Original Article

The Effect of Menopause on the Sexual Functions and Marital Adjustment of the Spouses

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Abstract

Background: This study was conducted as a cross-sectional descriptive study to determine the effect of menopause on the SFs and marital adjustment (MA) of the spouses. **Materials and Methods:** The sample of the study consisted of a total of 254 people, 127 of whom were postmenopausal women and their spouses. The data were collected with the Descriptive Information Form, the Female Sexual Function Scale (FSFS), the Arizona Sexual Experiences Scale (ASES), and the Marital Adjustment Scale (MAS). The *t*-test, Mann–Whitney *U*-test, Kruskal–Wallis test, and correlation analysis were used in the analysis of the data. **Results:** Sexual dysfunctions (SDs) were detected in 91.3% of women and 77.2% of men. MA was found to be low in 74.1% of the women. The relationship between the level of MA and the total mean score of the women's FSFS was found to be statistically significant ($P < 0.05$). In addition, the relationship between the presence of SD in the postmenopausal women and the mean ASES score in the husband was found to be statistically significant ($P < 0.05$). According to Spearman's rho correlation coefficient, the positive correlation between the total mean score of the MAS and the mean total score of the FSFS was weak ($r = 0.290$; $P = 0.001$), and the negative correlation between the mean score of the total score of the ASES was weak ($r = -0.381$; $P = 0.000$) which was found to be a relationship ($P < 0.05$). **Conclusion:** In this study, it was determined that menopause affects the marriage and sexual adjustment of spouses negatively.

Keywords: *Marital adjustment, menopause, sexual function*

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Introduction

Menopause is defined as the permanent cessation of menstruation as a result of loss of ovarian activity.[1] In the postmenopausal period, genitourinary problems such as frequently recurring genital infections, urinary system infections, genital atrophy, vaginal dryness, and uterine prolapse are frequently seen in women due to hypoestrogenemia developing with a loss of ovarian activity.[2] Studies on the subject show that there is a strong relationship between genitourinary problems and sexual dysfunctions (SDs) in this period.[3] In the postmenopausal period, female SDs are generally dyspareunia, sexual reluctance, orgasm disorders, sexual arousal disorders, and decreased sexual satisfaction.[4-7] While the decrease in estrogen production directly affects sexual function by causing vaginal dryness, hot flashes, and night sweats (which can lead to a loss of energy in women), it may also result in a decrease in sexual desire.[8,9]

In addition to biological factors like hypoestrogenemia during menopause, psychosocial factors can also cause sexual problems.[10] With menopause, women may think that their sexual attractiveness decreases. This situation can lead to deterioration in body image, self-esteem, and sexual reluctance.[11] It is known that emotional problems such as anxiety, depression, and anxiety disorders are more common in postmenopausal

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women. When the literature is examined, it is seen that there is a positive relationship between emotional problems experienced during menopause and SDs.[12-14] In addition, the psychosexual problems experienced by women during menopause can negatively affect their marital relations and marital adjustment (MA).[15] In addition, the spouses of women with SDs can also develop SDs.[16]

There are many studies in the literature on the SFs and MA of menopause.[6,7,17] However, a limited number of studies have been found in which the sexual problems experienced by married men whose spouses have entered menopause are separately addressed.[16,18,19] This situation was the determining factor in the planning of our study. In addition, it is known that regional factors and sociocultural environment play an important role in determining the outlook toward menopause, maintaining MA in menopause, and developing SD. In this sense, it can be thought that the realization of our study in Çorum, a Central Anatolian City, will set a regional example.

Aims

This study was conducted as a cross-sectional descriptive study to determine the effect of menopause on the SFs and MA of the spouses.

Objectives

- To determine the sexual life and MA of women in menopause
- To determine the sex lives of the partners of menopausal women.

Materials and Methods

Sample of the research

The population of this study, which was planned as a cross-sectional descriptive study, consisted of women who applied to the menopause polyclinic of a university hospital between November 08, 2017, and December 29, 2017. The samples of the study consisted of women who were aged between 45 and 65 years, had at least 1 year of menopause, had no communication barriers, volunteered to participate in the research, lived in the same house with their spouses, and had sexual activity in the past 4 weeks, who were selected using the simple random sampling method. Considering the limitations of the study, it is thought that the number of women who are married during menopause, who have a sexual function in the last month, and who do not have diabetes, hypertension, or depression is more than 30,000. Thus, the universe is considered infinite. The sample size was calculated with the following formula, which is used when the number of individuals in the population is not known.[20]

$$n = \frac{s^2 \times t^2}{d^2} = \frac{1.96 \times 1.96 \times 3.88 \times 3.88}{0.68 \times 0.68} = 125$$

Accordingly, the number of couples to be taken into the sample was determined as 125, and a total of 254 individuals, 127 of whom were menopausal women and their spouses, were included in the study.

