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Original Article

EVALUATION OF SEXUAL FUNCTION AND QUALITY OF LIFE IN MENOPAUSAL WOMEN

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ABSTRACT

Purpose: The aim of this study is to evaluate sexual function and quality of life in women with menopausal period.
Methods: 131 menopausal women (age: 60.81 years, Body Mass Index: 25.98 kg/m^2) participated in this study. The Female Sexual Function Index (FSFI) and Menopause Specific Quality of Life Questionnaire (MENQOL) were used to determine the sexual function and quality of life. Data were analyzed with descriptive statistics, normality tests, and Spearman tests. The significance level was set at $p < 0.05$.
Results: According to the FSFI total score, 125 of 131 women (95.40%) had sexual dysfunction. All the sub-scales and total scores of the FSFI and MENQOL were low. A negative and strong correlation was found between the FSFI and MENQOL total scores (rho= -0.827; p=0.001).
Conclusion: Sexual dysfunction during menopausal period negatively affects the quality of life. It is important to provide sufficient support to women who are in the menopausal period in terms of management of sexual dysfunction.
Key Words: Menopause, sexual function, quality of life.

ÖZET

Amaç: Bu çalışmanın amacı; menopozal dönemdeki kadınlarda cinsel fonksiyon ve yaşam kalitesinin değerlendirilmesidir.
Yöntem: Bu çalışmaya, menopoz sonrası 131 kadın (yaş: 60,81 yıl, Vücut Kütle İndeksi: 25,98 kg/m^2) katıldı. Cinsel işlevi ve yaşam kalitesini değerlendirmek için Kadın Cinsel Fonksiyon İndeksi (FSFI) ve Menopoza Özgü Yaşam Kalitesi Anketi (MENQOL) kullanıldı. Veriler, tanımlayıcı istatistiksel yöntemler, normal dağılım testleri ve Spearman testleri ile analiz edildi. İstatistiksel anlamlılık değeri p<0,05 kabul edildi.
Sonuçlar: FSFI toplam skorlarına göre 131 kadından 125'inde (%95,40) cinsel disfonksiyon olduğu belirlendi. FSFI ve MENQOL tüm alt boyutları ve toplam skorları puanlarının düşük olduğu bulundu. FSFI ve MENQOL toplam skorları arasında negatif yönde kuvvetli korelasyon olduğu bulundu (rho: -0,827, p<0,05).
Tartışma: Menopoz döneminde cinsel disfonksiyon, yaşam kalitesini negatif yönde etkilemektedir. Menopoz dönemindeki kadınlara cinsel disfonksiyonun yönetimi açısından yeterli desteğin sağlanması önemlidir.
Anahtar Kelimler: Menopoz, cinsel fonksiyon, yaşam kalitesi.

INTRODUCTION

Women spend approximately one-third of their lives in the menopausal period, and this duration is expected to increase in the future. According to the World Health Organization (WHO), by the year 2030, 1.2 billion women will be aged 50 or above, which is the menopausal period (1, 2). Therefore, understanding of the concept of menopause better and addressing the issues are crucial for improving the quality of life for women over the age of 50. To enhance the quality of life of adults, it is essential to comprehend the multidimensional nature of their lives, including physical, mental, and sexual health (3). The proportion of men and women actively engaging in sexual relationships is increasing, as middle-aged women's attitudes and experiences of sexual intercourse have changed. One study indicated an increase over time in the proportion of individuals aged 70 and above who actively maintain their sexual relationships due to viewing sexuality as a positive force (4). However, several studies have shown that sexual activity decreases with increasing age, especially among menopausal women (5, 6). Furthermore, sexual dysfunction, particularly in older adults, has been less studied. When considering the criteria in the Diagnostic and Statistical Manual of Mental Disorders - Fifth Edition (DSM-V) published by the American Psychiatric Association for the diagnosis of sexual dysfunction, it is clear that an important issue has been overlooked (7). Despite the prevalence of sexual difficulties in older adults, research on sexual satisfaction has shown that only a minority of them experiences significant distress. In a cross-sectional study of 297 adults aged 65-75, over 60% of the adults reported that they experienced at least one sexual difficulty, but only 25% of them reported distress related to these difficulties (8).

When examining the physiology of menopause, it is evident that it affects many body systems. These physiological changes directly and indirectly impact the sexual function and quality of life of the women. The changes of the reproductive system are related to the decrease in estrogen levels. The reproductive system is inherently sensitive to estrogen receptors, with the vagina being among the most sensitive structures. Several changes occur in the mechanism and secretion ability of the collagen and fat tissue of the vagina. Its ability to retain moisture decreases (9). This leads to vaginal dryness, resulting in a reduced amount of vaginal wetness during the arousal phase of the sexual cycle. Vulvovaginal atrophy (VVA) and difficulty in arousal contribute to reduced sexual function. The symptoms of VVA are quite common, affect at least 50% of menopausal women, thus reducing their quality of life (10, 11). In the literature, limited evidence is present on these issues in Turkish women who are in the menopausal period. The aim of this study was to assess sexual function and quality of life in menopausal Turkish women.

