Original Article

Relationship Between Coronavirus Anxiety and Sexual Quality of Life in Married Women

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Place of work: The study consisted in a family health center located in the Central Anatolia Region of Turkey.

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Abstract
Purpose: This study was conducted to determine the relationship between coronavirus anxiety and sexual quality of life in married women.
Methods: The population of this descriptive and cross-sectional study consisted of married women who presented to a family health center located in the Central Anatolia region. The sample was comprised of 125 with married women. The data were collected using the Personal Information Form, the Coronavirus Anxiety Scale (CAS) Short Form, the Sexual Quality of Life-Female (SQOL-F) Questionnaire.
Results: The mean scores the participants obtained from the overall CAS and SQOL-F were 3.29±3.15 and 75.44±19.71 respectively. Of the variables, income status, frequency of having sexual intercourse, perception of marriage, having children, the number of children and the presence of the people in the immediate circle who died due to the COVID-19 led to a statistically significant difference between the scores the participants obtained from the SQOL-F ($p<0.05$). Of the variables, perception of marriage, income status, having had COVID-19 test, having been diagnosed with COVID-19, having lost a relative due to COVID-19 and having been quarantined led to a statistically significant difference between the scores the participants obtained from the CAS ($p<0.05$). The moderate, negative and statistically significant correlation was determined between CAS and SQOL-F scores ($r=0.366$; $p=0.001$)
Conclusion: It was determined that the participating women's sexual quality of life levels decreased as their coronavirus-related anxiety levels increased.

Keywords: Pandemic, Married Woman, Sexual Life, COVID-19, Anxiety

Introduction

The new coronavirus disease, called COVID-19, first appeared in China in the last months of 2019. Coronaviruses, a large family of viruses, are known to be in several types that cause various diseases, especially the respiratory syndrome (WHO, 2020). Health problems caused by the COVID-19 emerge in two ways. The first is the physical health problems caused directly by the virus, and the other is the pandemic-induced mental health problems (Askin et al., 2019; Aslan, 2020). COVID-19 is known to cause psychological problems such as anxiety, stress and behavioral disorders in large masses (Aslan, 2020). Anxiety affects sexual life (Dettore et al., 2013; Flichman, 2013). A quality and satisfying sex life positively affects many individuals' not only immediate circle and life, but also their social and daily relationships (Van Lankveld et al., 2018; Flynn et al., 2016). People's sexual life is affected by several biological, psychological and socioeconomic factors that cause anxiety (Guthrıe, 1999). In a study in which the effect of psychological conditions on sexuality was discussed, it was reported that loss of sexual interest was negatively related to generalized anxiety disorder, that people with panic

disorder were more likely to face sexual problems, especially sexual reluctance, and that anxiety disorders affected their sexual performance, enjoyment of sexuality, and sexual satisfaction (Rokach, 2019). The COVID-19 pandemic has greatly affected the general well-being of people worldwide (Cao et al., 2020; Wang et al., 2020; White & Van Der Boor 2020). Uncertainties about health and work life, social distance, compulsory quarantine, home education, etc. in combination affect sufferers' psychological adjustment, anxiety and depression levels, sleep and eating patterns, and somatic symptoms (Ahmed et al., 2020; Cellini et al., 2020; Fernández-Aranda et al., 2020; Huang & Zhao 2020; Tian et al., 2020; Zhang et al., 2020). Adverse emotional reactions have been identified both in the general adult population, and in medical care personnel, children and adolescents, especially after the COVID-19 was declared as a pandemic. There are studies revealing that this case led to pre-existing health emergencies to trigger stressful emotional responses, often characterized by high levels of anxiety and negative emotions, and to a decrease in positive emotions (Brooks et al., 2020; Li S. et al., 2020). It was stated that there was a decrease in sexual desire and frequency of having sexual intercourse due to COVID-19, which directly showed the effect of COVID-19 on sexual health (Li G et al., 2020). Health professionals are expected to integrate sexuality and related factors into care by considering the individual as a whole in order that people receive holistic care and the quality of care is improved (Tugut & Golbasi 2014). Therefore, there is a need for literature information on the relationship between coronavirus anxiety and sexual quality of life of married women during the COVID-19 pandemic. The present study was conducted to determine the relationship between coronavirus anxiety and sexual quality of life in married women during the COVID-19 pandemic.

