RESEARCH / ARASTIRMA

The Relation of Attitudes towards Menopause of Postmenopausal and Premenopausal Women to Sexual Life and Quality of Life

Postmenopoz ve Premenopoz Dönemdeki Kadınların Menopoza İlişkin Tutumlarının Cinsel Yaşam ve Yaşam Kalitesi ile İlişkisi

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Abstract

Objective: The study examined the relation of postmenopausal and premenopausal women's attitudes towards menopause to sexual life and quality of life.

Material and Method: The sample of this descriptive study consisted of a total of 322 married women who were in the postmenopausal (n=161) and premenopausal (n=161) periods. The data were collected using the Personal Information Form, Attitudes towards the Menopause Questionnaire (ATMQ), Arizona Sexual Experiences Scale (ASEX), and Utian Quality of Life (UQOL) Scale.

Results: There was a statistically significant positive relationship between postmenopausal women's ATMQ scores and emotional quality of life subscale of UQOL (r=0.450; p=0.001) with postmenopausal women's having negative relationship between ATMQ scores and occupational quality of life of UQOL (r=-0.342; p=0.001), and negative relationship between ATMQ scores and ASEX total scores (r=-0.310; p=0.001).

Conclusion: Postmenopausal women had more negative health-related quality of life and sexual quality of life. As the positive attitudes of postmenopausal women towards menopause increased, their emotional quality of life increased, and their occupational quality of life decreased, and as their positive attitudes towards menopause decreased, their sexual quality of life levels were negatively affected. It is recommended by health professionals provide to help as postmenopausal married women develop positive attitudes toward menopause, to make regular follow-ups, and to provide educational and sexual counseling.

Keywords: Attitude, menopause, sexuality, quality of life, women.

Öz

Amaç: Araştırma postmenopoz ve premenopoz dönemdeki kadınların menopoza ilişkin tutumlarının cinsel yaşam ve yaşam kalitesi ile ilişkisinin incelenmesi amacı ile yapılmıştır.

Gereç ve Yöntem: Tanımlayıcı araştırmanın örneklemini postmenopoz (n=161) ve premenepoz (n=161) dönemde olan toplam 322 evli kadın oluşturmuştur. Veriler Kişisel Bilgi Formu, Menopoza İlişkin Tutum Ölçeği (MİTÖ), Arizona Cinsel Yaşantılar Ölçeği (ACYÖ) ve Utian Yaşam Kalitesi Ölçeği (UYKÖ) ile toplanmıştır.

Bulgular: Postmenopozal kadınların MİTÖ puanları ile UYKÖ alt boyutlarından emosyonel yaşam kalitesi arasında (r=0.450; p=0.001) pozitif yönlü, meslek / iş yaşam kalitesi arasında (r=-0.342; p=0.001) negatif yönlü, MİTÖ puanları ile ACYÖ toplam (r=-0.310; p=0.001) puanları arasında negatif yönlü istatistiksel olarak anlamlı ilişki vardır.

Sonuç: Postmenopozal kadınların sağlık ile ilgili yaşam kaliteleri ve cinsel yaşam kaliteleri daha olumsuzdur. Postmenopozal kadınların menopoza ilişkin olumlu tutumları arttıkça emosyonel yaşam kalitesi düzeyleri artmakta, meslek/iş yaşam kaliteleri azalmakta, olumlu tutumları azaldıkça cinsel yaşamları olumsuz etkilenmektedir. Sağlık profesyonellerinin menopoz sonrası evli kadınların menopoza yönelik olumlu tutum geliştirmelerine yardımcı olmaları, düzenli takip, eğitim ve cinsel danışmanlık yapmaları önerilmektedir.

Anahtar Kelimeler: Tutum, menopoz, cinsellik, yaşam kalitesi, kadın.

1. Introduction

Menopause is one of the most important physiological changes experienced by women (1). Menopause, which includes biopsychosocial and cultural dimensions (2,3), refers to the end of the woman's reproductive ability and

it expresses the absence of menstruation in the last year (4). It is reported that a total of 1.2 billion women in the world will be in menopausal or postmenopausal periods by 2030 (5). According to the World Health Organization, the average age range of the beginning of natural menopause is between 45 and 55 for women worldwide

(6). Additionally, a study reported that the average age of Turkish women at menopause was 47±4.22 (7).

Physiological, psychological and cultural characteristics of each woman differ according to the society in which they live, and there can be differences in their attitudes towards menopause (2,5,8,9). Problems such as life experiences, hot flashes, cardiovascular and musculoskeletal system problems, urinary incontinence, sleep disorders, and breast and skin atrophy can cause changes in attitudes toward menopause (1,8). In addition, women's knowledge about menopause, marital status, physical activity (1), menopausal age and duration of menopause (10) can also affect menopausal attitudes. While a study conducted among Iranian women (2) showed that 17% of women developed negative attitudes towards menopause, there were some studies conducted with Chinese and German women in the literature showing that women developed positive attitudes as well as enough (3,11). In addition, in a study conducted with 160 menopausal women between the ages of 46-60, 25% of women showed a negative attitude (5).