METHODS

Participants

This study was approved by the Hacettepe University Ethics Committee (Approval number: GO 20/957, approval date: 20.10.2020). The sample for this cross-sectional study was comprised of 139 women who applied to the Pelvic and Women's Health Physiotherapy and Rehabilitation Clinic at Faculty of Physical Therapy and Rehabilitation of Hacettepe University. The study was conducted through face-to-face and online administration of questionnaires using the Google Forms. Informed consent was obtained from each participant in accordance with the Helsinki Declaration. Women who have the history of spontaneous menopause, are willing to participate in the study, have no reading and/or comprehension problems with the scales, and who were sexually active were included in the present study. Women with current or past cancer diagnoses, those who had undergone gynecological surgery, and those with pelvic pain were excluded from the study. Eight individuals were excluded from the study due to a history of cancer in their medical history. Therefore, a total of 131 was included in the study.

Assessments

Firstly, a standard form containing demographic information of the women was used. To assess sexual function, the Turkish version of the Female Sexual Function Index (FSFI) who has acceptable validity and reliability was used (12). Additionally, the Turkish validated version of The Menopause Specific Quality of Life Questionnaire (MENQOL) was used to assess the menopause-specific quality of life (13).

The Female Sexual Function Index, developed by Rosen et al. (14) in 2000, is designed to evaluate women's sexual functions. It consists of a Likert-type scale with 19 items, divided into 6 sub-scales: desire, arousal, lubrication, orgasm, satisfaction, and pain. The scale reflects sexual functions of the women over the past month, with the scores calculated for each of the 6 sub-scales and an overall FSFI score. The calculation of sub-scale scores and the FSFI score is performed according to a scoring index established by the developers. In the validity and reliability study conducted in Turkey by Aygin and Aslan (12), the internal consistency coefficients were ranged from 0.70 to 0.90. The Cronbach's Alpha was 0.98, and the test-retest reliability coefficient was 0.75.

The Menopause Specific Quality of Life Questionnaire, developed by Hilditch et al. in 1996 and the Turkish validity and reliability of this questionnaire was established by Kharbouch and Şahin in 2005 (13). The scale consists of four sub-scales: vasomotor, psychosocial, physical, and sexual. It contains 29 Likert-type items, and as the score increases, the severity of complaints increases and, consequently, the quality of life decreases. The total score of the scale is calculated using the average score, resulting in a minimum score of 0 and a maximum score of 6. Each sub-scale in the MENQOL is also scored from 0 to 6, with "0" indicating no problems related to the domain. A score of "1" indicates the presence of a problem but not bothersome, while the scores between "2-6" indicate increasing the severity of problems. The Cronbach's alpha was found to be 0.90 for the total scale (13).

Statistical Analysis

Statistical analyses were performed using the IBM SPSS Statistics software, version 22 (IBM Corporation, Armonk, NY). Descriptive statistics for each parameter were presented as mean ± standard deviation, or median, and/or number (percentage). The normality distribution of the data was assessed using the Kolmogorov-Smirnov test. Spearman tests were conducted to determine the correlations between the sexual function and quality of life. The degree of the relationship was interpreted based on Spearman correlation coefficients: no relationship (0-0.19), weak (0.20-0.39), moderate (0.40-0.69), strong (0.70-0.89), very strong (0.90-1) relationship (15). The level of statistical significance was set at $p < 0.05$.

RESULTS

A total of 139 women were assessed in the study. Eight individuals were excluded due to a history of cancer in their medical file. Thus, the study was completed with 131 women (age;60.81±7.70 years). Table 1 provides information on the age, body mass index, and menopausal age of the women.

Table 1. Demographic and physical characteristics of menopausal women.

	X±SD
Age (years)	60.81±7.70
Body mass index (kg/m^2)	25.98±4.21
Age at menopause (years)	51.19±2.12

X: Mean, SD: Standard deviation.

It was found that the majority of the women participating in the study (n=125, 95.40%) experienced sexual dysfunction. The mean total FSFI and MENQOL scores of the women were 8.50 (ranging from 1.20 to 28.80) and 2.84 (ranging from 0.65 to 4.65), respectively. The clinical characteristics of menopausal women based on the scores of the scales are presented in Table 2.

Table 2. Clinical characteristics of menopausal women according to scale data.