Individuals with chronic systemic diseases (such as cancer, cardiovascular disease, kidney failure, hypertension, and diabetes mellitus) that may affect sexual function, or those with chronic neurotic-psychotic diseases (including major depression, anxiety disorder, paranoid disorder, and schizophrenia), as well as individuals using drugs affecting sexual function, men with urological problems, and those who had undergone surgical operations for it were not included in the study.

Data collection

The Descriptive Information Form (DIF), Female Sexual Functioning Scale (FSFS), Marital Adjustment Scale (MAS), and Arizona Sexual Experiences Scale-Male Form (ASES) were used to collect data.

Descriptive Information Form

The DIF was developed by the researcher according to the literature.[8] This form consists of questions to reveal some characteristics of sociodemographic and marital history such as age, education level, employment status, health insurance, monthly total income, marriage age, duration of marriage, and having children. It was composed of 31 questions in total, including questions to reveal some characteristics of menopause and SFs, such as the status and duration of replacement therapy, hormone replacement therapy (HRT), postmenopausal sexual problems, and the status of receiving sexual counseling.

Female Sexual Functioning Scale

The FSFS is a 19-item scale developed by Rosen *et al*. to measure SFs in women in the past 4 weeks.[21] The scale was adapted into Turkish by Aygın and Aslan. The Cronbach's alpha coefficient of the scale was 0.75, and the Cronbach alpha coefficient for the subscales was between 0.89 and 0.98. In the structure of the scale, there are six subdimensions: desire, arousal, lubrication, orgasm, satisfaction, pain, or discomfort. The cutoff point of the scale is 26.55. Those with a score below 26.55 on the scale are considered to be SDs.[22]

Arizona Sexual Experiences Scale-Male Form

The Male Form ASES is a 5-item Likert-type scale developed by McGahuey *et al*. to evaluate SFs in men.[23] The scale was adapted into Turkish by Soykan (2004). The Cronbach's alpha coefficient of the scale was

determined as 0.89.[24] In the structure of the scale, there are five sub-dimensions: arousal, arousal, penile hardening, ability to reach orgasm, and satisfaction from orgasm. The cutoff point of the scale is 11. A score of 11 and above is considered SD.

Marriage Adjustment Scale

The Marriage Adjustment Scale (MAS) is a 15-item Likert-type scale developed by Locke and Wallace (1959) to evaluate marital satisfaction and MA level.[25] It was adapted into Turkish by Tutarel and Kışlak (1999), and Cronbach's alpha coefficient was found to be 0.83 for men and 0.84 for women.[26] As the score obtained from the scale increases, MA also increases. The cutoff point of the scale is 43.5. Those who have a score below 43.5 on the scale are considered to have low MA.

Statistical analysis

In the study, descriptive statistics such as number, percentage, and mean were used in the evaluation of descriptive data. With the Kolmogorov–Smirnov test, it was decided whether the data showed normal distribution or not. The *t*-test was used for a two-group comparison of parametric data, the Mann–Whitney *U*-test was used for a two-group comparison of nonparametric data, and the Kruskal–Wallis test was used for a nonparametric data comparison of more than two groups. In addition, the relationship between the mean scores of the FSFS, ASES, and MAS was evaluated using Spearman's rho correlation analysis. The results were evaluated at a 95.0% confidence interval, $P < 0.05$ significance level, and $P < 0.01$ and $P < 0.001$ advanced significance level.

Results

The mean age of the women participating in the study was 55.94 ± 5.51 years, and the mean age of their spouses was 57.82 ± 4.91 years. 63.0% of women and 61.4% of their spouses are primary school graduates. 84.3% of women do not work in any job. The age at the first marriage of 74.8% of women is between 15 and 19 years.

The mean age of menopause of 67.7% of the women participating in the study was 47.00 ± 5.11 years. The menopause period of 41.7% of women is between 1 and 5 years, and 90.6% of them did not receive HRT. In addition, 45.7% of women reported that they had a very difficult menopause process, 81.1% did not experience premenopausal sexual problems, and 67.7% reported that menopause had a negative impact on their sexual life. 55.8% of the women stated that they experienced sexual reluctance, and 40.7% of them experienced dyspareunia. In addition, it was determined that 56.7% of women experienced vaginal dryness, and only 13.9% received treatment for vaginal dryness.