Subjects and Methods

Design: The research is of a descriptive and cross-sectional type.

Participants: The population of the study consisted of married women who presented to a family health center in the Central Anatolia region of Turkey between September 15, 2020 and February 17, 2021. Of the 131 women who presented to the family health center between the aforementioned dates, 125 who volunteered to participate in the study and met the inclusion criteria were included in the study sample. No sampling method was implemented in the present study. Of the women in the population, those who volunteered to participate in the study and met the inclusion criteria were included in the study. The criteria for inclusion in the research were being married, being over 18 years old, not having entered menopause, being literate, having no obstacles in perceiving and answering questions, not having a diagnosed chronic disease, not having a diagnosed psychiatric disease, not taking any medication regularly. After obtaining the necessary permissions to conduct the study, married women who presented to the aforementioned family health center and met the inclusion criteria were provided with a quiet environment, informed about the subject and purpose of the study, and their informed consent was obtained.

Measures Tools

Personal Information Form: The form consists of two parts. The first part includes 19 items questioning the participants' age, education level, family type, socio-economic status, etc. Of the 19 items, 3 are open-ended questions and 16 closed-ended questions (type of marriage, frequency of having sexual intercourse, etc.). The second part consists of eight questions about COVID-19 (history of having a COVID-19 test and diagnosis, measures taken to avoid contracting COVID-19, etc.). All of the questions in this section are closed-ended.

Coronavirus Anxiety Scale (CAS) Short Form:The form developed by Lee (2020) is a short mental health screening scale and it is administered to identify possible cases of dysfunctional anxiety associated with the COVID-19 crisis. The Cronbach's alpha coefcient of the questionnaire was 0.832. The CAS consists of five items and one sub-dimension. Responses given to the items are rated on a 5-point Likert type scale ranging from 0 to 4 ("0" "never", "1" "Rarely, less than one or two days", "2" "A few days", "3" "more than 7 days" and "4" "almost daily in the last two weeks). While the lowest possible score to be obtained from the scale is 0, the highest possible score is 20. Those whose

CAS score is nine and above can be interpreted as having a high level of anxiety (Bicer et al., 2020). The Cronbach's Alpha reliability coefficient of the CAS in the present study was 0.86.

Sexual Quality of Life-Female (SQOL-F) Questionnaire: Tugut and Golbasi adapted the Sexual Quality of Life-Female (SQOL-F) Questionnaire developed by Symonds et al. (2005) to Turkish (Tugut & Golbasi, 2010). The questionnaire consists of 18 items. Each item of the questionnaire is rated on a 6-point scale ranging from 1 to 6 (1=Completely Agree, 2=Moderately Agree, 3=Slightly Agree, 4=Slightly Disagree, 5=Moderately Disagree, 6=Completely Disagree). The lowest and highest possible scores to be obtained from the questionnaire are 18 and 108 respectively. High scores obtained from the scale indicate that the quality of sexual life is good. The Cronbach's alpha coefcient of the questionnaire was 0.83. The Cronbach's Alpha reliability coefficient of the SQOL-F Questionnaire in the present study was 0.72.

Data collection: To conduct the research, the permissions of scales and data collection were granted from the respective authors, Ministry of Health and the Provincial Health Directorate respectively. After obtaining the necessary permissions to conduct the study, women who presented to the aforementioned family health center and met the inclusion criteria were provided with a quiet environment, informed about the subject and purpose of the study, and their informed consent was obtained. In order to ensure confidentiality, it was stated that there was no personally identifiable information on the data collection forms delivered in a sealed envelope. The Personal Information Form, CAS Short Form, SQOL-F Questionnaire were administered to the women who agreed to participate in the study. It took the participants approximately 20 minutes to fill in the forms.

Ethical Considerations: Before the study was conducted, ethics committee approval was obtained from the Non-Interventional Clinical Research Ethics Committee (decision number: 2020/08-20). Permission to conduct the study was obtained from the Ministry of Health and the Provincial Health Directorate. The participants were told that the participation was voluntary, and that the data obtained would only be used within the scope of the study, which was conducted in line with the Principles of the Declaration of Helsinki.

