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Comparison of obsessive beliefs, depression and anxiety in patients with suspected COVID-19 and healthy patients in Razi Hospital, Ahvaz

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Abstract---Introduction: The prevalence of psychological disorders has a major impact not only on mental and physical health but also on the process of treatment, recovery and duration of hospitalization and referrals. The aim of this study was to compare obsessive beliefs, depression and anxiety in patients with suspected Covid-19 and healthy individuals in Ahvaz. Methods: This descriptive-analytical study was conducted using purposive sampling method, 150 patients with Covid-19, 150 suspects and 150 healthy patients referred to Razi Hospital. Information using questionnaires Obsessive beliefs, depression and anxiety were collected and data were analyzed using multivariate analysis of variance .Results: The results showed that there were significant differences between patients with Covid-19, suspected patients and healthy individuals in terms of obsessive beliefs, depression and anxiety ($p < 0.001$). Mean obsessive beliefs (132.35 ± 17.17) and depression (11.01 ± 4.41) were higher in patients with Covid-19 than in the other two groups ($p < 0.001$), and anxiety (22.62 ± 5.72) was higher in patients with Covid-19 than in the other two groups. The other two groups were higher ($p < 0.001$). Conclusion: According to the results, there is a significant difference between patients with suspected and suspected Covid-19 and healthy individuals in the components of obsessive beliefs, depression and anxiety, so there may be a relationship between obsessive beliefs, depression and anxiety and Covid-19. Bilateral and with Psychoneuroimmunology, psychological, social and individual factors.

Keywords---COVID-19, obsessive beliefs, depression, anxiety, Ahvaz.

Introduction

Obsessive beliefs are the cognitive basis of obsessive-compulsive disorder and obsessive-compulsive disorder. Following the Global Seminar on Behavioral and Cognitive Therapies, held in Denmark in July 1995, which established a symposium on beliefs related to obsessive-compulsive disorder (OCD), an "Obsessive-Compulsive Cognitive Working Group" was formed. Working group members were asked to explore areas of OCD-related beliefs. Later, five areas were considered as central factors of OCD, which were: 1) feeling too responsible 2) believing in the importance of the consequences of personal thinking 3) believing too much in the importance and necessity of having control over thoughts Self 4) overestimating the threat and 5) inability to tolerate ambiguity. Later, the sixth domain, perfectionism, was added to these five domains (1).

In recent years, many studies have been conducted on the effects of depression and anxiety on the onset, duration, and progression of coronary heart disease (2). Depression increases the risk of death from heart attack and stroke. In addition, people who suffer from depression after a heart attack are more likely to suffer from complications such as cardiac dysrhythmias, increased frequency of chest pain, decreased satisfaction with treatment, decreased effective activity, and decreased quality of life (3).

Depression and anxiety are strongly related to each other and often these two disorders are experienced together. Anxiety is one of the most important psychological factors in heart patients with a prevalence of up to 50% in patients with myocardial infarction (4). In this regard, in Maleki and Heydari research, the correlation between anxiety and depression was 64% (5). Coronaviruses are a large family of viruses that can cause respiratory infections ranging from the common cold to more serious illnesses such as measles and mumps. The virus has recently been dubbed COVID-19; The outbreak of the new virus began in December 2019 in Wuhan, China (6). The COVID-19 virus spreads easily in some affected areas of the community (7-9). This indigenous spread means that most people in a region are more likely to be infected, and some are not even sure how or where they became infected (7, 8). Symptoms of the virus range from mild to severe. Signs and symptoms of infection include fever, cough, and difficulty breathing (9).

As a result of obsessive-compulsive beliefs, obsessive-compulsive disorder sufferers see their thoughts as a sign of potential harm to themselves or others, and they think they are responsible for preventing it and preventing it (10). People with obsessive-compulsive disorder have disturbing thoughts that are also seen in normal people (11). The mental health of patients admitted to COVID-19 during an epidemic is unknown. After being diagnosed with COVID-19, patients may have psychological problems such as anxiety, fear of disease progression, disability, or premature death. The disease has also increased general fear and stress (12, 13). Because early prevention of mental health problems is critical (14), and given that the new coronavirus is a disease of the respiratory tract, it has been shown that some patients with high levels of anxiety and depression develop heart damage, which increases the risk of death. Brings with it (15); And that no study has been done in this regard so far. The aim of this study was to compare obsessive beliefs, depression and anxiety in patients with suspected COVID-19 and healthy individuals in Razi Hospital in Ahvaz.

Methods

Considering that the researcher described and analyzed the data and components of the research, it was a descriptive-analytical observational study. In terms of implementation method, it is a quantitative research and based on the results, it is an applied study; Which was done in 2022. The study population was patients (n = 150) and suspected (n = 150) with COVID-19 and healthy individuals in Razi Hospital in Ahvaz. Study data collection tool was collected by a questionnaire. The present questionnaire consisted of four parts:

The first part of the features was demographic, which included questions such as age, gender, education, and health status.