In the study, when the mean scores of the participants on the FSFS, ASES, and MAS and the distributions of SDs and MA were examined, the total mean score of the women's FSFS was 11.02 ± 9.80. This mean is below 26.55, which is the mean FSFS cutoff point. The women's mean FSFS subdimension scores are also quite low. The lowest subdimension mean score is arousal (1.58 ± 1.62). The mean total score of the ASES in men was 14.14 ± 3.29. This mean is above 11 points, which means SD, which is the cutoff mean of the ASES. According to the mean scores obtained from the scales, it can be said that 91.3% of the menopausal women and 77.2% of the men had SD. In the study, the mean total score of the women's MAS was found to be 35.55 ± 9.04. This average is below 43.5 points, which is the cutoff point average of the MAS, which means that there is a problem with the level of MA. According to this average, 74.1% of women have a low level of MA [Table 1].

In the study, when the distribution of the total mean score of the FSFS mean score of subdimension and the mean score of the ASES according to MA level was analyzed in the study, in the statistical evaluation,

Table 1: The participant's mean scores on the Female Sexual Function Scale, Arizona Sexual Experiences Scale, and Marital Adjustment Scale and their distribution regarding sexual dysfunction and marital adjustment

Scales	$\bar{X}$±SS/*n* (%)
FSFS	
Request	2.01±1.14
Arousal	1.58±1.62
Lubrication	1.84±1.92
Orgasm	1.87±1.86
Satisfaction	1.85±1.84
Pain	1.85±1.96
FSFS total score	11.02±9.80
ASES (men)	14.14±3.29
MAS	35.55±9.04
Women's SD	
Having	116 (91.3)
Not having	11 (8.7)
Men's SD	
Having	98 (77.2)
Not having	29 (22.8)
MA level	
Low	94 (74.01)
High	33 (35.09)

MA: Marital adjustment, MAS: MA Scale, FSFS: Female Sexual Function Scale, ASES: Arizona Sexual Experiences Scale, SD: Sexual dysfunction, SS: Standard deviation

the mean score of the total score of the FSFS of the women with low level of MA and the mean score of the subdimension of the FSFS (desire, arousal, lubrication, orgasm, satisfaction, and pain) are lower than women with high MA. This difference was found to be statistically significant ($P < 0.05$). In other words, a low level of MA has an increasing effect on female SDs. Accordingly, it can be said that the level of MA affects women's SFs. On the other hand, the relationship between the MA level and the ASES score average was found to be statistically insignificant ($P > 0.05$). In other words, the MA level does not affect SFs in men [Table 2].

In the study, when the distribution of the spouses' mean ASES scores in the presence of women's SDs was examined, the ASES score averages of the spouses of women with SDs were higher than the mean ASES scores of the spouses of women without SDs. This difference was found to be statistically significant ($P < 0.05$). Accordingly, it can be said that the SDs of the wife have an increasing effect on the SDs of the husband [Table 3].

In the study, according to Spearman's rho correlation analysis, which was performed to determine the relationship between the mean FSFS, ASES, and MAS scores, there was a weak positive relationship between the mean FSFS score and the mean MAS score ($r = 0.290$; $P = 0.001$), and there was a weak negative correlation between the mean FSFS score and the mean ASES score. It was determined that there was a relationship in the direction ($r=-0.381$; $P = 0.000$) ($P < 0.05$). According to this, as the mean FSFS scores decrease, the mean MAS scores of the spouses also decrease, while the mean scores of the spouses' ASES increase. In other words, as the SDs of the wife increase, the SD of the husband increases and MA decreases [Table 4].

Table 2: The distribution of the mean Female Sexual Function Scale and Arizona Sexual Experiences Scale scores by marriage adjustment level

Scales	X̄±SS		*t*	*P*
	Low MA level (*n*=94)	High MA level (*n*=33)		
FSFS lower dimension				
Request	1.88±1.08	2.40±1.22	−2.277	0.024*
Arousal	1.41±1.56	2.07±1.69	−2.032	0.044*
Lubrication	1.62±1.81	2.45±2.12	−2.153	0.033*
Orgasm	1.66±1.77	2.46±1.99	−2.143	0.034*
Satisfaction	1.65±1.78	2.43±1.90	−2.136	0.035*
Pain	1.61±1.82	2.54±2.21	−2.372	0.019*
FSFS total score	9.85±9.36	14.36±10.39	−2.315	0.022*
ASES for men	14.43±3.32	13.30±3.10	1.713	0.089

*$P<0.05$. FSFS: Female Sexual Function Scale, ASES: Arizona Sexual Experiences Scale, MA: Marital adjustment, SS: Standard deviation

Table 3: Distribution of spouses of women with sexual dysfunction according to their Arizona Sexual Experiences Scale scores

Scale	Having SD (*n*=116)		Not having SD (*n*=11)		*U*	*P*
	Mean rank	Sum of rank	Mean rank	Sum of rank		
ASES (men)	42.41	7661.5	66.05	466.5	400.5	0.040*

