

Original Research / Orijinal Araştırma

Determination of dyadic adjustment, life satisfaction, depression, and female sexual dysfunction in married women during the COVID-19 pandemic

COVID-19 pandemisi sürecinde evli kadınlarda çift uyumu, yaşam doyumu, depresyon ve kadın cinsel işlev bozukluğunun belirlenmesi

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Abstract

Aim: The COVID-19 (Coronavirus disease- 2019) pandemic negatively affects the sexual functions of women as well as their psychological health. The purpose of the study was to evaluate dyadic adjustment, life satisfaction, depression, and female sexual dysfunction (FSD) in married Turkish women during the COVID-19 pandemic. **Methods:** This is a descriptive study. Data were collected online between May 29th, 2020 and June 22th, 2020 with the Revised Dyadic Adjustment Scale (RDAS), Satisfaction with Life Scale (SWLS), Center for Epidemiologic Studies Depression Scale (CES-D), Female Sexual Function Index (FSFI), and questionnaire form from 210 married women. **Results:** The average RDAS and SWLS scores of the women were 50.55 ± 9.68 and 16.51 ± 4.96 , respectively. While 63.3% of the women had 'depression', there was FSD in 88.1%. In the study, there was a statistically significant difference between FSD presence and RDAS ($p < 0.001$) and SWLS ($p < 0.001$). There was no statistically significant difference between the presence of FSD and depression ($p = 0.078$). **Conclusion:** This study will enable health professionals (especially female health nurses, psychiatric nurses, and sexual and family therapists) to evaluate and be aware of the presence of FSD, and dyadic adjustment, life satisfaction, and depression levels in married women during the COVID-19 pandemic.

Key words: COVID-19, depression, dyadic adjustment, female sexual dysfunction, life satisfaction.

Özet

Amaç: COVID-19 (Coronavirus disease- 2019) pandemisi kadınların psikolojik sağlıklarının yanı sıra cinsel fonksiyonlarını da olumsuz etkilemektedir. Çalışmanın amacı, COVID-19 pandemisi sırasında evli Türk kadınlarında çift uyumu, yaşam doyumu, depresyon ve kadın cinsel işlev bozukluğunu (CİB) değerlendirmektir. **Yöntem:** Bu tanımlayıcı bir çalışmadır. Veriler, Yenilenmiş Çift Uyum Ölçeği (YÇUÖ), Yaşam Doyumu Ölçeği (YDÖ), Epidemiyolojik Araştırmalar Merkezi Depresyon Ölçeği (EAMDÖ), Kadın Cinsel Fonksiyon Ölçeği (KCFÖ) ile 29 Mayıs 2020 - 22 Haziran 2020 tarihleri arasında 210 evli kadından çevrimiçi anket formu ile toplanmıştır. **Bulgular:** Kadınların ortalama YÇUÖ ve YDÖ puanları sırasıyla 50.55 ± 9.68 ve 16.51 ± 4.96 idi. Kadınların %63.3'ünde 'depresyon', %88.1'inde cinsel işlev bozukluğu vardı. Çalışmada kadın cinsel kadın cinsel disfonksiyonu varlığı ile YÇUÖ ($p < 0.001$) ve SYDÖ ($p < 0.001$) arasında istatistiksel olarak anlamlı bir fark vardı. Kadın cinsel disfonksiyonu varlığı ile depresyon arasında istatistiksel olarak anlamlı bir fark yoktu ($p = 0.078$). **Sonuç:** Bu çalışma sağlık profesyonellerinin (özellikle kadın sağlığı hemşireleri, psikiyatri hemşireleri, cinsel ve aile terapistleri) COVID-19 döneminde evli kadınlarda cinsel kadın cinsel disfonksiyonu varlığını, çift uyumunu, yaşam doyumunu ve depresyon düzeylerini değerlendirmelerini ve farkında olmalarını sağlayacaktır.

Anahtar kelimeler: COVID-19, depresyon, çift uyumu, kadın cinsel disfonksiyonu, yaşam doyumu.

