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ORIGINAL RESEARCH

The Effect of Complementary and Alternative Treatment Methods Applied by Women in Postmenopausal Period on Their Menopausal Symptoms and Quality of Life

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Abstract

Objective: This study was carried out to determine the complementary and alternative treatment methods used by women in the postmenopausal period and their effects on menopausal symptoms and quality of life.

Material-Method: This study was designed as a cross-sectional and correlational study, and it was conducted at a Family Health Center in a province in the Southeast Anatolia Region of Türkiye between March and August 2018. The sample consisted of 259 postmenopausal women aged 45-60 registered at the Family Health Center. Data were collected using the Personal Information Form, the Menopause Rating Scale, and the Short-Form 36 (SF-36) Quality of Life Scale. The face-to-face interview technique was employed for data collection. Descriptive statistics, Pearson's correlation coefficient, and multiple linear regression (MLR) analyses were used to analyze the data.

Results: It was determined that 77.6% of the women in the postmenopausal period used complementary and alternative treatment methods to reduce menopausal symptoms. The analysis revealed that as postmenopausal women increasingly utilized nutrition, vitamins, and minerals as complementary and alternative medicine methods, their physical role limitations, a subdimension of quality of life, decreased ($\beta = -0.359$; $p < 0.05$). Additionally, physical functioning, another subdimension of quality of life, improved with the increased use of mind-body techniques as a complementary and alternative medicine method ($\beta = 0.273$; $p < 0.05$).

Conclusion: Nutritional, vitamin, and mineral treatments were significant predictors of physical role limitations in postmenopausal women, which is a subdimension of quality of life. Similarly, mind-body techniques were found to be significant predictors of physical functioning.

Keywords: Alternative, Complementary, Menopausal Symptoms, Postmenopause, Quality of Life

INTRODUCTION

Menopause, a significant phase in the lives of many women worldwide, is characterized by ovarian failure and follicular arthritis. Menopause is a period in which the level of estrogen hormone decreases, the menstrual period permanently stops, and reproduction ability is lost, as well as ovaries lose their function.[1] This period is the beginning of aging in women and a natural part of women's reproductive life.[2] In addition, some women may experience psychological, physiological, social, and physical changes during this period.[3] Women in the menopausal period generally experience symptoms affecting daily life activities and quality of life, such as hormonal changes, hot flashes, sweats, sleep disorders, vaginal dryness, poor memory, anxiety, and depression, as well as important health problems such as heart disease and osteoporosis.[4,5] The studies have shown that symptoms experienced by women in the menopausal period affect their health-related quality of life.[6-8] Within increasing life expectancy, women spend approximately one-third of their lives in the postmenopausal period. This fact indicates that more emphasis should be placed on menopausal symptoms experienced during this period.[9]

Although Hormone Therapy (HT) has positive

effects on menopausal symptoms[10], many women refuse or discontinue treatment because of their adverse and negative effects.[11,12] Therefore, many women seek alternative therapies that they can trust to reduce unpleasant symptoms and improve their quality.[13,14] Complementary and alternative medicine (CAM) may have the potential to relieve acute menopausal symptoms and improve the long-term well-being of women in the menopausal period.[15,16]

In the study investigating the use of CAM in menopausal women in Canada, it was stated that 91% of women used CAM for menopausal symptoms. It has been stated that the most commonly used methods are vitamins, relaxation techniques, yoga/meditation, soy products, and prayer. Among these methods, mental healing, relaxation techniques, therapy, and reiki are reported to be the most useful applications.[17]

It has been stated that 89.7% of the post-menopausal women who used HT and then quit in the UK used one or more CAM methods in the subsequent period to reduce menopausal complaints. The most commonly used CAM methods to relieve vasomotor symptoms (VMS) are regular exercise, herbal/homeopathic remedies, Cimicifuga racemosa, phytoestrogens, behavioral/lifestyle approach, diet change, meditation/yoga, and relaxation/ brisk breathing.[5]