Statistical analysis: The study data were analyzed using the SPSS 22.0. The Kolmogorov-Smirnov and Shapiro Wilks tests were used to find out whether the data were normally distributed. If the data met the parametric conditions, they were analyzed with the t test for two groups. If not, Mann Whitney U test was used. If the data met the parametric conditions for more than two groups, they were analyzed with the F test. If not, Kruskal Wallis test was used. Tamhane's T2 test and Bonferroni test were used to determine which group was statistically different from the others. The Cronbach's Alpha value was used to determine the internal consistency of the scales. Pearson's correlation analysis was used to determine the relationship between the scales. P values less than 0.05 were considered statistically significant.

Results

As is seen in Table 1, the mean scores obtained from the CAS and SQOL-F were 3.29±3.15 and 75.44±19.71 respectively.

As is seen in Table 2, where the mean scores the participants obtained from the CAS and SQOL-F were compared in terms of their sociodemographic characteristics, there was a statistically significant difference between the mean scores they obtained from the overall CAS in terms of variables such as income status and perception of marriage ($p<0.05$). According to the post-hoc analysis, there was a statistically significant difference between those whose income was less than their expenses and those whose income was equal to their expenses ($p<0.05$). There was also a statistically significant difference between the mean scores the participants obtained from the SQOL-F in terms of variables such as income status and perception of marriage. In the post-hoc analysis, there was a statistically significant difference between the groups whose income was less than their expenses and those whose income was equal to their expenses, and between those whose income was equal to their expenses and those whose income was more than their expenses ($p<0.05$). As for the variable of frequency of having sexual intercourse, there was a significant difference between those who had

sexual intercourse every other day and those who had sexual intercourse once a month, and between those who had sexual intercourse once or twice a week and those who had sexual intercourse once a month. As for the "perception of marriage" variable, there was a significant difference between the groups who perceived their marriage as "good" and those who perceived their marriage as "moderate", and between those who perceived their marriage as "good" and those who perceived their marriage as "bad" ($p<0.05$).

As is seen in Table 3, where the mean scores the participants obtained from the CAS and SQOL-F were compared in terms of their gynecological and obstetric characteristics, there was a statistically significant difference between the mean scores they obtained from the overall SQOL-F in terms of variables such as having children and the number of children ($p<0.05$). In the post-hoc analysis, a significant difference was determined between those who did not have children and those who had one child, and between those who did not have children and those who had three children ($p<0.05$).

As is seen in Table 4, where the mean scores the participants obtained from the CAS and SQOL-F were compared in terms of their COVID-19 pandemic-related characteristics, there was a statistically significant difference between the mean scores they obtained from the overall CAS in terms of variables such as having had a test for the COVID-19, having been diagnosed with COVID-19, having a person around diagnosed with COVID-19, having a person around who died due to COVID-19, and having been quarantined due to COVID-19 ($p<0.05$). There was a statistically significant difference between the mean scores they obtained from the overall SQOL-F in terms of the variable "having a person around who died due to COVID-19".

As is seen in Table 5, a moderate, negative and statistically significant correlation was determined between CAS and SQOL-F scores ($r=0.366$; $p=0.001$)

Table 1: Mean Scores Obtained from the Coronavirus Anxiety Scale (CAS) Short Form and Sexual Quality of Life – Female (SQOL-F) Questionnaire

	Min and max possible scores that can be obtained from the scale	**$\bar{X}$ ±SD**
Coronavirus Anxiety Scale Short Form	0 - 20	3.29±3.15
Sexual Quality of Life – Female Questionnaire	18 - 108	75.44±19.71

Table 2: Comparison of the socio-demographic characteristics of the participants in terms of their scores for the Coronavirus Anxiety Scale (CAS) and the Sexual Quality of Life -Female (SQOL-F) Questionnaire

Characteristics	**N (%)**	**CAS Median ($\bar{X}$)±SD (min-max)**	**SQOL- Median ($\bar{X}$)±SD (min-max)**
Age (years)*			
19-27	4(27.2)	2.94±2.92 (0-12)	75.84±22.56 (3.33-100.00)
28-37	67(53.6	3.24±3.13 (0-20)	**76.15±17.38 (14.44-100.00)**
38-46	24(19.2)	**3.92±3.21 (0-10)**	72.87±22.11 (3.33-98.89)
KW/ p		1.669/0.434	0.623/0.732

