Research Paper

Comparing the Resilience of the Medical Staff During the COVID-19 Pandemic After Yalom Group Psychotherapy and Acceptance and Commitment Group Therapy

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ABSTRACT

Background: The medical staff working on the front-line battle against coronavirus disease 2019 (COVID-19) are more exposed to mental health risks than the general population. Resilience is the ability to withstand challenging situations and help people defend their mental health against stressors. The present study aimed to compare the effectiveness of Yalom and acceptance and commitment therapy (ACT) on medical staff resilience in COVID-19 centers.

Methods: The research method was quasi-experimental with a pre-test-post-test design and a control group. The statistical population includes all 600 medical staff of Hamedan City, Iran, caring for patients with COVID-19 in 2021. Based on the average variance of resilience obtained in previous studies, 45 people were selected by convenience sampling and randomly assigned to two experimental groups (each 15) and one control group (n=15). The experimental groups were divided into Yalom and ACT group psychotherapy, and all three groups responded to the Connor-Davidson resilience scale (CD-RISC) before and after the intervention. The obtained data were analyzed by analysis of covariance in SPSS software, version 25.

Results: Yalom group psychotherapy and ACT group therapy had different effects on the participants' resilience and are statistically significant since the F statistics (106.722) was significant (P=0.001 and P=0.05, respectively). Based on the results, Yalom group psychotherapy has a better rate of improvement than ACT.

Conclusion: Considering the significant efficacy of Yalom group psychotherapy and its relative ease of implementation compared to ACT, it is possible to employ this intervention to protect the mental health of medical staff during severe epidemics of diseases such as coronavirus.

Keywords: Group psychotherapy, Acceptance and commitment therapy, Psychological resilience, Medical staff, Coronavirus, COVID-19

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1. Introduction

Previous studies have reported that medical staff, especially those in the emergency departments, intensive care units (ICU), and infectious disease units are at higher risk for psychological complications [1]. Due to the coronavirus pandemic, medical staff on the front line of the fight against the disease were soon exposed to high workloads and stress. In addition, the high incidence and casualties of the medical staff helping the community, the lack of facilities and equipment, and the long pandemic period endangered the health status of the medical staff. Reports of depression, anxiety, irritability, mood swings, and cases of sleep disturbance and suicide due to the anxiety of coronavirus disease have been published by medical staff worldwide [2]. Frustration, helplessness, and adjustment disorders are other problems that medical staff face [3].

Resilience is a key psychological trait that enables people to cope with stress from internal and external sources and employ more effective problem-solving strategies in difficult circumstances [4]. Resilience creates a positive compromise mechanism that uses several individual and social protective factors to strengthen the individual and reduce risk factors [5]. Resilience is the capacity to handle challenging situations, adapt to day-to-day challenges, and maintain one's health, happiness, and meaningful existence in adversity [6]. According to the definitions of resilience, preserving and enhancing this quality is crucial to improving the psychological health of medical professionals, particularly those on the front lines of the fight against the coronavirus pandemic. This study's priority was group psychotherapy because it can deliver appropriate psychological services to a large number of medical staff in a short time with the assistance of a few specialists [7]. On the other hand, Yalom group psychotherapy is the first method to be researched because of its simple implementation and emphasis on social support. This method aims to improve resiliency by analyzing the feelings and behaviors of group members and possibly determining how well they are prepared to deal with external stressors.

Yalom is an existential psychiatrist who is one of the pioneers of group psychotherapy. He has established his group intervention method based on emphasizing the process and the situation "here and now" [7]. He defines the process as the nature of the relationship between individuals in exchange, i.e. group members and therapists [7]. Process-focused therapists do not primarily deal with the content of the patient's words but rather with why and how they say them. So, the therapists focus on the meta-communicative aspects of the message and ask themselves why, in terms of communication, a person says a sentence to a certain person at a certain time and in a certain way [7]. To focus on the process by emphasizing the situation "Here and Now", the therapist tries to encourage the group members to express themselves emotionally and provide honest feedback to each other. Clinical observations indicate an increase in participants' feedback skills [7]. This intervention does not follow specific treatment methods. It focuses only on dynamic processes within the group, such as emotional support, emotional feedback, and a sense of belonging to a secure group. Rather it shows the positive effect of rich and constructive relationships in work environments with complex conditions such as coronavirus pandemics in hospitals and its impact on the mental health of medical staff.

