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Original Article

The Role of Perceived Stress, Intolerance of Uncertainty, and Anxiety of Corona Disease in Predicting the Severity of Symptoms of Patients with Obsessive-Compulsive Disorder during the coronavirus pandemic

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Abstract

The present study was conducted with the aim of investigating the role of perceived stress, intolerance of uncertainty and anxiety of corona disease in predicting the severity of symptoms of patients with obsessive-compulsive disorder (OCD). This research was a correlational-descriptive study. The population of this research included people aged 20 to 50 years who lived in the fall and winter in Ardabil city in 2020. The Vancouver Obsessive-Compulsive Inventory, the Corona Disease Anxiety Scale, Perceived Stress Scale of Campo-Arias, and Intolerance of Uncertainty were employed to collect the data. The data was analyzed using Pearson's correlation test and multiple linear regression analysis using SPSS software version 25. According to Pearson correlation test results, a positive and significant relationship was observed between anxiety of corona disease, stress, intolerance of uncertainty, and obsessive-compulsive disorder ($p<.05$). The results of the regression analysis also showed that Perceived Stress, Intolerance of Uncertainty, and Anxiety of Corona Disease have the ability to significantly predict the Severity of Symptoms of Patients with Obsessive-Compulsive Disorder. Based on the research findings, it can be concluded that perceived stress, intolerance of uncertainty, and anxiety related to the COVID-19 pandemic play significant roles in exacerbating the symptoms of obsessive-compulsive disorder in patients.

Keywords

Obsessive-compulsive disorder
Perceived stress
Intolerance of uncertainty
Anxiety of corona disease

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Introduction

In the late 2019, the world faced a phenomenon that will undoubtedly remain in the history of health. An outbreak of a viral disease was reported in Wuhan, China in December in 2019 (McIntosh et al., 2020). The cause of this disease was a new type of genetically changed virus from the family of corona viruses called SARS-CoV-2, named COVID-19 (Zhu et al., 2020). Covid-19 is an acute respiratory disease that is closely related to the SARS corona virus (Shigemura et al., 2020). This virus quickly spread worldwide due to its highly contagiousness (Zangrillo et al., 2020). According to global statistics, the death rate of this disease has been recorded to be 3.4% (Habibi et al., 2020). In Iran, according to the official statistics of the Ministry of Health, until the fall of 2021, a total of 3,300,000 corona patients were reported in the country. According to the statistics, 85,000 people lost their lives (*Ministry of Health and Medical Education*, 2021). This pandemic has rapidly and profoundly affected every part of people's daily lives, including how they work, live, shop, socialize, and plan for the future (Xiang et al., 2020). In addition to the physical and social effects of COVID-19, due to its pathogenicity, prevalence, and high mortality rate (Bao et al., 2020; Chen et al., 2020), 19-Covid-19 can have negative effects on people's mental health (Huang & Zhao, 2020). Perhaps anxiety and stress are among the first common effects of it (Choi & Taylor, 2020). It has been reported that people may experience symptoms of psychosis, anxiety, shock, suicidal thoughts, and fear (Salari et al., 2020). Also, some evidence has indicated that COVID-19 can cause anxiety (Ahmed et al., 2020) and even symptoms of post-traumatic stress (Bo et al., 2021). .Previous research also indicated that stress and anxiety are the most common psychological symptoms during disease outbreaks. The knowledge that

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the presence of illness conditions, such as heart disease and a weak immune system, increases the risk of morbidity and mortality in corona disease (Lima et al., 2020) can affect the stress and anxiety caused by this epidemic (Salari et al., 2020).

