



# BANDIRMA ONYEDİ EYLÜL ÜNİVERSİTESİ SAĞLIK BİLİMLERİ VE ARAŞTIRMALARI DERGİSİ BANU Journal of Health Science and Research

DOI: 10.46413/boneyusbad.1406925

Özgün Araştırma / Original Research

## Sexual Quality of Life and Marital Adjustment in Women with Hypertension in Türkiye Türkiye'de Hipertansiyonlu Kadınlarda Cinsel Yaşam Kalitesi ve Evlilik Uyumu

Haluk Furkan SAHAN<sup>1</sup>  Fatma USLU SAHAN<sup>2</sup>  Edanur KARAYEL<sup>3</sup> 

<sup>1</sup> Specialist Doc., Department of Cardiology, Etlik City Hospital, Ankara, Türkiye

<sup>2</sup> Assoc. Prof., Department of Obstetrics and Gynecologic Nursing, Faculty of Nursing, Hacettepe University, Ankara, Türkiye

<sup>3</sup> Res. Assist., Department of Midwifery, Faculty of Nursing, Ankara University, Ankara, Türkiye

Sorumlu yazar / Corresponding author

Fatma USLU SAHAN

fatma.uslu@hacettepe.edu.tr

Geliş tarihi / Date of receipt: 19.12.2023

Kabul tarihi / Date of acceptance: 16.05.2024

**Atf / Citation:** Sahan, H.F., Uslu Sahan, F., Karayel E. (2024). Sexual quality of life and marital adjustment in women with hypertension in Türkiye. *BANÜ Sağlık Bilimleri ve Araştırmaları Dergisi*, 6(2), 242-251. doi: 10.46413/boneyusbad.1406925

### ABSTRACT

**Aim:** This study aimed to determine whether the sexual quality of life and marital adjustment in women with hypertension differ according to some descriptive characteristics and the effect of sexual quality of life on marital adjustment.

**Material and Method:** This research was conducted as a descriptive cross-sectional study within the Cardiology outpatient clinic of a hospital located in the Türkiye's capital between July 15 and November 1, 2023. The study focused on female patients seeking medical care during this specified period, and purposive sampling was employed for participant selection. The study sample consisted of 157 women with hypertension. "Personal information form", "Sexual Quality of Life Scale" and "Marital Adjustment Scale" were used as data collection tools. "Descriptive statistics, Student's t-test, one-way analysis of variance, Pearson correlation analysis, and linear regression analysis" were used to analyze the data.

**Results:** The mean score of the sexual quality of life scale was  $59.13 \pm 21.37$ , and the mean score of the marital adjustment scale was  $37.82 \pm 11.55$  in participants. There was a positive correlation between the sexual quality of life and the marital adjustment scale ( $r=0.645$ ;  $p=0.001$ ). The sexual quality of life of participants accounted for 42% of the total effect on marital adjustment. An increase in the sexual quality of life leads to a 0.645-fold increase in marital adjustment.

**Conclusion:** The study suggests counseling patients and spouses about marital adjustment and considering the sexual quality of life in hypertensive women.

**Keywords:** Sexual Quality of Life, Marital Adjustment, Women, Hypertension, Türkiye

### ÖZET

**Amaç:** Bu çalışmada hipertansiyonlu kadınlarda cinsel yaşam kalitesi ve evlilik uyumunun bazı tanımlayıcı özelliklere göre farklılaşp farklılaşmadığı ve cinsel yaşam kalitesinin evlilik uyumu üzerine etkisinin belirlenmesi amaçlanmıştır.

**Gereç ve Yöntem:** Bu araştırma, 15 Temmuz- 1 Kasım 2023 tarihleri arasında Türkiye'nin başkentinde bulunan bir hastanenin Kardiyoloji polikliniğinde tanımlayıcı kesitsel bir çalışma olarak yürütülmüştür. Çalışma, belirtilen dönemde tıbbi bakım arayan kadın hastalara odaklanmış ve katılımcı seçimi için amaçlı örnekleme kullanılmıştır. Araştırmanın örneklemini 157 hipertansiyonlu kadın oluşturmuştur. "Kişisel bilgi formu", "Cinsel Yaşam Kalitesi Ölçeği" ve "Evlilik Uyum Ölçeği" veri toplama aracı olarak kullanılmıştır. "Tanımlayıcı istatistikler, Student's t-testi, tek yönlü varyans analizi, Pearson korelasyon analizi ve doğrusal regresyon analizi" verilerin analizinde kullanılmıştır.

**Bulgular:** Katılımcıların cinsel yaşam kalitesi ölçeği puan ortalaması  $59.13 \pm 21.37$ , evlilik uyumu ölçeği puan ortalaması  $37.82 \pm 11.55$  idi. Cinsel yaşam kalitesi ile evlilik uyumu arasında pozitif korelasyon vardı ( $r=0.645$ ;  $p=0.001$ ). Katılımcıların cinsel yaşam kalitesi, evlilik uyumu üzerindeki toplam etkinin %42'sini oluşturmaktadır. Cinsel yaşam kalitesindeki bir artış evlilik uyumunda 0,645 kat artışa yol açmaktadır.