In a related study, Haddadi et al. investigated the impact of Yalom group psychotherapy on the resilience and meaning of nurses' lives in COVID-19 hospitals in Hamadan City, Iran. They discovered that it raises nurses' levels of resilience and meaning [8]. As a result, this study aimed to evaluate the impact of group therapy on medical staff resilience using a different approach.

Acceptance and commitment therapy (ACT) is another new and popular approach to psychotherapy. One of the third-wave behavioral therapies built on mindfulness is this therapy. To practice mindfulness, one must learn to let thoughts and feelings come and go without trying to control them. Even the most painful ones become less frightening and look more manageable when we witness and experience private experiences (thoughts and emotions) with openness and acceptance [9]. Consequently, it seems it could be an appropriate treatment for medical professionals under much pressure to take care of their mental health and perform their job.

ACT has been used with positive results in the treatment of various mental disorders, including depression, coping with hallucinations and delusions, social phobia, trichotillomania, and others, including behavioral self-management, addiction, cancer-related conditions, epilepsy, chronic pain, self-harm, and lack of emotion regulation in borderline personality disorders [10-12]. ACT is a scientifically-proven tactic that psychologists and therapists advocate for developing resilience. These strategies and methods are based on many studies [13].

Al-Yassin et al. investigated the effectiveness of ACT therapy on the psychological well-being and resilience of diabetic patients and found that ACT can increase

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resilience [14]. Another study by Tavakoli-Saleh et al. found that ACT can increase the resilience of women with multiple sclerosis [15].

Yalom group psychotherapy strongly emphasizes empathy and interpersonal support, but ACT stresses the inner world of the individual (thoughts and emotions). Thus, comparing the effects of these two therapies on the resilience of medical staff, which has not been done so far, can be illuminating for researchers and therapists. Considering what was said, it is reasonable to anticipate a strong connection between Yalom group psychotherapy and ACT group therapy, particularly regarding the resilience of medical staff. As a result, the subject that will be investigated in this current research is whether the Yalom group psychotherapy and the ACT group have a distinct impact on the resilience of the medical personnel assisting with the coronavirus pandemic.

2. Methods

The present study was quantitative in nature, applied in terms of purpose, quasi-experimental in terms of method, and pre-test-post-test in terms of design. The study has two experimental groups (A, B) and one control group. The statistical population comprised all 600 medical staff of coronavirus hospitals in Hamedan City, Iran, in 2021 who cared for patients with COVID-19. First, the approval of the research was obtained from the Research and Ethics Committee of the Islamic Azad University, Hamadan Branch, and the necessary coordination was made with the hospital. Be'sat Hospital in Hamedan, one of the leading centers for the care of patients with CO-VID-19, was chosen purposefully. Based on the average variances of resilience from the Valizadeh et al. study [16], Equation 1 was used to estimate the sample size

1. $n = (\frac{z_{1\alpha/2} + z_{1-\beta}}{d})^2$.

Based on it, the number of 13 was obtained, but 15 people were selected in each group, considering possible dropouts.

Then 45 nurses and medical interns were selected by convenience sampling method and randomly divided into three groups (30 persons in experimental groups A, B, and 15 in the control group). The inclusion criteria were as follows: willingness to participate in the research, employment as medical staff for at least 6 months in COVID-19 wards, and not suffering from certain psychiatric diseases. The exclusion criterion was the absence of more than two intervention sessions.

Research ethics have been considered at every research stage. These ethical considerations included the scientific trustworthiness, the authors' intellectual property rights, confidentiality, and informed consent of all participants. With letter number 14220/D/1400 dated March 2022, the Hamedan Azad University Research and Ethics Council approved this study.

