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The Impact of Covid-19 on the Quality of Life Among University Students with Obsessive-Compulsive Disorder

Reem Almustafa[1], Abdulaziz Alkhoshi[1], Jumana Alshaikh[1], Reema Ayoub[1], Zainalabden. Aljifri[1], Sulhi A. Alfakeh[2]

[1]College of Medicine, Faculty of Medicine, King Abdulaziz University, Jeddah, Saudi Arabia.
[2]Division of Psychiatry, Department of Medicine, Faculty of Medicine, King Abdulaziz University, Jeddah, Saudi Arabia.
*Correspondence to: Sulhi A. Alfakeh (E-mail: salfakeh@kau.edu.sa)
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Abstract

Objective: This study aims to assess the impact of the COVID-19 pandemic on the quality of life of university students diagnosed with obsessive-compulsive disorder (OCD). The research focuses on understanding the specific challenges and changes in the daily lives of individuals with OCD in response to precautionary measures implemented during the pandemic.

Methods: Students with validated confirmed diagnosis of OCD at King Abdulaziz University, Jeddah, received two online surveys: the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) to approve the diagnosis and the 36-Item Short-Form Health Survey (SF-36) to assess symptom severity and overall quality of life during the pandemic. Students with psychotic disorders were excluded from this study.

Results: The majority were females (62.5%), with an average age of 23.13 years. The participants had mild to moderate of OCD symptoms. The SF-36 role limitation due to emotional problems domain was significantly associated with the level of OCD symptoms ($P = 0.023$), with higher scores reported for those with mild symptoms. Age was positively correlated with social functioning and pain domains but negatively correlated with Y-BOCS scores. The general health domain was significantly associated with current OCD symptoms and family history of OCD diagnosis.

Conclusions: The self-reported decline in the severity of OCD symptoms in adult students indicates that the participants in our study with diagnosable OCD perceive an improvement in their symptoms from the previous year.

Keywords: Obsessive-compulsive disorder, college students, COVID-19, quality of life

Introduction

Since the beginning of the outbreak of the novel severe acute respiratory syndrome coronavirus (SARS-CoV-2) in late 2019 in Wuhan, China, it has evolved into a global pandemic, causing significant physiological, psychosocial, behavioral, and economic burdens on the global population[1,2] named 'coronavirus disease 2019' (COVID-19. Based on the World Health Organization, SARS-CoV-2 can spread pervasively through direct contact with respiratory droplets or after touching contaminated surfaces when touching the face without first washing hands.[3] Many affected countries, including Saudi Arabia, adopted isolation policies and reinforced quarantine, which negatively influenced their citizens' mental health, inducing stress and anxiety. Furthermore, it affected symptoms of other serious mental health disorders, such as obsessive-compulsive disorder (OCD).[4]

OCD is a long-standing chronic disorder characterized by repeated, uncontrollable thoughts (obsessions) or/and/or behaviors (compulsions) (American Psychiatric Association, 2013). OCD presents in many ways, and one of the most common types is associated with the obsessional fear of contamination integrated with unusual decontamination habits, including: washing compulsions.[5] Several studies have shown that the frequency of cleaning/washing symptoms in patients with OCD dramatically increases during the pandemic.[6] Moreover, the stress induced by prolonged lockdown contributes to the severity of general OCD symptoms.[7] According to a cross-sectional study, participants with pre-existing OCD presented with symptom exacerbations that demanded pharmacological adjustments and the onset of severe clinical features, including the development of new and recurring obsessions and compulsions.[8] A study by Fontenelle et al. aimed to explore whether the severity of the remaining OCD-related symptoms was affected by the pandemic in a sample of 829 participants. They discovered that 193 participants developed new OCD during the pandemic.[9] In contrast, other studies did not observe worsening of obsessive or compulsive symptoms, suggesting that the COVID-19 pandemic had minimal or no impact on the course of OCD.[10,11]