**Sonuç:** Bu çalışma, hipertansif kadınlarda cinsel yaşam kalitesinin göz önünde bulundurulması ve evlilik uyumu konusunda hasta ve eşlere danışmanlık verilmesini önermektedir.

**Anahtar Kelimeler:** Cinsel Yaşam Kalitesi, Evlilik Uyumu, Kadın, Hipertansiyon, Türkiye



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

## INTRODUCTION

Hypertension is a disease that affects people's and families' lives and lowers quality of life by causing life changes and other problems (Peixoto, Lopes, & Rodrigues, 2022; Santana et al., 2019). The World Health Organization reported that 1.28 billion adults globally, aged 30 to 79, suffered from hypertension in 2023. The majority of these persons, almost two-thirds, resided in low/middle-income countries. By 2025, 29.2% is the anticipated proportion (World Health Organization, 2023). Conversely, the occurrence of hypertension in the Turkish populace is shown to be 30.3%, with a rate of 32.3% among women and 28.4% among males (Sengul et al., 2016).

Problems with sexual dysfunction can be observed in women who have hypertension as a result of the impact on their musculoskeletal and cardiovascular systems (Peixoto et al., 2022; Duncan, Lewis, Jenkins, & Pearson, 2000). Dumas et al. (2006) emphasized that sexual dysfunction had a substantial impact on sexual health, occurring in 19.4% of healthy women and 42.1% of women with hypertension. Problems that negatively affect sexual health in women include decreased blood flow in the pelvic region, changes in vaginal and clitoral vasculature, thinning of the clitoral smooth muscles and vaginal wall (Choy et al., 2019; Lunelli, Irigoyen, & Goldmeier, 2018). Women with hypertension often have problems with dyspareunia, which is caused by a lack of lubrication (Choy et al., 2019). Hypertension can lead to decreased lubrication and dyspareunia by affecting blood flow with insufficient vasocongestion during sexual arousal (Choy et al., 2019; Duncan et al., 2000). Sexual health and sexuality, which is an fundamental aspect of quality of life, can be one of the critical factors affecting marital adjustment (Çömez İkican, Coşansu, Erdoğan, Küçük, & Özel Bilim, 2020; Assari, Lankarani, Ahmadi, & Saleh, 2014; Kazemi-Saleh et al., 2008).

Marital adjustment is defined as “the ability of couples to create a good relationship schema by having positive feelings and thoughts about each other, establishing healthy communication, solving problems that arise between them, and engaging in mutual activities that they enjoy” (Çömez İkican et al., 2020). Although many factors affect marital adjustment, the most important ones are understanding, loyalty, sharing, shared interests, philosophy of life, and an excellent sexual life (Erbek, Beştepe, Akar,

Eradamlar, & Alpkan, 2005). Sexual life, which is one of these factors, is considered good and healthy if the spouses enjoy sex and maintain these feelings (Kaplan Serin, Duman, & Yilmaz 2020; Mulhall, King, Glina, & Hvidsten, 2008). A fulfilling sexual life improves marital adjustment and is essential to a happy marriage. Similarly, a happy marriage results in a sexual life that is healthy (Kaplan Serin et al., 2020). According to a 2008 study covering 27 countries, sexual dissatisfaction has become increasingly common, and 58% of women and 57% of men are reported to be dissatisfied with their sexual lives (Mulhall et al., 2008). Given that marital adjustment is seen as a gauge of sexual happiness, these data imply that severe issues with it exist.

Due to cultural norms and privacy concerns, it is not common for sick or healthy individuals in Turkish society to discuss sexual problems (Mangolian Shahrabaki, Mehdipour-Rabori, Gazestani, & Forouzi, 2021; Çömez İkican et al., 2020; Kaplan Serin et al., 2020). Nevertheless, issues pertaining to sexual life, which are frequently regarded as shameful and avoided in conversation, are of considerable importance and should not be disregarded (Karakaş Uğurlu, Uğurlu, & Çayköylü, 2020). Despite the prevalence of sexual dysfunctions and the availability of effective treatments, the utilization of healthcare services for these issues remains relatively low (Mangolian Shahrabaki et al., 2021; Çömez İkican et al., 2020). Rather than applying to the health system as a result of their sexual dysfunction, they apply because of the impacts of their sexual dysfunction. The inclusion of cultural elements in insolvencies and taboos further complicates the sexuality of individuals (Karakaş Uğurlu et al., 2020; Ceyhan, Ozen, Simsek, & Dogan, 2019; Santana et al., 2019).

Given these factors, the management of hypertension and the assessment of its impact are highly significant. Although sexual dysfunctions related to hypertension frequently develop, the relevant research has primarily focused on male sexuality (Choy et al., 2019; Manolis & Dumas, 2009; Duncan et al., 2000). The limited investigation into women may be attributed, in part, to the challenge of evaluating the caliber of women's sexual experiences. Hence, it is vital to scrutinize the interplay between sexuality and marriage to safeguard, advance, and enhance the well-being of women afflicted with hypertension. This study aimed to determine whether the sexual quality of life and marital adjustment differ

according to some descriptive characteristics and the effect of sexual quality of life on marital adjustment in women with hypertension.