In a study investigating the prevalence of CAM use for VMS and other menopausal symptoms in Australian women aged 40-65, the prevalence of CAM use for VMS and other symptoms was reported to be 13.22% and 32.23%, respectively. The most commonly used CAM methods for VMS were reported to be phytoestrogens, evening primrose oil, and ginseng, respectively. In contrast, fish or cyrillic oil, glucosamine, and valerian were reported as the most commonly used CAM methods for other menopausal symptoms.[18]

Studies have shown that CAM methods have significant effects on alleviating menopausal symptoms and improving quality of life.[19,20]

Although many studies have been conducted on CAM use during the menopausal period,[5,17-20] this is the first study investigating the effects of CAM on postmenopausal symptoms and quality of life in Türkiye. Accordingly, this study was carried out to determine the use of complementary and alternative treatment methods by postmenopausal women and their effects on menopausal symptoms and quality of life.

MATERIALS AND METHODS

Research design

The study was designed as a cross-sectional and correlational study.

Research place and time

The study was conducted in a Family Health Center (FHC) in a province in Türkiye's Southeastern Anatolia Region between March and August 2018.

Population and sample

The study population consisted of 1025 women aged 45-60 registered at the Family Health Center (FHC). No specific sampling method was employed, and the final sample included 259 women who met the inclusion criteria.

Inclusion Criteria: Being between the ages of 45-60, having no menstruation for at least a year, having no severe physical and psychological disease, receiving no HT for the last six months, entering the menopause naturally, volunteering to participate in the study.

Data Collection

In the data collection, the Personal Information Form prepared by the researchers, the Menopause Rating Scale (MRS), and the Short Form 36 (SF-36) Quality of Life Scale were used. In the Personal Information Form, socio-demographic information of the participants such as age, gender, education, income, marital status, disease status, smoking; obstetric and gynecological histories such as first gestational age, number of pregnancies, number of deliveries, first menstrual age, last menstruation date; menopausal histories such as the age of menopause, the meaning of menopause, experiencing menopause complaints, and used methods to reduce complaint sand the use of CAM methods were questioned. The data on CAM methods were collected under four headings such as 1. Herbal therapies, 2. Nutritions-vitamins-minerals therapies, 3. Mind-body techniques, 4. Other methods.

Menopause Rating Scale (MRS): The MRS was developed in 1992 by Schneider et al.[21] to measure the severity of menopausal symptoms in German and was later adapted to English.[22] The Turkish reliability and validity study of the MRS was conducted by Gürkan in 2005 in Türkiye. It is a 4-point likert type scale and consists of 11 items. The lowest score obtained from the scale is 0, while the highest score is 44. The increase in the total score obtained from the scale shows the increase in the severity of the complaints. The scale consists of three sub-dimensions somatic symptoms,

psychological symptoms, and urogenital symptoms. In the factor analysis performed by Gürkan, 3. and 11. items were found to be in the different groups (in somatic complaints in the original). Therefore, Gürkan suggested that using sub-group analysis or making evaluations based on the total score obtained from the scale were included in different subgroups in new studies using the scale. Therefore, an assessment was made based on the total score for this study. The overall Cronbach's Alpha reliability coefficient of the MRS is 0.84. In this study, Cronbach's Alpha reliability coefficient was 0.93**.**

Short Form 36 (SF-36) Quality of Life Scale: SF-36 was developed by Ware and Sherbourne.[24] The scale does not have a total score. The scale consists of 36 items and provides the measurement of 8 dimensions. These dimensions are physical functioning (10 items), social functioning (2 items), role limitations due to physical problems (4 items), role limitations due to emotional problems (3 items), mental health (5 items), energy/vitality (4 items), pain (2 items) and general perception of health (5 items). The weighted scores obtained from the questions, including the sub-scales of the SF-36, are summed, and the physical (physical health component summary scale-PCS) and Mental (mental health component summary scale-MCS) Health Summary Value is obtained. The summary values are expressed as continuous variables ranging from 0 to 100; "0" indicates poor health, and "100" indicates well-being. On the scale, physical functioning, physical role, and pain are predominant in calculating physical health status, while mental role and mental functioning are predominant in calculating mental health status.

