

Original Article

Comparing the Effectiveness of In-person and Telehealth Cognitive-Behavioral Therapy on Psychological Distress and Resilience in People Recovered from COVID-19: A Quasi-Experimental Study

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Abstract

Background and Aim: Apart from the physical effects that COVID-19 causes, the disease is also associated with various psychological problems that required research and clinical attention. Purpose of this study was to compare the effectiveness of in-person and telehealth Cognitive-Behavioral Therapy (CBT) in people who have recovered from COVID-19.

Materials and Methods: The present study was a quasi-experimental study with a pre-post design, a control group, and three-month follow-up. The statistical population consisted of patients who recovered from COVID-19 in Tehran between 2022-2023, of which 45 patients were selected using a convenience sampling method and randomly divided into three groups including the two study groups: in-person CBT and telehealth CBT group (15 patients for each) and a control group (15 patients). The in-person CBT group received 11 sessions, and the telehealth CBT group received 12 sessions. Research instruments included the Depression, Anxiety, and Stress Scale (DASS-21) and the Resilience Scale (RS). The data were analyzed using repeated measures analysis of variance.

Results: The results showed that although both treatments led to improvements in psychological distress ($P < 0.01$) and resilience ($P < 0.01$), the effectiveness of in-person CBT was greater and statistically significant. Between effects size for depression, anxiety, stress and resilience was 0.37, 0.38, 0.44, and 0.64, respectively.

Conclusion: The study results show that both in-person and virtual CBT lead to improvements in psychological distress and resilience in patients with a COVID-19 background compared to the control group, and the improvement rate for in-person CBT is higher in compared to the virtual group. In fact, in-person CBT leads to significant improvements in psychological distress and resilience.

Keywords: COVID-19, Psychological distress, Resilience, In-person cognitive-behavioral therapy, Telehealth cognitive-behavioral therapy

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Introduction

In March 2020, the World Health Organization declared a global alert for the coronavirus disease2019 (COVID-19) virus epidemic, as over 640 million people worldwide have been infected with the virus and 6.5 million have died from it (1). Most clinical and research objectives pursued in the field of this disease are primarily focused on transmission patterns, physiological symptoms, and vaccine development attempts (2). Research has shown that, in addition to its mortality rate and physical symptoms, people infected with this virus usually suffer from stress, anxiety, and depression, which greatly impacts their quality of life (3, 4). In terms of treatment, the basic method of controlling and managing the spread of this disease is isolation and quarantine (2). Although these methods have advantages such as controlling the spread of the disease and preventing infection on a wider scale, they are fundamentally associated with psychological problems such as fear (5), anxiety, stress, and depression in patients (6). In addition, the lack of interaction with others leads to a sense of loss of control (7), intolerance to the situation, and psychological distress (8). The physical symptoms of the disease, such as fever and cough, can also exacerbate people's anxiety and stress (9). The results indicate that even after the viral pandemic has subsided, many people continue to suffer from significant psychological distress, consequently psychotherapy is necessary (10). The psychological effects of COVID-19 persist even after the infection is cured and the disease is controlled (11). In a study by Wang et al. (12), half of the participants reported experiencing moderate to severe mental health problems caused by the COVID-19, such as anxiety and stress. In Iran, studies have shown that mental health problems, such as anxiety, stress, and depression, increased significantly after the spread of COVID-19 (13). Since the severity of these mental health problems was considered to be very high, researchers found it important to provide psychological interventions for people suffering from