### Research Questions

1. What is the level of sexual quality of life and marital adjustment among women with hypertension?
2. What are the descriptive characteristics of women with hypertension that influence sexual quality of life and marital adjustment?
3. Is there a correlation between the quality of sexual life and marital adjustment among women with hypertension?
4. How does the quality of sexual life affect the marital adjustment of women with hypertension?

## MATERIAL AND METHODS

### Study Design

This study was conducted as a descriptive cross-sectional study. “The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Checklist” was used (Von Elm et al., 2014).

### Settings and Participants

The study population comprised female patients who sought medical care at the Cardiology outpatient clinic of a hospital in the Türkiye's capital from July 15 to November 1, 2023. The study employed purposive sampling to select the sample. The inclusion criteria for this study were being at least 18 years old, having a documented history of hypertension for a minimum of six months, being married and living with one's spouse, having the capacity to verbally communicate, and providing voluntary consent to engage in the research. Exclusions were made for women who had already undergone mastectomy or total hysterectomy, pregnant women, women with infants under six months old, women diagnosed with any psychiatric disorder, and women whose partners experienced sexual dysfunction. The study sample comprised patients who willingly consented to participate and fulfilled the specified inclusion criteria.

The sample size of women was determined using G\*Power 3.1.9.2. A sample of 132 women was planned to be included in the study, with an effect level of small-medium (0.12), a power level of 95%, and a significance level of 0.05. Thirteen women were excluded from the study sample due

to non-compliance with the research criteria out of the total 170 women who were assessed for study eligibility. These women included two who had previously undergone mastectomy surgery, one who had undergone hysterectomy surgery, ten who expressed reluctance to participate in the study, and two who were illiterate. The study completed included 157 women. The research was finished at a 98% power level, per the power analysis at the conclusion.

The first and third authors collected study data. The women who met the requirements for inclusion were given information about the study and asked to sign an informed consent form. Participants filled out forms in an empty outpatient clinic room. Data collection took about 20 minutes per session.

### Data Collection Tools

The hypertensive women who participated in the data collection process completed “a personal information form,” “the Marital Adjustment Scale”, and “the Sexual Quality of Life Scale”.

**Personal Information Form:** Eleven questions on the form asked details about the women with hypertension, such as their age, education level, length of time since diagnosis, frequency of sexual activity, and more (Çömez İkican et al., 2020; Kaplan Serin et al., 2020; Ceyhan et al., 2019; Kazemi-Saleh et al., 2008).

**Sexual Quality of Life Scale:** Symonds, Boolell, & Quirk (2005) developed the scale. Tuğut & Gölbaşı (2010) conducted a study in Türkiye to assess the validity and reliability of the scale. Participants were required to evaluate each item based on their sexual experiences within the past four weeks. The original scale version allows scoring each item on a scale ranging from 0 to 5. Hence, the range of scores achievable on the scale spans from 0 to 90. The total score is converted into a score out of 100. To convert the total scale score to 100, the formula “Raw score obtained from the scale-18) × 100/90” should be used. The scale's high scores imply a high sexual quality of life (Tuğut & Gölbaşı, 2010). The scale's Cronbach alpha was 0.75 in the original study (Symonds et al., 2005) and 0.83 in the Turkish version (Tuğut & Gölbaşı, 2010). The scale's Cronbach alpha was determined to be 0.89 in this study.

**Marital Adjustment Scale:** Locke & Wallace (1959) developed the scale. Kışlak (1999) conducted a study in Türkiye to assess the validity

and reliability of the scale. The scale comprises 15 items, encompassing 1 item assessing overall marital adjustment, eight items evaluating areas of consensus, and six things gauging conflict resolution, communication, and commitment. The scale encompasses the reciprocal interplay between spouses within the context of marriage, consensus on matters about marriage and family, engaging in shared leisure activities, open expression of emotions, proficient resolution of conflicts, nurturing connections with extended family members, sexual compatibility, and faithfulness. The scoring system assigns a value between 0 and 6 to each item based on the available possibilities. The overall score can range from 0 to 60. Significant scores achieved on the scale suggest satisfactory marital adjustment (Kışlak, 1999). The scale's Cronbach Alpha was 0.90 in the original study (Locke & Wallace, 1959) and 0.84 in the Turkish version (Kışlak, 1999). The scale's Cronbach Alpha was determined to be 0.91 in this study.

### Ethical Considerations

Written consent was received from the hospital where the study was done, and ethics committee approval was acquired from the university's ethics committee (Date: 11.07.2023, and Approval Number: 2023/12-17). Participants received a detailed explanation of the study's goal and the required information before applying. Their written consent was thus obtained, and the participants signed the "Informed Voluntary Consent Form" created by "the Declaration of Helsinki". Permission was obtained from the authors for using the scales.

### Data Analysis

The data were analyzed utilizing "the SPSS 22 software". The statistical analysis involved the utilization of descriptive statistics "mean, standard deviation, frequency, and percentages". It was examined whether the variables met the normality assumption, which is the hypothetical criterion for the use of parametric techniques in examining the relationships between variables. According to the kurtosis and skewness coefficients of the variables and the coefficient of variation, the variables were determined to be normally distributed. The associations between variables were examined by applying "one-way analysis of variance (ANOVA)," "Student's t-test," "Pearson correlation," and "linear regression." The acquired analytical findings were interpreted using a statistical significance

level of  $p < 0.05$ .

