considering BMI classification, increasing frequency of severe menopausal symptoms was observed among women from lean to overweight but the difference among BMI groups was statistically non-significant except for MRS somatic subscale (p=0,01). Selected sociodemographic characteristics of women with or without severe menopausal symptoms based on MRS subscale and total scores are shown in Table 2.

Table 2: Distribution of severe symptoms by selected sociodemographic characteristics among study women as identified by MRS subscale and total scores.

Sociodemographic Characteristics (n:169)	Menopause Rating Scale: Somatic Severe Symptom		Psychological Severe Symptom		Urogenital Severe Symptom		Total Score Severe Symptom		Total**	
	No %*	Yes %*	No %*	Yes %*	No %*	Yes %*	No %*	Yes %*	n	%*
Age group										
40-44	66,7	33,3	40,0	60,0	60,0	40,0	60,0	40,0	15	8,9
45-49	86,8	13,2	60,5	39,5	63,2	36,8	63,2	36,8	38	22,5
50-54	77,8	22,2	59,3	40,7	57,4	42,6	55,6	44,4	54	32,0
55-59	67,6	32,4	51,4	48,6	45,9	54,1	48,6	51,4	37	21,9
60-65	52,0	48,0	40,0	60,0	40,0	60,0	36,0	64,0	25	14,8
	X^2=10,71 p=0,03		X^2=4,466 p>0,05		X^2=4,688 p>0,05		X^2=5,191 p>0,05			
Marital status										
Married	73,2	26,8	52,0	48,0	48,8	51,2	50,4	49,6	127	75,1
Single	82,4	17,6	64,7	35,3	70,6	29,4	70,6	29,4	17	10,1
Divorced/ Widowed	64,0	36,0	52,0	48,0	68,0	32,0	56,0	44,0	25	14,8
	X^2=1,772 p>0,05		X^2=0,996 p>0,05		X^2=5,224 p>0,05		X^2=2,545 p>0,05			
Education level										
Illiterate	30,0	70,0	20,0	80,0	20,0	80,0	20,0	80,0		5,9
Primary school graduate	64,9	35,1	43,2	56,8	35,1	64,9	37,8	62,2	37	21,9
Middle school graduate	62,1	37,9	58,6	41,4	55,2	44,8	48,3	51,7	29	17,2
High school graduate	84,1	15,9	61,4	38,6	63,6	36,4	65,9	34,1	44	26,0
University graduate	83,7	16,3	57,1	42,9	65,3	34,7	63,3	36,7	49	29,0
	X^2=17,865 p<0,001		X^2=7,727 p>0,05		**X^2=14,129 p=0,007**		**X^2=13,067 p=0,01**			
Average monthly income										
Less than 2000 TL	59,2	40,8	38,8	61,2	36,7	63,3	34,7	65,3	49	29,0
2001-5000 TL	78,5	21,5	60,2	39,8	60,2	39,8	61,3	38,7	93	55,0
5001 TL or higher	77,8	22,2	55,6	44,4	63,0	37,0	59,3	40,7	27	16,0
	X^2=6,446 p=0,04		**X^2=5,994 p=0,05**		**X^2=8,194 p=0,01**		**X^2=9,584 p=0,008**			
Presence of a chronic illness										
Yes	57,8	42,2	43,4	56,6	39,8	60,2	37,3	62,7	83	49,1
No	87,2	12,8	62,8	37,2	67,4	32,6	68,6	31,4	86	50,9
	X^2=18,401 p<0,001		**X^2=6,397 p=0,01**		**X^2=13,024 p<0,001**		**X^2=16,574 p<0,001**			

Menstrual cycle										
Irregular within the last 1 year	82,7	17,3	59,6	40,4	61,5	38,5	61,5	38,5	52	30,8
None within the last 1 year	70,8	29,2	52,1	47,9	60,4	39,6	54,2	45,8	48	28,4
None within the last 5 years	66,7	33,3	49,3	50,7	43,5	56,5	46,4	53,6	69	40,8
	X^2=3,973 p>0,05		X^2=1,310 p>0,05		X^2=5,056 p>0,05		X^2=2,761 p>0,05			
Prior delivery										
Yes	72,7	27,3	51,3	48,7	52,7	47,3	51,3	48,7	150	88,8
No	73,7	26,3	68,4	31,6	63,2	36,8	68,4	31,6	19	11,2
	X^2=0,009 p>0,05		X^2=1,978 p>0,05		X^2=0,747 p>0,05		X^2=1,978 p>0,05			
BMI classification										
Underweight	100,0	0,0	100,0	0,0	100,0	0,0	100,0	0,0	2	1,2
Normal	83,3	16,7	59,7	40,3	59,7	40,3	58,3	41,7	72	42,6
Overweight	69,8	30,2	49,1	50,9	56,6	43,4	56,6	43,4	53	31,4
Obese	57,1	42,9	45,2	54,8	38,1	61,9	38,1	61,9	42	24,9
	X^2=10,216 p=0,01		X^2=4,425 p>0,05		X^2=7,07 p>0,05		X^2=6,618 p>0,05		169	100,0

