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Araştırma Makalesi / Original Research

Examining Women's Sexual Life Quality During the COVID-19 Pandemic

COVID-19 Pandemisinde Kadınların Cinsel Yaşam Kalitesinin İncelenmesi

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Abstract:

Aim: The purpose of this research is to examine the sexual life quality of women aged 18-65 during the COVID-19 pandemic period.

Methods: The study is of descriptive and cross-sectional design, completed with 560 women. A 24-question "information form" and the "Sexual Quality of Life-Female (SQOL-F) questionnaire" were used to collect data.

Results: The mean "Sexual Quality of Life-Female" score was found 71.57 ± 17.52 . A statistically significant positive and weak correlation was found between "Sexual Quality of Life-Female" total score and age, and a negative and weak correlation was found between "Sexual Quality of Life-Female" total score and duration of marriage. A statistically significant difference was found between "Sexual Quality of Life-Female" total score and the use of contraceptive methods, COVID-19 diagnosis status, pandemic effect on economic situation, cigarette consumption and changes in romantic relationships in the pandemic.

Conclusion: Women who are at risk for a healthy sexual life should be informed about protective measures.

Key Words: COVID-19; female; sexual quality of life; sexuality

Özet:

Amaç: Araştırmanın amacı, COVID-19 pandemisi döneminde 18-65 yaş arası kadınların cinsel yaşam kalitesini incelemektir.

Yöntem: Araştırma, tanımlayıcı ve kesitsel tasarımda olup 560 kadınla tamamlanmıştır. Verilerin toplanmasında 24 soruluk "bilgi formu" ve "Cinsel Yaşam Kalitesi Ölçeği-Kadın Formu (CYKÖ-K)" kullanılmıştır.

Bulgular: "Cinsel Yaşam Kalitesi Ölçeği-Kadın Formu" ortalama puanı 71.57 ± 17.52 olarak bulunmuştur. Kadınların "Cinsel Yaşam Kalitesi Ölçeği-Kadın Formu" toplam puanı ile yaş arasında istatistiksel olarak anlamlı pozitif ve zayıf ilişki, "Cinsel Yaşam Kalitesi Ölçeği-Kadın Formu" toplam puanı ile evlilik süresi arasında negatif ve zayıf bir ilişki saptanmıştır. "Cinsel Yaşam Kalitesi Ölçeği-Kadın Formu" toplam puanı ile kontraseptif yöntem kullanımı, COVID-19 tanı durumu, pandeminin ekonomik duruma etkisi, sigara kullanımı ve pandemide romantik ilişkilerdeki değişiklikler arasında istatistiksel olarak anlamlı fark bulunmuştur.

Sonuç: Sağlıklı bir cinsel yaşam için risk altında olan kadınların koruyucu önlemler konusunda bilgilendirilmesi gerekmektedir.

Anahtar Kelimeler: COVID-19; kadın; cinsel yaşam kalitesi; cinsellik

Introduction

Coronavirus disease (COVID-19) in China at the end of 2019 has led to world outbreak and has become a significant health problem. COVID-19 has been declared a public health emergency of global area by World Health Organization (WHO).⁽¹⁾

Such infectious diseases, which were not known before and spread very rapidly, affect people's psychology and lifestyles.⁽²⁾ COVID-19 virus requires serious precautions to be taken due to contamination risks such as droplet infection and contact with contaminated surfaces.⁽³⁾ During the epidemic, individuals are expected to maintain social distance in order to reduce the risk of contamination.⁽⁴⁾ Social distance affects spousal relations, thus sexual activity.⁽³⁾

Sexuality is an important part of women's life and is one of the factors affecting mental health. It has a great impact on maintaining relationships between people. Coronavirus disease has also affected people's lifestyle.⁽⁵⁾ Psychological and mental health-related problems have also become common during this epidemic.⁽⁶⁾ The impact of COVID-19 also appears to be related to sexual health.⁽⁵⁾ The decrease in sexual activity and quality of sexual life can negatively affect the quality of life of the individual and cause depression⁽⁶⁾. In the research of Schiavi et al., it was found that women's sexual functions and quality of life were negatively affected due to COVID-19 disease and social distance.⁽⁷⁾

It is an undeniable fact that the life quality of women and their sexual function and sexual life quality, which are of the most important determinants of this, are affected when the social isolation during the pandemic process, the fear of catching or transmitting the disease, the problems that may occur between the spouses.⁽⁸⁾ The purpose of this research is to examine the sexual life quality of women aged 18-65 during the COVID-19 pandemic period.