Studies have reported that sexual dysfunction is high during the menopause period (9,12-15). In particular, biological, psychological, social and cultural factors affect sexual health (9,16). As a result of decreased estrogen production, factors such as vaginal dryness, dyspareunia, loss of libido, difficulty in arousal, decreased lubrication, breast tenderness, and clitoral atrophy may cause sexual dysfunction problems (3). In a study, it has been found that sexual activity decreases with advancing age in Turkish, Lithuanian and Iranian women (15,17,18), 73.1% of women in Bangladesh experience vaginal dryness and pain during sexual intercourse (5), and 56.4% of Turkish women have poor sexual function (19). In studies conducted in different countries, the rate of sexual dysfunction after menopause varies between 45.6% and 79.4% (18,19,20). Sexual dysfunctions lead to sexual dissatisfaction and difficulties in interpersonal relationships and seriously affect women's quality of life (21,22).

It has been found that the most affected area of life quality of postmenopausal women in Nepal is the physical area (23). Sexual problems caused by the decrease in hormones, and changes in physical, mental, social and family life may negatively affect women's quality of life (3,11,12,17-20). Nazarpour et al. (18) found a positive correlation between sexual dysfunction and quality of life among menopausal women, and it was found in another study (3) that the frequency and intensity of symptoms adversely affected women's quality of life.

Factors such as perception of sexuality, cultural background, beliefs about sexuality, attitudes, and values can affect sexual function positively or negatively during menopause (24). In Turkey, women go through menopause when their children get married and leave home and their grandchildren are born. As the age progresses, Turkish women can accept their physical changes and menopause as a natural event and period of life without feeling any tension. Today, there is no defined upper age limit for sexuality. For this reason, since the possibility of pregnancy is eliminated during menopause, women can only experience their sexuality to satisfy their desires (25). However, women in Turkish society may perceive menopause negatively as the loss of maternal role, loss of marital relationship and femininity, loss of beauty,

decrease in self-esteem, loss of physical strength, and end of sexual life (24). Since women represent femininity in Turkish society, it is expected that women who are in menopause due to their gender roles are expected to fulfill their femininity roles at home and continue their duties as a wife, mothers and at home roles (26).

Women spend about a third of their lives in the postmenopausal period (18). Therefore, it is important to understand women's attitudes towards menopause to assess their menopausal experience and to improve sexual health and quality of life, and to provide life-cycle-specific health services (1). Additionally, Ali et al. reported that menopausal women experienced psychological distress and decreased life satisfaction (27). Addressing women in premenopause and postmenopause periods in a biological, psychological, social and cultural integrity, women's having a positive attitude towards menopause, protecting and improving sexual life and quality of life of women should be one of the important goals in the field of health. For this reason, the findings can be a guide in the care, counseling, and training to be applied to women. In this context, the study was carried out to examine the relation of attitudes towards menopause of postmenopausal and premenopausal women to sexual life and quality of life.

2. Materials and Methods

2.1. Design and Participants

The sample of this descriptive study consisted of postmenopausal and premenopausal women who applied to a Family Health Center in the Eastern Anatolia region of Turkey. The region where the study was conducted is a province with the most intense winter conditions in Turkey and an agricultural economy. In the power analysis (G*Power 3.1 program) made with reference to Uçanok's (28) study (Analysis of variance of mean scores of "Attitudes toward the Menopause Ouestionnaire" was used); for α =0.05, p=0.95 power and an acceptable difference of 0.02, the sample size of the postmenopausal (n=161) and premenopausal (n=161) groups was determined as a total of 322 women. While women in the postmenopausal group consist of women who have been in menopause for at least a year, the women in the premenopausal group consist of women who have not entered menopause yet. Research data were collected between January 15, 2019 and July 15, 2019.

2.1.1. Inclusion criteria

- Being woman and married,
- Being in the postmenopausal period (having been in the menopause period for at least one year),
- Those who have started having menopausal symptoms but have not yet entered menopause,
- · Volunteering to participate in the study,
- Being able to communicate and speak Turkish

2.2. Data Collection

2.2.1. Personal Information Form: This form was prepared for postmenopausal and premenopausal women and included questions about socio-demographic characteristics such as age, occupation, education, employment, and income status (15 questions), obstetric characteristics, perception of

communication with their partners, participation in family decisions and perception of health status (four questions). In addition, the form included nine questions specific to menopause for the postmenopausal group. The form consisted of 28 questions in total for the postmenopausal group and 19 questions for the premenopausal group.