Educational status*			
Elementary school	25(20.0)	3.24±2.89 (0-10)	76.71±15.66 (31.11-98.89)
Junior high school	32(25.6)	2.81±2.76 (0-10)	74.86±13.31 (46.67-96.67)
Senior high school	31(24.8)	2.81±2.72 (0-10)	**78.13±22.80 (3.33-100.00)**
University	37(29.6)	**4.14±4.10 (0-20)**	72.82±23.96 (3.33-97.78)
KW/ p		1.299/0.729	3.334/0.343
Working at a paid job **			
Yes	35(28.0)	**4.31±4.23 (0-20)**	71.52±27.14 (3.33-100.00)
No	90(72.0)	2.89±2.82 (0-12)	**76.96±15.85 (4.44-100.00)**
Z / p		1293.500/0.116	1602.500/0.880
Social security **			
Yes	116(92.8)	3.10±3.12 (0-12)	**75.65±19.82 (3.33-100.00)**
No	9(7.2)	**5.67±5.16 (0-20)**	72.71±19.05 (31.11-91.11)
Z / p		656.000/0.193	467.000/0.599
Spouse's age (years) *			
23-31	18(14.4)	2.71±2.67 (0-12)	**77.75±22.39 (3.33-100.00)**
32-40	87(69.6)	3.52±3.63 (0-20)	74.65±18.99 (3.33-100.00)
41-50	20(16.0)	**3.75±3.33 (0-10)**	73.05±16.02 (31.11-96.67)
KW/ p		2.647/0.266	4.310/0.116
Spouse's educational status*			
Elementary school			
Junior high school	12(9.6)	**4.08±2.93 (0-10)**	**77.22±13.04 (57.78-98.89)**
Senior high school	29(23.2)	2.90±2.84 (0-10)	74.25±18.91 (3.33-95.56)
University	39(31.2)	3.13±3.11 (0-12)	76.80±18.73 (4.44-98.89)
	45(36.0)	3.47±3.14 (0-20)	74.54±22.74 (3.33-100.00)
KW/ p		1.917/0.590	0.610/0.894
Spouse's working at a paid job **			
Yes	121(96.8)	**3.30±3.24 (0-20)**	**75.80±19.56 (3.33-100.00)**
No	4(3.2)	3.00±2.96 (0-9)	64.44±24.19 (31.11-87.78)
Z / p		214.000/0.690	163.000/0.268
Place of residence lived in longest *			
Village	17(13.6)	3.24±2.53 (0-9)	70.13±16.49 (31.11-98.89)
District / town	11(8.8)	2.27±1.61 (0-6)	**83.03±15.47 (55.56-98.89)**
City	97(77.6)	**3.41±3.33 (0-20)**	75.50±20.49 (3.33-100.00)
KW/ p		0.619/0.724	5.624/0.060
Family type*			
Nuclear	118(94.4)	3.19±3.15 (0-20)	**75.87±19.60 (3.33-100.00)**
Extended	7(5.6)	**5.00±3.26 (2-10)**	68.09±21.75 (31.11-90.00)
Z / p		568.000/0.091	318.000/0.307
Income status**			
Income less than expenses	30(24.0)	4.37±3.05[a] (0-10)	68.44±22.05[a] (3.33-100.00)
Income equal to expenses	88(70.4)	2.80±2.39[a] (0-20)	**78.32±18.84[ab] (3.33-100.00)**
Income more than expenses	7(5.6)	**4.86±4.70 (0-12)**	69.20±11.01[b] (57.78-88.89)
KW/ p		***8.841/0.012****	***9.529/0.009****