the disease (14). The spread of the disease and preventive strategies such as quarantine and social isolation may increase various mental health problems in people. Moreover, people are unable to cope with such challenges and problems and will deal with them in different ways(15). This ability to endure difficulties and adapt to them positively is known as resilience (16). As a result, it was shown that reduced resilience under the COVID-19 pandemic is associated with various psychological problems such as depression and anxiety. Indeed, resilience acts as a protector during crises, changes, and challenges and plays a key role in adaptation to such situations (15, 17). Therefore, therapeutic attention to psychological distress and resilience is particularly important. While the World Health Organization and other relevant agencies have focused on the physical and biological aspects of the disease, less attention has been paid to mental health interventions for affected people (18). The implementation mixed interventions is particularly important with regard to physical and mental health (9). One of the treatments that has been effective with high empirical support in the field of psychological interventions is Cognitive-Behavioral Therapy (CBT). Studies have shown that CBT is one of the most effective treatments to improve various psychological problems such as anxiety, stress, and depression (19-21). During disease epidemics. On the other hand, the impact of the spread of the COVID-19 disease was such that it led many human activities, including education and civil service activities, to switch from face-to-face settings to online ones (22). These changes continued even after the outbreak of the disease subsided, and led many researchers to believe that the COVID-19 pandemic caused significant changes in people's lifestyles and work, even after the spread of the disease decreased and the disease was under control (23). One of the main changes is the way psychological services are provided, as many people still prefer online treatment, while many others prefer face-to-face treatment (24). There are significant distinctions between in-person and online cognitive-behavioral therapies. In-person cognitive-behavioral therapy

necessitates both physical presence in the treatment environment and additional time, as the therapist schedules a session with the client at a specific time and location. As a result, the client must spend more time seeking psychological services (25). However, many clients may find it difficult to take in these facilities due to the lengthy physical distances required to reach professional psychotherapy centers, lack of adequate time, and substantial travel fees. As a result, many clients and even therapists emphasize the usage of telehealth healthcare therapies (26). This means that in this treatment method, both the psychotherapist and the client have a virtual or online therapy session using related softwares.

Despite these preferences and differences in clinical practice, there have been no consistent studies comparing face-to-face and telehealth Iranian CBT for patients who have survived from COVID-19. Also, despite the important role of resilience as a psychological protective factor against life's challenges and changes, it has received little attention in research on people with a history of COVID-19. This study was conducted to investigate and compare in-person and telehealth CBT in patients with a history of COVID-19.

Methods

The present study was a randomized clinical trial with a pre-post design, a control group, and three-month follow-up. The study population included all COVID-19 patients who referred to Tehran clinics between 2022 and 2023. Due to the nature of psychological intervention studies, blinding was not possible. The primary outcomes of this study included depression, anxiety, and stress, and secondary outcomes included resilience. After receiving the code of ethics from Islamic Azad University, Science and Research Branch, (IR.IAU.SRB.REC.1402.381), the research process began. The sample size for this study was determined by G*Power version 3.1.9.2 software considering previous studies (27). Based on effect size of 0.56 (27), desired statistical power level of 0.80, and probability level of 0.05, the sample size was calculated as 36 people. However, regarding the attrition rate, the number has increased to 45 people. After calling for participation in East Tehran Health

Center, psychotherapy centers, hospitals, and telehealth spaces in Tehran, 51 people expressed their willingness to participate in the study. Four participants did not participate in the research process because they were receiving other psychological interventions at the same time, and two did not participate in the research process because of a history of substance abuse in the previous months. Therefore, 45 people were selected using a convenience sampling method and randomly divided into three 15-participant groups, the in-person CBT group, the telehealth CBT group, and the control group. Block randomization was used to divide subjects into three groups. Inclusion criteria for this study included: history of COVID-19 infection, isolation at the time of infection, having severe psychological distress according to the DASS-21 questionnaire and clinical interview, consent to participate in the study, with minimum age of 18 y/o, and the ability to read and write. Exclusion criteria were as follows: lack of cooperation and not answering survey questions, not attending two or more sessions, Substance abuse, and receiving psychotherapy other than the study treatment. Subjects were assessed immediately before and after the intervention, and also at a follow-up period, three months after the end of the last session. In the telehealth CBT group, one participant did not complete the post-test and follow-up assessments due to not attending psychotherapy sessions. In the in-person CBT group, one participant did not complete the follow-up assessment due to lack of contact. In the control group, two did not complete the post and follow-up tests (Figure 1).