The second part included the Obsessive Beliefs Questionnaire; Which includes 44 questions and 5 dimensions (general (16 questions), perfectionism and certainty (10 questions), sense of responsibility and risk and threat assessment (7 questions), importance and control of thoughts (6 questions) and complete performance (5 questions)) Was. The answers to questions one to seven ranged from strongly agree to strongly disagree. The scale rating includes: (3-) Strongly

Agree, (0) Neither Agree nor Disagree, and (3+) Strongly Disagree. The minimum possible score was -132 and the maximum was +132. The more negative the answer to the questions, the higher the obsessive thoughts in the person. The higher the response rate to positive questions, the more balanced the individual's thoughts (16). In a study conducted in Iran by Shams et al., Cronbach's alpha (0.92) was found to have a correlation coefficient by the two-half method (0.94) and a retest reliability coefficient (0.82) (17).

The third part was the Anxiety Questionnaire which consisted of 35 questions; Which was in the form of a 5-point Likert scale never, rarely, sometimes, often and always. A score below 70 meant that he had a low level of anxiety and no mental or physical problems, and a score of 105-70, ie test results, indicates a moderate level of dysfunction and injury in the individual (18). Afzali et al. Obtained the validity and reliability of this questionnaire at 0.73 (19).

The fourth section was the Depression Inventory; Which has 30 questions that were adjusted based on different symptoms of depression. For each question, there were 4 options that indicated the intensity of the symptom, respectively; Option A was assigned a score of zero, option B was assigned a score of 1, option C was assigned a score of 2, and option D was assigned a score of 4; Therefore, the total score of the respondents was between zero and 90. The scoring method was that they bring a score less than 21, they are safe with 0.99; People between the ages of 22 and 53 have mild to moderate depression; And above this score indicates severe depression (20). The psychometric properties of this questionnaire in a sample of 94 people in Iran were as follows: alpha coefficient, 0.910 coefficient of correlation between the two halves of the test was 0.890 and alpha coefficient of retest was 0.94 (21).

In order to study the statistical indicators and describe the variables, descriptive statistics such as mean, standard deviation, percentage, etc. were used. Pearson correlation coefficient test was used to examine the relationship between variables if the data were normal and Spearman correlation coefficient test was used if the data were abnormal. Independent t-test was used to compare the means. Data were analyzed using SPSS 22 software.

Results

The total sample was 450 people who were divided into each group of patients with suspected Covid-19 and the group of 150 healthy individuals. In the group of patients with Covid-19, the number of married people was 53 (35.3%), single 91 (60.8%) and divorced 6 (3.9%). In the group of patients suspected of Covid-19, married people 57 (38%), single 90 (60%) and divorced 3 (2%) and in the healthy group, 46 (30.6%), Single people were 101 (67.3%) and divorced were 3 (2.1%). In the group of patients, the frequency according to the level of education was as follows: 11 illiterate people (7.8%), 15 people (9.8%) in primary and secondary education, 50 people (33.4%) in diplomas and 74 people in bachelor and higher (49%), in the group of suspected illiterates 15 (10%), elementary and cycle 12 (8%), diploma 45 (30%) and bachelor and above 78 (52%) and in the healthy group There are 18 illiterates (12.2%), elementary and cycle 9 (6.2%), diplomas 37 (24.5%) and bachelors and above 86 (57.1%).

The mean and standard deviation of age in the group of patients with Covid-19 was 35.71 \pm 7.7, in the group of suspected patients was 40.40 \pm 6.54 and in healthy individuals was 36.30 \pm 4.95 years.

Table 1 shows the mean, standard deviation, the lowest and highest scores of obsessive beliefs, depression and anxiety in the research groups

Maximum	Minimum	SD \pm Mean		
146	84	118.42 \pm 15.98	healthy people	Obsessive beliefs
150	92	126.36 \pm 14.88	Suspicious	
180	89	132.35 \pm 17.64	Affected	
13	0	6.8 \pm 4.04	healthy people	Depression
16	2	11.6 \pm 5.40	Suspicious	
19	4	13.01 \pm 4.17	Affected	
15	0	9.41 \pm 4.38	healthy people	Anxiety
36	6	22.72 \pm 5.62	Suspicious	
30	4	20.60 \pm 4.72	Affected	

Table 1: Mean, standard deviation, lowest and highest in patients with suspected Covid-19 and healthy individuals in Ahvaz in 2022

Table 2 summarizes the results of multivariate analysis of variance on the scores of obsessive beliefs, depression and anxiety in three groups. As shown in this table of indicators that there is a significant difference between groups in terms of at least one of the variables of obsessive beliefs, depression and anxiety, one-way analysis of variance ANOVA was used to determine the statistically significant source of multivariate effect.

Tukey test results	Significant level	Ratio F	Average squares	Total squares	The dependent variable
3 <2 <1	0.001	18.11	6771.011	13542.022	Obsessive beliefs
3 <2 <1	0.001	42.22	725,360	1450.721	Depression
3 <2 <1	0.001	50.50	1975.556	3951.113	Anxiety

Table 2: Results of one-way analysis of variance in ANOVA text and Tukey test on the scores of obsessive-compulsive beliefs, depression and anxiety, suspected of Covid-19 and healthy individuals in Ahvaz in 2022.