Type of marriage *			
Arranged, without knowing each other beforehand	38(30.4)	2.63±2.61 (0-10)	**76.31±12.30 (38.89-94.44)**
Arranged, then by meeting and approving	29(23.2)	**4.10±4.02 (0-20)**	74.71±14.65 (31.11-95.56)
Love marriage	58(46.4)	3.31±3.20 (0-12)	75.22±25.31 (3.33-100.00)
KW/ p		1.646/0.429	2.836/0.242
Length of marriage (years)*			
0-5	47(37.6)	3.21±3.20 (0-12)	76.95±21.72 (3.33-100.00)
6-10	23(18.4)	3.35±3.17 (0-20)	**80.38±12.47 (46.67-95.56)**
11-15	26(20.8)	3.19±3.16 (0-10)	72.00±19.65 (14.44-100.00)
≥16	29(23.2)	**3.45±2.92 (0-10)**	72.14±20.78 (3.33-98.89)
KW/ p		0.820/0.845	4.672/0.197
Frequency of having sexual intercourse *			
Every day	5(4.0)	3.80±3.83 (0-9)	64.88±35.42 (3.33-87.78)
Every other day	12(9.6)	2.00±2.92 (0-10)	**83.88±13.57[a] (63.33-100.00)**
Once/twice a week	85(68.0)	2.92±2.84 (0-12)	78.02±17.61[b] (3.33-100.00)
Once a month	20(16.0)	**5.30±5.01 (0-20)**	62.55±21.25[ab] (14.44-88.89)
Once every two weeks	2(1.6)	2.00±1.87 (0-4)	68.88±28.28 (48.89-88.89)
KW/ p		6.236/0.182	***13.390/0.010****
Perception of marriage*			
Good	86(68.8)	2.84±3.42[a](0-20)	**79.35±17.82[ab] (3.33-100.00)**
Moderate	36(28.8)	**4.33±3.30[a] (0-12)**	67.68±21.40[a] (3.33-95.56)
Bad	3(2.4)	3.67±3.54 (0-9)	56.29±16.71[b] (38.89-72.22)
KW/ p		***7.945/0.019****	***15.006/0.001****

KW: Kruskal Wallis test was used Z: Mann Whitney U test was used p<0.05* p<0.01** p<0.001***
a-b: In the groups with the same letter, there was a statistical relationship between the groups and their mean score for the overall scale.

Table 3: Comparison of the mean scores the participants obtained from the Coronavirus Anxiety Scale (CAS) and the Sexual Quality of Life Scale (SQOL) in terms of their obstetric-gynecological characteristics

Characteristics	**N(%)**	**CAS Median(X̄)±SD (min-max)**	**SQOL Median(X̄)±SD (min-max)**
Having children **			
Yes	107(85.6)	**3.38±3.17 (0-20)**	73.49±20.27 (3.33-100.00)
No	18(14.4)	2.72±2.35 (0-12)	**86.97±10.38 (61.11-100.00)**
Z / p		823.000/0.317	***1392.500/0.003****
The number of children*			
None	18(14.4)	2.72±2.35 (0-12)	**86.97±10.38[ab] (61.11-100.00)**
1	33(26.4)	**3.94±3.45 (0-20)**	73.83±25.91 (3.33-100.00)
2	39(31.2)	3.28±3.18 (0-10)	75.69±16.26[b] (14.44-98.89)

≥3	35(28.0)	2.97±2.68 (0-10)	70.73±18.43[a] (3.33-96.67)
KW/ p		1.179/0.758	***13.011/0.005****
Pregnancy planning *			
Right now	7(5.6)	3.57±2.82 (1-8)	**83.96±8.50 (71.11-90.00)**
Not for a while	45(36.0)	**3.71±4.25 (0-20)**	77.23±19.55 (4.44-100.00)
No	73(58.4)	3.00±2.93 (0-10)	73.51±20.41 (3.33-98.89)
KW/ p		0.560/0.756	3.205/0.201
How long later do those who have planned not to be pregnant for a while plan to become pregnant?*			
0-23 months	9(7.2)	4.11±3.44 (0-10)	**80.88±12.46 (57.78-95.56)**
24-47 months	22(17.6)	**4.14±5.20 (0-20)**	75.95±18.87 (34.44-100.00)
≥48 months	14(11.2)	2.79±2.96 (0-10)	76.19±24.48 (4.44-100.00)
Those who are not planning a pregnancy / those who are planning a pregnancy right away	80(64.0)	3.05±2.91 (0-10)	74.47±19.97 (3.33-98.89)
KW/ p		1.495/0.683	1.074/0.783
Impact of COVID-19 on delaying pregnancy plan *			
COVID-19 has no effect	100(80.0)	3.041±3.48 (0-20)	74.57±21.24 (3.33-100.00)
I postpone it due to my concern for my own health.	3(2.4)	**8.67±4.16 (4-12)**	71.11±12.01 (57.78-81.11)
I postpone it due to my concern for my baby's health.	5(4.0)	3.00±1.22 (2-5)	74.88±11.72 (58.89-86.67)
I postpone it due to my concern for both my own and baby's health.	10(8.0)	4.40±2.87 (0-9)	78.11±12.49 (48.89-93.33)
KW/ p		8.972/0.062	3.911/0.418

