



# How has the COVID-19 Pandemic affected sexual health of partnered men?

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## Abstract

### *How has the COVID-19 Pandemic affected sexual health of partnered men?*

**Objective:** Mental health and human psychology have been negatively affected during the COVID-19 pandemic. Since psychomental status and sexual health are related, it is possible that the sexual health of couples may be affected along with their mental health. We aimed to perform a quantitative evaluation of male partners' sexual lives during the COVID-19 pandemic.

**Method:** A hundred-sixteen men filled out our online survey in which International Erectile Index Score (IIEF) was embedded. The relationship between COVID-19 pandemic and stress, economical concerns, workload, etc. was questioned.

**Results:** Twenty-nine people had not had intercourse for more than 1 month. Twenty-one of them (72.4%) showed pandemic-related relationship sexual avoidance behaviour. 55.2% of survey respondents who also filled IIEF questionnaire were economically affected by the pandemic, 66.7% were psychologically affected and 71.2% were significantly or somewhat sexually affected. the total average of the erectile function score was  $25.95 \pm 5.4$ . These scores indicate a slight predominance of ED.

**Conclusion:** It is clear the COVID-19 pandemic affects people's sex lives in myriad of negative ways. We believe that many the domestic problems likely to develop as a result of lockdowns and other measures intended to prevent virus spread can be prevented or reduced by facilitating healthy sex lives between couples.

**Keywords:** Coronavirus Disease 2019, Pandemic, International Index Of Erectile Dysfunction, Sexual Life, Men

## Öz

### *COVID-19 pandemisi evli erkeklerin cinsel hayatını nasıl etkiledi?*

**Amaç:** COVID-19 salgını sırasında ruh sağlığı ve insan psikolojisi olumsuz etkilenmiştir. Psikomental durum ve cinsel sağlık ilişkili olduğundan, ruh sağlığı ile birlikte çiftlerin cinsel sağlıklarının da etkilenmesi olasıdır. COVID-19 salgını sırasında erkek partnerlerin cinsel yaşamlarının nicel bir değerlendirmesini yapmayı hedefledik.

**Yöntem:** Yüz on altı erkek, Uluslararası Erektıl İşlev Skorunun (IIEF) da içeren çevrimiçi anketimizi doldurdu. COVID-19 salgını ile stres, ekonomik kaygılar, iş yükü vb. parametreler arasındaki ilişki sorgulandı.

**Bulgular:** Yirmi dokuz kişi 1 aydan uzun süredir cinsel ilişkiye girmemişti. Bunlardan 21'i (%72.4) pandemiyle ilişkili cinsel kaçınma davranışları gösterdi. IIEF anketini de dolduran anket katılımcılarının %55.2'si pandemiden ekonomik olarak etkilendiğini, % 66.7'si psikolojik olarak etkilendiğini ve %71.2'si önemli ölçüde veya bir şekilde cinsel olarak etkilendiğini belirtti. Erektıl fonksiyon skorunun toplam ortalaması  $25.95 \pm 5.4$  idi. Bu puanlar, ED'nin hafif düzeyde bir artışı olduğuna işaret etmektedir.

**Sonuç:** COVID-19 salgınının insanların cinsel yaşamlarını çeşitli olumsuz sebeplerle etkilediği açıktır. Kapanmanın ve virüs yayılmasını önlemeye yönelik diğer kısıtlamaların bir sonucu olarak ortaya çıkabilecek olası birçok ev içi sorunun çiftler arasındaki sağlıklı cinsel yaşamı destekleyerek önlenebileceğine veya azaltılabilirliğine inanıyoruz.

**Anahtar Kelimeler:** Yeni Koronavirüs Hastalığı, Pandemi, Uluslararası Erektıl İşlev Skoru, Cinsel Hayat, Erkek

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## INTRODUCTION

The COVID-19 pandemic has wrought havoc in many countries around the world since December 2019 (1). Due to the transmission pathways of SARS-CoV2, the virus that causes the disease, isolation and hygiene practices such as washing hands and sterilizing surfaces are the best ways to prevent infection. Therefore, in many countries, restrictions designed to mitigate the spread of SARS-CoV2 were imposed (2). Research into how these restrictive measures affected societies and individuals remains fairly limited (3).

Links between sexual health and psychological factors are well established (4). It has been further established that mental health and human psychology have been negatively affected during the COVID-19 pandemic (5). Therefore, it is possible that the sexual health of couples may be affected along with their mental health. However, it is also possible that staying home and having plenty of free time will positively affect couples' relationships and improve their sex lives. Which has been the more common sexual outcome? In this study, we aimed to perform a quantitative evaluation of male partners' sexual lives during the COVID-19 pandemic.