General health, vitality, and social functioning similarly contribute to calculating both health conditions. The scale's items of 1, 6, 7, 8, 9a, 9d, 9e, 9h, 11b, 11d are reverse scored. The scale makes evaluations based on the last four weeks. The reliability and validity studies for the Turkish version were performed by Koçyiğit et al.[25] Cronbach's alpha reliability coefficients for each sub-dimension in the Turkish reliability of the scale were calculated as follows. Physical functioning: 0.75, Physical role limitations: 0.76, Pain: 0.76, General health perception: 0.76, Vitality: 0.73, Social functioning: 0.75, Mental role limitations: 0.76, Mental health: 0.76. In this study, Cronbach's alpha reliability coefficients for SF-36 quality of life sub-dimensions were as follows. Physical functioning: 0.89, Physical role limitations: 0.83, Pain: 0.89, General health perception: 0.54, Vitality: 0.48, Social functioning: 0.70, Mental role limitations: 0.83, Mental health: 0.87.

Data Collection

The pre-application of the questionnaire was carried out with ten postmenopausal women from a different province population. The data collected from the pre-application were not included in the study. Then, 1025 women aged 45-60 who were registered to the FHC were called by phone and asked whether they were in the postmenopausal period or not and whether they met the inclusion criteria or not. Women in the postmenopausal period and meeting the inclusion criteria were invited to the FHC. The women who cannot be reached by phone were called for at least three different times. Twenty-six women who met the inclusion criteria were not included in the study because they did not want to participate in the study, 24 women who met the inclusion criteria were not included in the study because they could not be contacted, and 11 women who met the inclusion criteria were not included in the study because they did not answer many questions. The study was carried out with 259 women who met the inclusion criteria. The researchers interviewed the women at the FHC five days a week. They were informed about the objective of the study, and informed consent was obtained from each participant. The questionnaire was given to 259 women who agreed to participate in the research and met the inclusion criteria, and they filled out the questionnaire under supervision. The data were collected using a face-to-face interview technique. The average time to complete the interview was 20-25 minutes.

Ethical Statement

The study was designed according to the Helsinki Declaration. Ethical committee approval was obtained from the University's Non-Interventional Ethics Committee (Date: 15.02.2018, No: 82), and written permission was also obtained from the institution where the study was conducted (02.04.2018, number 120). In addition, informed consent was obtained from all participants who volunteered to participate in the study.

Data analysis

The data were analyzed using the SPSS 15.0 (Chicago, IL, USA) software package. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were calculated for variables related to socio-demographic characteristics, menopause, and CAM usage. Pearson's correlation

coefficient was used to examine the relationship between quality of life subscales and CAM methods. A multiple linear regression model included Independent variables associated with quality of life sub-dimensions. The regression analysis treated herbal therapies, nutritional/vitamin/mineral therapies, mind-body techniques, and other methods as dummy variables. A statistical significance level of $\alpha<0.05$ was set for inclusion in the regression equation. Cronbach's alpha coefficient was calculated to assess the internal consistency of the scales.

RESULTS

The mean age of the postmenopausal women was 55.21±5.28. It was determined that 33.6% of the women were not literate, 21.6% were literate, 23.9% were primary school graduates, 15.1% were middle school graduates, and 5.8% were high school graduates. 74.1% of the women were married, 91.5% of them were not employed, 63.7% of them lived in nuclear families, 58.3% of them had income levels that were lower than their expenses, 65.3% of them had health insurance, 64.5% of them had any chronic disease. In addition, 81.5% of the menopausal women did not smoke, 15.4% of them had last menstruation one year ago, 24.7% of them had previous menstruation 1-2 years ago, 39.0% of them had last menstruation 2-5 years ago, 20.9% of them had previous menstruation five years ago or before. The mean age of marriage of the women was 17.39±2.61, the mean age for first pregnancy was 18.47±2.58, the mean number of pregnancies was 5.05±2.20, the mean number of delivery was 4.43±1.78, the mean number of living children was 4.31±1.68, the mean first menstruation age was 12.83±1.18.