These previous findings concerning the effects of the pandemic on people with OCD emphasize the importance of screening for OCD and evaluating OCD symptoms among high-risk groups for early and appropriate diagnosis and management.[12] Individuals with other psychiatric illnesses and high school and university students are at a higher risk of developing OCD.[13] Furthermore, studies have suggested that mental disorders hinder student attendance and increase dropout rates.[14] Therefore, how this pandemic affected students with OCD must be understood to address the problems and help improve their quality of life. However, data on the matter, both globally and locally in Saudi Arabia, are lacking. Therefore, this study aims to evaluate the impact of the COVID-19 pandemic on the quality of life of students with OCD at King Abdulaziz University (KAU), Jeddah, Saudi Arabia in 2021.

Methods and Materials

Study Design and Setting

This cross-sectional study was conducted at KAU in Jeddah, Saudi Arabia between June and July 2021 and targeted all students of KAU who were diagnosed with OCD. This study excluded students with OCD who also had coexisting psychotic or bipolar disorders, intellectual disabilities, or neurological or other medical diseases.

Sample Size and Sampling Procedure

The sample size required for this study was calculated as 100 participants for a 95% confidence level and margin of error of 5%. A stratified random sample was used for sampling.

Data Entry and Analysis

Data were entered into Microsoft Excel 2016, and IBM SPSS Statistics version 26.0.0.0 (IBM Corp., Armonk, NY, USA) was used to analyze the data.

Research Ethics

This study was approved by the Institutional Review Board of KAU Hospital (HA-02-J-008). Informed consent was obtained from all participants. This study was conducted in accordance with the tenets of the Declaration of Helsinki.

Data Collection Instruments

Two questionnaires were distributed online through the Blackboard online forum to all KAU students. The questionnaires included demographic questions and two validated Arabic questionnaires. First, the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) was used to assess the severity of OCD symptoms. This scale consists of an obsessions section and a compulsions section; each section consists of five questions. The obsession section collects data regarding the amount of time spent on these thoughts, the distress it causes, and the extent of control that OCD patients exhibit to avoid it. The compulsion section contains similar questions. A total score of 8–15 = mild OCD, 16–23 = moderate OCD, 24–31 = severe OCD, and 32–40 = extreme OCD. The second questionnaire was the Short-Form Health Survey 36 (SF-36) which includes 36 questions. Participants were asked to report their current state (June-July 2021), as well as that exactly a year ago, in terms of physical functioning, bodily pain, energy/fatigue, social functioning, emotional well-being, general health perception, and role limitations due to physical, personal, or emotional problems at the time of distribution of the survey.

Results

This study assessed the impact of COVID-19 on the quality of life and academic performance of 24 adult students with OCD at King Abdulaziz University. The socio-demographic characteristics of the participants showed an average age of 23.13 ± 3.0 years (range, 19–29 years). Most participants were female (62.5%, *n* = 15), and half held a bachelor's degree in education (50.0%, *n* = 12).

Table 1 presents the participants' OCD-related characteristics. All the participants had been diagnosed with OCD by a specialist. Most participants had never taken sedatives (75.0%, *n* = 18) and were not currently using sedatives (79.2%, *n* = 19) for OCD. Furthermore, most participants had not undergone behavioral and cognitive therapy sessions for OCD symptoms (66.7%, *n* = 16), did not currently experience OCD symptoms (54.2%, *n* = 13), and had no family members diagnosed with OCD (83.3%, *n* = 20).

The SF-36 health assessment results are shown in Table 2. Table 2 reveals that roughly two-thirds of the students had very good to excellent overall health (66.6%, *n* = 16), and nearly half of them reported better health status compared with that of the previous year.