## RESULTS

The mean "age" of the participants was  $48.80 \pm 11.82$  years (min: 24-max: 64), "mean duration of marriage" was  $28.10 \pm 13.72$  (min: 1-max: 49) (years), mean "duration of hypertension diagnosis" was  $6.23 \pm 8.33$  (min: 1-max: 36) (years), and mean "duration of hypertension medication use" was  $5.92 \pm 8.19$  (min: 1-max: 36) (years). Of the participants, 51.6% (n=81) had primary school education, 77.7% (n=122) were not working, 47.8% (n=75) had income equal to expenses, 48.4% (n=76) had an arranged/unwilling marriage, 79% (n=124) had children, 24.8% (n=39) reported that "the frequency of sexual intercourse" was once a month, and 53.5% (n=84) reported that they had no problems in sexual intercourse (Table 1).

**Table 1. Descriptive Characteristics of the Participants**

Characteristics		Mean $\pm$ SD	
<b>Age (year)</b>		$48.80 \pm 11.82$ (min:24-max: 64)	
<b>Marriage duration (year)</b>		$28.10 \pm 13.72$ (min:1-max: 49)	
<b>Duration of hypertension diagnosis (year)</b>		$6.23 \pm 8.33$ (min:1-max: 36)	
<b>Duration of hypertension medication use (year)</b>		$5.92 \pm 8.19$ (min:1- max: 36)	
		<b>n</b>	<b>%</b>
<b>Educational status</b>	Primary school	81	51.6
	High school	44	28.0
	Undergraduate and above	32	20.4
<b>Employment</b>	Employed	35	22.3
	Unemployed	122	77.7
<b>Income status</b>	More than expenses	58	36.9
	Equals the expenses	75	47.8
	Less than expenses	24	15.3
<b>Types of marriages</b>	Arranged marriage-reluctantly	76	48.4
	Arranged marriage-willingly	32	20.4
	Companionate marriage	49	31.2
<b>Having children</b>	Yes	124	79.0
	No	33	21.0
<b>Sexual intercourse frequency</b>	Once a week	34	21.7
	Two to three times a week	30	19.1
	Once every two weeks	25	15.9
	Once a month	39	24.8
	Once every three months or longer	29	18.5
<b>Having problems with sexual intercourse</b>	Yes	73	46.5
	No	84	53.5

The mean score of “the sexual quality of life scale” was  $59.13 \pm 21.37$  (Table 2). Participants with primary school education ( $p=0.001$ ), not working ( $p=0.001$ ), and without children ( $p=0.001$ ) had a lower sexual quality of life, whereas participants with income more than expenses ( $p=0.001$ ), the frequency of sexual intercourse ( $p=0.001$ ) was two to three times a week and once a week

( $p=0.001$ ), and participants who did not have problems in sexual intercourse ( $p=0.001$ ) had a higher sexual quality of life. As age ( $r=-0.371$ ), duration of marriage ( $r=-0.403$ );, duration of hypertension diagnosis ( $r=-0.312$ ), and duration of hypertension medication use ( $r=-0.331$ ); increased, sexual quality of life decreased ( $p=0.001$ ) (Table 3).

**Table 2. Descriptive Statistics and Correlations among the Sexual Quality of Life and Marital Adjustment**

Scales	Mean	SD	Low-High values	Min-Max	Marital adjustment	
					r	p
Sexual quality of life	59.13	21.37	5-89	0-90	-	-
Marital adjustment	37.82	11.55	9-58	0-60	0.645	0.001

“SD: Standard deviation; r: Pearson correlation”

**Table 3. Comparison of Sexual Quality of Life and Marital Adjustment by Sample Descriptive Characteristics**

Characteristic	Sexual quality of life		Marital adjustment		
	Mean ± SD	Test statistics	Mean ± SD	Test statistics	
Educational status	Primary school	$52.60 \pm 21.76^a$	$F=11.104$	$35.67 \pm 12.55^a$	$F=5.796$
	High school	$61.89 \pm 20.15^b$	$p=0.001$	$37.55 \pm 10.46$	$p=0.004$
	Undergraduate and above	$71.88 \pm 14.96^b$		$43.63 \pm 8.12^b$	
Employment	Employed	$67.31 \pm 14.51$	$t=2.617$	$43.37 \pm 7.99$	$t=3.331$
	Unemployed	$56.79 \pm 22.47$	$p=0.001$	$36.22 \pm 11.94$	$p=0.001$
Income status	More than expenses	$53.88 \pm 21.57^b$	$F=9.921$	$32.93 \pm 11.43^a$	$F=11.734$
	Equals the expenses	$57.96 \pm 21.28^b$	$p=0.001$	$39.33 \pm 11.19^b$	$p=0.001$
	Less than expenses	$75.50 \pm 11.59^a$		$44.88 \pm 7.65^b$	
Types of marriages	Arranged marriage/willingly	$60.74 \pm 23.86$	$F=2.020$	$36.47 \pm 11.64^b$	$F=11.616$
	Arranged marriage/reluctantly	$52.41 \pm 20.42$	$p=0.136$	$32.25 \pm 11.96^b$	$p=0.001$
	Companionate marriage	$61.04 \pm 16.96$		$43.53 \pm 8.52^a$	
Having children	Yes	$62.28 \pm 19.64$	$t=3.723$	$39.47 \pm 10.16$	$t=3.606$
	No	$47.30 \pm 23.69$	$p=0.001$	$31.61 \pm 14.25$	$p=0.001$
Sexual intercourse frequency	Two to three times a week (b)	$70.94 \pm 11.59^a$		$42.53 \pm 9.21^c$	
	Once a week (a)	$74.73 \pm 13.35^a$	$F=30.570$	$40.93 \pm 10.45^c$	$F=16.641$
	Once every two weeks (c)	$66.92 \pm 17.79$	$p=0.001$	$44.92 \pm 7.80^c$	$p=0.001$
	Once a month (d)	$47.62 \pm 17.63^b$		$35.23 \pm 8.77^b$	
	Once every three months or longer (e)	$37.93 \pm 19.35^b$		$26.41 \pm 12.14^a$	
Status of getting help for the problems experienced	Yes	$43.55 \pm 18.33$	$t=-11.610$	$32.48 \pm 12.83$	$t=-5.963$
	No	$72.68 \pm 12.96$	$p=0.001$	$42.45 \pm 7.82$	$p=0.001$