When we evaluated the characteristics of the women in the study for menopause and the use of CAM methods, the mean menopausal age was 51.66±4.27), 37.5% of them perceived menopause as a natural process, 98.1% of them had menopausal complaints, and 93.1% of them had not received HT previously to alleviate the symptoms of menopause. In addition, 77.6% of the postmenopausal women used CAM methods to reduce menopausal complaints, 50.7% of them used CAM methods for one year or shorter, 23.4% of them had reduced complaints after using CAM methods, 35.8% of them used CAM methods because they did not want to use medication. When the CAM methods used by the women using CAM methods were examined, 35.8% of them consumed balm tea as a herbal treatment, 35.3% of them were fed with low salty/spicy foods as nutritions-vitamins-minerals treatments, 57.7% of them made handiworks as mind-body techniques (knitting, etc.), and 38.8% of them did religious practices such as prayer, 56.7% of them often took warm showers as other methods (Table 1).

When we examined the quality of life sub-dimensions and menopausal symptoms of the postmenopausal women, the mean score of them on the physical functioning subscale, which is the sub-dimension of the quality of life scale, was 50.65±21.93, their mean score on the physical role limitations subscale was 37.74±39.58, and their mean score on the pain subscale was 41.77±22.13, their mean score on the general health perception subscale was 36.52 ± 15.25, their mean score on the vitality subscale was 40.03±14.50, their mean score on the social functioning subscale was 56.66±25.79, their mean score on the mental role limitation subscale was 44.91±43.16, and their mean score on the mental health subscale was found to be 50.77±96.00. In addition, their mean score on total menopause symptoms was 28.15±4.65 (Table 2).

When the frequencies of experiencing menopausal symptoms by the postmenopausal women in the study were analyzed, 44.4% of them experienced very severe hot flashes and sweating, 32.1% of them experienced a severe and very severe heart problem, 35.5% of them had severe sleep problems, 24.7% of them experienced very severe malaise, 26.3% of them experienced very severe nervousness, 28.6% of them experienced severe anxiety/worry, 35.1% of them experienced severe physical and mental fatigue, 12.8% of them had experienced severe and very severe sexual problems, 18.9% of them had experienced very severe urinary problems, 21.2% of them had experienced severe vaginal dryness and 44.0% of them had severe joint and muscle disorders (Table 3).

In the postmenopausal women, there were significant positive relationships between taking any herbal treatment as a CAM method and physical functioning ($r = 0.261$), physical role limitations ($r = 0.171$), mental role limitations ($r = 0.126$), and MHS ($r = 0.153$) ($p <.05$). There were significant positive relationships between receiving nutritions-vitamins-minerals supplementation as a CAM method and physical functioning ($r = 0.235$) and physical role limitations ($r = 0.119$) ($p <.05$).

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Table 1. Characteristics of the women in terms of menopause, the use of alternative and complementary therapies