According to recent studies, experiencing severe stress results from the spread of global infectious diseases, such as COVID-19, especially in people at risk (Faramarzi et al., 2023). Perceptual stress is a state that occurs when people are faced with events that are dangerous and threatening to their mental and physical health (Movahed et al., 2023). Stress is a state that is caused by stressful factors and leads to the production of stress responses. These responses are designed and implemented to deal effectively with an unpleasant situation (Hajian & Nikoonejad, 2021). Anxiety, which is a threat to mental health, is currently the cause of many problems, including the worry about being infected by Covid-19 for all members of society. Anxiety is one of the most common psychiatric disorders and includes physical, mental, and behavioral changes and occurs automatically when faced with threats and danger. Anxiety disorders have far-reaching and severe impacts on individuals and society. They lead to excess mortality, excessive utilization of healthcare services, and significant dysfunction. Moreover, anxiety disorders are often associated with other mental health conditions, such as schizophrenia, depression, and substance abuse, as well as various physical illnesses. These disorders also elevate the risk of suicide. Long-term anxiety can further increase the likelihood of developing neurodegenerative diseases like Parkinson's and Alzheimer's. Additionally, it can raise mortality rates due to high blood pressure and cardiovascular issues (Yaghoutimoghaddam et al., 2021). One crucial factor in understanding anxiety disorders is Intolerance of Uncertainty (IU). IU is a cognitive construct that reflects an individual's inability to endure ambiguous or unknown situations. Those with high levels of IU tend to experience significant distress when faced with uncertain outcomes, which can intensify anxiety and related disorders. By addressing these elements, excessive stress, intolerance of uncertainty, and their consequential impacts on both mental and physical health, therapists and clinicians can develop more effective treatment and management plans for individuals suffering from anxiety and related conditions.

Intolerance of Uncertainty is a cognitive construct that expresses people's inability to tolerate ambiguous and unknown situations (Besharat et al., 2015). Intolerance of Uncertainty is a type of cognitive bias that affects how a person perceives, interprets, and reacts to an uncertain situation at the emotional, cognitive, and behavioral levels (Shirin et al., 2021). Daily life is often marked by the presence of uncertainty, which can elicit varying degrees of anxiety depending on the person. Individuals who struggle with making decisions often view uncertain situations as unpleasant, distressing, and overwhelming and may try to avoid them. When faced with these types of situations, their ability to function effectively may be compromised (Ahadi & MoradI, 2018). The majority of studies on intolerance towards uncertainty align with the cognitive model that targets three types of anxiety disorders, which include generalized anxiety disorder, obsessive-compulsive disorder, depressive disorder, and the corresponding treatments for these conditions (Hebert & Dugas, 2019). These conditions frequently occur together and share similar risk factors, which is another contributing factor. Due to the correlation between high levels of intolerance of uncertainty, anxiety disorder, depression, and obsessive-compulsive disorder, it is believed that the experience of uncertainty in these conditions results in anxiety and induces detrimental behaviors like seeking reassurance, checking, and heeding alarms in order to alleviate uncertainty (Ahadi & MoradI, 2018; Tanovic et al., 2018). Symptoms of generalized anxiety disorder, major depressive disorder, and obsessive-compulsive disorder are associated with uncertainty intolerance, according to the findings of a meta-analysis (Gentes & Ruscio, 2011). Patients diagnosed with obsessive-compulsive disorder demonstrated elevated levels of metacognition and intolerance of uncertainty when compared to the control group (Sohn et al., 2016). One of the most prevalent, incapacitating, and unyielding mental illnesses is obsessive-compulsive disorder, which is differentiated from other anxiety disorders in the Diagnostic and Statistical Manual of Mental Disorders (Bagheri Sheykhangafshe & Sadeghi Chookami, 2020). A person experiencing obsession has persistent thoughts or emotions along with a conscious behavior compulsion, such as counting, checking, or avoiding, which results in heightened anxiety. However, the individuals engaged in these compulsions to alleviate the anxiety associated with the obsession, which ultimately lessened the anxiety. This did not result in increased anxiety (Benatti et al., 2020). Obsessive-compulsive disorder is a serious condition that affected approximately 2% of the population, according to research studies. It was possible that in the community, there were a greater number of people experiencing less severe symptoms. Various symptoms could be observed in individuals with intellectual and scientific obsessions, including but not limited to cleaning or pollution-related obsessions, accumulation or hoarding, compulsive checking, adherence to symmetry, and obsessive behaviors. The most common obsession, as stated by the American Psychological Association, is the fear of contamination. This obsession was typically linked to compulsive behaviors, like washing hands, cleaning, and taking precautions, to avoid contact with contaminated objects (Abramowitz & Jacoby, 2014).

Mental tensions, stress, and anxiety are the primary symptoms that spread within a society during a disease epidemic, according to research studies. This was also evident in the Covid-19 epidemic. On the other hand, previous studies also reported that it was possible for obsessive-compulsive disorder to manifest in various settings as an anxiety disorder. Due to the fact that adhering to personal hygiene practices, such as constant hand washing, wearing masks and gloves, and maintaining social distance were crucial in preventing

and stopping further spread of the COVID-19 virus, it was highly probable for practical obsessions and hoarding to occur during the 2019 coronavirus pandemic (Shafran et al., 2020). The COVID-19 virus can trigger anxiety and stress in some individuals, which can lead to difficulties for those who are already susceptible to practical obsessions. If the cleaning process was carried out excessively, it could disturb their regular routine and cause inconvenience (Chakraborty & Karmakar, 2020).