## METHODS

Permission was obtained from the local ethics committee (protocol no: 2017-KAEK-189\_2020.05.28\_13). A hundred-sixteen men filled out our online survey and those who had engaged in sexual intercourse in the previous month were evaluated for their International Erectile Index Score (IIEF). Surveys were filled out between June 2020 and September 2020. Participants who have a regular sexual partner were included in the study. Men who had not had sex in over one month were excluded from IIEF evaluation; however, their survey responses were taken into consideration.

When evaluating the erectile function with the IIEF scale, the values of the answers to questions 1-5 and 15 were added together, and patients with a score between 0-10 were interpreted to have severe, 11-16 moderate, 17-21 mild-moderate, and 22-25 mild erectile dysfunction (ED). Those with a score of 26-30 were considered to have normal erectile function.

Intercourse satisfaction was evaluated by adding together the scores of questions 6-8 of the IIEF. Orgasmic function was evaluated by the sum of the scores of questions 9-10; sexual desire the sum of the scores of questions 11-12; and overall satisfaction the sum of the scores of questions 13-14. Since there is no international scale for assessment of these parameters, the evaluations were made only by comparing the numerical data across participants.

Demographic parameters such as age, occupation, height, weight, disease history and level of sexual activity were obtained through a survey designed by our study group through Google Docs. The final questions of the survey asked whether participants had been or were being affected by the COVID-19 pandemic in terms of economic, psychological and sexual quality of life. Volunteers who stated that their sex life had been affected or had not had intercourse for more than 1 month were asked why this was the case. Participants who identified workload, stress and fear of disease spread as factors were questioned about the relationship of these options to COVID-19. Those who identified economic distress as the source of their stress were also asked about the relationship of their economic concerns with COVID-19. When the participants indicated that their psychological and sexual health was affected and that this was directly or indirectly related to the COVID-19 pandemic, it was evaluated as COVID-19-related impact for the purposes of our study.

Statistical analysis was performed using IBM SPSS Statistics for Windows, v25.0 (IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.) The data were analysed with descriptive analysis. The graphics were taken from Google Docs. Data are represented as mean  $\pm$  standard deviation (SD) values. Percent values are given in the graphic representations.

## RESULTS

The demographic data of volunteers is summarized in Table 1 (Table 1). 1.7% of volunteers were between the ages of 18 and 24, 37.9% were between the ages of 25 and 43, 56.9% were between the ages of 44 and 64, and 3.5% were between 65 and 79 years old. Professionally, 13.8% were academics, 40.5% were health workers, 12.1% were other civil servants, 8.6% were laborers, 1.7% were craftsmen, 16.4% were self-employed and 1.7% were artists. The average height of the volunteers was  $169.08 \pm 38.71$  cm and the average weight was  $84.29 \pm 13.02$  kg. Only seven people had a previously diagnosed psychiatric problem that they were being treated for. 61.2% of the volunteers did not have any chronic diseases. Twenty-nine people had not had intercourse for more than 1 month; therefore, they did not answer the questions to determine an IIEF score. They were asked why they had not had intercourse in the last month. 15 of these people (51.7%) stated they preferred not to have sex with their partner due to the Covid-19 pandemic, while 6 people (20.7%) did not have intercourse because of the workload caused by the pandemic and concern about spreading the infection to their family members. In total, 21 people (72.4%) showed pandemic-related relationship avoidance behaviour (Figure 1).

**Table 1. Demographic data**

Parameters		n	%
Age Groups	18-24 years	2	1.7
	25-43 years	44	37.9
	44-64 years	66	56.9
	65-79 years	4	3.5
Education Status	Academic	16	13.8
	Healthcare professional	47	40.5
	Other civil servant	14	12.1
	Labourer	10	8.6
	Craftsman	2	1.7
	Self-employed	19	16.4
	Artist	2	1.7
Psychiatric problem	Present	7	6.03
	Absent	109	93.97
Intercourse status	Regular	68	58.6
	If have time/a chance	19	16.4
	N/A for a month	29	25
BMI (kg/m <sup>2</sup> )		26.85 ± 3.62	