Variables		n	%
Menopausal Age		51.66±4.27 (min-max=40.00-61.00)	
What does menopause mean?			
	A natural process	97	37.5
	Aging	88	34.0
	Menstruation	27	10.4
	Female Characteristics	17	6.6
	Fertility	12	4.6
	No answer	18	6.9
Having menopausal complaints			
	Yes	254	98.1
	No	5	1.9
Having a Previous Hormone Therapy			
	Yes	18	6.9
	No	241	93.1
Using CAM methods			
	Yes	201	77.6
	No	58	22.4
Herbal Treatments[a] (n=201)			
	Melissa tea	72	35.8
	Chamomile tea	53	26.4
	Oregano tea	47	23.4
	Linden tea	40	19.9
	Green tea	35	17.4
	Sage tea	29	14.4
	Licorice root	14	6.9
	St. John's Wort Tea	13	6.4
Nutritions-Vitamins-Minerals Therapies[a](n=201)			
	Vegetable and fruit weighted nutrition	79	39.3
	Low salt/spicy nutrition	71	35.3
	Calcium tablets	46	22.9
	Mangesium tablets	36	17.9
	Calcium containing nutrition (Milk and milk products, vegetable etc.)	34	16.9
	Vitamin capsules		
	Fish Oil/ Omega-3	31	15.4
	Phytoestrogen tablets	17	8.4
	Phytodiet (Soy, lentil, chickpeas, bean, peas, etc.)	10	5.0
	Selenium tablets	7	3.5
		6	3.0
Mind-Body Techniques [a](n=201)			
	Handcraft (Knitting etc.)	116	57.7
	Religious practices (Prayer, etc.)	78	38.8
	Listening to Music	25	12.4
	Massage	19	9.5
	Dreaming	12	6.0
	Breathing Exercises	11	5.5
	Aromatherapy	3	1.5
	Other	4	2.0
Other Methods [a](n=201)			
	Frequently Taking Warm Showers	114	56.7
	Drinking Plenty Amount of Water	96	47.7
	Allocating time for oneself for resting	57	28.4
	Regular sleeping	53	26.4
	Preferring cotton and thin clothes	46	22.9
	Drinkinh cold beverages	29	14.4
	Washing own face	27	13.4
	Distraction	18	9.0
	Regular Physical Exercising	17	8.5
	Going to Thermal Springs	16	8.0
Duration of CAM Usage (n=201)			
	1 year or shorter	102	50.7
	>1 year -2 years	44	21.9
	3 years	28	13.9
	4 years	20	10.0
	Stating no date	7	3.5
Benefiting from CAM(n=201)			
Not beneficial		83	41.3
Relaxed Psychcologically		66	32.8
Reduced complaints		47	23.4
Complaints Disappeared		5	2.5
Reason for Using CAM(n=201)			
	No desire to use drugs	72	35.8
	To improve life quality	56	27.9
	They are easily reachable	27	13.4
	They are cheap	22	10.9
	They have less side effects	13	6.5
	Higher trust to these methods compared to drugs	9	4.5
	No reason was stated	2	1.0

[a]More than one choice was selected.

Table 2. Life quality subdimensions and menopausal symptoms scores

Life Quality Subdimensions	Mean ± SD	Min-Max
Physical Functioning	50.65±21.93	.00-100.00
Physical Role Limitations	37.74±39.58	.00-100.00
Pain	41.77±22.13	.00-100.00
General Health Perception	36.52±15.25	.00-80.00
Vitality	40.03±14.50	5.00 -75.00
Social Functioning	56.66±25.79	.00-100.00
Mental Role Limitations	44.91±43.16	.00-100.00
Mental Health	50.77±96.00	8.00-96.00
Summarized Health Values		
Mental Health Status-MHS	35.11±8.40	13.80-57.69
Physical Health Status-PHS	39.77±11.31	21.78-66.31
Total Menopausal Symptoms	28.15±4.65	4.00-44.00

Table 3. Frequencies of menopausal symptoms

	None n(%)	Mild n(%)	Moderate n(%)	Severe n(%)	Very severe n(%)
1. Hot flushes, sweatings	4 (1.5)	10 (3.9)	30 (11.6)	100 (38.6)	115 (44.4)
2.Heart Disorders	73 (28.2)	41 (15.8)	62 (23.9)	40 (15.5)	43 (16.6)
3.Sleeping Problems	15 (5.8)	19 (7.3)	56 (21.6)	92 (35.5)	77 (29.7)
4.Malaise	52 (20.1)	34 (13.1)	51 (19.7)	58 (22.4)	64 (24.7)
5.Nervousness	58 (22.4)	28 (10.8)	36 (13.9)	69 (26.6)	68 (26.3)
6.Anxiety/ worry	78 (30.1)	8 (3.1)	33 (12.7)	74 (28.6)	66 (25.5)
7.Physical and mental fatigue	18 (6.9)	17 (6.6)	60 (23.2)	91 (35.1)	73 (28.2)
8.Sexual Problems	102 (39.4)	48 (18.5)	76 (29.3)	25 (9.7)	8 (3.1)
9.Urinary Problems	80 (30.9)	31 (12.0)	51 (19.7)	48 (18.5)	49 (18.9)
10.Vaginal Dryness	87 (33.6)	26 (10.0)	46 (17.8)	55 (21.2)	45 (17.4)
11.Joint and Muscle Problems	4 (1.5)	3 (1.2)	42 (16.2)	114 (44.0)	96 (37.1)