Materials

In-person CBT included 11 weekly sessions (Table 1). Telehealth CBT included 12 weekly sessions (Table 2). The control group didn't receive any intervention. The telehealth treatment was carried out using Skype software. The trainer or the therapist was a doctoral student in psychology who had completed training in CBT at a certified workshop and obtained a system number and work license from the Psychology and Counseling Organization Islamic Republic of Iran. In addition, the therapist conducted the sessions under the supervision of a supervisor who was a university faculty member.

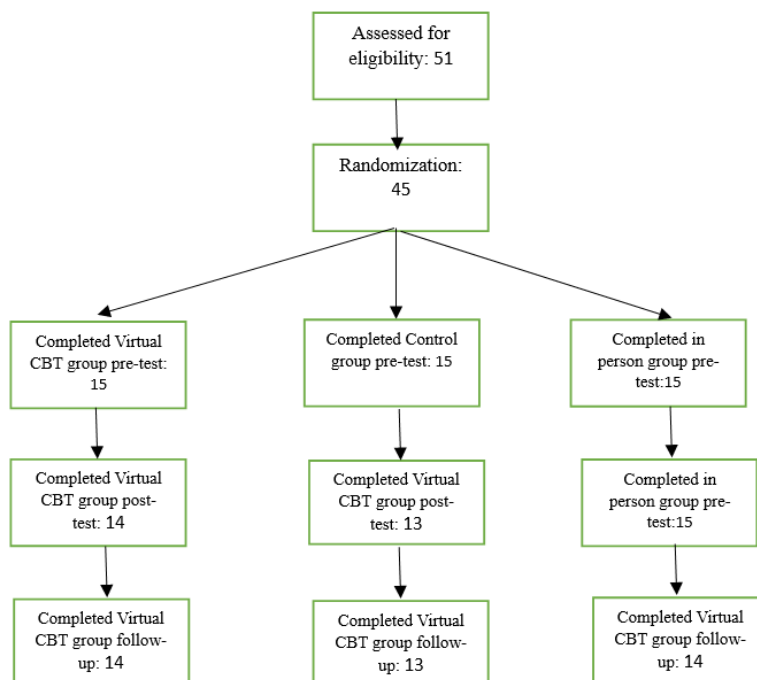


Fig. 1. Diagram illustrating numbers of participants in pre-test, post-test, and follow-up phases

Table 1. contents of the in-person CBT

Session	Content
Assessment session	Welcoming and involving the person in the therapeutic process, explaining the history of a traumatic event, normalizing reactions, and establishing treatment goals.
Session 1	Reviewing the assessment results, discussing the psychological distress caused by the illness, normalizing problems, setting general behavioral goals, and assigning homework.
Session 2	Recalling previous sessions, providing information about the type of trauma they have experienced, muscle relaxation, homework, timetable for events, practicing abdominal breathing, working on behavioral goals.
Session 3	Reminding the tasks already completed, correcting misjudgments of traumatic events and its markers, improving mood, training exposure and relaxation, training guided imagery about traumatic events, assigning homework.
Session 4	Reviewing the previous session, explaining automatic thoughts, discussing how thoughts affect emotions, reviewing the list of cognitive distortions, providing introduction to the ABC model, assigning homework.
Session 5	Recalling previous sessions, reviewing the relationship between negative thoughts and traumatic events, training cognitive restructuring, explaining the role of lack of social relationships in feelings of distress, assigning homework addressing cognitive restructuring.
Session 6	Recalling previous sessions, defining psychological distress and resilience, explaining the fight-or-flight response, discussing the relationship between psychological distress and traumatic events, leading experiments to reduce psychological distress and increase resilience, defining activities that could make them happy in the past, encouraging to deal with it, assigning homework about dealing with stressful events
Session 7	Recalling previous sessions, modifying misjudgments about traumatic events and their consequences, introducing social skills, training steps of timely activities, and assigning homework about the targeted activities.
Session 8	Review previous sessions, identifying enjoyable activities, obtaining detailed information about cognitive reframing and applying it to the traumatic event, planning enjoyable activities, and assigning homework.
Session 9	Training anger management and differentiation of stimuli: Reviewing the previous session, helping the client identify and confront triggers of the traumatic event, distinguishing between