The current situation was such that the fifth wave of the Corona pandemic was ongoing, and the statistics indicated that up to 800 people were losing their lives every day in the country. However, the vaccination process was progressing at a slow pace.

The production of domestic vaccines has been slow, and both domestic and foreign institutions have not yet announced the amount of antibody production or their effectiveness against the coronavirus. In addition, foreign vaccines are hindered by various factors, such as the prohibition of certain components and limited availability in the country. In this situation, the lack of clarity about the exam time that foreign vaccines would be widely available, or when domestic vaccines would be supplied to the market and the uncertainty about the level of protection they offer, as announced by credible institutions, can cause stress and anxiety for people who were in danger. This included individuals with obsessive-compulsive disorder who might have difficulty coping with this uncertainty. It was currently unclear how intolerance of uncertainty contributed to the worsening of symptoms caused by stress and anxiety related to COVID-19 in individuals with intellectual and practical obsessions. Therefore, the factors of main questions of the current research were "Do perceived stress, uncertainty intolerance, and corona disease anxiety play a role in predicting the severity of symptoms in patients with obsessive-compulsive disorder?", and "Can intolerance of uncertainty play a mediating role in the effect of stress and anxiety of Corona on the severity of symptoms of patients with obsessive-compulsive disorder?"

Method

Participants

The current research was a descriptive correlational research that was practical in terms of purpose. The statistical population of the current study was people with obsessive-compulsive disorder who were in the age of between 20 and 50 years old and lived in Ardabil city. The case study consisted of 150 people who were selected in an available manner.

Instrument

Vancouver Obsessive-Compulsive Inventory:

Obsessive-compulsive disorder has been measured using the Vancouver Obsessive-Compulsive Scale (Thordarson et al., 2004), which is an interval-based questionnaire. The score obtained from this scale has been used in the research. It contains 55 questions that have been used to evaluate and measure the level of obsession with different people. This questionnaire includes 6 components (dimensions) which are pollution, checking, obsessive thoughts, hoarding, perfectionism, precision, and doubt.

Perceived Stress Scale:

Perceived stress is measured using the Perceived Stress Scale (Campo-Arias et al., 2020), which is an interval-based questionnaire. This scale was developed and validated by Campo-Arias et al. in 2020. It has 10 items and measures the perceived stress of Corona with a 5-point Likert scale. It was reported that the Cronbach's alpha of this scale was 0.92. The score obtained from this scale has been used in the research. The reliability of this tool is not available in domestic research.

Intolerance of Uncertainty scale:

The score for uncertainty intolerance scale represents the definition of fear of corona used in this research (Freeston et al., 1994). It is important to note that the questionnaire's scale is interval. This test has 27 questions that are related to the unacceptability of uncertainty and ambiguity. Each item or question is rated on a five-point Likert scale of never (1), rarely (2), sometimes (3), often (4), and always (5). In the initial version in French, internal consistency was 0.91, and retest reliability coefficient with an interval of 4 weeks was 0.78. The reliability coefficient of this test has been reported to be significant and satisfactory (Buhr & Dugas, 2002) (Friston et al., 1994, quoted by Asadi Majra et al., 2011). In another research, the face validity of this scale was confirmed by psychology professors, and its total reliability was obtained by Cronbach's alpha, which was 0.92 (Vakili Heris et al., 2020).

Corona Disease Anxiety Scale:

This tool has been prepared and validated to measure the anxiety caused by the spread of the corona virus in Iran. The final version of this tool has 18 items and 2 components (factors). Items 1 to 9 measure psychological symptoms, and items 10 to 18 measure physical symptoms. This tool has been scored on a 4-point Likert scale (never = 0, sometimes = 1, most of the time = 2, and always = 3); therefore, the highest and lowest scores obtained by respondents in this questionnaire are between 0 and 54. High scores in this questionnaire indicated a higher level of anxiety in people. The reliability of this tool was obtained using Cronbach's alpha for the first factor (α=0.879), the second factor (α=0.861) and for the whole questionnaire (α=0.919). Also, Gottman's λ-2 value was obtained for the first factor (λ-2=0.882), the second factor (λ-2=0.864) and for the entire questionnaire (λ-2=0.922) (Alipour, et al., 2020).