2.2.2. Attitudes toward the Menopause Questionnaire (ATMO)

The scale was developed by Uçanok (28). Two of the items in this five-point Likert-type and 20-item scale were indicates positive and 18 were indicates negative items. Positive items were scored between "strongly disagree: 0 points" and "strongly agree: 4 points", while negative items were reverse scored. The highest possible score from the overall total of the scale was 80. The cut-off point of the scale was 40 points. A high score on the scale and a high average (40 and above) score indicated more positive attitudes. In the validity and reliability study, the Cronbach Alfa coefficient for the overall total was found to be 0.86, and 0.94 in our study.

2.2.3. Arizona Sexual Experiences Scale (ASEX) The scale was developed by McGahuey et al. (29). The form used in our study included 5 questions that quantified sex drive, arousal, vaginal lubrication/penile erection, ability to reach orgasm, and satisfaction from orgasm. Each question was scored from 1 to 6, the lowest possible score from the scale was 5, and the highest score was 30. Low scores indicated strong, easy and satisfying sexual response, while high scores indicated sexual dysfunction. The validity and reliability study of the scale was performed by Soykan (30), and the cut-off point was found to be 11. In the validity and reliability study, the Cronbach Alfa coefficient was found to be 0.90 (30), and 0.92 in our study.

2.2.4. Utian Quality of Life (UQOL) The scale was developed by Utian et al. (31) to evaluate the effect of menopause on quality of life. The validity and reliability were conducted by Abay (32). This five-point Likert-type scale consisted of 23 items and was evaluated between "strongly disagree: 1 point" and "strongly agree: 5 points". The scale reflected four components of QOL: occupational QOL, health QOL, emotional QOL, and sexual QOL. The lowest possible score from the overall total of the scale was 23, and the highest score was 115. The increase in the total and subscale scores of the scale indicated that the quality of life increased. In the validity and reliability study, the Cronbach Alfa coefficient was found to be 0.88, and 0.65 in our study.

2.3. Procedure

Written informed consents were obtained from women who met the research criteria and volunteered to participate in the study. Then, the Personal Information Form, ATMQ, ASEX, and UQOL were filled by the researchers by face-to-face interview method. The interviews were held when the women applied to the Family Health Center, in a quiet environment in a separate room where they could feel comfortable, and it took 15-20 minutes to fill out the forms.

2.4. Statistical Analysis

The data were evaluated using the SPSS 23.0 package program. Whether it showed a normal distribution was determined by the Kolmogorov-smirnov test. The number and percentage distribution were used to evaluate the socio-demographic characteristics, and the chi-square test was used to compare the socio-demographic

characteristics of the two groups. T-test was used in independent groups in the comparisons between the scale scores of the two groups, and the relationship between the variables was examined with Pearson correlation analysis. The results were evaluated with effect size at a 95% confidence interval and a significance level of p < 0.05.

2.5. Ethical Aspect of Research

Cumhuriyet University Non-interventional Clinical Research Ethics Committee approval (decision no: 2018-12/27; date: 05.12.2018) and written permission were obtained from the institution where the study would be conducted. The women were informed that their names were not written on the forms, that the findings would only be used within the scope of the research, and that they could withdraw from the study at any time. The research was conducted according to the Principles of the Helsinki Declaration.

3. Results

3.1. Socio-demographic Characteristics

No statistically significant difference was found between the socio-demographic characteristics of postmenopausal and premenopausal women (p>0.05), and their characteristics were found to be similar (Table 1).

Table 1. Socio-demographic characteristics of postmenopausal and premenopausal women (n=322)

Characteristics		Postmenopause	Premenopause	χ^2/p
		(n=161)	(n=161)	
Mean Age		55.45±7.07	45.98±4.43	•
		(min-max: 41-74)	(min-max: 39-62)	
		n (%)	n (%)	
Educational status	Literate	87 (54.0)	67 (41.6)	6.502 / 0.090
	Primary school	59 (36.6)	72 (44.7)	
	Secondary school and high	15 (9.4)	22 (13.7)	
Employment status	Working	154 (95.7)	150 (93.2)	0.942 / 0.332
	Not working	7 (4.3)	11 (6.8)	
Perception of income	Bad	22 (13.7)	19 (11.8)	0.287 / 0.866
	Moderate	108 (67.1)	109 (67.7)	
	Good	31 (19.2)	33 (20.5)	
Communication with the	Good	103 (64.0)	100 (62.1)	0.120 / 0.729
partner*	Moderate	58 (36.0)	61 (37.9)	
Health status*	Good	50 (31.1)	57 (35.4)	0.686 / 0.408
	Moderate	111 (68.9)	104 (64.6)	
Marriage age	13–18	91 (56.5)	75 (46.6)	3.959 / 0.138
	19–22	52 (32.3)	69 (42.9)	
	23 and above	18 (11.2)	17 (10.6)	

 $[\]chi^2:$ Chi-square test; *Communication with the partner and perception of health status were grouped as "good, moderate, and bad", and no one stated as bad.