Table 1. **Obsessive-compulsive disorder-related characteristics of the studied population (*N* = 24)**

Variables		Count	%
Total		24	100.0
Have you been diagnosed by a specialist with obsessive-compulsive disorder?	Yes	24	100.0
Do you currently use sedatives for obsessive-compulsive disorder?	Yes	5	20.8
	No	19	79.2
Have you ever taken sedatives for obsessive-compulsive symptoms previously?	Yes	6	25.0
	No	18	75.0
Have you had behavioural and cognitive therapy sessions for obsessive-compulsive symptoms, previously or currently?	Yes	8	33.3
	No	16	66.7
Do you currently suffer from obsessive-compulsive symptoms?	Yes	11	45.8
	No	13	54.2
Has anyone in your family been diagnosed with obsessive-compulsive disorder by a specialist?	Yes	4	16.7
	No	20	83.3
If one of your family members was diagnosed with obsessive-compulsive disorder, what is the relationship of kinship?	None	20	83.3
	Father	1	4.2
	Mother	1	4.2
	Sister	2	8.3

Table 2. **SF-36 health assessment of the studied population (*N* = 24)**

SF-36		Count	%
Total		24	100.0
Overall, how do you feel about your health?	Excellent	8	33.3
	Very good	8	33.3
	Good	3	12.5
	Fair	2	8.3
	Bad	3	12.5
Compared to a year ago, how would you rate your overall health now?	Much better than it was a year ago	9	42.9
	Somewhat better than last year	3	14.3
	Roughly the same	8	38.1
	Much worse than it was a year ago	1	4.8
	Missing	3	

The Y-BOCS results are shown in Table 3. Approximately one-third of the participants did not spend any amount of time on obsessive thoughts (33.3%, *n* = 8), had no obsessive thoughts interfering with their social and work activities (36.4%, *n* = 8), experienced severe amounts of stress and anxiety associated with obsessive thoughts most of the time (33.3%, *n* = 8), made some effort to resist obsessive thoughts (37.5%, *n* = 9), and had no compulsions interfering with their social and work activities (37.5%, *n* = 9) during the past seven days (Table 3). Table 4 shows that approximately one-third of

Table 3. **Yale-Brown Obsessive-Compulsive thought assessment of the studied population (*N* = 24)**

During the past 7 days		Count	%
Total		24	100.0
The amount of time you spend on obsessive thoughts	None	8	33.3
	Less than an hour a day, or sometimes	6	25.0
	1 to 3 hours a day, or often	2	8.3
	3 to 8 hours a day, or occurring very often	3	12.5
	More than 8 hours a day, or occurring frequently	5	20.8
How much the obsessive thoughts interfere with your social and work activities.	None	8	36.4
	Mild interference with social or practical activities but general activity is not affected	6	27.3
	Clear but controllable conflict with social or practical activities	5	22.7
	Causes significant disruption in the performance of social or practical activities	2	9.1
	Causes severe impairment	1	4.5
	Missing	2	
The amount of stress and anxiety associated with obsessive thoughts	None	6	25.0
	Mild (sometimes), not annoying	2	8.3
	Moderate (mostly), annoying but manageable	7	29.2
	Severe (most of the time), very annoying	8	33.3
	Extreme (permanent) almost disabling	1	4.2
The amount of effort spent resisting the obsessive thoughts (regardless of how successful you are in resisting)	I do not make an effort to always resist	8	33.3
	I try to resist most of the time	4	16.7
	I make some effort to resist	9	37.5
	I surrender to all obsessive thoughts without trying to control them, and if I try to control it, it is after hesitation	2	8.3
	I completely and willingly surrender to all obsessive thoughts	1	4.2
How much control do you have over obsessive thoughts?	Complete control	6	25.0
	Great control, usually I can stop or distract myself from the obsession when I make some effort or focus	5	20.8
	Medium control, sometimes I can stop or distract my attention from the obsession.	6	25.0
	Little control, I rarely succeed in stopping obsessions, I can only distract and with difficulty.	7	29.2
The amount of time you spend performing the compulsive actions	None	7	29.2
	Less than an hour a day, or do the actions occasionally	7	29.2
	1 to 3 hours a day, or do the actions a lot	5	20.8
	More than 3 hours a day, or doing the action very often	2	8.3
	More than 8 hours a day or doing the action frequently	3	12.5
How much the compulsions interfere with your social and work activities	None	9	37.5
	Mild interference with social or work activities, but general activity is not affected	8	33.3
	Significant but controllable interference with social or work activities	4	16.7
	Significantly disrupt social or work performance	1	4.2
	Cause significant disability	2	8.3