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Introduction

COVID-19 (Coronavirus disease-2019), which first appeared in Wuhan, China in late December 2019 and spread to around 170 countries, affected virtually the whole world in a very short time.¹ The number of cases in the world has exceeded 271 million, and the number of deaths has exceeded five million.² In Türkiye, according to the latest data, the number of infected cases is over six million and the number of deaths is over 50,000.¹ As a result of the increasing number of confirmed cases and deaths caused by COVID-19, many psychological problems such as anxiety, depression, and stress have been experienced in the general population.^{3,4}

A limited number of studies show that the COVID-19 pandemic negatively affects the sexual functions of individuals as well as their psychological health.⁵⁻⁷ In influencing sexual function and behavior, psychological, social, and environmental factors are very important. A comprehensive approach to female sexual function, in particular, requires more than just understanding the physiological process.⁸⁻⁹ Female sexual dysfunction (FSD) is defined as decreased sexual function, low sexual desire, decreased arousal, orgasmic difficulties, and dyspareunia.¹⁰⁻¹² FSD is a multidimensional and complex problem affected by cultural and religious variables, as well as social, psychological, and physical factors.^{10,11,13} Female sexual dysfunction prevalence is between %27 and %75.7,^{9,14-17} and the prevalence of sexual dysfunction in marriage is higher in women than in men.¹⁵ The most important of the basic tenets of a happy and satisfied marriage and harmony between married couples is a healthy sex life.^{15,18} Studies show that psychological problems, especially anxiety and depressive problems are related to sexual dysfunction and psychological problems in marriage.^{17,19,20} It was reported that sexual dysfunction decreases as marital adjustment increases, and sexual dysfunction increases as the level of depression increases.¹⁹ It was also reported that sexual dysfunction among married individuals negatively affects individuals' quality of life and self-esteem.¹⁹ Erdinc (2018) found that as sexual satisfaction among married individuals decreases, marital adjustment and life satisfaction decrease.²⁰ Life satisfaction is defined as the satisfaction of the individuals with what they possess in life and the extent of achieving what is desired.^{20,21} In other words, it is the pleasure of life, adding meaning to life, or dependence to anything that is important in life.^{20,21} Studies show that there is a relationship of life satisfaction with sexual satisfaction and sexual function in women.²²⁻²⁶ As seen, while FSD is influenced by many factors in the context of psychological and interpersonal relationships, the presence of FSD can affect many aspects in women, from dyadic adjustment to life satisfaction. In the literature studies are available examining the relationship of sexual dysfunction with depression, satisfaction with life, and dyadic adjustment in women. However, the evaluation of the dyadic adjustment, life satisfaction, depression, and sexual dysfunctions in married women will make an important contribution to the literature especially during the COVID-19 pandemic, which is an unordinary and difficult situation for the whole world in which spouses have to spend more time together in the home environment.

This study will enable health professionals (especially female health nurses, psychiatric nurses, and sexual and family therapists) to evaluate and be aware of the presence of FSD, and dyadic adjustment, life satisfaction, and depression levels in in married women during the pandemic. The aim of the study was to evaluate dyadic adjustment, life satisfaction, depression, and FSD levels in married Turkish women during the COVID-19 pandemic process.

Research Questions

1. Is there an association between dyadic adjustment and FSD in married Turkish women during the COVID-19 pandemic?
2. Is there an association between life satisfaction and FSD in married Turkish women during the COVID-19 pandemic?
3. Is there an association between depression and FSD in married Turkish women during the COVID-19 pandemic?

Methods

Study Design and Participants

This is a descriptive study. Data were collected online in women between May 29th, 2020, and June 22th, 2020 during the COVID-19 pandemic. The researcher reached out to married women through her social media accounts, with a messaging app, colleagues, family, and relatives, and sent the link of the online questionnaire form and scales via phone or social media accounts. They were also asked to forward the online link to

married women from their social circles. The women were asked to click the link in the message and answer all the questions, and send the form with the submit button.

It was explained to the women that the data on the online form would be collected anonymously and that after clicking the 'accept to participate in the study' button, they could proceed to answer the questions. The participants were warned if they missed an answer, and incomplete questionnaires were not allowed to be submitted to the system unless they were answered in completely. The women's answers accumulated in the e-mail address of the researcher without the name and phone number of the participants. The data were collected using the Revised Dyadic Adjustment Scale (RDAS), the Satisfaction with Life Scale (SWLS), and the Center for Epidemiologic Studies Depression Scale (CES-D), the Female Sexual Function Index (FSFI), and personal information questionnaire. The filling time for the entire survey is 15-20 minutes. The study group was composed of literate married Turkish women with no communication problems (no mental deficiency, no visual impairment), who were sexually active. Pregnant women were not included in the study. Study sample size was calculated using the G* Power program as 210 women with 0.25 (medium) effect size, 95% statistical power, and 0.05 α error probability level. The 't-test' was used as a reference test ($t=1.971$). The data collection process was completed with 210 women.

Measures

Questionnaire Form

The personal information questionnaire consists of 11 items (such as age, duration of marriage, educational status, family type, and employment status), which evaluate the socio-demographic characteristics of the women.