3.2. Menopausal Characteristics

The mean menopausal age of postmenopausal women was 47.04±6.07 (range: 23-63). 54% of women stated that menopause was a natural process. 41.6% of women stated

that they experienced menopausal-specific complaints, and 80.6% of them stated that these complaints were hot flashes, 14.9% of them physical problems, and 4.5% mental problems.

3.3. ATMQ, UQOL and ASEX Related Results

There was no statistically significant difference between the postmenopausal and premenopausal groups in terms of ATMQ mean scores (p>0.05, Table 2). 40.9% (n=66) of postmenopausal women and 40.3% (n=65) of premenopausal women had negative attitudes towards menopause.

Table 2. Attitudes toward the Menopause Questionnaire scores of postmenopausal and premenopausal women (n=322)

	Postmenopause (n=161)		Premenop	t/p	
	Min-Max	M±SD	Min-Max	M±SD	
ATMQ total	8-73	38.77±14.42	5-72	39.71±14.33	-0.585 / 0.559

t: t-test in independent groups; ATMQ: Attitudes Toward the Menopause Ouestionnaire

A statistically significant difference was found between the postmenopausal and premenopausal groups in terms of the mean scores of the health-related quality of life subscale of the UQOL scale, (p<0.05), and the health-related quality of life of postmenopausal women was lower (Table 3).

Table 3. Utian Quality of Life scale total and subscale scores of postmenopausal and premenopausal women (n=322)

	Postmenopause (n=161)			Premenopause (n=161)	
	Min- Max	M±SD	Min- Max	M±SD	-
UQOL total	55-99	74.45±8.03	54-107	75.57±8.90	-1.183 / 0.238
UQOL Subscales	i				
Emotional quality of life	12-28	18.57±3.09	12-30	18.44±3.57	0.350 / 0.727
Sexual quality of life	5-15	9.75±1.59	6-15	9.74±1.71	0.067 / 0.946
Occupational quality of life	7-35	24.20±5.77	9-35	24.22±5.62	-0.039 / 0.969
Health-related quality of life	15-35	21.91±2.72	16-35	23.15±2.99	-3.873 / 0.001*

*p<0.05; t: t test in independent groups; UQOL: Utian Quality of Life Scale

A statistically significant difference was found between the postmenopausal and premenopausal groups in terms of sex drive, arousal, vaginal lubrication/penile erection, ability to reach orgasm, satisfaction from orgasm subscales and total mean scores of ASEX (p<0.05). It was found that the sexual response was not strong, easy, and satisfactory in the postmenopausal group, with more sexual dysfunction (Table 4).

A very weak negative statistically significant relationship was found between ATMQ scores and sex drive scores of postmenopausal women (r=-0.189; p=0.017), and a weak negative relationship between ATMQ scores and arousal (r=-0.276; p=0.001), vaginal lubrication/penile erection (r=-0.264; p=0.001), ability to reach orgasm (r=-0.338; p=0.001), satisfaction from orgasm (r=-0.315; p=0.001) subscales, ASEX total (r=-0.310; p=0.001) scores association. As the positive attitudes of postmenopausal women towards menopause decreased, sex drive, arousal, vaginal lubrication/penile erection, ability to reach orgasm, satisfaction from orgasm, and general sexual dysfunction

levels increased (Table 4).

Table 4. Arizona Sexual Experiences Scale scores of postmenopausal and premenopausal women (n=322)

	Menopausal (n=161)		Non-M (n=161	lenopausal I)		
	Min- Max	M±SD	Min- Max	M±SD	t/p	
Sex drive	1-6	4.12±1.18	1-6	3.62±1.05	3.962 / 0.001*	
Arousal	2-6	3.96±1.14	1-6	3.60±1.02	2.969 / 0.003*	
Vaginal lubrication/ penile erection	1-6	4.01±1.16	1-6	3.68±0.92	2.810 / 0.005*	
Ability to reach orgasm	2-6	3.96±1.19	1-6	3.71±0.93	2.126 / 0.034*	
Satisfaction from orgasm	1-6	3.98±1.18	1-6	3.60±1.02	3.073 / 0.002*	
ASEX total	10-30	20.06±5.24	8-30	18.24±4.27	3.411 / 0.001*	

*p<0.05; t: t test in independent groups; ASEX: Arizona Sexual Experiences Scale

A moderate positive statistically significant relationship was found between ATMQ scores and emotional quality of life of UQOL scores of postmenopausal women (r= 0.450; p=0.001), and a weak negative statistically significant relationship was found between ATMQ scores and occupational quality of life scores of postmenopausal women (r=-0.342; p=0.001). As postmenopausal women's positive attitudes towards menopause increased, their emotional quality of life levels increased, and their occupational quality of life scores decreased (Table 5).