There were statistically significant relationships between using any mind-body technique as a CAM method and physical functioning (r = 0.291), physical role limitations (r = 0.159), and MHS (r = 0.177) ($p < 0.05$). There was also a statistically significant positive relationship between using any method as other CAM methods and physical functioning (r = 0.265), physical role limitations (r = 0.160), and MHS (r = 0.155) ($p < 0.05$) (Table 4). Multicollinearity was not detected between the independent variables.

Table 4. The relationship between used CAM methods and life quality and menopausal symptoms in the postmenopausal women

Variables[c]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.Herbal treatments	1														
2.Nutritions-vitamins-minerals therapy	.928[b]	1													
3. Mind-body techniques	.836[b]	.845[b]	1												
4.Other methods	.957[b]	.928[b]	.856[b]	1											
5.Physical functioning	.261[b]	.235[b]	.291[b]	.265[b]	1										
6.Physical role limitations	.171[b]	.119[a]	.159[a]	.160[a]	.667[b]	1									
7.Pain	-.022	-.030	.000	-.047	.446[b]	.570[b]	1								
8.General health perception	-.026	-.024	.020	-.023	.513[b]	.497[b]	.621[b]	1							
9.Vitality	.052	.048	.111	.068	.440[b]	.486[b]	.582[b]	.530[b]	1						
10. Social functioning	.013	.007	-.030	-.022	.293[b]	.415[b]	.757[b]	.478[b]	.463[b]	1					
11. Mental role limitations	.126[a]	.100	.115	.112	.467[b]	.705[b]	.554[b]	.353[b]	.445[b]	.490[b]	1				
12. Mental health	.020	.030	.045	-.006	.289[b]	.421[b]	.710[b]	.384[b]	.647[b]	.750[b]	.528[b]	1			
13. PHS	.014	.016	.012	-.011	.207[b]	.448[b]	.691[b]	.360[b]	.630[b]	.800[b]	.745[b]	.912[b]	1		
14. MHS	.153[a]	.117	.177[b]	.155[a]	.869[b]	.789[b]	.604[b]	.717[b]	.457[b]	.337[b]	.386[b]	.217[b]	.140[a]	1	
15. Menopausal symptoms	.048	.046	.009	.068	-.306[b]	-.407[b]	-.719[b]	-.392[b]	-.545[b]	-.713[b]	-.497[b]	-.859[b]	-.795[b]	-.275[b]	1

[a]p<.05, [b]p<.01, [c]Pearson's correlation analysis was applied as a parametric test.

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Multiple regression analysis was performed to determine the contribution of CAM methods associated with physical functioning and physical role limitations in postmenopausal women, which are the sub-dimensions of quality of life. Separate models were established for the physical functioning and physical role limitations in postmenopausal women. The individual regression models for physical functioning and the physical role limitations, the sub-dimensions of the quality of life, were statistically significant ($p< 0.05$). The mind-body techniques ($\beta = 0.273$; $p 0<.05$) applied for physical functioning, which is the sub-dimension of quality of life, were found to be statistically significant predictors. Nutritions-vitamins-minerals therapies ($\beta = -.359$; $p <.05$) were found to be statistically significant predictors for physical role limitations (Table 5).

Table 5. Life quality predictors in postmenopausal women

	Physical Functioning[a]			Physical Role Limitations[a]		
	Beta	**T**	**p**	**Beta**	**T**	**p**
Herbal Therapies	.135	.610	.542	.363	1.603	.110
Nutritions-Vitamins-Minerals Therapies	-.217	-1.221	.223	-.359	-1.974	.049
Mind-Body Techniques	.273	2.275	.024	.127	1.034	.302
Other Methods	.103	.451	.652	.036	.155	.877

[a]The established regression model for Physical functioning and Physical role limitations was statistically significant $p<.05$. Herbal therapy, nutritions-vitamins-minerals therapies, mind-body techniques and other methods were taken as dummy variables.