Table 3 shows the one-way analysis of variance in ANOVA to compare the means of the three groups in the variables of obsessive beliefs, depression and anxiety. According to this table, F observed between groups in obsessive beliefs, depression and anxiety is significant. . In addition, the results show that the average score of patients with obsessive-compulsive disorder and depression and those with suspected anxiety is higher.

p-Value	DF error	DF Hypothesis	Ratio F	amount	Test
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0.001>	275	5	23.36	0.701	Pilay effect
0.001>	278	5	24.56	0.398	Wilks Lambda
0.001>	281	4	28.95	1.17	Hotelling effect
0.001>	160	3	43.21	0.908	The largest root on

Table 3: Summary of the results of multivariate analysis of variance on the scores of obsessive beliefs, depression and anxiety, suspected of Covid-19 and healthy people in Ahvaz in 2022.

Discussion

The results of this study showed that there is a significant difference between the three groups in terms of obsessive beliefs, depression and anxiety. According to this finding, obsessive beliefs were observed in patients with Covid-19 more than suspected cases and healthy individuals. In this regard, no internal study has been performed, but the results of this study are consistent with the results of external studies. Which took place in Egypt in 2021 showed that obsessive-compulsive disorders have increased significantly in the Covid epidemic and it is also stated that the rate of this disorder in the general population, especially health care workers, was 28.2%, which is The rate was reported to be lower in the healthy population (22), and is consistent with the results of a 2020 study by Xiang et al. (23) Also in two studies conducted by Wong (24) and Robillard (25) that were consistent with the results of this study and stated that out of 6041 participants in March 2020, 60% of them had obsessive-compulsive thoughts. Hand infections were reported to be associated with increased levels of distress.

Obsessive-compulsive disorder puts a lot of stress on the person, causing anxiety and obsessive-compulsive disorder in people with suspected Covid-19, who have obsessive-compulsive symptoms such as frequent body temperature control, frequent sterilization, and increased aggression. It causes social exclusion, financial loss, discrimination and serious problems (26), all of which are considered a threat to the mental health of society, as well as these patients experience fear of severe consequences of illness and infection (27). They may reduce loneliness, denial, anxiety, insomnia and frustration which may reduce adherence to treatment. No group of people with mental disorders may be as directly affected by the prevalence of Covid 19 as people with obsessive-compulsive disorder (28). Covid virus 19, secondly, is the vapor of psychological stressors such as quarantine and social isolation and fear of killing the disease, the immune response leading to the production of cytokines, chemokines and other inflammatory factors (29).

In addition, the findings of the present study showed that the rate of depression in patients with suspected and healthy patients was affected by the Covid-19 epidemic, respectively, and a statistically significant difference was observed in the field of depression. In studies by Gu et al., Lee et al., Wang et al. (30-32). Findings from a stress study by Catherine Packer et al., Conducted in New York City, in which a significant number of hospitalized patients with a diagnosis of Covid-19 disease experienced symptoms of high anxiety (33). Also, in the study of Van Amerijen et al., A significant increase in stress and anxiety was observed in patients (34). (35-37) are consistent with the results of this study, so the cause of

the occurrence and increase of disorders and symptoms associated with depression and anxiety can be multidimensional. And these stressors may lead to neuropsychotic (neuropsychological) consequences in adulthood. However, other studies show that the stress caused by the Covid 19 pandemic activates the neuroimmune endocrine system, which in turn increases mental disorders (38, 39), as well as other factors such as quarantine and infectious stigma that lead to social isolation and reduced support. It becomes familial and social (40) and social role disorder (41) is involved.

Another finding of the study was that the scores of depressive, depressive and anxious beliefs in healthy individuals in the Covid-19 epidemic were high, which was consistent with the results of other studies, which show that even for people who already have mental health conditions. Pandemic can cause anxious thoughts and obsessive behaviors (42).

Another finding of this study was that the level of anxiety was higher in suspected patients than in patients with Covid-19, while the scores of obsessive beliefs and depression in patients were higher than those of suspects in Covid-19. Findings: A similar study has not been performed, but in the study, Parade et al. Saw an increase in patients' anxiety in anticipation of cardiac catheterization and showed that waiting for diagnosis and treatment increases patients' anxiety (43). And its unpredictable nature, as well as the fear and anxiety caused by the possible occurrence of a psychologically destructive factor that causes mental, psychological and stress disorders in society (44), so it seems that this disease is epidemic for People are stressful because the fear and worry about a new illness and what might happen can be overwhelming and cause a great deal of excitement. Tolerate a lot of anxiety (45 and 48).

The lack of elimination of confounding factors in examining the differences between these groups has also been one of the limitations of this study. This study has not been done in Iran and it is necessary to study more and in other regions and also to examine another variable in order to achieve more accurate and comprehensive results.

Conclusion

The results of the present study showed that there is a significant difference between patients with Covid-19 and suspected and healthy individuals in terms of obsessive beliefs, depression and anxiety. In other words, obsessive-compulsive beliefs and depression were higher in patients with Covid-19 than in suspect and healthy individuals. Is a disease. It is recommended that the results of this research be used by counselors and mental health professionals in medical and counseling centers.

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