In addition, a weak positive statistically significant relationship was found between the ATMQ scores and the emotional quality of life scores of UQOL of premenopausal women (r=0.364; p=0.001). As the positive attitudes of premenopausal women towards menopause increased, their emotional quality of life increased as well as enough (Table 5).

Table 5. The Relationship between Attitudes toward the Menopause Questionnaire and Utian Quality of Life Scale, Arizona Sexual Experiences Scale of Postmenopausal and Premenopausal Women (n=322)

Variables	ATMQ					
	Menopausal (n=161)		Non-Menopausal (n=161)			
UQOL and the subscales	r	р	r	р		
Emotional quality of life	0.450**	0.001	0.364**	0.001		
Sexual quality of life	-0.038	0.632	0.107	0.179		
Occupational quality of life	-0.342**	0.001	-0.119	0.132		
Health-related quality of life	-0.077	0.330	0.087	0.272		
UQOL total	-0.106	0.180	0.121	0.128		
ASEX and the subscales						
Sex drive	-0.189*	0.017	-0.149	0.060		
Arousal	-0.276**	0.001	-0.065	0.416		
Vaginal lubrication/penile erection	-0.264**	0.001	-0.101	0.204		
Ability to reach orgasm	-0.338**	0.001	-0.135	0.088		
Satisfaction from orgasm	-0.315**	0.001	-0.078	0.324		
ASEX total	-0.310**	0.001	-0.122	0.122		

*Correlation is significant at the 0.05 level. **Correlation is significant at the 0.01

level. r: Pearson Correlation Analysis; ATMQ: Attitudes Toward the Menopause Questionnaire; UQOL: Utian Quality of Life Scale; ASEX = Arizona Sexual Experiences Scale

4. Discussion

The mean scores of the women in both groups in terms of attitudes were close to each other and nearly half of them had negative attitudes (postmenopause: 40.9%; premenopause: 40.3%). This result can be explained by the cultural characteristics of the women included in the sample group. Because the roles of women in society can determine the conditions for developing attitudes towards menopause (8). The region where the study was conducted which is located in the Eastern Anatolia region of Turkey. The patriarchal family structure prevails in the region, women think that they have lost their feminine role and may perceive themselves as useless. Negative attitudes can be experienced in this region because the roles of femininity are important and menopause is perceived as the loss of the ability to give birth. In addition, menopause is perceived as an indicator of old age and death for some women and can be associated with loss of energy, loss of feminine attractiveness, and decreased physical abilities (11). A study found by whether women were in menopause or pre-menopause did not affect their attitudes towards menopause (33). This supports our research finding. Some studies in the literature have also revealed that menopausal women have negative attitudes (5,13).

In a study conducted with non-menopausal Nigerian women over the age of 40, it was found that 23% of women had positive attitudes, 21.4% had negative attitudes, and younger people showed more negative attitudes (4). Similarly, in another study, the finding that premenopausal Mexican women had negative attitudes supports our findings (34). In other studies conducted internationally, the finding that women had more positive attitudes towards menopause and aging (3,8-11) differs from our study finding. These differences were explained by the fact that the cultural characteristics of the women included in the sample group were different.

Menopausal women often experience complaints such as insomnia, fatigue, hot flashes, night sweats, joint pain, decreased sexual interest and intercourse (27,35). Around half of working all women in Turkey are in the agricultural sector (26). In the Eastern Anatolia region, where the research was conducted, women mostly work in agriculture and earn their living in this way. For this reason, women are expected to fulfill their feminine roles and sexual lives in the same way, regardless of their quality of life. Health-related quality of life may be low due to the symptoms caused by menopause and the difficult living conditions of women. In the study of Koirala et al. (23), the most common menopausal symptom among postmenopausal women was decreased physical strength (82.70%), and the physical area was the most affected area of quality of life, which is consistent with our findings. Other studies reporting that menopausal women had negative quality of life supports our findings (3,22,35-38).

In one study (35), it was reported that the psychological quality of life was more negative in postmenopausal women than in premenopausal women, although it was not statistically significant, and in another study (27), psychological distress was more common among menopausal women. Li et al. (3) found that women with positive attitudes tended to have a higher quality of life, which is consistent with our findings. In a study at the national level, similar to our findings, it was found that the quality of life in the psychosocial area decreased as the negative attitude increased (38). In addition, other studies in the literature reported that the emotional quality of life of postmenopausal women was poor and that menopause negatively affected the quality of life (36,37). However, in our study, as the positive attitudes of postmenopausal women towards menopause increased, their occupational quality of life decreased. This can be explained by the fact that women who are in menopause retire at the time they enter menopause (the mean age at menopause is 47 in our study) or that they do not have any expectations for their profession/career. As in our study, in a study conducted with 405 postmenopausal Iranian (21) and Lebanese women (36) between the ages of 40-60, it was found that the quality of life in women changed with menopause. However, women in Turkish society continue their daily lives by accepting that their lives have changed due to their roles, and they may not need health professionals due to the change in their quality of life.