KW: Kruskal Wallis test was used Z: Mann Whitney U test was used p<0.05* p<0.01** p<0.001***
a-b: In the groups with the same letter, there was a statistical relationship between the groups and their mean score for the overall scale.

Table 4: Comparison of the mean scores the participants obtained from the Coronavirus Anxiety Scale (CAS) and the Sexual Quality of Life Scale (SQOL) in terms of their COVID-19 Pandemic-related characteristics

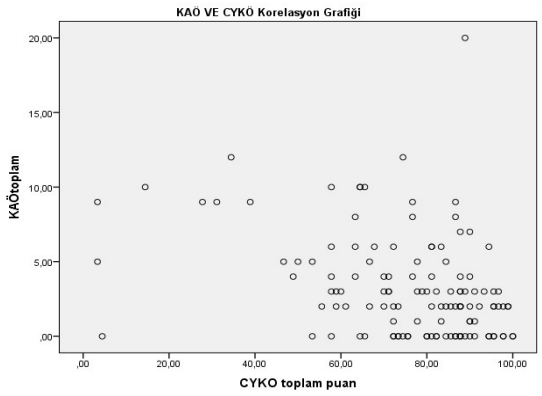
Characteristics	N(%)	CAS Median(X̄)±SD (min-max)	SQOL Median(X̄)±SD (min-max)
Having had a test for the COVID-19 *			
Yes	45(36.0)	**4.62±3.42 (0-12)**	71.40±21.83 (3.33-100.00)
No	80(64.0)	2.54±2.26 (0-20)	**77.70±18.16 (3.33-98.89)**
Z / p		***1060.500/0.000****	2139.500/0.081
Having been diagnosed with COVID-19*			
Yes	23(18.4)	**5.04±3.67 (0-12)**	72.51±20.41 (14.44-100.00)
No	102(81.6)	2.89±2.29 (0-20)	**76.10±19.59 (3.33-100.00)**
Z / p		***708.000/0.003****	1316.000/0.362

Presence of a person around diagnosed with COVID-19*			
Yes	86(68.8)	**3.56±3.20 (0-12)**	**74.70±21.45 (3.33-100.00)**
No	39(31.2)	2.69±2.92 (0-20)	77.06±15.31 (31.11-98.89)
Z / p		***1274.000/0.029****	1688.000/0.953
Presence of a person around who died due to COVID-19*			
Yes	35(28.0)	**4.57±3.50 (0-12)**	65.46±27.16 (3.33-96.67)
No	90(72.0)	2.79±2.32 (0-20)	**79.32±14.32 (31.11-100.00)**
Z / p		***1033.000/0.002****	***2048.000/0.009****
Having been quarantined due to COVID-19*			
Yes in tables	36(28.8)	**4.36±3.48 (0-12)**	75.61±18.20 (14.44-100.00)
No	89(71.2)	2.85±2.36 (0-20)	**75.36±20.38 (3.33-100.00)**
Z / p		***1110.000/0.006****	1638.500/0.842
Having received information about COVID-19*			
Yes	123(98.4)	**3.29±3.18 (0-20)**	75.30±19.84 (3.33-100.00)
No	2(1.6)	3.00±2.24 (0-6)	**83.88±0.78 (83.33-84.44)**
Z / p		117.500/0.912	102.000/0.679
Source of the information about COVID-19**			
Media	73(58.4)	2.59±2.64 (0 – 10)	76.54±19.17 (3.33-100)
Midwife/nurse	3(2.4)	4.33±5.13 (0 – 10)	79.25±14.50 (65.56-94.44
Physician	4(3.2)	**6.50±9.14 (0 – 10)**	**87.22±7.93 (81.11-97.78**
Media, midwife/nurse, physician	43(34.4)	4.19±3.58 (0 – 12)	71.80±21.66 (3.33-100.00
Not received information	2(1.6)	3.00±2.24 (0 – 6)	83.88±0.78 (83.33-84.44)
KW/ p		6.621/0.157	3.505/0.477