Based on row percentage.
*** Based on column percentage.*

Thirteen strategies were identified by the participants to cope with the symptoms of menopause. Among these, a coping strategies were most commonly reported including visit to a medical doctor or a healthcare center (n=103, 60.9%).When the strategies to cope with menopausal symptoms used by the women were examined, trying to cope with symptoms by using medications at hand was more common among women with severe symptoms than those without severe symptoms based on MRS subscale (p=0.01; p=0.03 ve p=0.002) and total scores (p<0,001) (Table 3).

Tablo 3: Distribution of severe symptoms by the strategies to cope with menopausal symptoms among study women as identified by MRS subscale and total scores.

Strategies to Cope with Menopausal Symptoms	**Menopause Rating Scale**									
	Somatic Severe Symptom		**Psychological Severe Symptom**		**Urogenital Severe Symptom**		**Total Score Severe Symptom**		**TOTAL****	
	No	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**		
	%*	**%***	**%***	**%***	**%***	**%***	**%***	**%***	**n**	**%**
Visit to a medical doctor or a healthcare center										
Yes	71,8	28,2	54,4	45,6	50,5	49,5	53,4	46,6	103	60,9
No	74,2	25,8	51,5	48,5	59,1	40,9	53,0	47,0	66	39,1
	X^2=0,117 p>0,05		X^2=0,717 p>0,05		X^2=1,199 p>0,05		X^2=0,02 p>0,05			
Using medications she has										
Yes	48,5	51,5	36,4	63,6	30,3	69,7	27,3	72,7	33	19,5
No	78,7	21,3	57,4	42,6	59,6	40,4	59,6	40,4	136	80,5
	X^2=12,219 p=0,001		**X^2=4,700 p=0,03**		**X^2=9,146 p=0,002**		**X^2=11,120 p=0,001**			

Using home-made herbal remedies										
Yes	52,1	47,9	33,3	66,7	45,8	54,2	35,4	64,6	48	28,4
No	81,0	19,0	61,2	38,8	57,0	43,0	60,3	39,7	121	71,6
	X²=14,498		**X²=10,687**		X²=1,732		**X²=8,569**			
	p=0,001		**p=0,001**		p>0.05		**p=0,003**			
Enjoying hobbies										
Yes	58,6	41,4	34,5	65,5	51,7	48,3	48,3	51,7	29	17,2
No	75,7	24,3	57,1	42,9	54,3	45,7	54,3	45,7	140	82,8
	X²=3,543		**X²=4,955**		X²=0,63		X²=0,349			
	p>0,05		**p=0,02**		p>0,05		p>0,05			
Seeking psychological support										
Yes	68,0	32,0	48,0	52,0	40,0	60,0	48,0	52,0	25	14,8
No	73,6	26,4	54,2	45,8	56,3	43,8	54,2	45,8	144	85,2
	X²=0,339		X²=0,325		X²=2,263		X²=0,325			
	p>0,05		p>0,05		p>0,05		p>0,05			
Using medications for psychological support										
Yes	50,0	50,0	28,6	71,4	39,3	60,7	32,1	67,9	28	16,6
No	77,3	22,7	58,2	41,8	56,7	43,3	57,4	42,6	141	83,4
	X²=8,792		**X²=8,213**		X²=2,863		X²=6,009			
	p=0,003		**p=0,004**		p>0,05		p<0,05			
Starting doing exercise										
Evet	81,4	18,6	65,1	34,9	60,5	39,5	65,1	34,9	43	25,4
Hayır	69,8	30,2	49,2	50,8	51,6	48,4	49,2	50,8	126	74,6
	X²=2,160		X²=3,260		X²=3,260		X²=1,017			
	p>0,05		p>0,05		p>0,05		p>0,05			
Quit/reduce smoking and/alcohol consumption										
Yes	80,6	19,4	54,8	45,2	41,9	58,1	51,6	48,4	31	18,3
No	71,0	29,0	52,9	47,1	56,5	43,5	53,6	46,4	138	81,7
	X²=1,185		X²=0,38		X²=2,167		X²=0,41			
	p>0,05		p>0,05		p>0,05		p>0,05			
Starting a healthy diet										
Yes	70,4	29,6	52,1	47,9	50,7	49,3	50,7	49,3	71	42,0
No	74,5	25,5	54,1	45,9	56,1	43,9	55,1	44,9	98	58,0
	X²=0,344		X²=0,64		X²=0,486		X²=0,320			
	p>0,05		p>0,05		p>0,05		p>0,05			
Spending more time with family members										
Evet	73,0	27,0	48,6	51,4	54,1	45,9	62,2	37,8	37	21,9
Hayır	72,7	27,3	54,5	45,5	53,8	46,2	50,8	49,2	132	78,1
	X²=0,01		X²=0,404		X²=0,01		X²=1,510			
	p>0,05		p>0,05		p>0,05		p>0,05			
Reading books about menopause										
Yes	77,8	22,2	66,7	33,3	61,1	38,9	66,7	33,3	18	10,7
No	72,2	27,8	51,7	48,3	53,0	47,0	51,7	48,3	151	89,3
	X²=0,254		X²=1,456		X²=0,428		X²=1,456			
	p>0,05		p>0,05		p>0,05		p>0,05			
Doing pelvic floor exercises										
Yes	85,7	14,3	66,7	33,3	47,6	52,4	57,1	42,9	21	12,4
No	70,9	29,1	51,4	48,6	54,7	45,3	52,7	47,3	148	87,6
	X²=2,025		X²=1,733		X²=0,374		X²=0,146			
	p>0,05		p>0,05		p>0,05		p>0,05			
Doing nothing										
Yes	75,0	25,0	39,3	60,7	64,3	35,7	57,1	42,9	21	12,4
No	72,3	27,7	56,0	44,0	51,8	48,2	52,5	47,5	148	87,6
	X²=0,83		X²=2,631		X²=1,472		X²=0,204			
	p>0,05		p>0,05		p>0,05		p>0,05			