  

	Test statistics		Test statistics	
	r	p	r	p
Age (year)	-0.371	0.001	-0.223	0.005
Marriage duration(year)	-0.403	0.001	-0.255	0.001
Duration of hypertension diagnosis (year)	-0.312	0.001	-0.144	0.071
Duration of hypertension medication use(year)	-0.331	0.001	-0.174	0.029

a.b.c: Groups with different letters for each variable in the same column are significant. Bonferroni test t: Student's t-test; F: One-Way Analysis of Variance (ANOVA); r: Pearson correlation

The participants' mean “marital adjustment scale” score was  $37.82 \pm 11.55$  (Table 2). Participants with primary school education ( $p=0.004$ ), not working ( $p=0.001$ ), income less than expenses ( $p=0.001$ ), who had no children ( $p=0.001$ ) had lower marital adjustment, whereas participants who had companionate marriage ( $p=0.001$ ), whose frequency of sexual intercourse was two to three times a week, once a week and once every two weeks ( $p=0.001$ ), and who did not experience problems in sexual intercourse ( $p=0.001$ ) had higher marital adjustment. Marital adjustment decreased with increasing age ( $r=-0.223$ ), duration of marriage ( $r=-0.255$ ), and duration of

hypertension medication use ( $r=-0.174$ ) ( $p=0.001$ ) (Table 3).

A moderate positive correlation was observed between the mean score of sexual quality of life and the mean score of the marital adjustment scale ( $r=0.645$ ;  $p=0.001$ ) (Table 2). In Table 4, the effect of the participants' sexual quality of life on marriage was reached based on a simple regression model. Beta=0.645,  $R^2=0.42$ , and  $F=110.195$  in the model. The participants' sexual quality of life accounts for 42% of the total effect on marital adjustment. An increase in the sexual quality of life leads to a 0.645-fold increase in marital adjustment.

**Table 4. Regression Analysis for the Prediction of Marital Adjustment by Sexual Quality of Life**

Marital adjustment	B	Std. Error	Beta	t	p	95 % CI
Constant	14.033	4.491		3.125	0.002	5.161-22.905
Sexual quality of life	1.193	0.114	0.645	10.497	0.001	0.968-1.417
F (p)	110.195 (0.001)					
R <sup>2</sup>	0.42					
Adj R <sup>2</sup>	0.41					

## DISCUSSION

Hypertension involves several factors that affect not only the cardiovascular system but also individuals' overall quality of life (Lou, Chen, Ali, & Chen, 2023; Peixoto et al., 2022). Sexual quality of life and marital adjustment are essential components that deeply affect an individual's quality of life (Çömez İkican et al., 2020; Ceyhan et al., 2019). However, to the best of our knowledge, there is no information in the literature that hypertension has potential effects on these two critical areas in women. This study identified the descriptive characteristics that differentiate women with hypertension's sexual quality of life and marital adjustment, as well as the effect of sexual quality of life on marital adjustment. The current study's findings are expected to contribute to closing this gap in the body of literature.

Antihypertensive medications employed for hypertension treatment and disease management induce alterations in the function and structure of the reproductive organs, resulting in sexual dysfunction issues in females (Lou et al., 2023; Peixoto et al., 2022; Anastasiadis et al., 2002). While sexual dysfunctions in women are equally prevalent as in males, they have not received

substantial attention in research studies (Peixoto et al., 2022; Ceyhan et al., 2019; Duncan et al., 2000). This study, undertaken with women suffering from hypertension, is expected to make a valuable contribution to the existing literature on this topic. This present study reported that women with hypertension had a moderate sexual quality of life. Consistent with our research findings, the literature highlights that women's sexual satisfaction falls below the desired level (Zhong & Anderson, 2022; Ceyhan et al., 2019; Choy et al., 2019; Doumas et al., 2006; Duncan et al., 2000). A recent meta-analysis found that women with hypertension practice sexual dysfunction. Women with hypertension are 2.7 times more likely to experience sexual dysfunction than women without the condition (Choy et al., 2019). Similarly, Okeahialam & Obeka (2006) reported that women with hypertension had elevated rates of sexual dysfunction compared to women with normal blood pressure and those recently diagnosed with hypertension. Women with hypertension saw a decline in vaginal lubrication, a decrease in the frequency of orgasms, and an increase in the occurrence of pain, independent of the type of medication they received. This was observed after age adjustment (Zhong & Anderson, 2022;

Duncan et al., 2000). These findings from our study highlight the need for health professionals to raise awareness about providing individualized sexual health services to women with hypertension. Gaining insight into the effect of hypertension on women's sexual health can facilitate improved communication and enable the assessment of suitable treatment alternatives.