KW: Kruskal Wallis test was used. Z: Mann Whitney U test was used. p<0.05* p<0.01** p<0.001***

Table 5: Correlation Graph of Coronavirus Anxiety Scale (CAS) and Sexual Quality of Life Scale (SQOL)

		CAS	SQOL
CAS	r p	1	***-0.366*** ***0.001******
SQOL	r p	-0.366	1



***P<0.001

Discussion

Anxiety is the most common etiological factor in sexual dysfunctions, and regardless of its source, it prevents the feeling of pleasure that accompanies the sexual response, but it does not always prevent it at the same level. While a moderate level of anxiety initiates sexual desire, a high level of anxiety impairs sexual function (Althof et al., 2005). Pedrozo-Pupo et al. investigated the effect of the pandemic on stress (March 2020) and determined that 15% of the participants had higher stress levels due to the COVID-19 pandemic (Pedrozo-Pupo et al., 2020). In a study, the participating women's anxiety levels were significantly higher than were those of the participating men in the first wave of the pandemic, especially the women were negatively affected by the pandemic, and the scores they obtained from the stress, anxiety and depression-related measurements were significantly higher (Erdogdu et al., 2020). On the contrary, conducted in Brazil in which pre- and post-pandemic conditions were compared, 58.2% of the participants were women, and it was determined that the frequency of anxiety disorder decreased, there was no change in the prevalence of depression or other psychiatric disorders, and there was no evidence of psychopathology worsened due to the pandemic (Brunoni et al., 2021). In a study conducted in the UK (March-August 2020) and it was determined that depressive and anxiety symptoms were moderately high at the beginning of quarantine measures but rapidly decreased over the next 20 weeks (Fancourt et al., 2020).

In our study, while 11.2% of the participating women suffered from coronavirus anxiety at high levels, the remaining women's anxiety levels were low. Depression and anxiety levels were the highest in the early stages of quarantine. Quite a rapid decrease was observed in anxiety levels as the pandemic waves progressed, which was probably due to the fact that individuals adapt to the conditions.

In our study, among the variables affecting the level of anxiety, the effect of income status was noteworthy. There was a statistically significant difference between the mean scores obtained from the overall CAS by the women in terms of their income status, and those whose income was less than their expenses suffered from the coronavirus anxiety at a higher level than did those whose income was equal to their expenses.

In a study in which a statistically significant relationship was observed between the median scores of the CAS and the female sex, the level of coronavirus anxiety was significantly lower in those whose monthly income was good (Soylemez., 2022). It is thought that the prolonged length of time people spend at home due to the pandemic-related restrictions and the inclusion of some workplaces in the restriction brought about financial concerns, and increased individuals' anxiety levels.

Among the other factors that affected coronavirus anxiety were PCR testing, disease diagnosis and restrictions.

In a study in which people diagnosed with COVID-19 were followed up, it was determined that of the participants, 56% had at least one mental disorder and 42% suffered anxiety in their mental evaluations at least one month after they were discharged. In the same study, the basic systemic immune inflammatory index was determined to be associated with anxiety (Mazza et al., 2020).

In a study conducted in Turkey, a statistically significant difference was determined between the state of having had COVID-19 and the level of anxiety (Guzel & Yagci Ozen, 2022). Likewise, in another study, a statistically significant difference was determined between the state of having had COVID-19 and coronavirus anxiety (Soylemez, 2022). In a study in which 59.5% of the participants were women, the anxiety scores of the participants with a diagnosis of COVID-19 were statistically significantly higher than were those of the participants without a diagnosis of COVID-19. In the same study, the death of a loved one due to COVID-19 significantly increased the anxiety scores of the participants (Onel & Ozcan, 2022).