Table 4. **Yale-Brown Obsessive-Compulsive tension and anxiety assessment of the studied population (*N* = 24)**

During the past 7 days		Count	%
Total		24	100.0
The amount of tension and anxiety resulting in the event of abstaining from compulsive actions	None	9	37.5
	Slight anxiety when not taking action	2	8.3
	Anxiety appears, but it can be tolerated.	6	25.0
	Anxiety that is very obvious and disturbing	5	20.8
	Anxiety that is severely incapacitating	2	8.3
The amount of effort spent resisting the compulsions (regardless of how well you resist)	I make an effort to always resist	8	33.3
	I try to resist most of the time	6	25.0
	I surrender to all compulsive thoughts without trying to control them, if I try to control it, it is after hesitation	1	4.2
	I surrender completely and voluntarily to all coercive acts.	9	37.5
How much control you have over the compulsions	Total Control	8	33.3
	I usually stop compulsions with difficulty	5	20.8
	Sometimes I can stop compulsions with difficulty	5	20.8
	I can hardly delay -only- the compulsions but I have to do them to the end.	5	20.8
	I can rarely delay doing a compulsion, even for a moment	1	4.2

the students did not experience any amount of tension and anxiety resulting from abstaining from compulsive actions (37.5%, *n* = 9), completely surrendered to compulsions (37.5%, *n* = 9), and totally controlled their compulsions (33.3%, *n* = 8).

With regard to the Y-BOCS mean scores, the students obtained the lowest mean score of 1.13 ± 1.2 (range 0–4, n = 24) for Y-BOCS item 7 and the highest mean score of 1.88 ± 1.8 (range 0–100, *n* = 24) for Y-BOCS item 9. Overall, the students unfavorably had below half mean Y-BOCS score of 14.88 ± 11.6 (range 0–36, *n* = 24). Regarding symptoms, one-third of the participants reported very mild obsessive-compulsive symptoms (37.5%, *n* = 9), followed by one-fourth of those who exhibited moderate symptoms (25.0%, *n* = 6). The distribution of the students' means Y-BOCS scores is shown in Figure 1.

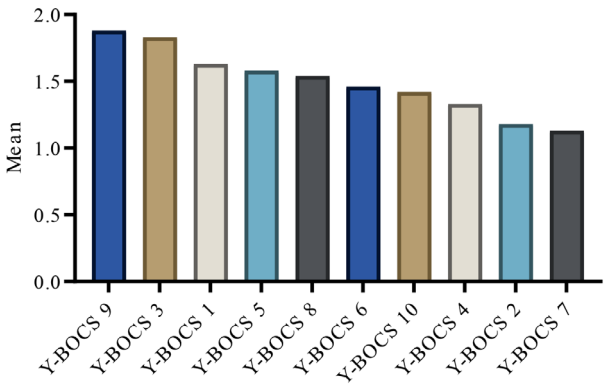

Fig. 1 **The distribution of the students' means Y-BOCS scores.**

The association between the mean Y-BOCS and SF-36 health survey domain scores was then assessed. The results revealed that only the SF-36 role limitation due to emotional problems domain was significantly associated with the Y-BOCS level of symptoms (*P* = 0.023) according to one-way ANOVA at a < 0.05 significance level and Games–Howell tests. More specifically, a significantly higher proportion of students with very mild obsessive-compulsive symptoms (48.1 ± 41.2) compared with those with mild (0.00 ± 0.0), noticeable (0.00 ± 0.0), and severe symptoms (0.00 ± 0.0) experienced role limitation due to emotional problems. The rest of the Y-BOCS symptom levels showed no significant correlation with the rest of the SF-36 health survey domains (*P* > 0.05).