Revised Dyadic Adjustment Scale (RDAS)

The scale was developed by Spanier (1976)²⁵ to evaluate the quality of the relationship between married couples/partners, reorganized by Busby et al. (1995)²⁶, and adapted to Turkish by Gundogdu (2007).²⁷ Then, it took the final form with 14 items. The scale consists of 3 sub-dimensions: 'satisfaction' (items 7, 9, 11, 12, and 13), 'reconciliation' (items 1, 2, 3, 4, 5, and 6), and 'conflict' (items 8, 10, and 14). The scale is a 5-point Likert-type (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Quite often, 5 = Most of the time). The Cronbach alpha coefficient of the scale is 0.87 for the total score.²⁷ Items 7, 8, 9, and 10 of the scale are reversed. The highest score that can be obtained from the scale is 70. The score obtained shows the quality of the relationship.²⁸ For this study, Cronbach alpha coefficient of the scale was calculated as 0.84 for the total score.

The Satisfaction with Life Scale (SWLS)

Diener et al. (1985) developed the original form of the Satisfaction with Life Scale (SWLS), which is a 7-point Likert-type consisting of 5 items.²⁹ Each item is evaluated according to the 7-point Likert-type system (1: Strongly Disagree - 7: Totally Agree). The scale was adapted to Turkish by Koker (1991) and used in some studies as a 7-point Likert-type scale.^{21,30} Dagli and Baysal (2016) conducted its Turkish validity and reliability study and determined that the 7-point Likert-type was difficult to understand, and that a 5-point Likert-type would be more suitable in the Turkish version.²⁵ When the number of the Likert-type points was reduced to five, the SWLS was again adapted from English to Turkish. In the Turkish validity and reliability study of Dagli and Baysal (2016), the scoring of the statements in the scale is 'I do not agree at all (1), I agree very little (2), I agree moderately (3), I strongly agree (4), and I totally agree (5)'. The Cronbach's alpha internal consistency coefficient of the scale was 0.88. As the score increases, life satisfaction increases.²¹ In this study, Cronbach alpha coefficient of the scale was calculated as 0.90.

The Center for Epidemiologic Studies Depression Scale (CES-D)

The Center for Epidemiologic Studies Depression Scale (CES-D), developed by Radloff (1977), aims to measure symptoms of depression.³¹ The Turkish adaptation of the scale was performed by Tatar and Saltukoglu (2010).³² The scale has a total of 20 items, and there is only one dimension. Internal consistency coefficient of the scale in the adaptation study was found between 0.75 and 0.90. The scale is a 4-point Likert-type (0 = Never-Rarely (less than 1 day), 1 = Slightly-Few times (1-2 days), 2 = Occasionally-Sometimes (3-4 days), 3 = Frequently-Most of the time (5-7 days)). Items 4, 8, 12, and 16 of the scale are reversed. The total score range is between 0 and 60. Those who fill out the scale are asked to evaluate how often they experienced the expressions in the scale by considering the previous two weeks. The cut-off point is 16 and high scores

indicate high depression levels.³² In this study, the Cronbach alpha coefficient of the scale was calculated as 0.88.

Female Sexual Function Index(FSFI)

The FSFI was developed by Rosen et al. in 2000. The index includes 19 items; each is a 6-point Likert type. Each item inquires sexual desire, arousal, lubrication, orgasm, sexual satisfaction, and pain.³³ Aygin and Aslan (2005) studied the Turkish validity and reliability of the FSFI. The index consists of 6 subscales: desire, arousal, lubrication, orgasm, sexual satisfaction, and pain. The cut-off score for the total score of the scale is 26.5. Higher scores indicate better sexual function.³⁴ The Cronbach alpha coefficient of the Turkish version of the scale is 0.95. The internal consistency coefficient in the present study was 0.96.

Data Analysis

The data were analyzed using the Statistical Package for the Social Sciences for Windows, version 20.0 (SPSS). The normality of the study was tested by the skewness and kurtosis test. Parametric tests were performed because the skewness and kurtosis values ranged between -1.5 and +1.5. Descriptive statistics (number, percentage, mean, standard deviation, minimum and maximum values) were used to analyze the data. The association between independent variables [the Revised Dyadic Adjustment Scale (RDAS) mean score, the Satisfaction with Life Scale (SWLS) mean score, and the level of the Center for Epidemiologic Studies Depression Scale score (CES-D) and the level of the FSD of women were analyzed using the bivariate tests: the independent sample t test and the Pearson Chi-square test. In the study, two-tailed tests were used, and significance was accepted as $p < .05$.