In our study, a statistically significant relationship was determined between the CAS scores and the variables such as having had a test for the COVID-19, having been diagnosed with COVID-19, having a person around who died due to COVID-19, and

having been quarantined. The results are similar to each other. Being diagnosed with COVID-19 and therefore being quarantined are thought to increase the anxiety level in people for a number of reasons such as job loss, social isolation, stigma, concerns about infecting others, the prognosis of the disease, and fear of death. In addition, sadness and reactions due to having a close person among individuals who died due to coronavirus and the thought that the disease is deadly may have increased their anxiety levels.

Moreover, decreased sexual desire and satisfaction, insufficient lubrication, pain felt during sexual intercourse, and orgasm and arousal problems also cause anxiety (Van Minnen & Kampman, 2000). In a study, it was stated that during the COVID-19 pandemic, sexual desire and frequency of intercourse increased significantly, but that the quality of sexual life decreased significantly (Yuksel & Ozgur, 2020). The COVID-19 pandemic is stated to lead to an increase in stress and anxiety levels and to a significant decrease in the number of sexual intercourses mostly due to isolation and lack of sexual desire resulting from stress (Fuchs et al., 2020). Of the couples participating in our study, 68.0% stated that they had sexual intercourse twice a week. It was also determined that the level of the quality of sexual life decreased as the women's coronavirus-induced anxiety levels increased. Their anxiety level may have been increased due to concerns that the pandemic and coronavirus might pave way to potential deaths in individuals, which may have reduced the quality of their sexual life.

It is stated that if the sexuality is experienced at the desired level, individuals' anxiety levels decrease, and that the problems related to sexuality bring about many psychosocial problems, especially anxiety (Dokur & Profeta, 2006). During the pandemic, restricting social distancing measures, and fear of contracting the disease from sexual partners affected people's sexual life negatively (Schiavi et al., 2020). In a study in which the effect of COVID-19 pandemic-induced stress and anxiety on sexuality and relationship was investigated, the frequency of having sexual intercourse and the quality of sexual life were more likely to be negatively affected in the participants who experienced high levels of stress (Zhang et al., 2021).

The quality of sexual life of the women was moderate, but the quality of sexual life of women who had sexual intercourse less frequently was low, which suggests that as the level of coronavirus-induced anxiety increased, the level of sexual quality of life decreased. The participants whose income was less than their expenses had a lower level of sexual quality of life.

In a study, the sexual quality of life of the participants who perceived their economic status as good was high (Sevinc et al., 2021).

Based on our result that higher financial power and higher purchasing power prevent people from suffering high anxiety, it is thought that such a power strengthens communication between spouses and thus increases the sexual quality of life.

In our study, of the participants, those who did not have children obtained higher scores from the SQOL-F Questionnaire than did the other participants. In a study, it was determined that the scores the participants obtained from the SQOL-F Questionnaire decreased as the number of their children increased (Sevinc et al., 2021). It can be said that women's not only childcare responsibilities but also roles and other responsibilities in the home environment increased during the pandemic, which reduced the quality of their sexual life.

Conclusion: The relationship between coronavirus anxiety and sexual quality of life of married women during the pandemic period was investigated in terms of their sociodemographic, obstetric-gynecological, and COVID-19-related characteristics. While the variables affecting anxiety were income status, perception of marriage, history of having a COVID-19 test and having been diagnosed with COVID-19, having a person around diagnosed with COVID-19, having a person around who died due to COVID-19, and having been quarantined due to COVID-19, the variables affecting the quality of sexual life were income status, frequency of having a sexual intercourse, perception of marriage, having children, the number of children, and having a person around who died due to COVID-19. The participating women's coronavirus-related anxiety level was low and the level of the quality of their sexual life was moderate. As the participating women's anxiety levels increased, the level of

the quality of their sexual life decreased. If women are to have a healthy sexual life, they and their spouses should be emotionally and mentally healthy. It is thought that health care married women and their spouses should be given training about anxiety management and sexual life.

It is recommended a great number of detailed follow-up studies on these issues should be conducted in the future.

Limitations: The results are limited to the research sample; therefore, they cannot be generalized to all women. Because the number of studies conducted on the relationship between coronavirus anxiety and sexual quality of life during the pandemic period is limited, we could not compare our results with those of other studies adequately.

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Data availability statement: The data that support the findings of this study are available from the corresponding author, upon reasonable request.

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