	the experience of the traumatic event and the present moment, and discussing anger, emotions and their relationships with traumatic events.
Session 10	Addressing Sleep Hygiene: Reviewing previous session, explaining sleep importance, discussing improving sleep habits and monitoring sleep quality, and assigning homework.
Session 11	Relapse Prevention: Reviewing previous sessions, discussing session topic, and creating a proactive plan for what was learned.

Table 2. contents of the telehealth CBT (28)

Session	Content
Session 1	Getting to know the therapist and understanding the definition of psychological distress (depression, anxiety, stress)
Session 2	Five-part model: assessing Life Changes, assessing Physical Response, Experiencing Emotions, assessing Impact of Events on Behavior, assessing thoughts
Session 3	Identifying the relationships between thoughts, emotions, physical responses, and the environment, and pointing the role of thoughts in shaping emotions
Session 4	Introducing strategies that are helpful when facing stressful situations
Session 5	Understanding and evaluating emotions, recording dysfunctional thoughts, and examining the role of emotions in the emergence of emotional problems
Session 6	Explaining automatic thoughts, their development process, and their role in the cognitive process
Session 7	Planning activities, activating actions, and implementing informative programs related to enjoyable experiences
Session 8	Investigating the role of evidence in evaluating thoughts and feelings, and providing evidence for ineffective thoughts
Session 9	Teaching to replace balanced and logical thinking instead of inconsistent thinking
Session 10	Do experiments to find cognitive errors
Session 11	Applying practical plans for real life
Session 12	Reviewing all the previous sessions

Interviewers received the necessary training regarding the scoring and completion time questionnaire. Each session lasted 60 minutes and was conducted once a week.

Depression, Anxiety, and Stress Questionnaire (DASS-21)

This questionnaire was developed by Loviband and Loviband (29) to measure stress, anxiety, and depression and contains 21 items. Each subscale consists of seven questions and the final score is the sum of the scores of the relevant questions. Each question is scored using a Likert scale from 0 (not at all) to 3 (very true). The lower and upper limits of these subscales are 0 and 42 respectively. The reliability of the questionnaire was evaluated using Cronbach's alpha, with values of 0.79, 0.84, and 0.82 for depression, anxiety, and stress, respectively. In an Iranian study by Samani and Jokar (2007), the coefficients of the test-retest reliability were 0.80 for stress, 0.81 for depression, 0.78 for anxiety, and 0.82 for the entire scale. The alpha coefficient was used to assess the internal consistency, and this coefficient

was found to be 0.87, 0.85, and 0.75 for the factors of stress, depression, and anxiety, respectively (30).

Resilience Scale (RS-25)

This questionnaire was designed by Connor and Davidson (31) and contains 25 questions. The questions are rated on a 5-point Likert scale ranging from 0 (completely incorrect) to 4 (completely correct). The questionnaire has a lower limit of zero and an upper limit of 100. The reliability of the questionnaire was calculated using Cronbach's alpha and was reported to be 0.89. Its convergent validity was 0.38 (31). In Iran, the questionnaire was standardized by Zarifi et al, (32), who demonstrated that the questionnaire has good psychometric properties.

Ethical consideration

This study was approved by the ethics committee of Islamic Azad University Sciences and Research Branch with the code IR.IAU.SRB.REC.1402.38. In order to comply with ethical standards, all subjects filled out a consent form before starting the study. They could withdraw the study at any time. All their personal information was kept confidential.

The statistical analysis

SPSS-26 software was used for data analysis. Normality of the data was checked using the Kolmogorov-Smirnov test. Frequencies, percentages, means, and standard deviations were reported in the descriptive statistics section, while repeated measures analysis of variance was used for the inferential statistics.