The correlations among the SF-36 health survey domains are shown in Table 5 and were determined using two-tailed tests at 0.05 and 0.01 significance levels. Regarding the correlation between SF-36 health survey domains and age, the results revealed that age exhibited a significantly positive correlation with social functioning (*P* = 0.042, r = 0.418, *n* = 24) and pain (*P* = 0.027, r = 0.452, *n* = 24). In contrast, age was reported to exhibit a significantly negative correlation with Y-BOCS scores (*P* = 0.025, r = -0.456, *n* = 24).

Table 6 shows the association between the mean SF-36 health survey domain scores and the sociodemographic and obsessive-compulsive characteristics of the students. The results revealed that the general health SF-36 domain was significantly associated with current suffering from obsessive-compulsive symptoms (*P* = 0.007) and a family history of OCD diagnosis (*P* = 0 .026). Specifically, significantly higher mean general scores were observed for those without obsessive-compulsive symptoms (70.00 ± 11.2) than for those with such symptoms (44.55 ± 24.6) and for those without a family history of OCD diagnosis (62.75 ± 19.4) than for those with a family history (36.25 ± 25.6). Furthermore, significant associations were found between educational attainment and

Table 5. **Correlation between the age and SF-36 health survey domains**

Correlations		Age
Physical functioning	r	–0.053
	P-value	0.807
	N	24
Role limitations due to physical health	r	0.082
	P-value	0.702
	N	24
Role limitations due to emotional problems	r	–0.049
	P-value	0.820
	N	24
Energy/fatigue	r	0.331
	P-value	0.114
	N	24
Emotional well being	r	0.304
	P-value	0.148
	N	24
Social functioning	r	0.418*
	P-value	0.042
	N	24
Pain	r	0.452*
	P-value	0.027
	N	24
General health	r	0.274
	P-value	0.195
	N	24
	r	–0.456*
Yale-Brown Obsessive-Compulsive Scale	*P*-value	0.025
	N	24

*Correlation is significant at the 0.05 level (2-tailed).

emotional well-being ($P = 0.006$), as well as energy/fatigue ($P = 0.008$). Specifically, those with master's (62.20 ± 24.3; 66.33 ± 26.6) and secondary degrees (51.67 ± 12.0; 4.71 ± 10.2) had significantly higher mean emotional well-being and energy/fatigue scores than those with bachelor's degrees (32.17 ± 17.7; 29.86 ± 22.0). Significantly higher mean emotional well-being scores were also observed for those without obsessive-compulsive symptoms (54.85 ± 18.6) than for those with (33.36 ± 19.1). Additionally, higher scores were observed for those without a family history of OCD diagnosis (49.00 ± 19.6) compared with those with such history (22.00 ± 15.5). Moreover, a significantly higher mean role limitations score due to emotional problems was reported for those without obsessive-compulsive symptoms (61.54 ± 39.0) than for those with such symptoms (25.00 ± 40.3).

Lastly, the association between the mean Y-BOCS level of obsessive-compulsive symptoms and the socio-demographic and obsessive-compulsive characteristics of the students was evaluated. The results showed that only current suffering from obsessive-compulsive symptoms was significantly associated with the Y-BOCS level of obsessive-compulsive symptoms ($P = 0.006$) according to the chi-squared test at a 0.05 significance level. Specifically, a significantly higher proportion of students who were not currently suffering from obsessive-compulsive symptoms showed very mild Y-BOCS symptoms (69.2%, $n = 9$) compared with those with mild to severe Y-BOCS symptoms (0–15.4%).

Discussion

This cross-sectional study assessed the effects of the COVID-19 pandemic on the quality of life of KAU students with OCD. The main results highlighted that half of the sample presented with an improvement in their OCD symptoms and general health after one year of the COVID-19 pandemic, and only a small percentage showed significant deterioration of their symptoms. The severity of these symptoms is greatly affected by the quality of physical and mental health in both college and home environments. However, one year after the beginning of the pandemic, the outcomes changed. This could be explained by several factors. First, COVID-19 has had a noticeable impact on many aspects of patients with OCD. However, these effects differ from country to country because of the distinct procedures undertaken by governments. Nevertheless, as people began to adapt to the sudden changes in their daily lives and become adjusted to social distancing, these impacts tended to level off.