Ethical Approval

Permission was obtained from the local ethics board of the institution and the study was performed in accordance with the Declaration of Helsinki and its later amendments/comparable ethical standards (IRB number: 2020/598). In addition, an 'Informed Consent Form' was sent to the women before the online form via a text message, asking volunteers to click the 'accept' button to participate in the study.

Results

Description of the Sample

The average age of the participants in the study was 31.44 ± 6.75 years, and the average duration of marriage was 8.77 ± 7.50 years. It was observed that 75.7% of the participants were high school graduates or above, 39.5% of them were employed, and 68% of them defined their relationship with their spouses as 'good' (Table 1).

The Distribution of Participants' Dyadic Adjustment, Life Satisfaction, Depression, and FSD

The mean RDAS score was 50.55 ± 9.68 , the mean 'satisfaction' sub-dimension score was 17.90 ± 4.00 , average 'consensus' score was 22.88 ± 5.59 , and average 'conflict' average score was 9.76 ± 2.21 . The mean SWLS score was 16.51 ± 4.96 . Of the participants, 63.3% experienced 'depression', and FSD was found in 88.1% (Table 2).

The Comparison of Participants' Dyadic Adjustment, Life Satisfaction, and Depression Levels with FSD

There was a statistical difference between FSD and RDAS ($p < .001$), sub-dimensions of satisfaction ($p < .001$), consensus ($p < .001$), and conflict ($p = .034$), and SWLS ($p < .001$). No statistical difference was found between FSD and depression ($p = .078$) (Table 3).

The Relationship between FSFI and RDAS, Satisfaction, Consensus, Conflict, SWLS, and CES-D

There was a significant, positive, moderate correlation between the participants' total FSFI score average and RDAS ($r=0.481$), satisfaction ($r=0.431$), consensus ($r=0.449$) and SWLS ($r=0.432$) mean scores ($p<0.001$). There was a significant, positive and weak correlation between the participants' FSFI mean score and their conflict ($r=0.188$) mean score ($p=0.006$). There was a significant, negative and moderate correlation between the participants' FSFI mean score and their CES-D ($r= -0.312$) mean score ($p<0.001$; Table 4).

Table 1. Socio-demographic characteristics of the women (n = 210)

	Mean ± Standard deviation	Minimum-Maximum
Age	31.44 ± 6.75	19-50
Husband's age	34.47 ± 7.39	21-59
The duration of marriage (year)	8.77 ± 7.50	1-35
	Number (%)	95% Confidence interval Lower-Upper
Education status		
Literate/primary school	51 (24.3)	18.6-30.5
High school and above	159 (75.7)	69.5-81.4
Husband's education status		
Literate/primary school	54 (25.7)	20.5-31.9
High school and above	156 (74.3)	68.1-79.5
Location where resided longest		
City	161 (76.7)	71-83.4
District/village	49 (23.3)	17.6-29
Family type		
Nuclear	185 (88.1)	83.8-92.4
Extended	25 (11.9)	7.6-16.2
Employment status		
Yes	83 (39.5)	33.3-46.2
No	127 (60.5)	53.8-66.7
Husband's employment status		
Yes	197 (93.8)	90.5-96.7
No	13 (6.2)	3.3-9.5
Relationship with husband		
Moderate/poor	67 (31.9)	25.2-38.6
Good	143 (68.1)	61.4-74.8
Income level		
Poor	35 (16.7)	11.9-21.4
Moderate	124 (59)	52.9-65.7
Good	51 (24.3)	18.1-30

Table 2. Distribution of the women' dyadic adjustment, life satisfaction, depression, and female sexual dysfunction (n = 210)

Variables	Mean ± SD	Minimum-Maximum
RDAS	50.55 ± 9.68	22-69
Satisfaction ^a	17.90 ± 4.00	7-25
Consensus ^a	22.88 ± 5.59	6-30
Conflict ^a	9.76 ± 2.21	4-15
SWLS	16.51 ± 4.96	5-25
	Number (%)	95% Confidence interval Lower -Upper
With depression		
(CES-D score > 16)	133 (63.3)	56.7-70
Without depression		
(CES-D score <16)	77 (36.7)	30-43.3
With FSD		
(FSFI < 26.5)	185 (88.1)	83.3-92.4
Without FSD		
(FSFI > 26.5)	25 (11.9)	7.6-16.7

Note. ^aSubdimensions of RDAS, SD = Standard deviation, RDAS = Revised Dyadic Adjustment Scale, SWLS = The Satisfaction with Life Scale, CES-D = The Center for Epidemiologic Studies Depression Scale, FSD = Female sexual dysfunction, FSFI = Female Sexual Function Index.

