




# Comparing the Efficacy of Cognitive-Behavioral Therapy, Brief Intervention, and Combined Intervention on Reducing Social Alienation in COVID-19 Recovery Patients in Andimeshk

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## ABSTRACT

**Objective:** This study aimed to compare the effectiveness of cognitive-behavioral therapy, brief intervention, and combined intervention on social alienation among COVID-19 recovery patients in Andimeshk. Research

**Methods and Materials:** The method used in this study was a quasi-experimental pre-test post-test design with a control group. The sample consisted of 80 COVID-19 recovery patients covered by comprehensive health centers in Andimeshk, who were randomly assigned to experimental and control groups (each group containing 20 individuals). The experimental group underwent cognitive-behavioral therapy interventions in eight 90-minute sessions held weekly, while the control group received no intervention. Data were collected using the Melvin Seeman Social Alienation questionnaire, and hypotheses were tested using analysis of covariance.

**Findings:** The results showed a significant difference between the effectiveness of cognitive-behavioral therapy and brief intervention on social alienation among COVID-19 recovery patients in Andimeshk; however, no significant difference was found between the effectiveness of cognitive-behavioral therapy and the combined intervention on social alienation among these patients.

**Conclusion:** Based on the findings, it can be concluded that cognitive-behavioral therapy is effective in reducing social alienation, and there is no difference in effectiveness between cognitive-behavioral therapy and the combined intervention (cognitive-behavioral therapy and brief intervention).

**Keywords:** Cognitive-behavioral therapy, brief intervention, combined intervention, social alienation, COVID-19 virus.

## 1. Introduction

In late December 2019, a new virus known as coronavirus was identified, which is a virus belonging to the betacoronavirus category. Chen et al. (2020) confirmed that

the novel coronavirus 2019 is a new coronavirus closely related to the SARS bat coronavirus. By early August 2021, 220 countries across all continents were affected by this virus, with 90,236,617 positive cases recorded, 1,937,376

deaths, and 64,603,836 recoveries (Chen et al., 2020). The current pandemic situation of the coronavirus worldwide remains severe and concerning, posing a clinical threat to the general population and healthcare personnel globally. Given the current emergency status of this disease, it is predictable that symptoms of psychological disorders will manifest in patients with COVID-19. In this regard, multiple studies conducted on patients with COVID-19 in China during the disease outbreak have reported a high prevalence of psychological disorders among these patients, including anxiety, fear, post-traumatic stress, emotional changes, insomnia, and depression (Liu et al., 2020; Yang et al., 2020). In a study involving 822 participants, results showed that 29.35% of individuals exhibited symptoms of depression (Yang et al., 2020). Additionally, self-quarantine during the coronavirus pneumonia also increases the likelihood of mental health problems. Quarantine gradually isolates individuals from each other, and in the absence of interpersonal communication, social alienation ensues (Shahidi et al., 2020).

Alienation, according to the Oxford Dictionary (2013), refers to actions or processes that cause a person to feel isolated, estranged, or unsympathetically and hostilely. It generally signifies a negative orientation of mismatched individual emotions, a sense of meaninglessness in life, separation from oneself, and aversion to societal values. Essentially, it is a response or reaction to the pressures, tensions, adversities of life, and individual and societal disparities (Seeman, 1959). Scott (2001) believes that social alienation involves losing conditions that were previously valued by an individual. Social alienation significantly impacts socialization and can be linked to elements of societal adherence, social discipline, respect for others' rights, punctuality, honesty, and truthfulness (Mohammadpour et al., 2021; Scott, 2003). Macro theories on alienation have focused on the presence of alienation in a society leading to various manifestations of alien-like behaviors, such as powerlessness, isolation, cultural hatred, and the like. Alienation was a strength of Marx's political philosophy, based on the direct and indirect exploitation of labor by capitalists (Epenikaloum et al., 2017). Sociologists and social psychologists have extensively used alienation to explain certain forms of actions and reactions to social currents and surrounding realities, psychological stress, external impositions, disinterest, and lack of social participation. Signs and examples of social alienation include feelings and attitudes of powerlessness, normlessness, social isolation, and overall alienation from

oneself and a sense of separation from others (Zokaei & Esmaili, 2012). Alienation can be considered a lack or weakness of an individual's connections with other individuals, groups, and society. Alienated individuals lack self-confidence, power, identity, and will, leading to a meaningless and hopeless life, disenchantment with the environment, and exposure to various social harms and damages, thereby feeling a sense of separation from society (Inyikalum Daniel & Uranta, 2017).