**Based on row percentage.*
*** Based on column percentage.*

Awareness of Menopause

Average score of the participants obtained on the menopause awareness statements was 13.95±2.26. 111(55.6%) women scored below the average awareness score of the study sample. When menopause awareness scores were examined by selected sociodemographic characteristics, no significant differences were observed in average scores in relation to age, marital status, BMI classification, parity and the presence of a chronic illness (p>0.05).

Average menopause awareness scores differed significantly by education level such that women with high school or higher academic degrees scored higher than those with lower levels of education (p=0.00). Considering the income level, average menopause awareness scores were lower in women with a monthly income of 2000 TL or less in comparison to women with higher monthly income (p=0.00). Postmenopausal women had lower average menopause awareness scores compared to the women with menstrual cycles (p=0.01). There was no difference between average menopause awareness scores of the women in relation to the strategies used to cope with menopausal symptoms (p>0.05)

The presence of severe symptoms identified by MRS subscale and total scores did not differ among women seeking advice from friends, following advice they have heard from the TV programs, deciding on their own to do something or seeking advice from a doctor (p>0.05). Following advice from the TV programs was less common among the women with severe symptoms with higher MRS somatic (p=0.009), psychological (p=0.001) and urogenital (p=0.02) subscale scores and total scores (p=0.01).

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Discussion and Conclusion

Menopause represents a biological milestone in a woman's life. This study aimed to determine women's awareness of this phase, their menopausal symptoms and how they cope with them and the sources of information they choose to be informed about coping strategies. According to data from the Turkish Statistical Institute, life expectancy at birth is 81.0 years at women and menopause around the ages of 47,5 -51 in Turkey, with an increasing number of women spend a significant portion of their lives in menopause (5,21,22).

More than half of the participants in our study (55.6%) had mean menopause awareness scores that were below the average menopause awareness score of the entire study sample. Women with high school or higher academic degrees had a greater awareness of menopause than those with lower levels of education and women with a lower income and postmenopausal women had lower menopause awareness score compared to others. While reported data greatly vary across studies in different regions and cultures, our findings are consistent with those of some studies (23-25). One in two women in our study lacked knowledge on menopause, suggesting that although menopause is a normal part of a woman's aging process, there is a need to better inform and educate the general population about potential health problems associated with menopause or hormone deficiency-related symptoms.