The first noticeable change associated with menopause is the reduction of vaginal wetting that occurs during arousal (21). In a study, 31.4% of menopausal women stated that they experienced vaginal dryness, and 24% stated that they were not pleased at all or almost not pleased with their sexual satisfaction (12). In addition, other national and international studies also found sexual dysfunction in menopausal women is consistent with our findings (14-16,18,19,21). In some studies, it was found that postmenopausal women had a significantly lower sexual quality of life than premenopausal women (3), women who were younger (45-50 years) had better sexual functions (17) and sexual function worsened with the advancing age (20). In the study of Marvan (9), the pain experienced during the sexual intercourse was higher among postmenopausal women, while the level of "desire", "arousal" and "lubrication" was found to be lower, which supports our findings. In the study of Lo and Kok (21), 79.3% of women who went through menopause naturally experienced sexual dysfunction and the findings obtained from other studies support our study findings. These findings emphasize that sexual life in menopause should be addressed. However, it is also reported that women in menopause do not receive counseling from a health institution due to cultural factors, embarrassment, and family and spouse relations, though their sexual and social lives are adversely affected (24).

An important factor affecting women's sexual quality of life during menopause, a period in which fertility declines and ends, is the women's attitudes towards this period (39). In Turkish culture, the social and economic existence of women is associated with childbearing, and menopause is synonymous with the loss of fertility. Therefore, the end of the reproductive function means the completion of the sexual act. In addition, women may be ashamed of their sexuality and stay away from sex, as children get married and grandchildren are born in the period after menopause in Turkey. Thus, social-cultural characteristics specific to

the period rather than biological factors may play a role in the formation of attitudes towards menopause and sexual function problems (25). Studies have shown that women have a negative attitude towards menopause, which in turn affects their sexual quality of life negatively (13,39). In studies, the finding that severe symptoms of menopause were associated with decreased sexual satisfaction and sexual dysfunction supports our finding (16,19). In addition, Marvan et al., (9) found that positive attitudes were associated with better sexual function, and negative attitudes were associated with worse sexual function, which is consistent with our study findings.

5. Conclusion

Postmenopausal women had lower health-related quality of life and more sexual dysfunctions. In addition, as the positive attitudes of postmenopausal women towards menopause increased, their emotional quality of life increased, as the positive attitudes towards menopause decreased, sexual life was negatively affected. In line with these results, it is recommended by health professionals provide to help postmenopausal married women develop positive attitudes towards menopause, address their physical health, make regular follow-ups, provide support, and provide educational and sexual counseling. It is recommended that women in the premenopausal period should be given information about menopause and sexual life during menopause, that group training and individual counseling should be provided to improve the quality of life, and that early follow-up should be carried out starting from the pre-menopausal period. It is also recommended that both premenopausal and menopausal women, especially those living in the Eastern Anatolia Region, should be addressed and monitored by health professionals in terms of menopause-related sexual life and quality of life. It is also recommended to conduct studies with different sample groups in different regions of Turkey.

6. Contribution to the Field

This study emphasizes the sexual life and quality of life of women in menopause, one of the important periods in women's lives. It reveals the difference in the sexual lives and quality of life of postmenopausal women compared to premenopausal women. It may also guide in future studies on the subject.

Limitations and Strengths

The findings obtained from this study include the women in the sample group (Women in the Eastern Anatolia Region of Turkey) in which the research was conducted and cannot be generalized to all postmenopausal and premenopausal women. Another limitation of this study is its descriptive type. In addition, the low Cronbach Alfa value in the Utian Quality of Life Scale is another limitation. Comparing two groups in the study is a strong aspect of the research.

Conflict of interest

There is no conflict of interest regarding any person and/or institution.

Authorship Contribution

Concept: \$PS, \$EP; Design: \$PS, \$EP; Supervision: \$EP; Funding: \$PS; Materials: \$PS; Data Collection/

Processing: \$PS; Analysis/Interpretation: \$EP; Literature Review: \$PS, \$EP; Manuscript Writing: \$PS, \$EP; Critical Review: \$EP.