Research indicates that this feeling is influenced by individual perceptions, and thoughts play a significant role in its perception. Among the therapeutic approaches focused on thoughts is cognitive-behavioral therapy. Cognitive-behavioral therapy is a common-sense-based approach grounded on two fundamental principles: first, cognitive schemas have a controlling effect on emotions and behaviors; and second, the manner of functioning or behavior strongly influences an individual's patterns of thought and emotional states. Cognitive elements of this approach were identified centuries ago by sophists like Epictetus and also by Cicero, Seneca, and others, long before cognitive-behavioral therapy was introduced (Beck, 1979, 1996).

In this model, cognitive processing plays a central role as individuals continuously assess the significance of environmental and internal events (such as high-pressure events, receiving or not receiving feedback from others, memories of past events, assigned tasks, physical sensations). The effectiveness of the cognitive-behavioral approach has been demonstrated in numerous studies (Barlow et al., 1989; Clark et al., 1994). Given the lengthy nature of cognitive-behavioral sessions regarding depression (20 sessions according to Beck) and the associated elements, as well as the low motivation and energy levels in these individuals, the effectiveness of brief intervention will also be examined. Brief intervention is a concise and condensed summary of cognitive-behavioral therapy content, reducing the number of sessions to 4 to 8 and focusing the therapy specifically on a limited number of individual problems (Walter & Peller, 2013). Therefore, the present study aims to compare the effectiveness of cognitive-behavioral therapy, brief intervention, and combined intervention in reducing social alienation among COVID-19 recovery patients covered by comprehensive service centers and seeks to answer whether cognitive-behavioral therapy, brief intervention, and combined intervention differ significantly in reducing social alienation among COVID-19 recovery

patients covered by comprehensive health service centers in Andimeshk.

## 2. Methods and Materials

### 2.1. Study Design and Participants

The design used in this study was a quasi-experimental pre-test post-test with a control group. The population of this research consisted of COVID-19 recovery patients covered by the comprehensive health service centers in the city of Andimeshk. Initially, the Social Alienation questionnaire was sent to the COVID-19 recovery patients under the coverage of the comprehensive health service centers in Andimeshk. Then, 40 individuals who had not been diagnosed with depression prior to contracting COVID-19 and were willing to participate in the research project, and whose depression scores were above average, were selected as the entry criteria. Criteria for exclusion included substance misuse, existing psychiatric disorders, participation in similar sessions, and absence from more than two sessions. These participants were randomly assigned into two groups (experimental and control). Subsequently, the Social Alienation and Social Support questionnaires were sent to them for completion.

The experimental group underwent cognitive-behavioral therapy intervention, while the control group was placed on a waiting list. The cognitive-behavioral intervention for the experimental group was conducted over eight 1.5-hour sessions, held weekly. After the sessions were completed, a post-test was administered to both groups (experimental and control), and the resulting data were collected. After the intervention period ended, self-help books in this area were introduced to the individuals in the control group for study.

### 2.2. Measures

#### 2.2.1. Social Alienation

This questionnaire was developed by Melvin Seeman (1956) and consists of 19 questions. It addresses the condition in which an individual feels alienated from their academic, university, life, social, and political activities. The validity of the questionnaire items was estimated through face validity, where the questionnaire's questions, after being drafted, were presented to several experts and specialists in social sciences, and after gathering their feedback, the final questionnaire was designed. Factor analysis was also used to assess the validity of the questionnaire, indicating that the measuring instrument has relatively high validity. The

reliability of the questionnaire items, differentiated by each construct and variable, was obtained using Cronbach's alpha for ordinal items, demonstrating high reliability of the questionnaire (Naderi et al., 2010).

### 2.3. Interventions

#### 2.3.1. Cognitive-Behavioral Therapy

The Cognitive-Behavioral Therapy (CBT) intervention for COVID-19 recovery patients focuses on addressing social alienation and improving social and psychological functioning. This intervention is structured over eight weekly sessions, each lasting 1.5 hours. The program aims to equip participants with skills to recognize and modify negative thought patterns and behaviors that contribute to feelings of alienation and depression. Each session builds on the previous, incorporating homework assignments to reinforce learned skills (Barlow et al., 1989; Gelernter et al., 1991; Zoalfaghari et al., 2018).