A striking finding in our study was that almost all of the descriptive characteristics investigated affected the sexual quality of life of women with hypertension. In this study, the sexual quality of life of participants whose education was primary school, who were unemployed, and who had no children was lower. In contrast, the sexual quality of life of participants whose income was higher than expenses, whose frequency of sexual intercourse was two to three times a week and once a week, and who did not experience problems in sexual intercourse was higher. However, the sexual quality of life decreased as the duration of marriage, duration of hypertension diagnosis, and duration of hypertension medication use increased. According to Ceyhan et al. (2019) age, marital status, duration of drug initiation, duration of disease diagnosis, type of marriage, and frequency of sexual activity, all had an effect on the sexual function of women with hypertension. Similar to our study, Duncan et al. (2000) emphasized that women with hypertension who had a higher level of education had a higher level of sexual function while having children did not make a difference in sexual function, contrary to our findings. The outcomes of our study are expected to direct healthcare practitioners in to deliver enhanced and tailored treatment and care to women.

Sexuality within the context of marriage is crucial for the mutual experience of pleasure, strengthening and intensifying emotional closeness, and navigating the challenges of life and the marital relationship as a united front (Çömez İkican et al., 2020). Decreases in sexual quality of life can result from chronic conditions, and this can negatively affect the adjustment of a married couple (Ruiz-Marin, Molina-Barea, Slim, & Calandre, 2021; Ceyhan et al., 2019; Assari et al., 2014). In the study, marital adjustment of women with hypertension was moderate. Gülsün, Ak & Bozkurt (2009) highlighted that marriages characterized by diminished sexual functionality are not conducive to happiness and satisfaction. In their study, Morokoff & Gilliland (1993) examined the parameters associated with sexual

function and marital adjustment. It was shown that factors like frequency of sexual activity and sexual satisfaction correlated directly with marital happiness. Chronic disorders, like hypertension, are sad occurrences in life that have the potential to alter family responses and dynamics. The spouse's dual duty resulting from illness substantially impacts the quality of life, marital adaptation, and connection (Ruiz-Marin et al., 2021). Considering the impact of psychological distress on marital adjustment for both women and their partners, it is advisable to conduct screenings for psychological distress in couples following diagnosis and to monitor them during their treatments closely.

Another striking finding in our study was that almost all of the descriptive characteristics investigated affected the marital adjustment of women with hypertension. In the present study, marital adjustment was lower in women whose education was primary school, who did not work, whose income was less than their expenses, and who did not have children. In contrast, marital adjustment was higher in women who had companionate marriages, whose frequency of sexual intercourse was two to three times a week, once a week, and once every two weeks, and who did not experience problems in sexual intercourse. Marital adjustment decreased with increasing age, duration of marriage, and duration of hypertension medication use. The degree to which spouses can adapt and accommodate the challenges and changes in their marriage significantly impacts their psychological and physical well-being. Moreover, higher degrees of marital adjustment have been consistently conjunction with improved health outcomes (Ruiz-Marin et al., 2021). It is anticipated that the findings of our study will guide the interventions to be developed to improve the health outcomes of women with hypertension.

Several studies have been conducted on the relationship between marital quality and sexual function in the general population as well as among individuals with chronic diseases. These studies are available in the medical literature. This topic is still a subject of debate (Çömez İkican et al., 2020; Ceyhan et al., 2019; Assari et al., 2014). Nevertheless, there is a lack of data about the correlation between the sexual quality of life and marital adjustment in female patients diagnosed with hypertension. Existing literature indicates that enhancing sexual function has the potential to decrease marital problems (Ceyhan et al., 2019;

Assari et al., 2014; Kazemi-Saleh et al., 2008). The study's findings indicate a relationship between marital adjustment and sexual quality of life. However, sexual quality of life explained 42% of the total effect on marital adjustment. Kazemi-Saleh et al. (2008) stated that there is a collinearity between marital relationships and sexual intercourse. Ceyhan et al. (2019) discovered a correlation between sexual dysfunction and marital adjustment. They observed that the diagnosis of hypertension had a significant impact on 24.5% of marital adjustment. Assari et al. (2014) emphasized a notable correlation between sexual function and the quality, union, and satisfaction of marriage in persons with ischemic heart disease. The study's findings indicate that the quality of one's sexual life is a crucial factor in determining marital adjustment. This highlights the significance of sexual gratification, emotional dedication, and communication among women suffering from hypertension and their partners.

There are certain limitations in this study. The study's exclusive emphasis on a hospital and city center is one of its initial limitations. The fact that the study was conducted at a single location and that women's remarks were used as the basis for answers to the questions on the data collection forms represents another restriction. Moreover, although the main goal is to determine the relationship between the sexual quality of life and the way in which women with hypertension adjust to marriage, partners will also be important in this regard. This study exclusively focused on women due to the challenges of accessing their partners. For future studies, including both spouses in the sample is advisable.