However, a few studies have shown only minimal or no increase in obsessive or compulsive symptoms in response to COVID-19 restrictions.[9] Moreover, OCD symptoms can be well-controlled in the stressful environment of the pandemic if proper treatment is applied. Nonetheless, we discovered that medication compliance had no role in the severity of OCD symptoms during the pandemic, which could be because many had stopped taking their medication for various reasons, such as fear of a shortage of medications if they were to become unavailable, as found in a previous study.[9]

Finally, we highlight the need to make support programs and accommodations readily and widely available for students with OCD at times of future crises, irrespective of this pandemic, to assist them in dealing with such challenges.

This study had several limitations. First, although we gathered 1,041 responses, the final sample size was small after applying the exclusion criteria. Hence, the results may not reflect the definite impact of COVID-19 on all Saudi students with OCD. Additionally, we concentrated only on a particular age group of adults and neglected adolescents and children.

Conclusion

In conclusion, our findings revealed an improvement in OCD symptoms one year following the emergence of COVID-19 as a global pandemic. This impact could be explained by the global adaptation and adjustment of individuals to COVID-19 precautionary measures, inducing a better quality of life. We recommend that future research using interviews rather than self-reported questionnaires and an increased sample size be conducted to obtain more reliable results.

Key Points

- The COVID-19 pandemic has impacted individuals with obsessive-compulsive disorder (OCD) and their quality of life.

Table 6. **Association between the mean SF-36 health survey domain scores and socio-demographic and obsessive-compulsive characteristics of the studied population**