##### Session 1: Introduction and Psychoeducation

The first session introduces participants to CBT, outlining its principles and the structure of the intervention. It focuses on psychoeducation about social alienation and its psychological impacts. Participants learn about the relationship between thoughts, emotions, and behaviors, setting the foundation for understanding how changing their thoughts and behaviors can impact their feelings.

##### Session 2: Identifying Negative Thoughts

Participants are taught to identify negative automatic thoughts (NATs) that contribute to feelings of alienation. The session employs techniques like thought records to help participants track and evaluate their thoughts in response to specific situations, fostering self-awareness and pinpointing cognitive distortions.

##### Session 3: Challenging and Modifying Thoughts

Building on the previous session, participants learn techniques to challenge their negative thoughts. They practice cognitive restructuring to replace irrational or maladaptive thoughts with more balanced and realistic ones. This session aims to decrease emotional distress and promote more adaptive behaviors.

##### Session 4: Behavioral Activation

This session introduces behavioral activation, a strategy to help participants engage more in enjoyable or meaningful activities. It addresses the behavioral aspects of depression and alienation by encouraging active participation in social and individual activities that can boost mood and reduce isolation.

#### Session 5: Improving Social Skills

Participants are trained in social skills that are crucial for rebuilding and maintaining social connections. The session covers communication techniques, assertiveness training, and strategies for initiating and maintaining conversations, which are vital for reducing feelings of social alienation.

#### Session 6: Stress Management Techniques

This session focuses on teaching stress management techniques such as relaxation training, deep breathing exercises, and mindfulness. These skills help manage the physiological and psychological stressors that can exacerbate social alienation and depression.

#### Session 7: Problem Solving

Participants learn problem-solving skills to effectively tackle everyday challenges that may trigger feelings of alienation. This session emphasizes a systematic approach to identifying problems, generating alternatives, evaluating and implementing solutions, and assessing outcomes.

#### Session 8: Relapse Prevention and Closure

The final session reviews the skills learned throughout the program and discusses strategies for maintaining gains and preventing relapse. Participants develop personal action plans, incorporating the techniques and skills they found most helpful, and discuss how to continue using these tools post-intervention.

### 2.3.2. *Brief Intervention*

The brief intervention protocol is designed as a concise version of the CBT intervention, consisting of four to eight sessions that focus on key elements of cognitive-behavioral therapy. This intervention targets critical aspects of social alienation in a compressed format, suitable for individuals who may benefit from shorter, more focused therapeutic engagements (Spatola et al., 2014; Tunnell et al., 2019).

#### Session 1: Introduction to CBT and Core Concepts

The first session is an intensive introduction to the principles of CBT, focusing on its relevance to overcoming social alienation. Participants receive a condensed overview of the links between thoughts, emotions, and behaviors, setting the stage for the application of CBT techniques.

#### Session 2: Cognitive Restructuring and Behavioral Activation

This session combines two core components: cognitive restructuring and behavioral activation. Participants learn to identify and modify detrimental thoughts and are encouraged to engage in activities that have been shown to improve mood and increase social interaction.

#### Session 3: Social Skills and Stress Management

This session is dual-focused, offering training in essential social skills while introducing basic stress management techniques. Emphasis is placed on practical skills for enhancing interpersonal interactions and managing everyday stress effectively.

#### Session 4: Review and Relapse Prevention

The final session reviews the material covered in previous sessions, reinforces the application of learned skills, and discusses strategies for maintaining improvements and preventing relapse. Participants develop a continuation plan, identifying personal goals and strategies for sustaining progress.

These protocols provide a structured approach to addressing the psychological needs of COVID-19 recovery patients experiencing social alienation, tailored to fit different lengths of therapeutic engagement according to patient needs and treatment settings.

### 2.3.3. *Combined Intervention*

The Combined Intervention protocol is designed to integrate the comprehensive approach of Cognitive-Behavioral Therapy (CBT) with the focused, streamlined elements of the Brief Intervention. This intervention spans eight sessions, each 1.5 hours long, and aims to provide a robust treatment option that addresses social alienation by combining the depth of CBT with the efficiency of brief interventions. This hybrid approach is intended to maximize therapeutic benefits by addressing a broader range of psychological issues within a condensed time frame.

#### Session 1: Introduction to Combined Therapy and Goal Setting

The first session introduces the concepts and structure of the combined intervention. It begins with an overview of both CBT and Brief Intervention strategies, explaining how they will be integrated throughout the sessions. Participants set personal goals for the intervention, establishing clear objectives and expectations.