Total average MRS score was 16.6 ±8.9 among women and almost one-half of the women completing the MRS scale (46.7%) had severe menopausal symptoms, with a high percentage of women experiencing severe psychological symptoms (46.7%). The most common menopausal symptom was physical and mental exhaustion, followed by hot flushes as the second most common symptom and nervousness and anxiety as the third most prevalent symptom. Previous regional studies in

Turkey have reported average MRS scores ranging from 14 and 20 points and approximately one in two women were found to experience severe menopausal symptoms (26-28). Additionally, hot flashes are common in the perimenopause and psychological symptoms are prevalent in the postmenopausal women (29-32).

The prevalence of menopausal symptoms reported in literature varies between racial or ethnic groups but globally, the most prevalent symptoms include physical and mental exhaustion, hot flashes, sleep disorders, depression, vaginal dryness and night sweats (33-38). Lifestyle, culture, genetic background, diet and comorbidities also have an impact on the occurrence of menopausal symptoms. Along with studies reporting high prevalences of physical symptoms, musculoskeletal disorders and depressive disorder similar to our findings, there are numerous studies that reported hot flushes as the most common symptom (34,39-47).

The frequency of severe menopausal symptoms was lower in women from 45 to 49 years of age as reflected by total MRS scores. Increased severity of symptoms with older ages may be attributed to a greater frequency of complaints and greater psychological burden in postmenopausal women. In the present study, women with a monthly income of 2000 TL or less, women with a chronic illness and illiterate women showed a higher frequency of severe menopausal symptoms based on total MRS scores. In Turkey, comparable findings were obtained in studies with the use of the MRS (26,48,49).

Contrastingly, a study from Taiwan reported an increased prevalence of menopausal complaints with higher education level. However, our findings suggest that more educated women are more likely to have a greater awareness of menopause and healthy living, complain less about their menopausal symptoms, and show a positive attitude towards menopause and they express themselves better (50). It has been recognized that poverty and low education level are related to inequality in access to healthcare. Considering that socioeconomic status might substantially affect access to healthcare services, it seems plausible that women with a lower income are more likely to report menopausal complaints due to lower access to treatment and rehabilitation. The high prevalence of severe symptoms among women with a chronic illness may be explained by added burden of menopausal symptoms on top of existing burden of chronic illness on human health, inevitably leading to greater frequency of complaints (38, 51).

Coping is defined as an individual's response to manage a stressful condition. In one study, women were found to choose coping strategies that suit them best based on their personality, and the nature and severity of their menopausal symptoms (52). In our study, 13 different statements on coping strategies were presented to the women and the most widely used strategies were reported as visiting a doctor, trying to eat a healthy diet, using home-made herbal remedies, doing exercise and spending more time with family members. The finding, "visit a doctor" was reported by the majority of the women may be explained by the fact that women regard healthcare providers as the most reliable source of information. This finding is consistent with literature (53). Seeking advice from informal sources other than healthcare professionals has also been reported by some studies (54).

Top 5 coping strategies identified in our study included spending more time with family members. In a study reporting seeking social support is among the most commonly preferred three coping strategies by postmenopausal women, which was implemented as a means to reduce stress (55). It might be assumed that individuals supported by a good family, caring friends and a good social environment may be more healthy and experience less psychiatric symptoms.

The use of medications at hand was more common among the women with severe symptoms than those without severe symptoms based on MRS subscale and total scores. Home-made herbal remedies used as a coping strategy was more common among women with severe symptoms as shown by higher somatic and psychological subscales and total MRS scores. The use of complementary and alternative medications during menopause has been reported in a number of studies (53,57,58). The use of medications at hand as identified as a coping strategy in our study clearly shows the need to educate the community on health literacy and rational use of medications in Turkey (59,60).

Doctors were cited by the study women as the first source of information to cope with nmenopausal symptoms. Several studies reported internet and friends as the most widely used sources of information (39,57,61). However, in a qualitative study, it was found that Asian women thought that they did not need to get help or information from others because they considered menopause as a normal aging process and no specific source of information was cited (53). With access to information, women were reported to have a better understanding of the needs of their bodies, the symptoms they have and treatment options offered to them (57).

In conclusion, with the increase in life expectancy in women, women spend a significant longer time in menopause which is affected by several factors including the personality, biological structure and lifestyle of the individual woman as well as the characteristics of the society she lives in, her role in the society, prevailing customs and traditions, cultural influences and perceptions of menopause. Structured educational programmes targeting women of all ages and socioeconomic levels and general population as a whole should be designed and implemented to raise awareness of menopause and better inform the community.

This study was conducted at a tertiary care hospital located in a relatively more developed neighborhood and therefore, the study data may not be generalized for the whole female population in Turkey.

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