Table3. Comparison of dyadic adjustment, life satisfaction, and depression levels and female sexual dysfunction levels (n = 210)

Independent value	RDAS Mean±SD	Satisfaction ^a Mean±SD	Consensus ^a Mean±SD	Conflict ^a Mean±SD	SWLS Mean±SD	With depression (CES-D score > 16) Number (%)	Without depression (CES-D score < 16) Number (%)
With FSD (FSFI< 26.5)	41.92 ± 8.87	14.92 ± 3.77	18.12 ± 5.66	8.88 ± 2.40	12.40 ± 4.69	113 (61.1)	72 (38.9)
Without FSD (FSFI>26.5)	51.72 ± 9.20	18.31 ± 3.87	23.52 ± 5.28	9.88 ± 2.16	17.07 ± 4.74	20 (80)	5 (20)
Significance Test	<i>t</i> = 5.021 <i>p</i> = .000	<i>t</i> = 4.123 <i>p</i> = .000	<i>t</i> = 4.764 <i>p</i> = .000	<i>t</i> = 2.138 <i>p</i> = .034	<i>t</i> = 4.626 <i>p</i> = .000	<i>X</i> ² = 3.395 <i>p</i> = .078	

Note. ^aSubdimensions of RDAS, SD = Standard deviation, RDAS = Revised Dyadic Adjustment Scale, SWLS = The Satisfaction with Life Scale, CES-D = The Center for Epidemiologic Studies Depression Scale, FSD = Female sexual dysfunction, Bold values: *p* < .05 is statistically significance value. *t* = Independent Sample *t* Test, *X*² = Pearson Chi-square Test.

Table 4. Correlation analysis between FSFI, RDAS, Satisfaction, Consensus, Conflict, SWLS, and CES-D (n = 210)

Independent value	RDAS	Satisfaction ^a	Consensus ^a	Conflict ^a	SWLS	CES-D
Total FSFI score						
r	0.481	0.431	0.449	0.188	0.432	-0.312
p	<i>p</i> = .000	<i>p</i> = .000	<i>p</i> = .000	<i>p</i> = .006	<i>p</i> = .000	<i>p</i> = .000

Note. ^aSubdimensions of RDAS, RDAS = Revised Dyadic Adjustment Scale, SWLS = The Satisfaction with Life Scale, CES-D = The Center for Epidemiologic Studies Depression Scale, FSFI = Female Sexual Function Index.

Discussion

Distribution of Participants' Dyadic Adjustment, Life Satisfaction, Depression, and FSD Characteristics

In this study, the participants' mean dyadic adjustment score was found at a 'good' level. In addition, satisfaction and consensus levels between couples were moderate, and conflict level was low (Table 2). In similar studies, in which different measurement tools with items similar to the RDAS were used to evaluate dyadic adjustment, it was found that participants had a 'good' level of dyadic adjustment in line with the results of the present study.^{17,18,35} According to the results of this study, the dyadic adjustment level of the married Turkish women during the COVID-19 pandemic is good. However, conducting further studies with a larger sample group, including men, may be useful to assess dyadic adjustment during the COVID-19 pandemic.

In the present study, participants' life satisfaction was at the 'moderate' level. Erdinc (2018) and Stephenson and Meston (2015) conducted studies before the pandemic, and reported higher life satisfaction scores than that of the present study, which was conducted during the COVID-19 pandemic.^{20,24} So we can say that, during the COVID-19 pandemic, which imposed quarantine and social isolation practices via measures and restrictions taken by countries, and closures of several venues, such as gyms, cinemas, theater halls, and recreation areas, women had to stay more at home more than usual, which may be associated with the low level of women's life satisfaction. Studies conducted during the COVID-19 pandemic show that individuals' mental health is affected negatively.⁵⁻⁷ Therefore, during the COVID-19 pandemic, evaluating the mental health of the individuals should definitely be included in government health policies. In this sense, it is recommended to create psychological support lines for individuals.

In the present study, 63.3% of the participants had depression, so we can say that the majority of the women were depressed during the COVID-19 pandemic. Studies conducted during the COVID-19 pandemic found that women had higher levels of depression than men.^{36,37} Therefore, being a woman may be among the risk factors in terms of depression during the COVID-19 pandemic. All health professionals working in the field of women's health, especially women's health and psychiatric nurses should be aware of such psychological changes in women in this process and refer them to appropriate specialists for them to get support when necessary.