Procedure

To conduct the research, research questionnaires were completed by people who were diagnosed with obsessive-compulsive disorder and were willing to participate in the research and were in the age range of 20 to 50 years. Due to the outbreak of Corona, the questionnaires were prepared electronically and sent to these patients through communication software. After collecting the data, they were analyzed using statistical software and the results were reported. Also, Pearson correlation test and multiple regression analysis were used to test the research hypotheses. The data were analyzed using SPSS 25 software.

Results

In the present study, 135 patients with obsessive-compulsive disorder in Ardabil city were studied, of which 75 (668.65%) were male and the rest were female. The average age of the participants in the study was 30.36±6.65 years. The highest frequency was related to the level of master's degree with 65 (48.1%) and the lowest frequency was related to the level of undergraduate and graduate degree with 5 (3.7%).

The correlation between anxiety of coronavirus, stress levels, intolerance of uncertainty, and obsessive-compulsive disorder was examined using Pearson's correlation test. Table 1 displays the outcomes of this test.

Table 1. Correlation test between the anxiety of corona disease, stress, and intolerance of uncertainty with obsessive practical thinking

Variables	Obsessive Compulsive Disorder	Pollution	Checking	Obsessive Thoughts	Hoarding	Idealism	Hesitation	Anxiety of Corona Disease	Mental Symptom	Physical Symptoms	Stress	intolerance of uncertainty
Obsessive Compulsive Disorder	1	*.828	*.848	*.785	*.894	*.766	*.878	*.680	*.654	*.552	*.656	*.540
Pollution		1	*.630	*.577	*.557	*.620	*.683	*.474	*.498	*.341	*.509	*.352
Checking			1	*.485	*.676	*.619	*.689	*.622	*.600	*.504	*.481	*.389
Obsessive Thoughts				1	*.760	*.452	*.693	*.552	*.496	*.485	*.632	*.460
Hoarding					1	*.583	*.696	*.671	*.544	*.650	*.462	*.460
Idealism						1	*.577	*.409	*.368	*.359	*.550	*.461
Hesitation							1	*.630	*.696	*.419	*.639	*.589
Anxiety of Corona								1	*.892	*.884	*.736	*.512
Mental Symptom									1	*.577	*.680	*.523
Physical Symptoms										1	*.626	*.385
Stress											1	*.648
intolerance of uncertainty												1

Based on the table shown above, it is evident that there is a noteworthy and affirmative correlation between the anxiety of corona virus, stress, intolerance of uncertainty, and Obsessive-compulsive disorder ($p < 0.01$). To predict the seriousness of symptoms of patients diagnosed with obsessive-compulsive disorder, a simultaneous regression test was carried out using various variables, such as anxiety caused by the corona virus, stress, and intolerance of uncertainty. Before performing regression analysis, it was necessary to verify two assumptions, namely the collinearity of predictor and owner variables and the independence of errors of predictor variables. The evaluation of collinearity involves assessing two indicators, which are variance tolerance and VIF. If the index of tolerance of variance falls between 0 and 1 and the VIF value is less than 10, the variables are collinear. To ensure the independence of predictor and owner variables, the Watson Camera index must be less than 4 (Durbin-Watson < 4) that have been illustrated by Table 2.

Table 2. Examining the statistical assumptions of the multiple regression test

Predictor variable	Assumption of collinearity of variables		The assumption of independence of errors
	VIF	Tolerance	Durbin-Watson
Anxiety of Corona	1.221	.766	
Mental Symptom	1.566	.632	
Physical Symptoms	1.543	.635	2.412
Stress	1.008	.992	
Intolerance of uncertainty	1.442	.873	

The aforementioned indices have the necessary limit, and the value of the Watson camera index is 2.412 and smaller than 4. Therefore, it can be said that the assumption of independence of the predictor and criterion variables is met, and the use of regression analysis is unimpeded. Therefore, it can be said that the assumption of collinearity of variables is established. Considering the assumptions of regression analysis, regression analysis can be used to test the second hypothesis of the research.