#### Session 2: Identification and Modification of Negative Thoughts

Participants learn to identify their negative automatic thoughts related to social alienation and use cognitive restructuring techniques to modify these thoughts. This session combines the thorough cognitive work of CBT with the accelerated techniques used in Brief Interventions.

#### Session 3: Behavioral Activation and Social Skills

This session integrates behavioral activation techniques to encourage participants to engage in positive activities while also introducing essential social skills. The focus is on practical application, helping participants to initiate and sustain social interactions, which are critical for reducing feelings of alienation.

**Session 4: Stress Management and Relaxation Techniques**

Participants are taught a variety of stress management techniques, including relaxation exercises and mindfulness, which are common in both CBT and Brief Interventions. This session aims to provide participants with tools to manage daily stressors that can impact social functioning and well-being.

**Session 5: Advanced Cognitive Techniques and Emotional Regulation**

Building on earlier sessions, this meeting delves into more advanced cognitive techniques for challenging dysfunctional beliefs and enhancing emotional regulation. The session focuses on developing deeper insights into the participants' thought processes and emotional responses.

**Session 6: Enhancing Communication Skills**

This session focuses on enhancing communication skills, including assertiveness and active listening. These skills are crucial for improving interpersonal relationships and reducing the impact of social alienation.

**Session 7: Problem Solving and Coping Strategies**

Participants learn problem-solving skills to address challenges that exacerbate feelings of alienation. This session also covers coping strategies for dealing with setbacks and maintaining social connections.

**Session 8: Review, Evaluation, and Future Planning**

The final session reviews all the techniques and strategies discussed throughout the sessions. Participants evaluate their progress towards the initial goals set and develop a future plan that includes ongoing practice of the learned skills, ensuring long-term maintenance and preventing relapse.

**2.4. Data analysis**

The data were analysed using analysis of covariance and SPSS-26 software.

**3. Findings and Results**

The mean and standard deviation of the ages were reported as follows: first experimental group 36.78 (SD = 6.54), second experimental group 37.44 (SD = 6.78), third experimental group 38.13 (SD = 6.89), and the control group 36.48 (SD = 6.45). Additionally, the highest level of education in the experimental groups was a bachelor's degree, and in the control group, it was a high school diploma. The mean and standard deviation of social alienation scores in the experimental and control groups, separated by pre-test and post-test stages, are discussed below.

**Table 1**

*Mean and Standard Deviation of Research Variables by Experimental and Control Groups*

Variables	Stages	Group	Mean	SD
Social Alienation	Pre-test	Experimental 1	52.800	2.627
		Experimental 2	53.200	2.687
		Experimental 3	53.150	2.739
		Control	50.550	3.531
	Post-test	Experimental 1	25.000	3.960
		Experimental 2	42.850	5.008
		Experimental 3	25.050	3.872
		Control	51.400	3.084

As observed in Table 1, the mean and standard deviation of social alienation scores in the experimental and control groups did not differ significantly at the pre-test stage.

However, at the post-test stage, the mean scores of social alienation in the experimental groups decreased compared to the control group.

**Table 2**

*Results of the Analysis of Covariance on Post-test Mean Scores of Social Alienation for Experimental and Control Groups*

Source of Variation	Sum of Squares	df	Mean Square	F	Sig	Eta Squared
Pre-test	121.916	1	121.916	8.176	0.005	0.098
Group	10,370.698	3	3,456.899	231.823	0.001	0.903
Error	1,118.384	75	14.912			

As seen in Table 2, the likelihood of accepting the null hypothesis for comparing the experimental and control groups on the post-test social alienation variable is less than 0.05 ( $P < 0.001$ ,  $F = 231.823$ ). In other words, after adjusting for pre-test scores, the factor between subjects in all four groups has a significant effect. Therefore, it can be

concluded from the evidence gathered in this study that cognitive-behavioral therapy, brief intervention, and combined intervention have been effective in reducing social alienation among COVID-19 recovery patients in Andimeshk. A follow-up test using the Scheffé method is used to examine this difference further.