In the present study, the presence of FSD was found in approximately 9 out of 10 women (Table 2). Considering that the FSD rates in the literature range between 27% and 75.7%,^{9,14-18} we can say that FSD rates are considerably high in married women. A study conducted in China during the COVID-19 pandemic reported a decrease in sexual activity and frequency among young men and women.⁶ In another study, it was reported that COVID-19 epidemic decreased the quality of life of individuals by negatively affecting interpersonal relationships, social life, and sexual health.⁷ Studies conducted during the COVID-19 pandemic show that people's sexual health may be affected negatively. However, the sexual function of women is also affected by psychological, interpersonal relations, and environmental factors. In addition, neuroendocrine and somatic disorders may also cause sexual dysfunction.^{9,14} Therefore, sexual dysfunction in women should be evaluated multidimensional. However, considering that environmental factors and women's lifestyles have changed during the COVID-19 pandemic process, via similar studies FSD should be assessed during the COVID-19 pandemic, the factors that cause FSD should be explained, and strategies should be developed to combat FSD because sexual well-being is one of the important components of mental and physical health and is the most important factor for a happy marriage.¹⁸

Discussion of Participants' Dyadic Adjustment, Life Satisfaction, and Depression Levels with FSD

RDAS, satisfaction, consensus, conflict and SWLS scores were significantly lower in participants with FSD in the present study. In the study, the sexual function levels of the participants increased as their dyadic adjustment, satisfaction, consensus, and life satisfaction increased. Accordingly, we can say that spouse compatibility and life satisfaction are important variables for a healthy sexual life in women. As the depression levels of the participants' increase, their sexual function levels decrease. We can say that depression negatively affects women's sexual functions. Pre-pandemic studies in Türkiye have reported that with increasing dyadic adjustment, sexual functions, and sexual satisfaction levels also increased.^{18,20,35,39} In a study conducted with married women in Iran, it was found that, with increasing FSD rates, marital satisfaction levels decreased.¹⁷ Sexual problems between couples in marriage can negatively affect dyadic adjustment. In this sense, sex and marriage therapists have to deal with difficult and complex clinical situations.¹⁹ It is important that therapists working with couples pay attention to sexual issues, develop culturally appropriate and practical strategies to raise awareness of sexual issues, and train couples on communication skills.³⁸ On

the other hand, dyadic adjustment problems and sexual dysfunction in marriage also bring psychological problems.¹⁹ Studies have also found depression in individuals with sexual dysfunction problems.^{9,18,39}

Strengths and Limitations

This is the first and only study to evaluate dyadic adjustment, life satisfaction, and depression and FSD levels in married Turkish women during the COVID-19 pandemic. Study results are valid for the sample group, and they cannot be generalized to the general public. In addition, the fact that hospitals and family health centers do not accept researchers from outside the institution during the pandemic made it compulsory to conduct the study online. Collecting the data online is not a preferred method in Turkish society, and Turkish people are not accustomed to filling out surveys by this way. For this reason, not too many women could be reached, and because the data could not be collected face to face, possible questions of the women regarding the data collection tools could not be answered. Another limitation was the evaluation of the symptoms of depression and FSD based on a self-report measure.

Conclusion

It was found in the present study that the occurrence of FSD and depression in married Turkish women were very high, dyadic adjustment and subdimensions, satisfaction, consensus, and life satisfaction were moderate, and conflict was low during the COVID-19 pandemic. The occurrence of FSD declines with dyadic adjustment and life satisfaction. As the depression level of the participants increases, their sexual functions decrease.

In this study, an online survey revealed dyadic adjustment, life satisfaction, depression, and FSD levels in married Turkish women during the COVID-19 pandemic. This study will encourage health professionals (especially female health nurses, psychiatric nurses, and sexual and family therapists) to evaluate and be aware of the presence of FSD, and dyadic adjustment, life satisfaction, and depression levels in married women during the pandemic. It is important for the couples to maintain healthy sexual function with dyadic adjustment during the pandemic process in order not to complicate the marriage and maintain a healthy social structure.

Considering that incompatible relationship and sexual dysfunction negatively affect the mental health, providing online psychological help or a special help-line for the married women and men under social isolation and quarantine conditions to protect and manage sexual health and mental health may be a viable strategy. In addition, individuals have applied to primary health care institutions the most during the pandemic, as they are easier to access and they consider it safer in terms of COVID-19 compared to secondary and tertiary health institutions. For this reason, family physicians, nurses, and midwives working in primary health care can detect potential problems at an early stage by evaluating the marital compatibility, mental health, and sexual health of the individuals. Thus, during the pandemic process, the levels of couple harmony can increase and family unity can be preserved and family and community mental health can be protected.

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Declaration of Interest Statement

The author reports no conflict of interest relevant for this manuscript.