	Median (min-max)
FSFI total	8.52 (1.20- 28.80)
FSFI desire	2.04 (1.20- 4.80)
FSFI arousal	1.30 (0 - 4.80)
FSFI lubrication	1.29 (0 - 4.80)
FSFI orgasm	1.29 (0 - 4.80)
FSFI satisfaction	1.30 (0 - 4.80)
FSFI pain	1.28 (0 - 4.80)
MENQOL total	2.84 (0.65- 4.65)
MENQOL vasomotor	3.07 (0 - 6.00)
MENQOL psychosocial	2.63 (0 - 5.43)
MENQOL physical	2.56 (0.63 - 4.19)
MENQOL sexual	4.63 (1.00 - 6.00)

MENQOL: The Menopause Specific Quality of Life Questionnaire.
FSFI: Female Sexual Function Index.

It was found a negatively strong correlation between the total scores of the FSFI and MENQOL (rho= -0.827; p=0.001) (Table 3).

Table 3. The relationship between the FSFI and MENQOL scales.

	FSFI rho (p)
MENQOL	-0.827(<0.001)*

**p<0.05.* rho: Spearman correlation coefficient. MENQOL: The Menopause Specific Quality of Life Questionnaire. FSFI: Female Sexual Function Index.

DISCUSSION

In the present study, it was observed that sexual function and quality of life decreased in Turkish women who are in the menopausal period. Additionally, a significant correlation was found between sexual function and quality of life. These results suggest that sexual health is crucial for improving the quality of life in menopausal women.

Menopause, sexual function, and genitourinary health have been addressed in many guidelines published in recent years, indicating a decrease in sexual frequency and a decrease in the quality of life in menopausal women (16, 17). In the literature, sexual function has been evaluated using the FSFI scale. Physiological reasons that contribute to a decrease in sexual function during menopause include VVA, decreased sexual desire, and dyspareunia (18). Studies conducted in different countries have reported varying incidence rates for the sexual dysfunction (19, 20, 21). In studies conducted in Iran and Lithuania, the prevalence of sexual dysfunction was reported as 86.7% and 67.9%, respectively (19, 20). In our study, this rate was higher, and has been found as 95.4%. Another study by Nappi et al. reported that 58% of menopausal women experienced a decrease in sexual desire due to VVA (22). In Iran and the United States, the rates were 69.8% and 39.9%, respectively (19, 21). In our study, all women had decreased sexual desire, and 95.4% had sexual dysfunction.

When examining the impact of sexual function on quality of life, many studies have investigated this relationship (24, 25). One study reported significant decreases in health-related quality of life in menopausal women with sexual dysfunction (24). Another study reported that not only sexual dysfunction but also a decrease in sexual well-being reduced overall well-being (25). The limitation of these studies is that they solely assess sexual dysfunction using a scale and establish a diagnosis. Similarly, a limitation of our study is that it relied solely on scale-based assessment. Our study indicated that sexual function and quality of life decreased in menopausal women. When compared to other subscale of MENQOL, the sexuality subscale had the lowest scores, contributing to a decrease in the overall quality of life.

In a large-scale study involving 1189 menopausal women, it was reported that 15% of women had sexual dysfunction. Women with sexual dysfunction were statistically more likely to be depressed and physically impaired than those without sexual dysfunction (24). Similarly, in our study, the psychosocial and physical domains of the MENQOL subscales were quite low.

In the historical context, hormone replacement therapy was considered as a common option for the management of the menopausal symptoms. In a meta-analysis published in 2020, the relationship between exercise and quality of life in menopausal women was investigated. The study reported that exercise improved psychological and physical quality of life (26). Further research is needed to investigate the relationship between exercise and sexuality and quality of life. A recent study has emphasized the need for more alternative treatment approaches with a holistic approach (27). Therefore, improving the quality of life of menopausal women is crucial.

Limitations

In the present study, due to the pandemic, the administration of scales varied between face-to-face and online methods, which may have introduced some technical differences. Therefore, it can be considered that women who filled in the online questionnaires might have been less hesitant to share their sexual function. Another possible limitation of the present study was that the COVID-19 pandemic led to decreased social interactions and increased social isolation and quarantine requirements, which may have positively supported online survey administration. Furthermore, as it was a cross-sectional study, it may be limited to prove the causality. Lastly, the women in the menopausal period were not classified as perimenopausal or postmenopausal in our

study. Further studies should consider classification and use clinical measurement methods.

CONCLUSION

The strength of this study lies in its contribution to the literature by providing fundamental knowledge about how sexual function is affected in Turkish women during the menopausal period and how this affects their quality of life. Based on these preliminary findings, It is important to provide sufficient support to women who are in the menopausal period in terms of management of sexual dysfunction in order to enhance quality of life.

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