*$P<0.05$. ASES: Arizona Sexual Experiences Scale, SD: Sexual dysfunction

Table 4: Distribution of the correlations of the Female Sexual Function Scale, Marital Adjustment Scale, and Arizona Sexual Experiences Scale scores mean

Scales	FSFS	MAS	ASES
FSFS	1.000		
MAS	0.290*	1.000	
ASES	−0.381*	−0.282*	1.000

*$P<0.05$

Discussion

Due to hypoestrogenemia seen in the postmenopausal period, many genitourinary problems occur in women, especially vaginal atrophy, vaginal dryness, genital infections, and pelvic prolapse.[2] Emotional problems caused by both genitourinary problems and psychosocial changes in this process can negatively affect the SFs and MA of menopausal women.[3,27] Studies on the subject show that the incidence of SD in women in the postmenopausal period is 2–3 times higher than in women in the same age group in adulthood.[7,10]

Similarly, in our study, most of the women (81.1%) reported that they did not have sexual problems before menopause, while approximately three out of every 5 (67.7%) women reported that menopause had a negative impact on their sexual life. In addition, SD was detected in almost all (91.3%) postmenopausal women in the study. It is reported in the literature that the incidence of SD in menopausal women varies between 48.3% and 85.9%.[28-30] In our study, it was determined that the mean total score of the women's FSFS was below the cutoff score (26.55) (11.02 ± 9.80). When the international and national literature is examined, it is seen that the mean MAS score of menopausal women varies between 18.6 ± 7.91 and 27.16 ± 6.25.[29,31,32]

According to the literature, physical and mental changes experienced during menopause can negatively affect the level of MA.[13,14,16,17,33] When the literature on the subject is examined, different study results are

encountered. In some studies, it has been reported that MA strengthens with the increase in spousal support during menopause, while in some studies, an increase in physical and emotional complaints of women and a decrease in MA with deterioration in SFs.[34,35] In our study, it was determined that the mean total score of the MAS (35.55 ± 9.04) was below the cutoff point (43.5). This finding indicates that MA is low in the population of menopausal women included in the study. On the other hand, the MA level of 74.1% of the women was found to be low compared to the total mean score of the MAS in the study. When the international and national literature is examined, it is seen that the mean total score of the MAS of menopausal women varies between 18.6 ± 7.91 and 27.16 ± 6.25.[13,17] The finding of our study is similar to the literature.

In our study, it was determined that the mean ASES total score (14.14 ± 3.29) in male spouses was above the cutoff point. This mean indicates SD in the male partner population included in the study. In the study, 77.2% of male spouses were found to have SD, according to the ASES total score average. Many studies on male sexual life have been found in the international and national literature available;[36,37] however, there are many studies that deal with the SFs of men whose spouses are in the menopause period. No quantitative study was found. In the literature, only qualitative studies on the subject have been found, and it has been reported that the sexual life of some men with menopausal spouses is not the same as before.[16,19] In a study examining men's point of view toward menopause, it was determined that the most important concern of a man whose wife is in menopause is about his own sexual life.[18] In some studies, it is reported that men with menopausal spouses only think about their own sexual activities and mostly experience SDs.[19,38] The finding of our study is similar to the literature.

In addition, in the study, it was determined that as the SDs of the wife increased, the SDs of the male partner increased. In other words, it was determined that males with a partner with SDs developed more SDs than the other population. Supporting the results of our study, Goldstein *et al*.[39] and Krakowsky and Grober[38] reported that the sexual life satisfaction of menopausal women and their spouses is related to each other, and as the SDs increase in menopausal women, the SFs of their spouses are also negatively affected.

In our study, SDs were found to be higher in women with low MA levels. Accordingly, it can be said that low MA negatively affects women's SFs. On the other hand, no relationship was found between MA level and male SFs in our study. In other words, the MA level does not affect SFs in men. When the literature is examined, different study results are encountered. While some studies have reported that MA only affects SFs in women, male SFs are not affected by MA, which supports the result of our study.[14,16,40] In some studies, it has been reported that MA affects SFs in both men and women regardless of gender.[35,39] In some studies, however, MA could not be associated with SFs.[15,40] The significance that individuals attribute to sexuality in marital relationships varies from one relationship to another. In addition, both the biological differences of the male and female sexes, as well as the differences in perspective toward marriage, are important determinants of SFs. In this context, it can be considered reasonable that the relationship between MA and SFs cannot be clearly explained.

Conclusion

In the study, SDs were detected in 91.3% of menopausal women, and 77.2% of men whose spouses are in menopause. In addition, 74.1% of women have a low level of MA. The rate of SDs in women with low MA was found to be higher than in the other population. However, no relationship was found between female MA level and male SFs. In addition, in the study, it was determined that the SDs of the spouses had an increasing effect on the SDS of the men.

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Conflicts of interest

There are no conflicts of interest.

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