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References

1. Republic of Turkey Ministry of Health. Covid-19 number of cases in Turkey. 2020. Accessed from <https://covid19bilgi.saglik.gov.tr/tr/gunluk-vaka.html>. Accessed date 10.11.2021.
2. Worldometer. Covid-19 coronavirus pandemic. 2020. Accessed from <https://www.worldometers.info/coronavirus/>. Accessed date 14.12.2021.
3. Li S, Wang Y, Xue J, Zhao N, Zhu, T. The impact of COVID-19 epidemic declaration on psychological consequences: a study on active Weibo users. *Int. J. Environ. Res. Public Health* 2020; 17: 1-9.
4. Liu S, Yang L, Zhang C, et al. Online mental health services in China during the COVID-19 outbreak. *Lancet Psychiat*,

2020;7: 17-18.

5. Arafat SY, Mohamed AA, Kar SK, Sharma P, Kabir R. Does COVID-19 pandemic affect sexual behaviour? A cross-sectional, cross-national online survey. *Psychiat Res* 2020; <https://doi.org/10.1016/j.psychres.2020.113050>. Accessed date 10.10.2021.
6. Li W, Li G, Xin C, Wang Y, Yang S. Changes in sexual behaviors of young women and men during the coronavirus disease 2019 outbreak: a convenience sample from the epidemic area. *J Sex Med* 2020b; <https://doi.org/10.1016/j.jsxm.2020.04.380>. Accessed date 06.10.2021.
7. Maretti C, Privitera S, Arcaniolo D, et al. COVID-19 pandemic and its implications on sexual life: Recommendations from the Italian Society of Andrology. *Arch Ital Urol Androl* 2020; 92:73-77.
8. McCabe MP, Sharlip ID, Atalla E, et al., Definitions of sexual dysfunctions in women and men: a consensus statement from the fourth international consultation on sexual medicine. *J. Sex. Med* 2015;13: 135–143.
9. Nappi RE, Cucinella L, Martella S, et al. Female sexual dysfunction (FSD): Prevalence and impact on quality of life (QoL). *Maturitas* 2016; 94:87-91.
10. Murtagh J. Female sexual function, dysfunction, and pregnancy: implications for practice. *JMWG* 2010;55:438-446. <https://doi.org/10.1016/j.jmwh.2009.12.006>.
11. Kucukdurmaz F, Efe E, Malkoc Ö, et al. Prevalence and correlates of female sexual dysfunction among Turkish pregnant women. *Turk J Urol* 2016;42(3):178-183. <https://doi.org/10.5152/tud.2016.49207>.
12. Aydin S, Onaran ÖI, Topalan K, et al. Development and validation of Turkish version of the female sexual distress scale-revised. *Sex Med* 2016;4(1):43-50. <https://doi.org/10.1016/j.esxm.2015.12.003>.
13. Ahmed MR, Madny EH, Sayed Ahmed WA. Prevalence of female sexual dysfunction during pregnancy among Egyptian women. *J Obstet Gynaecol Res* 2014;40(4):1023-1029. <https://doi.org/10.1111/jog.12313>.
14. Tehrani FR, Farahmand M, Simbar M, Afzali HM. Factors associated with sexual dysfunction; a population based study in Iranian reproductive age women. *Arch Iran Med* 2014;17:679-684.
15. Amidu N, Owiredu WK, Gyasi-Sarpong CK, Woode E, Quaye L. Sexual dysfunction among married couples living in Kumasi metropolis, Ghana. *BMC Urol* 2011; 11(3); 1-7.
16. Jaafarpour M, Khani A, Khajavikhan J, Suhrabi Z. Female sexual dysfunction: prevalence and risk factors. *Journal of clinical and diagnostic research: JCDR* 2013; 7(12):2877-2880.
17. Khazaei M, Rostami R, Zaryabi A. The relationship between sexual dysfunctions and marital satisfaction in Iranian married students. *Procedia Soc Behav Sci* 2011; 30: 783-785.
18. Tunc D. Evli bireylerde cinsel doyumun depresyon düzeyi ve evlilik uyumu ile ilişkisinin incelenmesi [The investigation of relationship between sexual satisfaction and the level of depression and marital adjustment in married individuals] 2019; 52-53. Istanbul University, Institute of Social Sciences, Department of Psychology, Master Thesis, Istanbul.
19. Trudel G, Goldfarb MR. Marital and sexual functioning and dysfunctioning, depression and anxiety. *Sexologies*, 2010;19: 137-142.
20. Erdinc I. Evli çiftlerde, evlilik uyumu, cinsel yaşam doyum ve yaşam doyum arasındaki ilişkinin incelenmesi [The examination of the meaningfulness of the relationship between sexual satisfaction, life satisfaction, and marital adjustment levels of married individuals]. 2018;35-38. Istanbul University, Institute of Social Sciences, Department of Psychology, Master Thesis, Istanbul.
21. Dağlı A, Baysal N. Yaşam doyum ölçeğinin Türkçe'ye uyarlanması: geçerlik ve güvenilirlik çalışması [Adaptation of the satisfaction with life scale into Turkish: the study of validity and reliability]. *ESOSDER*, 2016; 15: 1250-1262.
22. Thompson WK, Charo L, Vahia IV, et al. Association between higher levels of sexual function, activity, and satisfaction and self-rated successful aging in older postmenopausal women. *J Am Geriatr Soc* 2011; 59: 1503–1508.
23. Woloski-Wruble AC, Oliel Y, Leefsma M, Hochner-Celnikier D. Sexual activities, sexual and life satisfaction, and successful aging in women. *J. Sex. Med* 2010; 7: 2401-2410.
24. Stephenson KR, Meston CM. The conditional importance of sex: exploring the association between sexual well-being and life satisfaction. *J. Sex Marital Ther* 2015; 41: 25-38.
25. Spanier GB. Measuring dyadic adjustment: A new scales for assessing the quality of marriage and similar dyads. *J Marriage Fam* 1976; 38: 15-28.
26. Busby DM, Christensen C, Crane RD, Larson JH. Are vision of the dyadic adjustment scale for use with distressed and non distressed couples: Construct hierarchy and multidimensional scales. *J. Sex Marital Ther* 1995; 21:289-298.
27. Gundogdu A. Relationship's between self-construals and marital quality. 2007; 30-36. Middle East Technical University Institute of Social Sciences Department of Psychology, Master Thesis, Ankara.
28. Bayraktaroglu HT, Cakıcı ET. Psychometric properties of Revised form Dyadic Adjustment Scale in a sample from North Cyprus. *Int. J. Educ. Sci* 2017; 19: 113-119.
29. Diener E, Emmons RA, Larsen RJ, Griffi, S. The satisfaction with life scale. *J. Pers. Assess* 1985; 49: 71-75.
30. Koker S. Normal ve sorunlu ergenlerin yaşam doyum düzeylerinin karşılaştırılması [Comparison of life satisfaction levels of normal and problematic adolescents]. 1991; 31-35. Ankara University Institute of Social Sciences, Master Thesis, Ankara.
31. Radloff LS. The CES-D scale: A self-report depression scale for research in the general population. *Appl Psych Meas* 1977; 1: 385-401.
32. Tatar A, Saltukoglu G. The adaptation of the CES-Depression Scale into Turkish through the use of confirmatory factor analysis and item response theory and the examination of psychometric characteristics. *Klin Psikofarmakol B*, 2010; 20: 213-227.
33. Rosen C, Brown J, Heiman S, Leiblum C, et al. The Female Sexual Function Index (FSFI): a multidimensional self-report