## CONCLUSION

The study conducted a comprehensive examination of the intricate interplay between hypertension, sexual quality of life, and marital adjustment in women with hypertension in Türkiye. The findings underscore the need for a holistic approach to healthcare for women with hypertension, recognizing the profound influence of sexual quality of life on overall marital adjustment. This insight is especially crucial given the societal and cultural context in Türkiye, where discussions about sexual health may still carry a certain degree of taboo.

The study emphasizes the importance of integrating counseling interventions for both women with hypertension and their partners. It

suggests that healthcare providers should actively engage in open and regular communication with women with hypertension and their partners to address potential challenges in sexual functioning. By doing so, practitioners can contribute significantly to enhancing the overall quality of life for women with hypertension. The incorporation of discussions about sexual health and marital adjustment into routine care can significantly contribute to a more comprehensive and effective approach to managing hypertension and improving overall well-being for women with hypertension.

## Ethics Committee Approval

Ethics committee approval was received for this study from the Hacettepe University Non-Interventional Research Ethics Committee (Date: 11.07.2023, and Approval Number: 2023/12-17).

## Author Contributions

Idea/Concept: H.F.S., F.U.S.; Design: H.F.S., F.U.S.; Supervision/Consulting: H.F.S., F.U.S.; Analysis and/or Interpretation: H.F.S., F.U.S., E.K.; Literature Search: H.F.S., F.U.S., E.K.; Writing the Article: H.F.S., F.U.S., E.K.; Critical Review: H.F.S., F.U.S., E.K.

## Peer-review

Externally peer-reviewed.

## Conflict of Interest

The authors have no conflict of interest to declare.

## Financial Disclosure

The authors declared that this study has received no financial support.

## Acknowledgments

We thank all women with hypertension who participated in the study.

## REFERENCES

- Anastasiadis, A. G., Davis, A. R., Ghafar, M. A., Burchardt, M., Shabsigh, R. (2002). The epidemiology and definition of female sexual disorders. *World Journal of Urology*, 20, 74–78. doi: 10.1007/s00345-002-0272-5
- Anastasiadis, A. G., Davis, A. R., Ghafar, M. A., Burchardt, M., Shabsigh, R. (2002). The epidemiology and definition of female sexual disorders. *World Journal of Urology*, 20, 74–78. doi: 10.1007/s00345-002-0272-5
- Assari, S., Lankarani, M. M., Ahmadi, K., Saleh, D. K. (2014). Association between sexual function and marital relationship in patients with ischemic heart disease. *The Journal of Tehran University Heart Center*, 9(3), 124.
- Ceyhan, O., Ozen, B., Simsek, N., Dogan, A. (2019).