Materials and Methods

Research Design and Sample

The type of research is descriptive and cross-sectional design. The universe of the study consisted of women age between 18-65 years old in Turkey between July 2021 and December 2021. The sample size was calculated using the G*Power (v3.1.7) power analysis programme. The "Sexual Quality of Life-Female (SQOL-F) questionnaire" was considered as the main parameter in calculating the effective value. In the research of Erbas and Demirel, it was found that the SQOL-F score of women was 68.5 ± 11.5 .⁽⁹⁾ Based on the results of this study, sample size was determined as 562 women with considering the degree of confidence (95%), margin of error (5%), effect size (0.5) and ability test (80%). The data was collected with 560 women

by online survey application (Google Forms). The sample was obtained by simple random sampling method.

Women who wanted to participate in the study voluntarily, who were between the ages of 18-65, who were sexually active, who spoke Turkish, and who had no communication barriers were included in the study.

Data Collection Tools

The research data was collected with a 24-question “information form” including sociodemographic and sexual function data conducted by the researchers^(5,7,8) and “Sexual Quality of Life-Female Scale (SQOL-F)”. The reliability and validity study of the scale was conducted by Symonds et al.⁽¹⁰⁾ The scale is Likert type and contains 18 items. Scores between 18 and 108 points can be obtained from the scale. High scores mean having a good sexual life. The validity and reliability of the scale in Turkish was conducted by Tuğut and Gölbaşı (2010).⁽¹⁰⁾ The Cronbach’s alpha for SQOL-F was 0.83, and in this study the Cronbach’s alpha was 0.95.

Statistical Analysis

The data were analyzed using the statistical program SPSS 22 (IBM Corp. Released 2013. IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.). Descriptive statistics were presented in numbers, frequencies, and percentages. The One-Sample Kolmogorov-Smirnov test was performed and it showed that the data did not follow a normal distribution. So, the data were assessed using the Kruskal-Wallis Analysis of Variance and the Mann-Whitney U test for determining the relationship between the descriptive data and scale. A margin of error of $p=0.05$ was used.

Ethical Consideration

Ethics committee approval was received from the Non-invasive Clinic Ethical Committee of a university (Decision no: 61351342/June 2021-31; Date: 28.06.2021). After ethical approval, institutional permission was received. Written consent was received from the women included in the research. The research was conducted in accordance with the Declaration of Helsinki.

Results

The mean age of women was 35.79 ± 8.32 . The mean marriage year of participants was found 12.28 ± 8.68 . The 48.7% ($n=273$) of them had graduate education level. The 49.3% ($n=276$) of them are working. Most of women (54.8%, $n=307$) were in normal BMI range (18,5-

24,9 kg/m²). It was found that 52.0 % (n=291) of the women used contraception method, and the most used contraception method was male condom (29.1%, n=163) (Table 1).

Table 1. Distribution of data on women's characteristics

Variables		$\bar{X} \pm (SD)$	Min-Max
Age (year)		35.79±8.32	20-56
Partner age (year)		39.06±8.21	22-62
Duration of marriage		12.28±8.68	1-40
Parity		1.72±2.23	0-6
Number of child		1.58±1.08	0-4
Duration of menopause		6.00±1.78	0-16
		n	%
Education level	Primary school	157	28.1
	High school	35	6.3
	Graduate	273	48.7
	Master degree	95	16.9
Working status	Employee	276	49.3
	Non-employee	284	50.7
BMI	<18,49 kg/m ²	9	1.6
	18,5-24,9 kg/m ²	307	54.8
	25-29,9 kg/m ²	130	23.2
	>30 kg/m ²	94	16.8
Contraception use	Yes	291	52.0
	No	269	48.0
Type of contraception	Combine oral contraception	63	11.3
	Condom	163	29.1
	Intrauterine device	24	4.3
	Withdrawal for contraception	82	14.6
	Tubal ligation	13	2.3
Menopausal status	Yes	108	19.3
	No	452	80.7

BMI: Body Mass Index, $\bar{X} \pm (SD)$: Mean±Standard Deviation, Min: Minimum, Max: Maximum

While the mean sexual intercourse number per week before pandemic was found as 2.08±1.13, it was found as 2.23±1.28 in pandemic period. The 51.4% (n=288) of women diagnosed with COVID-19. It was found that 35.5% (n=199) of women stated that COVID-19 pandemic moderately adversely affected their economic situation. It was determined that 22.0% (n=123) of them had an increased sexual intercourse time, and 10.4% (n=58) of them had an increased sexual arousal (Table 2).