BMI: Body Mass Index. BMI results were given as mean ± standard deviation

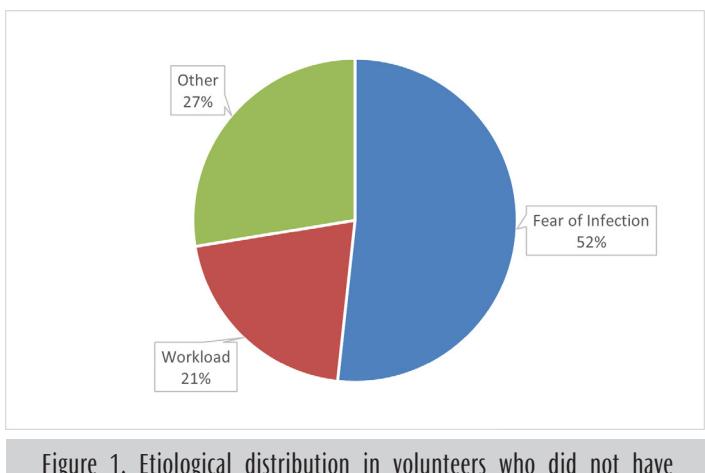


Figure 1. Etiological distribution in volunteers who did not have intercourse in the last month

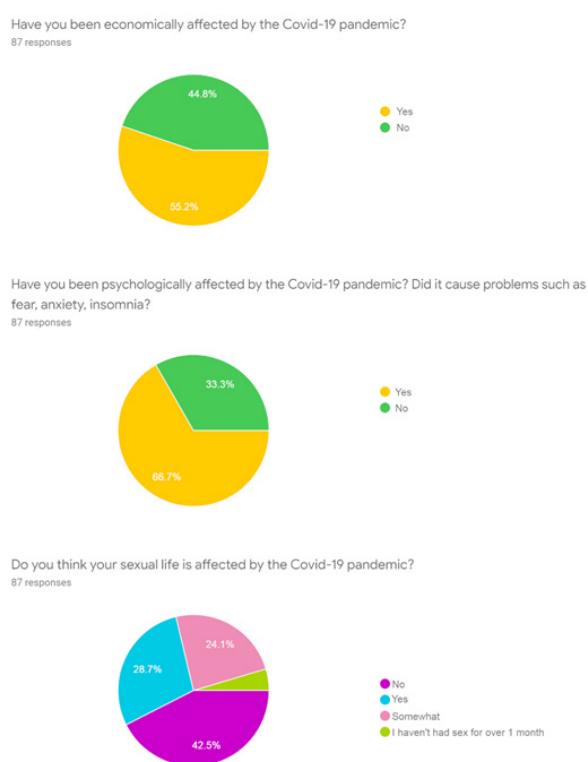


Figure 2. Economic, psychological and sexual impact rates of pandemic in volunteers in a relationship

The density in the figure has been recorded as the workload of employees struggling with the COVID-19 pandemic. For this reason, it can be said that there is a total of 73% pandemic-induced intercourse avoidance behaviour. The survey answers of the remaining 87 volunteers related to the COVID-19 pandemic are summarized in Figure 2 (Figure 2). According to the data, 55.2% of survey respondents were economically affected by the pandemic, 66.7% were psychologically affected and 71.2% were significantly or somewhat sexually affected. When we looked at the analysis of IIEF parameters of these patients, the total average of the 1-5 and 15th questions came to  $25.95 \pm 5.4$  (Table 2). These scores indicate a slight predominance of ED in the IIEF group.

**Table 2. International Erectile Index Score (IIEF) data**

IIEF Parameters	Value
Erectile Function	$25.95 \pm 5.4$
Orgasmic Function	$8.93 \pm 2.3$
Sexual Desire	$7.12 \pm 2.0$
Sexual Satisfaction	$10.49 \pm 3.3$
Overall Satisfaction	$7.71 \pm 2.3$

## DISCUSSION

Isolation measures imposed during the COVID-19 pandemic have had negative psychological effects on people and may affect their sexual lives (5–7). Studies have demonstrated that sexual lives can be affected regardless of whether individuals have regular sexual partners or not. Zurlo et al. stated that young people are under considerable stress during the pandemic and that their sexual lives have been affected due to this stress (8). Jacob et al. reported that certain populations, including females, “people who abstain from alcohol consumption,” and older adults were less likely to engage in sexual intercourse during COVID-19-related isolation, and they mentioned that these populations should be taken into account in plans to promote mental, physical and sexual health (9). The 1954 survey respondents in Ko et al. reported decreased satisfaction, decreased frequency of intercourse, and decreased frequency of “sex-seeking activities” during the pandemic (10). 22% of participants in Li et al. reported a drop in sexual desire while 31% reported a deterioration in partner relationships (11). In their study, Ibarra et al. reported that interest in pornographic content increased during the COVID-19 pandemic period, as did sexual dysfunction (7). They surmised that fear or anxiety due to COVID-19 could lead to sexual dysfunction, and that this and other factors related to the pandemic could go so far as to lead to marriage dissolution in the future. Panzeri et al. found that more couples participating in their study reported a decrease in their sexual quality than reported the opposite,

and cite worry and stress as contributing factors (6). Cito et al. reported a decrease in the frequency of sexual intercourse between couples (12). Finally, Karagöz et al. reported a decrease in frequency of sexual intercourse and overall satisfaction scores in couples (13).