- Sexuality and marital adjustment in women with hypertension in Turkey: how culture affects sex. *Journal of Human Hypertension*, 33(5), 378–384. doi: 10.1038/s41371-019-0181-3
- Choy, C. L., Sidi, H., Koon, C. S., Ming, O. S., Mohamed, I. N., Guan, N. C., Alfonso, C. A. (2019). Systematic review and meta-analysis for sexual dysfunction in women with hypertension. *The Journal of Sexual Medicine*, 16(7), 1029–1048. doi: 10.1016/j.jsxm.2019.04.007
- Çömez İkican, T., Coşansu, G., Erdoğan, G., Küçük, L., Özel Bilim, İ. (2020). The relationship of marital adjustment and sexual satisfaction with depressive symptoms in women. *Sexuality and Disability*, 38, 247–260. doi: 10.1007/s11195-019-09590-7
- Doumas, M., Tsiodras, S., Tsakiris, A., Douma, S., Chounta, A., Papadopoulos, A., Kanellakopoulou, K., Giamarellou, H. (2006). Female sexual dysfunction in essential hypertension: a common problem being uncovered. *Journal of Hypertension*, 24(12), 2387–2392. doi: 10.1097/01.hjh.0000251898.40002.5b
- Duncan, L. E., Lewis, C., Jenkins, P., Pearson, T. A. (2000). Does hypertension and its pharmacotherapy affect the quality of sexual function in women? *American Journal of Hypertension*, 13(6), 640–647. doi: 10.1016/s0895-7061(99)00288-5
- Erbek, E., Beştepe, E., Akar, H., Eradamlar, N., Alpkan, R. L. (2005). Marital adjustment. *Dusunen Adam The Journal of Psychiatry and Neurological Sciences*, 18(1), 39–47.
- Gülsün, M., Ak, M., Bozkurt, A. (2009). Marriage and sexuality from a psychiatric point of view. *Current Approaches in Psychiatry*, 1(1), 68–79.
- Kaplan Serin, E., Duman, M., Yılmaz, S. (2020). Sexual life quality and marital adjustment in women with and without diabetes. *Sexuality and Disability*, 38, 625–635. doi: 10.1007/s11195-020-09663-y
- Karakaş Uğurlu, G., Uğurlu, M., Çayköylü, A. (2020). Prevalence of female sexual dysfunction and associated demographic factors in Turkey: a meta-analysis and meta-regression study. *International Journal of Sexual Health*, 32(4), 365–382. doi: 10.1080/19317611.2020.1819503
- Kazemi-Saleh, D., Pishgou, B., Farrokhi, F., Assari, S., Fotros, A., Naseri, H. (2008). Gender impact on the correlation between sexuality and marital relation quality in patients with coronary artery disease. *The Journal of Sexual Medicine*, 5(9), 2100–2106. doi: 10.1111/j.1743-6109.2007.00724.x
- Kışlak, T. Ş. (1999). Evlilikte Uyum Ölçeğinin (EUÖ) güvenilirlik ve geçerlik çalışması. *Psikiyatri Psikoloji Psikofarmakoloji Dergisi*, 7(1), 50–57.
- Locke, H. J., Wallace, K. M. (1959). Short marital-adjustment and prediction tests: Their reliability and validity. *Marriage and Family Living*, 21(3), 251–255. doi: 10.2307/348022
- Lou, I. X., Chen, J., Ali, K., Chen, Q. (2023). Relationship Between Hypertension, Antihypertensive Drugs and Sexual Dysfunction in Men and Women: A Literature Review. *Vascular Health and Risk Management*, 691–705. doi: 10.2147/VHRM.S439334
- Lunelli, R. P., Irigoyen, M. C., Goldmeier, S. (2018). Hypertension as a risk factor for female sexual dysfunction: cross-sectional study. *Revista Brasileira de Enfermagem*, 71, 2477–2482. doi: 10.1590/0034-7167-2017-0259
- Mangolian Shahrabaki, P., Mehdipour-Rabori, R., Gazestani, T., Forouzi, M. A. (2021). Iranian nurses' perspective of barriers to sexual counseling for patients with myocardial infarction. *BMC Nursing*, 20(1), 1–8. doi: 10.1186/s12912-021-00697-x
- Manolis, A., Doumas, M. (2009). Hypertension and sexual dysfunction. *Archives of Medical Science Special Issues*, 2009(2), 350.
- Morokoff, P. J., Gilliland, R. (1993). Stress, sexual functioning, and marital satisfaction. *Journal of Sex Research*, 30(1), 43–53. doi: 10.1080/00224499309551677
- Mulhall, J., King, R., Glina, S., Hvidsten, K. (2008). Importance of and satisfaction with sex among men and women worldwide: Results of the global better sex survey. *The Journal of Sexual Medicine*, 5(4), 788–795. doi: 10.1111/j.1743-6109.2007.00765.x
- Okeahialam, B. N., Obeka, N. C. (2006). Sexual dysfunction in female hypertensives. *Journal of the National Medical Association*, 98(4), 638.
- Peixoto, M. M., Lopes, J., Rodrigues, A. L. (2022). Quality of Life, Sexual Functioning and Chronic Disease: A Comparative Study with Portuguese Women without Chronic Disease, and Women with Diabetes Type 1 and 2, and Arterial Hypertension. *International Journal of Sexual Health*, 34(2), 209–220. doi: 10.1080/19317611.2021.2015038
- Ruiz-Marin, C. M., Molina-Barea, R., Slim, M., Calandre, E. P. (2021). Marital adjustment in patients with cancer: association with psychological distress, quality of life, and sleep problems. *International Journal of Environmental Research and Public Health*, 18(13), 7089. doi: 10.3390/ijerph18137089
- Santana, L. M., Perin, L., Lunelli, R., Inácio, J. F. S., Rodrigues, C. G., Eibel, B., Goldmeier, S. (2019). Sexual dysfunction in women with hypertension: A systematic review and meta-analysis. *Current Hypertension Reports*, 21, 1–10. doi: 10.1007/s11906-019-0925-z
- Sengul, S., Akpolat, T., Erdem, Y., Dericu, U., Arici,

- M., Sindel, S., ..., Caglar, S. (2016). Changes in hypertension prevalence, awareness, treatment, and control rates in Turkey from 2003 to 2012. *Journal of Hypertension*, 34(6), 1208–1217. doi: 10.1097/HJH.0000000000000901
- Symonds, T., Boolell, M., Quirk, F. (2005). Development of a questionnaire on sexual quality of life in women. *Journal of Sex & Marital Therapy*, 31(5), 385–397. doi: 10.1080/00926230591006502
- Tuğut, N., Gölbaşı, Z. (2010). Cinsel yaşam kalitesi ölçeđi-Kadın Türkçe versiyonunun geçerlik ve güvenilirlik çalışması. *Cumhuriyet Medical Journal*, 32(2), 172–180.
- Von Elm, E., Altman, D. G., Egger, M., Pocock, S. J., Götzsche, P. C., Vandenbroucke, J. P. STROBE Initiative (2014). The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Statement: Guidelines for reporting observational studies. *International Journal of Surgery*, 12(12), 1495–1499. doi: 10.1016/j.ijisu.2014.07.013
- World Health Organization. (2023). *Hypertension*. Accessed Date: 13.12.2023, <https://www.who.int/news-room/fact-sheets/detail/hypertension>
- Zhong, Q., Anderson, Y. (2022). Management of Hypertension with Female Sexual Dysfunction. *Medicina*, 58(5), 637. doi: 10.3390/medicina58050637