Variables		Total	Physical functioning	Role limitations due to physical health	Role limitations due to emotional problems	Energy/ fatigue	Emotional well being	Social functioning	Pain	General health
Gender	Male	9	60.00 ± 39.1	58.33 ± 43.3	22.22 ± 33.3	44.81 ± 16.2	42.00 ± 14.9	62.50 ± 16.5	84.17 ± 22.2	62.78 ± 20.2
	Female	15	52.48 ± 31.2	36.67 ± 42.1	37.78 ± 41.5	43.22 ± 29.6	46.80 ± 24.8	49.17 ± 27.7	65.83 ± 23.6	55.67 ± 23.7
P-value			0.608	0.240	0.351	0.884	0.606	0.206	0.073	0.462
Academic Qualification	Secondary	7	45.32 ± 31.7	42.86 ± 37.4	38.10 ± 40.5	51.67 ± 12.0[A]	54.71 ± 10.2[A]	48.21 ± 13.4	62.14 ± 22.7	62.14 ± 9.5
	Bachelor's degree	12	59.17 ± 34.0	37.50 ± 44.6	27.78 ± 37.2	29.86 ± 22.0[B]	32.17 ± 17.7[B]	47.92 ± 24.9	71.04 ± 25.5	49.17 ± 26.9
	Master degree	5	60.00 ± 39.8	65.00 ± 48.7	33.33 ± 47.1	66.33 ± 26.6[A]	62.20 ± 24.3[A]	77.50 ± 25.6	91.50 ± 14.1	75.00 ± 10.6
P-value			0.667	0.501	0.862	0.008[c,d]	0.006[c,d]	0.051	0.111	0.075
Do you currently use sedatives for obsessive-compulsive disorder?	Yes	5	75.00 ± 35.7	75.00 ± 43.3	53.33 ± 50.6	50.33 ± 36.7	57.20 ± 25.3	60.00 ± 34.7	85.00 ± 24.0	72.00 ± 12.0
	No	19	50.12 ± 32.1	36.84 ± 40.3	26.32 ± 34.4	42.11 ± 22.0	41.79 ± 19.8	52.63 ± 22.3	69.47 ± 24.0	54.74 ± 23.2
P-value			0.145	0.077	0.170	0.524	0.157	0.563	0.212	0.126
Have you ever taken sedatives for obsessive-compulsive symptoms previously?	Yes	6	56.67 ± 37.1	58.33 ± 40.8	55.56 ± 34.4	59.72 ± 27.4	56.33 ± 21.1	58.33 ± 28.1	75.83 ± 22.6	69.17 ± 11.6
	No	18	54.85 ± 33.6	40.28 ± 43.8	24.07 ± 37.6	38.52 ± 22.5	41.22 ± 20.7	52.78 ± 24.1	71.67 ± 25.4	54.72 ± 24.0
P-value			0.912	0.385	0.084	0.071	0.138	0.643	0.725	0.175
Have you had behavioral and cognitive therapy sessions for obsessive-compulsive symptoms, previously or currently?	Yes	8	50.28 ± 35.0	50.00 ± 40.1	33.33 ± 35.6	38.75 ± 20.3	38.63 ± 19.7	50.00 ± 25.9	66.88 ± 30.1	58.75 ± 26.2
	No	16	57.81 ± 33.9	42.19 ± 45.4	31.25 ± 41.2	46.35 ± 27.3	48.19 ± 22.1	56.25 ± 24.6	75.63 ± 21.4	58.13 ± 21.0
P-value			0.617	0.684	0.904	0.494	0.313	0.570	0.419	0.590
Do you currently suffer from obsessive-compulsive symptoms?	Yes	11	52.47 ± 35.7	25.00 ± 40.3	18.18 ± 34.5	31.52 ± 24.3	33.36 ± 19.1	43.18 ± 22.6	65.45 ± 23.7	44.55 ± 24.6
	No	13	57.69 ± 33.2	61.54 ± 39.0	43.59 ± 39.4	54.23 ± 21.2	54.85 ± 18.6	63.46 ± 23.1	78.85 ± 24.1	70.00 ± 11.2
P-value			0.714	0.035[a]	0.110	0.023[a]	0.011[a]	0.042[a]	0.185	0.007[b]
Has anyone in your family been diagnosed with obsessive-compulsive disorder by a specialist?	Yes	4	37.50 ± 35.2	43.75 ± 42.7	16.67 ± 33.3	27.50 ± 26.3	22.00 ± 15.5	34.38 ± 18.8	58.75 ± 33.1	36.25 ± 25.6
	No	20	58.86 ± 33.1	45.00 ± 44.1	35.00 ± 39.7	47.08 ± 24.1	49.60 ± 19.6	58.13 ± 24.1	75.50 ± 22.3	62.75 ± 19.4
P-value			0.256	0.959	0.399	0.157	0.015[a]	0.078	0.216	0.026[a]

[a]significant using Independent *t*-test at <0.05 level. [b]significant using Welch's *t*-test at <0.05 level. [c]significant using One-Way ANOVA Test at <0.05 level. [d]Post-Hoc Test = LSD. A and B letters indicates Post-Hoc multiple pairing summary indicator, the same letter means the same measure statistically.

- The study investigated the impact of the pandemic on the quality of life of university students with OCD.
- Students with confirmed diagnosis of OCD received two online surveys: Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) and 36-Item Short-Form Health Survey (SF-36).
- SF-36 role limitation due to emotional problems domain was significantly associated with the level of OCD symptoms, with higher scores reported for those with mild symptoms.
- The study concludes that the self-reported decline in the severity of OCD symptoms in adult students indicates an improvement in their symptoms from the previous year.

Statements and Declarations

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Competing Interests

The authors have no relevant financial or non-financial interests to disclose.

Author Contributions

All authors contributed to the study conception and design. Material preparation, data collection and analysis. The first draft of the manuscript was written by Reem Amustafa, Abdulaziz AlKhoshi, and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

Data Availability

The datasets generated and analyzed during the current study are available from the corresponding author on reasonable request.

Ethics Approval

This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Committee of King Abdulaziz University Hospital (No: HA-02-J-008).

Consent to Participate and Publish

Consent was obtained or waived by all participants in this study. ■

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