Results

Demographic characteristics of participants have presented in Table 3. Statistically, there were no differences between the two groups in terms of demographic characteristics.

Table 4 shows the descriptive statistics including means and standard deviations for the pretest, posttest, and follow-up values of the research variables for the two intervention and control groups. As Table 4 shows, mean scores improved in both the in-person and telehealth CBT groups, but the degree of improvement was greater in the in-person CBT group than in the telehealth CBT group.

Before performing the repeated measures analysis of variance, the data were checked for normality. The results of the Kolmogorov-Smirnov test for resilience, depression, stress and anxiety were the same: (statistic = 0.131, $P = 0.081$), (statistic = 0.10, $P = 0.200$), (statistic = 0.11, $P = 0.154$), (statistic = 0.12, $P = 0.092$), indicating a normal distribution of the study

variables. Therefore, parametric tests were used.

To ensure that the research data could be assessed for the assumptions underlying the repeated measures analysis of variance, these assumptions were examined prior to analyzing the hypotheses. The results of the Levene test for the variables anxiety (Levene = 0.86, $P = 0.42$), depression (Levene = 0.52, $P = 0.59$), stress (Levene = 2.46, $P = 0.07$), and resilience (Levene = 2.81, $P = 0.07$) were not significant, indicating homogeneity of variance for the variables. Furthermore, Mauchly's sphericity values for the variables, depression (Mauchly = 0.005, $P = 0.97$), anxiety (Mauchly = 0.864, $P = 0.06$), stress (Mauchly = 0.925, $P = 0.23$), and resilience (Mauchly = 0.977, $P = 0.645$) were not significant, and therefore the assumption of sphericity was observed for the dependent variables. Table 5 shows the results of the mixed repeated measures ANOVA comparing posttest to pretest scores for each variable in the in-person, telehealth, and control groups of CBT.

As the results in Table 5 show, in-person and telehealth CBT induced significant changes in depression, anxiety, stress, and resilience. Table 6 shows the results of Bonferroni post-hoc tests for comparisons of variables between pre-test, post-test, and follow-up conditions of the study.

As the Bonferroni post-hoc test results show, there were no significant differences between the post-test and follow-up conditions, so the treatments caused sustained effects over time.

Table 3. Demographic Characteristics of Participants

Variable		Group	F(Percent)	Mean+SD	P-value
Age		Telehealth CBT		37.26±8.85	0.37
		in-person CBT group		35.06 ±9.33	
		Control Group		36.42 ±6.37	
Graduation	Diploma degree or less	Telehealth CBT	4 (26.7)		
		in-person CBT group	2 (13.3)		
		Control Group	6 (40.00)		
	Bachelor	Telehealth CBT	7 (46.7)		
		in-person CBT group	8 (53.4)		
		Control Group	2 (13.3)		
	MSc	Telehealth CBT	3 (20.00)		
		in-person CBT group	3 (20.00)		

Gender	Ph.D.	Control Group	3 (20.00)	0.42
		Telehealth CBT	1 (6.6)	
		in-person CBT group	2 (13.3)	
	Female	Control Group	4 (26.7)	
		Telehealth CBT	5 (33.34)	
		in-person CBT group	4 (26.64)	
	Male	Control Group	7 (46.66)	0.34
		Telehealth CBT	10 (66.66)	
		in-person CBT group	11 (73.36)	
		Control Group	8 (53.34)	

Table 4. Means and Standard Deviations of Research Variables

Variable	Group	Pretest Mean (standard deviation)	Posttest Mean (standard deviation)	Follow-up Mean (standard deviation)	P-value
Depression	Telehealth	17.78±1.73	16.57±2.5	14.43±3.22	0.001
	In-person	17.5±2.65	12.07±2.33	12.14±1.87	
	Control	15.23±3.13	17.54±2.33	17.62±1.71	
Anxiety	Telehealth	18.36±3.13	13.86±3.39	14 ±3.39	0.001
	In-person	15.36±2.43	11.86±3.41	11.57±3.54	
	Control	16.92±3.37	18.85±3.15	18.31±3.44	
Stress	Telehealth	26.79±2.19	23.64±4.01	24.29±4.02	0.001
	In-person	27.92±3.4	21.07±2.52	22.36±3.34	
	control	28.33±2.5	29.36±3.09	27.15±3.57	
Resilience	Telehealth	54.93±2.89	59.29±5.56	57.36±4.46	0.001
	In-person	58.14±4.16	66.36±3.22	65.57±3.41	
	control	51.54±2.78	53.15±3.57	53.00±3.44	