instrument for the assessment of female sexual function. *J. Sex Marital Ther* 2000; 26: 191-208.

34. Aygin D, Aslan FE. Kadın cinsel işlev ölçeği'nin Türkçeye uyarlaması [The Turkish Adaptation of the female sexual function index]. *Turkiye Klinikleri J Med Sci* 2005; 25: 393-399.

35. Rodoplu A. Evli çiftlerde evlilik uyumu ile cinsel doyum arasındaki ilişkinin incelenmesi [Examining the relationship between marital adjustment and sexual satisfaction in married couples]. 2019;48-52. Istanbul University, Institute of Social Sciences, Department of Psychology, Master Thesis, Istanbul.

36. Wang C, Pan R, Wan X, et al. Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *Int. J. Environ. Res. Public Health* 2020; 17: 1729; <https://doi.org/10.3390/ijerph17051729>

37. Qiu J, Shen B, Zhao M, et al. A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations. *Gen Psychiatr*, 2020; 33(2).

38. Ozturk CS, Arkar H. Evli çiftlerde evlilik uyumu ve cinsel doyum arasındaki ilişkiler [The relationships between marital adjustment and sexual satisfaction in married couples]. *Literatur Sempozyum* 2014; 1: 16-24.

39. Yavuz F. Kişilik inanclarının ve depresif belirtilerin evlilik uyumuna etkisinin incelenmesi [Examining the effect of personality beliefs and depressive symptoms on marital adjustment]. 2019; 40-43. Fatih Sultan Mehmet Vakif University, Graduate Education Institute, Department of Psychology, Master Thesis, Istanbul.