Table 3. The summary of the model

Model	Modified correlation coefficient	The square of the correlation coefficient	The correlation coefficient	Error rate
1	.522	.532	.730	.391

It indicates that there is a relationship between anxiety of coronavirus disease, stress, intolerance of uncertainty, and obsessive-compulsive disorder. Based on the correlation coefficient, the strength of this relationship is 73%, which implies a significant association between the two variables. In the following, the results of ANOVA test have been fully illustrated.

Table 4. ANOVA test

Model	Sum of squares	Degrees of freedom	Average of squares	F	The significance level
Regression	22.819	3	7.606	49.690	.000
Residual	20.053	131	0.153		
Total	42.872	134			

Since the significance level of the test is less than 0.05, a regression test is appropriate. All the information relevant to the multiple linear regression tests has been entirely demonstrated below.

Table 5. Multiple linear regression test to determine the role of predictor variables

Model	Non-standard coefficients		Standard coefficients	T	The significance level
	B	Error rate	B		
Constant	1.319	.157		8.392	.000
Anxiety of Corona	.411	.087	.417	4.711	.000
Stress	.196	.082	.238	2.383	.019
Intolerance of uncertainty	.151	.068	.173	2.197	.030

The significance levels of the regression tests for the variables of anxiety of corona disease (P=0.000), stress (P=0.019), and intolerance of uncertainty (P=0.030) were lower than 0.05. They play a significant role in predicting obsessive-compulsive symptoms. Considering the positivity of the standard beta coefficient for corona disease anxiety (B=0.417), stress (B=0.238), and intolerance of uncertainty (B=0.173), it can be said that corona disease anxiety is 41.7%, stress is 8.8% 23% and intolerance of uncertainty is 17.3%, all of which are involved in obsessive-compulsive symptoms.

Discussion

The results of a multiple linear regression test that was conducted to examine the correlation between perceived stress and the severity of symptoms in Obsessive-Compulsive Disorder (OCD) patients revealed that perceived stress plays a significant and positive role in predicting the severity of symptoms in these patients. The findings of the present study are consistent with some other studies (Adams et al., 2018; Ameri & Najafi, 2022; Ranjbari et al., 2018; van der Straten et al., 2020).

Regarding the impact of the COVID-19 pandemic on OCD, several studies have investigated the emergence and recurrence of the symptoms. It was reported that the anxiety caused by the pandemic has led to an increase in obsessive behaviors among working women in Tehran (Sadri & Benisi, 2021). Additionally, a study was conducted that highlighted the anxiety felt by individuals with OCD during the pandemic (Dalir, 2020), and in another study, it was reported that the coronavirus epidemic can increase obsessive-compulsive behaviors such as hoarding (Sheykhangafshe & Chookami, 2020). Other findings suggested that as the understanding level of illness increased, general health improved, and obsessive beliefs reduced.

Research has demonstrated that stress has clear impact on corticostriatal and limbic circuits when considering the pathophysiological perspective in relation to the influence of stress on the emergence of obsessive behaviors. Prolonged stress can negatively impact the structure and function of certain brain regions, such as the frontal cortex (especially the medial prefrontal cortex), dorsal striatum (caudate), and hippocampus, leading to neuronal atrophy. Stress can also lead to neuronal hypertrophy in the torsolateral striatum (putamen) and amygdala. The neural abnormalities observed in OCD can be explained by these neurobiological effects (Adams et al., 2018). These effects may cause an imbalance between goal-directed and habitual behaviors, which are believed to play a role in the development and expression of OCD symptoms (Adams et al., 2018).

This imbalance in goal-directed and habitual neural networks was also reported in another research (van der Straten et al., 2020). In that study, stress induction with a cold-water pressor test led to a decrease in cortisol response in patients. Patients demonstrated a decline in connectivity between the precuneus and caudate nucleus during stress, and this decline was positively correlated with compulsive behaviors.

Overall, these findings underscored the significant role of perceived stress in the severity of OCD symptoms and highlighted the exacerbating effects of the COVID-19 pandemic on obsessive-compulsive behaviors. The neurobiological insights further elucidated how stress-induced changes in brain structure and function contributed to the disorder, emphasizing the importance of stress management in the treatment of OCD. The multiple linear regression analysis results indicated that intolerance of uncertainty was a significant and positive

predictor of the severity of symptoms in patients diagnosed with obsessive-compulsive disorder (OCD). The findings align with other studies (Almardani et al., 2017; Gillett et al., 2018; Kazemi Rezaei et al., 2017; Pinciotti et al., 2021; Romero-Sanchiz et al., 2015; Salmani & Hasani, 2016; Vakili Heris et al., 2020).