Table 5. Mixed Analysis of Variance with Repeated Measures

	Source	F	MS	DF	P value	Eta squared
Depression	Interaction effect	13.92	188.90	2	0.001	0.42
	Within effect	6.57	38.90	2	0.048	0.14
	Between effect	11.51	33.93	2	0.001	0.37
Anxiety	Interaction effect	15.679	159.234	2	0.001	0.45
	Within effect	13.245	62.99	2	0.003	0.25
	Between effect	11.645	87.565	2	0.001	0.38
Stress	Interaction effect	12.83	220.62	2	0.001	0.40
	Within effect	14.725	124.150	2	0.002	0.27
	Between effect	15.510	76.813	2	0.001	0.44
Resilience	Interaction effect	13.26	148.895	1	0.001	0.41
	Within effect	52.01	256.017	2	0.001	0.58
	Between effect	34.764	396.951	1	0.001	0.64

Table 6. Bonferroni Tests for Comparisons Between Anxiety, Depression, Stress, and Resilience across Three Conditions

Variable	condition		standard error	Mean differences	P value
depression	pretest	Posttest	0.57	1.255	0.001
		Follow-up	0.50	1.919	0.001
Anxiety	posttest	Follow-up	0.53	0.66	0.651
		Pretest	0.49	2.02	0.001
	pretest	Posttest	0.49	2.02	0.001
		Follow-up	0.54	2.25	0.001
Stress	Posttest	Follow-up	0.38	0.22	1.000
		Pretest	0.64	2.92	0.001
	Pretest	Posttest	0.64	2.92	0.001
		Follow-up	0.71	3.10	0.001
Resilience	Posttest	Follow-up	0.55	0.17	1.000
		Pretest	0.52	-4.72	0.001
	Pretest	Posttest	0.52	-4.72	0.001
		Follow-up	0.47	-3.77	0.001
	Posttest	Follow-up	0.56	0.95	0.132

Discussion

This study was conducted to compare the effectiveness of in-person and telehealth CBT on psychological distress in people with a history of COVID-19. The results showed that both treatments led to significant improvements in subjects' psychological distress compared to the control group. This finding is consistent with studies that have shown that CBT, whether in-person or online, can improve patients' psychological distress (2, 23, 33). To explain these results, we can say that in the cognitive behavioral approach, the formulation of the treatment essentially depends on the sudden onset of the mental distress and the reasons for its onset (34). In these patients, the psychological distress after the initial infection with COVID-19 was further exacerbated by the experience of isolation and limited social relationships due to the disease prevention protocols. One of the main causes of the people's mental distress are the dysfunctional thoughts and lack of information about their illness (35). CBT offers patients the opportunity to recognize and challenge these ineffective thoughts and observe the illness as normal rather than catastrophic (27). One of the main goals of CBT is to formulate the problem in a way that helps the patient realize that they are not the only ones who suffer from this disease, but that many other people also suffer from it (36). After learning the links between events, thoughts, and feelings in the therapeutic environment, patients learn to apply them in the real world to learn that it gradually reduces psychological distress. The comparison of the