As well as the negative impact of the pandemic on the sexual lives of both singles and couples, the literature bears out a shift towards individual sexual activities such as pornography consumption and masturbation. Although Mahanty et al. reported that interest in pornographic content due to depression and anxiety caused by the COVID-19 pandemic has decreased in both men and women, Ballester-Arnal et al. found that sexual behaviour in both men and women shifted towards online sex and masturbation (2,14). Ibarra's study also reported an increase in interest in pornographic media (7). Finally, Karagöz et al. reported that both men and women avoided intercourse during the pandemic but increased their level of masturbation and/or consumption of sexually explicit media, though the tendency to engage in solitary sexual activities was more pronounced in men (13).

Although the pandemic has been shown to affect both men and women sexually, the nature of these effects may differ. Mahanty et al. stated that women in their sample experienced higher rates of depression while men experienced higher rates of financial anxiety (2). In addition, they found that the desire for parenthood in women remained higher than desire for parenthood in men relative to pre-pandemic levels. Yüksel et al. reported an increase in sexual desire and frequency of intercourse in women, however, a decrease in relationship quality and desire for parenthood (15). Kaya et al. observed that intercourse frequency and sexual satisfaction decreased in women who had contracted COVID-19, but that overall quality of life did not differ in any statistically significant way (4).

Much of women's decreased sexual satisfaction may be the result of the sexual effects of the pandemic on men (e.g. an increased prevalence of ED and premature ejaculation). The decrease in sexual satisfaction reported by Kaya in women, the intercourse-avoidance reported by Karagöz, the decrease in intercourse quality despite increased sexual desire in Yüksel's report may be mainly due to pandemic-related changes in the sexual lives of male partners (4,13,15).

In this study, we have demonstrated that sexually active men in various occupational and age groups have been significantly affected by the pandemic. We found that almost three-quarters of participants who reported avoidance of sexual activity did so due to the pandemic. We have shown that significant economic and psychological impacts on individuals can do significant damage to their sexual lives.

The limitations of this study include: only participants with regular partners were studied, female partners were not questioned, survey respondents self-select and may not be completely honest, and the survey did not ask questions about how privacy issues related to the presence of relatives such as parents and children at home affected the sexual lives of respondents.

## CONCLUSION

It is clear the COVID-19 pandemic affects people's sex lives in myriad of ways and that these ways are frequently negative. According to the results of this study, males' sex lives are frequently significantly affected. We believe that many the domestic problems likely to develop as a result of lockdowns and other measures intended to prevent virus spread can be prevented or reduced by facilitating healthy sex lives between couples. Healthy sex lives are a known stress reliever, and measures designed to prevent decreases in sexual frequency and satisfaction can help alleviate intense economic and psychological stress experienced by individuals. Therefore, both sexual education (16) of individuals and widening access to support for sexual dysfunction and sexual health initiatives during the pandemic can be beneficial. We believe that even simply providing pharmacological support and easing access to sexual counselling services can be on the table as implementable options in order to lower rates of erectile dysfunction and premature ejaculation.

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### Peer-Review

Both Externally and Internally Peer Reviewed

### Conflict of Interest

The authors declare that they have no conflict of interests regarding content of this article.

### Support Resources

No financial support was used by authors during this study.

### Ethical Declaration

Permission was obtained from the Yozgat Bozok University, Medical Faculty Clinical /Human Research Ethics Committee for this study, with date 28.05.2020 and number 2017-KAEK-189\_2020.05.28\_13, and Helsinki Declaration rules were followed to conduct this study.

### Authorship Contributions

Concept: M.C., L.I., Design: M.C., V.S., Ü.Ö., M.Ö., L.I., Data Collection or Processing:M.C., V.S., S.S., Ü.Ö., M.Ö., L.I., Analysis or Interpretation:M.C., V.S., Literature Search: M.C., M.Ö., Writing: M.C., L.I.

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