Table 2. Distribution of data for the COVID-19 pandemic period

Variables		$\bar{X} \pm (SD)$	Min-Max
Number of sexual intercourses per week in the pre-pandemic period		2.08±1.13	0-5
Number of sexual intercourses per week during pandemic		2.23±1.28	0-5
		n	%
Diagnosed with COVID-19	Yes	288	51.4
	No	272	48.6
Partner diagnosed with COVID-19	Yes	224	40.0
	No	336	60.0
Pandemic effect on economic situation	Slightly adversely affected	147	26.3
	Moderately adversely affected	199	35.5
	Severely adversely affected	105	18.8
	Not affected	109	19.5
Cigarette consumption in the pandemic	Not using	471	84.1
	Decreased	0	0.0
	Increased	26	4.6
	Not changed	63	11.3
Alcohol consumption in the pandemic	Not using	403	72.0
	Decreased	5	0.9
	Increased	9	1.6
	Not changed	143	25.5
Change in sexual intercourse time during pandemic	Increased	123	22.0
	Decreased	48	8.6
	Not Changed	389	69.5
Change in sexual arousal during pandemic	Increased	58	10.4
	Decreased	143	25.5
Abstinence from sexual intercourse during pandemic	Not Changed	359	64.1
	Yes	148	26.4
Reasons of abstinence	No	412	73.6
	Loss of Sexual Desire	156	27.9
	Risk of COVID-19 Contagious	40	7.1
Partner abstinence from sexual intercourse during pandemic	Tiredness	8	1.4
	Yes	109	19.5
Partner reasons of abstinence	No	451	80.5
	Loss of Sexual Desire	34	6.1
Changes in romantic relationship during pandemic	Tiredness	27	4.8
	Positively Affected	92	16.4
	Negatively Affected	133	23.8
	Not Affected	335	59.8

$\bar{X} \pm (SD)$: Mean±Standard Deviation, Min: Minimum, Max: Maximum

The mean SQOL-F score was determined 71.57±17.52 (Min: 0; Max: 100). A statistically significant positive and weak correlation was found between SQOL-F total score

and age ($r=0.103$; $p=0.015$), and a negative and weak correlation was found between SQOL-F total score and duration of marriage ($r=-0.108$; $p=0.010$) (Table 3).

It was determined that the mean SQOL-F total scale score was higher in participants who used contraception method than participants who do not use ($Z_{mwu}=-5.030$; $p<0.001$). A statistically significant difference was detected between SQOL-F total score and diagnosed with COVID-19 ($Z_{mwu}=-5.249$; $p<0.001$). A statistically significant difference was detected between SQOL-F total score and pandemic effect on economic situation ($X^2=19.424$; $p<0.001$). According to the Post Hoc Tukey HSD test, SQOL-F total score was higher in 'slightly adversely affected' than 'moderately adversely affected', and 'slightly adversely affected' than 'severely adversely affected', and 'moderately adversely affected' than 'not affected' ($p<0.05$). A statistically significant difference was detected between SQOL-F total score and cigarette consumption in the pandemic ($X^2=16.238$; $p<0.001$). According to the Post Hoc Tukey HSD test, SQOL-F total score was higher in 'not using' than 'not changed', and 'increased' than 'not changed' ($p<0.05$). Changes in romantic relationship during pandemic were found to significantly affect quality of sexual life ($X^2=14.324$; $p=0.002$) (Table 3).

Table 3. The comparison of women's characteristics and SQOL-F scale scores

Scale		$\bar{X} \pm (SD)$	Min-Max	
SQOL-F		71.57±17.52	0-100	
Characteristics			SQOL_F	P
			r	P
Age			0.103	0.015
Duration of marriage			-0.108	0.010
			$\bar{X} \pm (SD)$	Z_{MWU}
Contraception use	Yes	73.92±15.07	-5.030	<0.001
	No	69.02±19.54		
Diagnosed with COVID-19	Yes	68.28±16.36	-5.249	<0.001
	No	75.05±18.06		
			$\bar{X} \pm (SD)$	X²
Pandemic effect on economic situation	Slightly adversely affected	73.30±22.01		
	Moderately adversely affected	69.98±15.39		
	Severely adversely affected	71.61±13.90	19.424	<0.001
	Not affected	72.08±17.44		
Cigarette consumption in the pandemic	Not using	72.54±17.30		
	Increased	76.76±8.00	16.238	<0.001
	Not changed	62.12±19.08		
Changes in romantic relationship during pandemic	Not affected	70.88±15.32		
	Positively affected	76.52±11.90	14.324	0.002
	Negatively Affected	69.54±24.33		

$\bar{X} \pm (SD)$: Mean±Standard Deviation, Min: Minimum, Max: Maximum, r: Spearman's correlation, Z_{mwu} : Mann Whitney U Test, X^2 : Kruskal Wallis Test, $p<0.05$

Discussion

In the study, it was determined that the frequency of sexual intercourses per week during the pandemic increased compared to the pre-pandemic period, there was no change in the duration of sexual intercourse and sexual arousal in more than half of the women, and did not abstinence from sexual intercourse. There are studies with similar and different findings in the literature^(3,11-13). It is thought that the different results may be due to the sample characteristics.