References

- **1.** Akhtar N, Bala K, Gupt RK. Attitudes towards menopause and its relationship with sociodemographic factors among postmenopausal women living in a rural area of Jamm: A cross-sectional study. Int J Community Med Public Health. 2020; 7(1): 177–182. https://doi.org/10.18203/2394-6040.ijcmph20195850
- **2.** Bahri N, Roudsari RL, Tohidinik HR, Sadeghi R. Attitudes towards menopause among Iranian women: A systematic review and meta-analysis. Iran Red Crescent Med J. 2016; 18(10): e31012. https://doi.org/10.5812/ircmj.31012.
- 3. Li S, Ho SC, Sham A. Relationship between menopause status, attitude toward menopause, and quality of life in Chinese midlife women in Hong Kong. Menopause. 2016; 23(1): 67–73. https://doi.org/10.1097/GME.0000000000000566
- **4.** Bello FA, Daramola OO. Attitude to the menopause and sex amongst middle-aged women in a Family Medicine Clinic in Ibadan, Nigeria. Obstet Gynecol Int. 2016; 2016: 2031056. https://doi.org/10.1155/2016/2031056
- **5.** Harun MGD, Salema U, Chowdhury A, Haque MI, Kafi MAH, Shahajahan M, et al. Knowledge and attitudes associated with menopause among women aged 45 to 60 years: A pilot study among rural and urban women in Bangladesh. Menopause. 2020; 27(6): 648–657. https://doi.org/10.1097/GME.00000000000001525
- **6.** World Health Organization. Menopause. 2022. [cited 2004 May 12]. Available from https://www.who.int/news-room/fact sheets/detail/menopause#:~:text=The%20regularity %20and%20length%20 of,55%20years%20for%20women%20worldwide
- 7. Irmak Vural P, Balcı Yangın H. Perception of menopause: The Turkish and German women's comparison. Gümüşhane University Journal of Health Sciences. 2016; 5(3): 7–15.
- **8.** Dasgupta D, Ray S. Is menopausal status related to women's attitudes toward menopause and aging? Women & Health. 2017; 57 (3): 311–328. https://doi.org/10.1080/03630242.2016.1160965
- **9.** Marvan MaL, Espinosa-Hernandez G, Martinez-Garduno MD, Jasso K. Attitudes toward menopause, sexual function and depressive symptoms in Mexican women. J Psychosom Obstet Gynaecol. 2018; 39(2):121–127. https://doi.org/10.1080/0167482X.2017.1308350
- **10.** Dasgupta D, Ray S. Attitude toward menopause and aging: A study on postmenopausal women of West Bengal. J Women Aging. 2013; 25(1): 66–79. https://doi.org/10.1080/08952841.2012.720203
- **11.** Gregorin J, Pajk JR. Women's experience and attitudes towards menopause and health: Descriptive research. Slovenian Nursing Review. 2016; 50(4): 264–279. https://doi.org/10.14528/snr.2016.50.4.119
- **12.** Cornellana MJ, Harvey X, Carballo A, Khartchenko E, Llaneza P, Palacios S, et al. Sexual health in Spanish postmenopausal women presenting at outpatient clinics. Climacteric. 2017; 20(2): 164–170. https://doi.org/10.1080/13697137.2017.1282453
- **13.** Gozuyesil E, Avcıbay Vurgec B, Gokyildiz Surucu Onat Koroglu C. The relationship between the attitudes towards menopause and sexual functions among women in the climacteric period, Turkey. Journal of Midwifery and Reproductive Health. 2021; 9(3): 2889–2898. https://doi.org/10.22038/JMRH.2021.57544.1698
- **14.** Gozuyesil E, Gokyildiz Surucu S, Alan S. Sexual function and quality-of-life-related problems during the menopausal period. J Health Psychol. 2018; 23(14): 1769–1780. https://doi.org/10.1177/1359105317742194
- **15.** Yanikkerem E, Goker A, Cakır O, Esmeray N. Effects of physical and depressive symptoms on the sexual life of Turkish women in the climacteric period. Climacteric. 2018; 21(2): 160–166. https://doi.org/10.1080/13697137.2017.1417374