Although there was a significant relationship between receiving CAM methods as herbal treatment, nutritions-vitamins-minerals supplementation, and other methods, and physical functioning, according to Pearson's correlation analysis, the regression model was not significant. Similarly, there was a significant relationship between mental health status (MHS) and receiving herbal treatment as a CAM method, mind-body techniques, and other methods according to Pearson's correlation analysis, the regression model was not found to be significant.

DISCUSSION

The main findings of this study are that nutrition, vitamins, and minerals treatment are significant predictors of physical role limitations, which is a sub-dimension of quality of life in postmenopausal women, and mind-body techniques applied for physical functioning are also significant predictors.

According to our knowledge, this article is the first one on this subject. It provides valuable data on the use of CAM methods by women in postmenopausal periods in a province in the southeastern part of Türkiye and the effects of menopausal symptoms and life quality.

Due to the side effects and adverse effects of HT, the investigation of new non-hormone therapies for alleviating menopausal symptoms has been brought to the agenda.[11-14,26] One of these is CAM methods. It is stated that women in the menopausal period use CAM methods because they believe that CAM methods and products are natural and safe, can relieve symptoms and maintain overall health and have not adverse or side effect.[27] In this study, more than half of the women in the postmenopausal period stated that they were relieved psychologically, and their complaints decreased and disappeared after using CAM methods.

CAM usage rates vary in the studies conducted in different countries.[5,13,18] In a 6-year follow-up study conducted with different ethnic groups in the USA, approximately 80% of the participants used a CAM method in any period during entering menopause. In the same study, 38.77% of the African-Americans, 57.61% of the whites, 46% of the Chinese individuals, 20.14% of the Hispanics, and 64.29% of the Japanese individuals used at least one CAM method.[28] In our study, three-quarters of the women were using CAM methods. Different cultural characteristics may affect the use of CAM methods as well as medical treatments.

Women, who generally prefer treatment methods aligned with their cultural practices, often engage in acupuncture, yoga, relaxation exercises, meditation, exercise, and homeopathy. They may also use traditional Chinese medicines, natural estrogen sources, diet, vitamin, and mineral supplements.[29]

In this study, nutritions-vitamins-minerals therapies were found to be a significant predictor for physical role limitations, which is the sub-dimension of the quality of life in postmenopausal women. As the use

of nutritions-vitamins-minerals therapies as a CAM method increased in the postmenopausal period, the physical role limitations subdimension of the life quality decreased. In a study conducted in China, it was determined that the use of Chinese herbal medicine granules increased the quality of life in menopausal women, especially by alleviating vasomotor symptoms.[19] In a randomized controlled study, 12-week traditional treatment with Chinese medicine and acupuncture led to a significant decrease in the severity of hot flashes in postmenopausal women.[20] In a study conducted in London (UK), it was determined that there was an increase in the quality of life of menopausal women when Chinese herbal medicines were applied.[30] In a study conducted with women with breast cancer, vitamin E was found to have only a marginal effect on their vasomotor symptoms.[31] It was shown that daily use of 50 mg of soy isoflavone not only reduced the number and severity of hot flashes in perimenopausal women but was also safe for endometrial and breast tissue.[32] In another study, it was determined that soy isoflavone supplementation did not provide any benefit for the quality of life in postmenopausal women.[33] In a randomized controlled study, Femal, a pollen extract, was very effective in reducing hot flashes and some other menopausal symptoms.[26] In a study conducted with perimenopausal and postmenopausal women, it was found that a 12-week omega-3 treatment did not improve VMS frequency and discomfort, sleeping quality, or mood compared to a placebo.[34] In contrast, another study on omega-3 supplementation study had supporting findings for the positive effects of this treatment on VMS.[35] A study conducted to determine the effectiveness of 3 non-hormonal treatments in improving life quality in menopausal women with VMS revealed that yoga slightly improved the quality of life in them while exercise and omega-3 supplements did not improve.[36] Some studies show that nutrition-vitamins-minerals supplements positively affect menopausal symptoms and quality of life, but some studies also showed no effect on them. In our study, nutrition, vitamins, and mineral supplementation negatively affected the quality of life. This negativity may be due to factors such as the low level of education and socioeconomic status of the women living in the region, the absence of perception related to this method, the differences in how and how often they use the method, the effect of the memory factor as the data were collected retrospectively, the intense menopausal symptoms of the women, the different reasons affecting the quality of life.