**Table 3**

*Scheffé Post Hoc Test Results for Social Alienation Variable*

Group	Mean Difference	Standard Error	Sig	Lower Bound	Upper Bound
Experimental 1 vs.					
- Experimental 2	-17.85000	1.27749	0.001	-21.5025	-14.1975
- Experimental 3	-0.05000	1.27749	1.000	-3.7025	3.6025
- Control	-26.40000	1.27749	0.001	-30.0525	-22.7475
Experimental 2 vs.					
- Experimental 1	17.85000	1.27749	0.001	14.1975	21.5025
- Experimental 3	17.80000	1.27749	0.001	14.1475	21.4525
- Control	-8.55000	1.27749	0.001	-12.2025	-4.8975
Experimental 3 vs.					
- Experimental 1	0.05000	1.27749	1.000	-3.6025	3.7025
- Experimental 2	-17.80000	1.27749	0.001	-21.4525	-14.1475
- Control	-26.35000	1.27749	0.001	-30.0025	-22.6975
Control vs.					
- Experimental 1	26.40000	1.27749	0.001	22.7475	30.0525
- Experimental 2	8.55000	1.27749	0.001	4.8975	12.2025
- Experimental 3	26.35000	1.27749	0.001	22.6975	30.0025

As the results in Table 3 indicate, there is a significant difference in the effectiveness of each of the experimental groups on social alienation. There is a significant difference in the effectiveness of the cognitive-behavioral experimental group and the brief intervention on the social alienation variable, but no significant difference exists between the effectiveness of the cognitive-behavioral group and the combined intervention on the social alienation variable.

**4. Discussion and Conclusion**

The results revealed that there were significant differences in the mean scores of social alienation across the cognitive-behavioral, brief intervention, and combined treatment approaches in both the pre-test and post-test stages among the experimental and control groups ( $p < .05$ ). In fact, while there was no significant difference among the mean

scores of these four groups at the pre-test stage, significant differences were evident at the post-test stage. Based on these findings, it can be concluded that cognitive-behavioral therapy, brief intervention, and combined intervention have been effective in reducing social alienation. Regarding the differing effectiveness of these three therapeutic approaches, there are differences in their impact on reducing social alienation. The combined treatment was found to be more effective than cognitive-behavioral therapy by a margin of one point. The hypothesis of the study, concerning the effectiveness of cognitive-behavioral therapy, brief intervention, and combined intervention in reducing social alienation among COVID-19 recovery patients in Andimeshk, is confirmed.

Since there has been no research on the effectiveness of cognitive-behavioral therapy on social alienation, its

consistency cannot be determined. it is consistent. In explaining these findings, it can be said that cognitive-behavioral therapy, by identifying and challenging one's own negative thoughts and beliefs about oneself, others, and the world, helps individuals to not feel isolated from others. Typically, individuals who feel socially alienated are introverted, isolated, overly sensitive, and have low self-esteem. Cognitive-behavioral therapy, through empathy, encourages individuals to share their past pains and future fears with the therapist. When these individuals feel that the clinician understands their hypersensitivity and supports them, they are more likely to trust and collaborate. As these individuals begin to feel secure, they will describe their fears of rejection and criticism and express beliefs related to being unlovable, worthless, unimportant, and even incompetent. Alden (1992) describes four steps in this regard. The first step involves recognizing issues related to the treatment process for individuals with social alienation. Usually, these individuals tend to hide or trivialize some issues. It should be expected that these individuals might respond to direct questions with vague answers such as "I don't know" or "I'm not sure." During the initial stages of therapy, such evasive answers highlight their thought processes and prevent them from detailing social encounters. Therefore, instead of interpreting resistance or focusing on vague and general interpersonal beliefs and behaviors, the therapist should merely recognize that this communication style reflects the patient's inability to process positive information, maintain attention, and change firmly entrenched negative beliefs. The second step focuses on increasing awareness about interpersonal cognitive patterns. An interpersonal pattern includes four components: 1) beliefs and expectations of another person, 2) behaviors resulting from these beliefs, 3) the other person's reaction, and 4) the outcome drawn from the experience. People with social alienation are taught to observe and analyze their communication patterns and challenging the underlying beliefs of their self-protective behavior is very important (Mohammadpour et al., 2021; Zokaie & Esmaili, 2012). In the third step, once individuals understand and recognize their patterns and cognitive interpersonal styles, their motivation to try new behaviors can be increased. This helps individuals with social alienation realize that their old and new perspectives about themselves are in conflict and that such a conflict can be resolved. As these individuals gain a better understanding of their cognitive interpersonal patterns, they begin to try different strategies. The fourth step involves behavioral experimentation and cognitive evaluation. Establishing

friendships and assertive communication are two main interpersonal skills that these individuals need to acquire. Role-playing to acquire assertive communication skills, especially, is beneficial (Gelernter et al., 1991; Pour Hamidi et al., 2019).