In the research, it was observed that the sexual quality of life of women who reported that their sexual life was not adversely affected in the COVID-19 epidemic was also good. Studies show different results in this regard.^(7,11,14-17) It is possible to explain the difference between our findings and the findings of other researchs conducted during the pandemic period with individual characteristics, cultural differences and varying degrees of impact of COVID-19.

In the study, it was found as the age increases and the duration of marriage shortens, the sexual life quality score increases. Mamuk et al.'s (2023) study showed that the quality of sexual life decreases with age, and the duration of marriage is not associated to the sexual quality of life.⁽¹⁸⁾ In the literature; there were also studies showing that there was no difference in age and duration of marriage between women with and without sexual dysfunction in the COVID-19 pandemic.^(19,20) Obtaining different findings in the studies may be related to the measures taken during the COVID-19 pandemic and lifestyle changes of individuals.

In the research, it was found that the mean SQOL-F score was significantly higher in women using contraceptive methods. In the research of Yuksel and Ozgor (2020), it was reported that the use of contraception and the quality of sexual life decreased significantly during the pandemic.⁽¹¹⁾ Pandemics can limit access to health services, especially preventive and reproductive health services.⁽²¹⁾ During the COVID-19 pandemic, some problems were encountered in accessing family planning services and using contraceptive methods.⁽²²⁾ Since unwanted and unplanned pregnancies are prevented by the use of contraceptive methods, this may also have a positive impact on the quality of sexual life.

In the research, it was determined that the mean SQOL-F score in women diagnosed with COVID-19 was significantly lower. In the study of Kaya et al., (2021), it was determined that the frequency of sexual intercourse and sexual satisfaction in women decreased after COVID-19 disease.⁽²³⁾ It is thought that the measures implemented due to the fear of transmitting the virus may negatively affect the quality of sexual life.

In the research, it was found that the economic status of women at the time of the pandemic affected the quality of sexual life. In the research of Çankaya and Ekin Ateş (2021), it was found that women whose income decreased during the COVID-19 isolation period experienced more sexual problems.⁽¹⁹⁾ In the study of Keskin and Nacar (2023), it was showed a significant relationship between changes in the family income level during the pandemic and sexual quality of life.⁽²⁴⁾ Women who are economically dependent on their spouses are affected by their partners' stress due to the economic insecurity caused by the pandemic.⁽²⁵⁾ The deterioration of the economic situation negatively affects female sexuality.

In the study, it was found that the smoking habits of women at the time of the pandemic affected the quality of sexual life. It is thought that participants may prefer cigarette consumption as one of the methods of coping with the stress experienced during the pandemic. Karşıyakalı et al. (2021), found that there is a significant relationship between smoking during the COVID-19 epidemic and both the frequency of sexual intercourse and a decrease in sexual desire.⁽⁶⁾

It was found that women whose romantic relationships were positively affected during the pandemic that the quality of sexual life was better. In the research of Çankaya and Ekin Ateş (2021), it was determined that women whose romantic relationship satisfaction decreased during the COVID-19 isolation period experienced more sexual problem.⁽¹⁹⁾ Luetke et al., (2020) determined that the frequency of sexual intercourse among women who had conflicts with their spouses due to the COVID-19 pandemic also decreased.⁽²⁶⁾ In the study of Karagöz et al. (2021), it was observed that women exhibited sexual avoidance behavior twice as much as men during the COVID-19 pandemic.⁽²⁷⁾ The risk of virus transmission during the pandemic has negatively affected romantic relationships between spouses. Disruption of the healthy relationship between spouses affects sexual life. This may cause a decrease in women's sexual life quality.

Conclusion and Recommendations

During the COVID-19 outbreak, the age of the woman, the duration of marriage, the use of contraceptive methods, the diagnosis of COVID-19, the economic situation, the use of cigarettes and changes in romantic relationships were found to be the factors affecting the quality of sexual life. In situations that significantly affect life, such as the COVID-19 epidemic, it should be taken into account that the quality of sexual life may deteriorate due to the impact on sexual life, and women should be evaluated in terms of sexual health. It is important to develop screening and interventions for problems related to sexual function and sexual quality

of life for women. Health professionals should determine the factors that pose a risk for individuals to have a healthy sexual life. Information and training should be provided about coping, preventive and therapeutic practices regarding these factors.

Limitations

This study may not be generalized to all women. The findings of the study can only be generalized to the research sample. It is thought that qualitative studies can more deeply examine subject.

Conflict of Interests

The authors declare no conflict of interest.

Financial Disclosure

No financial disclosure was declared by the authors.

Contribution of Author

Research idea, Design of the study, Acquisition of data for the study, Analysis of data for the study, Interpretation of data for the study, Drafting the manuscript, Revising it critically for important intellectual content, Final approval of the version to be published: HA, MT, NP

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