- **16.** Pérez-Herrezuelo I, Aibar-Almazán A, Martínez-Amat A, Fábrega-Cuadros R, Díaz-Mohedo E, Wangensteen R, et al. Female sexual function and its association with the severity of menopause-related symptoms. Int J Environ Res Public Health. 2020; 17(19): 7235. https://doi.org/10.3390/ijerph17197235.
- **17.** Jonusiene G, Zilaitiene B, Adomaitiene V, Aniuliene R, Bancroft J. Sexual function, mood and menopause symptoms in Lithuanian postmenopausal women. Climacteric. 2013; 16: 185–193. https://doi.org/10.3109/13697137.2012.682746
- **18.** Nazarpour S, Simbar M, Tehrani FR, Majd HA. Quality of life and sexual function in postmenopausal women. J Women Aging. 2018; 30(4): 299–309. https://doi.org/10.1080/08952841.2017.1395539
- **19.** Andac T, Aslan E. Sexual life of women in the climacterium: A community-based study. Health Care Women Int. 2017; 38(12): 1344–1355. https://doi.org/10.1080/07399332.2017.1352588
- **20.** Ornat L, Martínez-Dearth R, Muño A, Franco P, Alonso B, Tajada M, et al. Sexual function, satisfaction with life and menopausal symptoms in middle-aged women. Maturitas. 2013; 75: 261–269. https://doi.org/10.1016/j.maturitas.2013.04.007
- **21.** Lo SS-T, Kok W-M. Sexuality of Chinese women around menopause. Maturitas. 2013; 74: 190–195. https://doi.org/10.1016/j.maturitas.2012.11.006
- **22.** Nazarpour S, Simbar M, Tehrani FR, Majd HA. Factors associated with quality of life of postmenopausal women living in Iran. BMC Womens Health. 2020; 20(1): 104. https://doi.org/10.1186/s12905-020-00960-4
- **23.** Koirala D, Thapa N, Shrestha S. Quality of life of postmenopausal women of Kaski district. Nep J Obstet Gynecol. 2020; 15(30): 43–49. https://doi.org/10.3126/njog.v15i1.29340
- **24.** Demirel Bozkurt O, Sevil U. Menopause and sexual life. Celal Bayar University, Journal of Health Sciences Institute. 2016; 3(4): 497–503.
- **25.** Varma GS, Karadağ F, Oğuzhanoğlu NK, Özdel O, Kökten S. Menopause: The relationship between climacteric symptoms and sexual satisfaction. New Symposium Journal. 2006; 44(4): 183–184.
- **26.** Bingol O. The fact of gender and womanhood in Turkey. KMU Journal of Social and Economic Studies. 2014; 16: 108–114.
- **27.** Ali AM, Ahmed AH, Smail L. Psychological climacteric symptoms and attitudes toward menopause among Emirati women. Int. J. Environ. Res. Public Health. 2020; 17: 5028. https://doi.org/10.3390/ijerph17145028
- **28.** Uçanok Z. Examination of menopausal symptoms, attitudes and perspectives on life in women of different age groups [dissertation on the internet]. Ankara: Hacettepe University; 1994. [cited 2018 November 10]. Available from: https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp
- **29.** McGahuey CA, Gelenberg AJ, Laukes CA, Moreno FA, Delgado PL, McKnight KM, et al. The Arizona Sexual Experience Scale (ASEX): Reliability and Validity. J Sex Marital Ther. 2000; 26(1): 25–40. https://doi.org/10.1080/009262300278623
- **30.** Soykan A. The reliability and validity of Arizona Sexual Experiences Scale in Turkish ESRD patients undergoing hemodialysis. Int J Impot Res. 2004; 16(6): 531–534. https://doi.org/10.1038/sj.ijir.3901249
- **31.** Utian HW, Janata WJ, Kingsberg AS, Schluchter M, Hamilton CJ. The Utian Quality of Life (UQOL) Scale: Development and Validation of an Instrument to Quantify Quality of life through and beyond menopause. Menopause. 2002; 9(6): 402–410.
- **32.** Abay H. Validation and Reliability of Utian Quality of Life Scale [dissertation on the internet]. Ankara: Yıldırım Beyazıt University; 2013. [cited 2018 November 15]. Available from: https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp
- **33.** Erbil N, Boyacı S, Kurt I, Akdogan Y, Kaya I. A Turkish study on menarche and menstrual experiences and their effects on attitudes towards menopause. Int J Nurs Pract. 2012; 18(2): 107–116. https://doi.org/10.1111/j.1440-172X.2012.02009.x

- **34.** Marvan Ma, Castillo-Lo´pez RL, Arroyo L. Mexican beliefs and attitudes toward menopause and menopausal-related symptoms. J Psychosom Obstet Gynaecol. 2013; 34(1): 39–45. https://doi.org/10.3 109/0167482X.2012.761194
- **35.** AlDughaither A, AlMutairy H, AlAteeq M. Menopausal symptoms and quality of life among Saudi women visiting primary care clinics in Riyadh, Saudi Arabia. Int J Womens Health. 2015; 29(7): 645–653. https://doi.org/org/10.2147/JJWH.S84709
- **36.** El Hajj A, Wardy N, Haidar S, Bourgi D, El Haddad M, El Chammas D, et al. Menopausal symptoms, physical activity level and quality of life of women living in the Mediterranean region. PLoS ONE. 2020; 15(3): e0230515. https://doi.org/org/10.1371/journal.pone.0230515
- **37.** Retno Hartanti SST, Satiyem SST, Wiyasa IWA, M.Kes N, Suryana BPP. Menopause-specific quality of life among Indonesian women: A descriptive study. EAS Journal of Nursing and Midwifery. 2020; 2(4): 280–284. https://doi.org/10.36349/EASJNM.2020.v02i04.012
- **38.** Gümüsay M, Erbil N. The effect of attitudes towards menopause on menopause specific quality of life of women. Ordu University J Nurs Stud. 2019; 2(2), 96–109.
- **39.** Jamali S, Javadpour S, Mosalanejad L, Parnian R. Attitudes about sexual activity among postmenopausal women in different ethnic groups: A cross-sectional study in Jahrom Iran. J Reprod Infertil. 2016; 17(1): 47–55.