In explaining the effectiveness of brief interventions on social alienation, it can be said that it has a mechanism similar to cognitive-behavioral therapy but, due to the fewer number of sessions, it has less effectiveness (based on mean scores) compared to cognitive-behavioral therapy. One of the focuses in brief intervention, especially concerning those with social alienation, is the therapeutic relationship. The relationship enables individuals to believe that they are accepted and are lovable and valuable. Often, these individuals need to feel that their therapist understands and cares for them to be fully engaged in therapy. However, even when the therapist exhibits this trait, some of these individuals may display negative reactions, such as doubting the therapist's motivation. Sometimes it is necessary to change the approach or adjust empathy, structure, didacticism, confrontation, self-disclosure, and humor.

Another important aspect of brief intervention is problem-solving. When individuals cannot solve their interpersonal issues, they distance themselves from others and reach social alienation. When individuals encounter difficulties in solving their problems, it may be due to either a performance deficit or a skills deficit. If it is a performance deficit, it means that although problem-solving skills are adequate, due to depression, anxiety, and excessive stress, there is difficulty in accessing and employing these skills. Conversely, individuals with a skills deficit may not be able to analyze the nature of the problem or provide logical ideas for solving the problem. Individuals with a skills deficit often face complex and vague issues in many areas of their lives or constantly use strategies that do not untie the knot or worsen the situation. Identifying and correcting any factor that prevents individuals from properly employing existing skills can assist clients with a performance deficit. Nevertheless, patients with a skills deficit may require basic training in problem-solving methods. Therefore, by teaching problem-solving to individuals with social alienation, they learn to approach interpersonal relationships logically rather than avoiding them, which only results in increased depression and despair.

Regarding the combined approach, it can be stated that although it was expected to be more effective than the cognitive-behavioral and brief intervention approaches, according to the results obtained, there was no significant

difference in effectiveness between the combined approach and cognitive-behavioral therapy. The lack of significant differences between the mean scores of subjects in the cognitive-behavioral approach and the combined intervention indicates that there were no significant differences in the mechanisms of effect between cognitive-behavioral intervention and combined intervention. This could be due to differences related to age group, educational level, and individual differences.

## 5. Limitations & Suggestions

This study has several limitations that must be acknowledged. First, the sample size is relatively small and limited to recovery patients from COVID-19 in the city of Andimeshk, which may limit the generalizability of the findings to other populations or regions. Additionally, the study relied heavily on self-report measures, which can be subject to biases such as social desirability or memory recall issues. Another limitation is the lack of long-term follow-up, which prevents the assessment of the durability of the therapeutic effects. Finally, the study did not control for potential confounding variables that could influence the outcomes, such as the participants' pre-existing mental health conditions or the use of medication.

Future research should consider expanding the sample size and including participants from diverse backgrounds and regions to enhance the generalizability of the findings. Longitudinal studies would be beneficial to assess the long-term effectiveness of the interventions on social alienation and other psychological outcomes. It would also be valuable to incorporate objective measures alongside self-report questionnaires to mitigate bias and provide a more comprehensive assessment of the interventions' impact. Further, exploring the effects of these interventions on different types of psychological distress, such as anxiety or PTSD, could provide insights into their broader applicability. Lastly, examining the potential moderators and mediators, such as resilience or social support, could offer deeper insights into the mechanisms through which these interventions exert their effects.

The findings of this study suggest practical implications for clinical practice, particularly in the treatment of individuals recovering from illnesses like COVID-19, who are at risk of social alienation. Healthcare providers, including psychologists and therapists, are encouraged to integrate cognitive-behavioral therapy, brief interventions, and combined treatments into their practice to address social

alienation effectively. These interventions could be particularly useful in hospital settings, rehabilitation centers, and community health services where patients often face significant social reintegration challenges. Additionally, training healthcare professionals in these therapeutic techniques could enhance the quality of care provided to patients. Implementing these interventions as part of standard post-recovery care plans can potentially accelerate recovery, improve quality of life, and reduce the long-term psychological impact of illness-related isolation.

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## Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

## Declaration of Interest

The authors of this article declared no conflict of interest.

## Ethics Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

## Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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## Authors' Contributions

All authors contributed equally.

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