One potential explanation for this association is that individuals with high levels of intolerance for uncertainty may feel inadequate in managing the anxiety and worry stemming from ambiguous situations (Saraff et al., 2023). OCD patients often attempt to mitigate their anxiety and distress through compulsive and ritualistic behaviors (Tolin et al., 2003).

The COVID-19 pandemic has introduced new layers of uncertainty due to the novel nature of the virus, ongoing mutations, and the temporary effectiveness of vaccines. This pervasive uncertainty could exacerbate obsessive thoughts and compulsive behaviors in individuals who had a low tolerance for ambiguity, leading to heightened anxiety (Pinciotti et al., 2021).

Individuals with OCD typically exhibit an extreme need for certainty and assurance while facing ambiguity and uncertain situations. When they cannot achieve the desired level of certainty, it results in significant distress (Vakili Heris et al., 2020). This lack of clarity complicates task execution and increases the likelihood of obsessive symptoms re-emerging in these individuals (Kazemi Rezaei et al., 2017).

Overall, these findings underscored the critical role that intolerance of uncertainty played in the manifestation and severity of OCD symptoms, particularly in the context of the unpredictable nature of the COVID-19 pandemic. Therefore, therapeutic interventions focusing on improving tolerance to uncertainty might be beneficial in reducing the severity of OCD symptoms.

A positive and significant role of corona disease anxiety was found in predicting the severity of symptoms of patients with obsessive-compulsive disorder through multiple linear regression tests. The results of the test indicated that corona-disease anxiety played a crucial role in predicting the severity of symptoms in patients diagnosed with obsessive-compulsive disorder. This result is in agreement with some results of other studies (Acenowr & Coles, 2021; Ameri & Najafi, 2022; Breteler et al., 2021; Mohammadpour & Jooshanlou, 2015; Ranjbari et al., 2018; Sadri & Benisi, 2021).

Different studies have indicated that the COVID-19 pandemic has led to the emergence of anxiety disorders among various groups of people. This could contribute to the development of fear of contracting the virus and even obsessive-compulsive disorder. The psychological impact of the spread of Covid-19 was investigated on the mental health of the community (Shahyad & Mohammadi, 2020). They found that this disease not only posed a threat to public health but also led to various psychological disorders, such as anxiety and fear. The psychological implications of the COVID-19 pandemic were investigated, and it was discovered that it resulted in unfavorable mental effects, such as anxiety (Shahed hagh ghadam et al., 2020). In the studied population, significant prevalence of anxiety-related symptoms was found (Choobineh et al., 2021). Anxiety has become more prevalent after the coronavirus pandemic, as evidenced by the studies mentioned earlier. The findings from this research suggested a correlation between anxiety and the recurrence of obsessive-compulsive symptoms. Generally, it can be concluded that one of the defining traits of obsessive-compulsive disorder is the need for certainty to alleviate anxiety and the negative effects of ambiguity. Worry is a mechanism that people use to control vague feelings and anxiety about future events (Ranjbari et al., 2018). Therefore, as a result of corona virus pandemic, the severe anxiety, and worry caused by it, those people inevitably began compulsive and repetitive behaviors. It is recommended to compare individuals with obsessive-compulsive disorder and those who are healthy in terms of the variables of the present study, including the degree of stress, anxiety, and intolerance of uncertainty. To better understand the impact of demographic factors, such as gender, age, occupation, or mediating variables like the impact of fear of coronavirus on stress, anxiety, and intolerance of uncertainty, several other studies can be conducted in other contexts to see if the finding can generalize.

Conclusion

The present study was conducted with the aim of investigating the role of perceived stress, intolerance of uncertainty and anxiety of corona disease in predicting the severity of symptoms of patients with obsessive-compulsive disorder. The results of the study showed that perceived stress, intolerance of uncertainty, and anxiety about the coronavirus were related to the severity of symptoms in patients with obsessive-compulsive disorder, and that predictor variables played a significant role in the exacerbation of symptoms of obsessive-compulsive disorder in patients.Therefore, as a result of the corona virus pandemic, the severe anxiety, and worry caused by it, those people inevitably began compulsive and repetitive behaviors.

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The authors declare that there is no conflict of interest regarding the publication of this paper.

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