effectiveness of in-person therapy and telehealth CBT showed that in-person therapy was more effective than telehealth therapy. To explain this result, it can be said that patients with greater severity of psychological distress respond better in-person CBT than telehealth CBT (37). For this reason, in-person CBT than telehealth CBT leads to more improvement in psychological distress. Also, patients with COVID-19 usually experience great stress due to isolation and quarantine (38). For this reason, face-to-face therapy is more effective because being in a real-world situation and having face-to-face social interaction with the therapist reduces feelings of stress. This result has been observed in various studies: the more isolation the patient experiences, the more stressed they are (39). Conversely, being in a real social situation, as in the therapeutic atmosphere, reduces anxiety. DeRubeis *et al.* proposed two types of adherence to CBT, which includes objective adherence and subjective adherence. Objective adherence includes cognitive restructuring sheets, homework, and behavioral techniques, whereas subjective adherence includes a broader range of treatment-related topics with an emphasis on understanding the patient's situation and beliefs, as well as discussing the patient's health and progress (40). Telehealth CBT focuses on objective adherence through homework, psychological training, and behavioral observation techniques. Both adherences are met in in-person CBT, then it seems that Face-to-face CBT reduces psychological distress much more efficiently. The therapeutic alliance also plays an important role in reducing symptoms of psychological distress (41).

This therapeutic alliance is especially emphasized in

cognitive-behavioral therapy, and is better addressed in face-to-face therapy than in telehealth therapy, because the therapist and patient have face-to-face communications, which is not observed in telehealth therapy due to its limited communicating ways.

Another finding of the study was that both in-person and telehealth CBT led to improved resilience in COVID-19 patients. This finding is consistent with studies that have shown that CBT leads to improved resilience (42, 43).

To explain this result, we can say that although a vaccine against COVID-19 has been found, there is still a lot of uncertainty about future complications of infection with this disease (44). Recovery from corona does not exclude possible future complications, and there are still many hypotheses indicating that the disease may be associated with risks that have not yet been reliably identified (45). On the other hand, the ability to accept ambiguity is one of the most important factors associated with resilience (46). The uncertainty about the disease was perceived as very devastating by the subjects who felt helpless in the face of the problem. These ambiguities and feelings of helplessness have been addressed using various methods, including cognitive restructuring which strengthens resilience (27). In this way, with the patient's help, cognitive distortions were diagnosed and, by matching them with reality, the patient was able to have a realistic view of both future dangers and their ability to deal with problems.

When comparing face-to-face and telehealth CBT, we see that the face-to-face CBT caused greater improvements in resilience, with a significant difference between them. To explain this result, it is noted that since therapeutic alliance can predict treatment outcome (47).

Improvement in telehealth CBT is lower than in-person CBT. Many CBT techniques, such as muscle relaxation and thought assessment, require the involvement of both the therapist and the client, and their active participation in training, a goal which is better achieved in in-person CBT. Also, relaxation techniques basically require the client to relax the muscles of the whole body, which is more effective in face-to-face therapy. The research results also show that there are different types of training in CBT. Face-to-face therapy is better than telehealth therapy

because it allows active and immediate participation of the client and therapist. On the other hand, most of the therapeutic progress in CBT is achieved through monitoring of the therapeutic progress, which relies on the therapeutic alliance and the physical presence of the therapist and client. It also leads to faster therapeutic progress.

Despite the above findings, the current study had some limitations that should be considered when generalizing the results. First, there is a significant difference between the two treatments in terms of efficacy. However, it is unclear whether this difference remains steady over a long follow-up period, such as six months. Second, the sample in this study included COVID-19 patients who had a history of isolation and limited social contact. Therefore, the results of this study cannot be generalized to other patients. The COVID-19 is a new disease and is different from other diseases. Third, sampling in this study was conducted using convenience sampling method. Therefore, future studies on other patients with random samples and longer follow-up periods are recommended.

Conclusion

These findings expand understanding of the psychological distress and resilience problems that people with a history of COVID-19 may experience. Based on these findings and the type of patient access to psychotherapy rooms, psychotherapists can use in-person or virtual cognitive behavioral therapy to reduce problems, especially for patients with a history of COVID-19. Patients with a history of COVID-19 should be informed about the psychological impact of the disease in order to receive cognitive behavioral therapy if necessary.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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