This study found that mind-body techniques were a significant predictor for physical functioning, which is the sub-dimension of quality of life in postmenopausal women. As the rate of use of mind-body techniques as a CAM method increased, physical functioning in the quality of life increased. A systematic review, which was conducted to evaluate the available evidence to date for the effectiveness of different mind-body therapies to relieve hot flashes and night sweats in healthy menopausal women and breast cancer survivors, concluded that the interventions involving cognitive behavioral therapy as well as breathing and relaxation techniques may be beneficial to alleviate vasomotor symptoms.[37] In a study conducted in India, it was stated that menopausal women's quality of life has been greatly improved with 18 weeks of yoga practice, including breathing exercises and meditation.[9] In another study, health life quality for vasomotor symptoms, the quality of sleep and memory inceased in the postmenopausal women who underwent relaxation techniques for 12 weeks, compared to the control group.[38] A study reported that eight weeks of meditation training improved postmenopausal women's sleep quality, quality of life, attention levels, and vasomotor symptoms.[39]

In a study conducted in Türkiye, it was stated that physical activity may play an essential role for alleviating the symptoms of menopause.[1] In a study conducted in the USA, it was observed that the women who stated that they exercised more frequently experienced menopausal symptoms.[40] In a study conducted to determine the effects of lavender aromatherapy on sleep quality and heart rate variability in middle-aged women experiencing insomnia, it was emphasized that there was a significant improvement in the sleep quality of the women receiving lavender aromatherapy, but it was not found to be beneficial for heart rate variability.[41] In a study investigating the use of CAM in menopausal women in Canada, it was stated that prayer/spiritual recovery was among the most useful CAM methods.[17] A study conducted in Brazil showed that therapeutic massage improved anxiety, depression, quality of life, and insomnia in postmenopausal women.[42] Upon reviewing the available evidence, we can conclude that health promotion programs focused on mind-body

techniques may improve menopausal symptoms and enhance quality of life.

This study has some limitations. First Limitation: Since this study was conducted in only one FHC region, the results of the survey can only be generalized to the postmenopausal women associated with this FHC. Second Limitation: The data was collected retrospectively, and therefore, it may not provide precise information about cause and correlation due to memory factors. Third Limitation: The last menstruation date was determined according to their statements, and therefore, it is difficult to determine whether women were in the menopausal transition period or early postmenopausal period at the time of the study. Fourth Limitation: In the study, the relationships between CAM methods and variables such as education status, income status, and employment status were not shown. Despite these limitations, we suggest that our study provided valuable data on the effects of CAM use on menopausal symptoms and quality of life. In addition, the fact that it is the first study on the subject in Türkiye constitutes the study's strength.

CONCLUSION

In this study, three out of four women preferred to use CAM to relieve menopausal symptoms. Nutritions-vitamins-minerals treatments were found to be a significant predictor for physical role limitations, which is the sub-dimension of quality of life in postmenopausal women. In addition, it was determined that mind-body techniques are a significant predictor of physical functioning. Nowadays, evidence for CAM methods is still a mixed issue, and their reliability is controversial. Therefore, it is important to identify safe and effective CAM methods to alleviate menopausal symptoms. In order to suggest that the use of CAM is beneficial in alleviating menopausal symptoms, more evidence-based studies should be conducted with larger samples. Treatments with proven reliability in the literature should be given priority. Health professionals also have important roles in informing the public about safe CAM methods.

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