Research tools

Connor-Davidson resilience scale

The resilience questionnaire was prepared by Connor and Davidson by reviewing the research sources of 1979-1991 in the field of resilience. The psychometric properties of this scale have been investigated in 6 groups: the general population, primary care patients, psychiatric outpatients, patients with generalized anxiety disorder, and two groups of post-traumatic stress patients. The producers of this scale believe that this questionnaire can distinguish resilient from non-resilient people in clinical and non-clinical groups and can be used in research and clinical situations. Connor-Davidson resilience questionnaire has 25 items scored on a 5-point Likert scale from 0 (completely false) to 4 (always true). Therefore, the range of test scores is between 0 and 100. Higher scores indicate greater resilience of the subject. The results of factor analysis indicate that this test has 5 factors: perception of individual competence, trust in individual instincts, tolerance of negative emotions, positive acceptance of change and safe relationships, control, and spiritual influences. Add the total scores of all the questions together to get the total score of the questionnaire. The higher the score, the greater the resilience of the respondent and vice versa. The cutoff point for this questionnaire is 50 points. In 2003, Connor and Davidson reported the test-retest reliability of this questionnaire on 24 patients with generalized anxiety disorder and post-traumatic stress disorder at 0.87 [17]. This questionnaire was also standardized by Bigdeli in Iran, and the results indicated that this questionnaire has a Cronbach α of 0.89. Regarding its validity, factor analysis was used to calculate each score with the total score, which showed that the coefficients of the items were 0.79-0.86, except for three items. The present study's Cronbach α for the whole scale was 0.88 [18].

The Yalom and Leszcz group psychotherapy protocol [7] and the ACT protocol [19] were used for in-session therapy for the experimental groups. The Yalom and Leszcz group psychotherapy protocol was designed by Yalom and Leszcz based on psychodynamic theories and interpersonal communication in 2003. The ACT

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protocol was developed based on the acceptance and commitment theory and mindfulness theory by Twohig et al. [20] in 2006. Both interventions were held in 8 sessions, each lasting for 90 minutes, once a week (Table 1). Under the supervision of a psychology professor, two clinical psychologists with experience in the therapeutic process carried out the interventions in a private psychology clinical center. The control group did not receive any treatment at this time, but after the end of the study, they underwent Yalom group psychotherapy for the same period.

In this study, after collecting the research data, the data were analyzed using SPSS software, version 25. First, the normality of data distribution and the homogeneity of variance of the two groups in the study's primary data were investigated. After examining the assumptions of homogeneity of variance and distribution of variables, an analysis of covariance was performed.

3. Results

Demographic data show that the average age of participants in the Yalom psychotherapy group was 26.2; in the ACT group, it was 26.8; in the control group, it was 26.3. About 42.2% of the participants in the research were medical interns, and 57.7% were nurses. Also, 62.2% of the subjects were women, and 37.7% were men

The results of measuring the resilience variable of experimental and control groups are as follows.

According to Table 2, in all studied variables, there is not much difference between the experimental and control groups in the pre-test. The mean resilience score of the pre-test in the control group was 41.73; in the first experiment, i.e. ACT group therapy, it was equal to 41.67, and in the second experimental group, i.e. Yalom group psychotherapy, it was equal to 41.87. However, significant differences were observed between the above three groups in the post-test stage, so the mean pre-test resilience score in the control group with a slight change from the pre-test was 42.87 and did not differ much from the pre-test stage. Nevertheless, the mean score in the first experimental group, i.e. ACT group therapy, was 48.87; in the second experimental group, i.e.Yalom group psychotherapy, it was equal to 56.73. These results showed that both intervention groups in the post-test increased resilience. The normality of the data distribution related to independent and dependent variables of the research in the pre-test and the post-test were investigated by the Kolmogorov-Smirnov and Shapiro-Wilk tests.

The Kolmogorov-Smirnov test indicates that the subjects' resilience in the pre-test stage was not normally distributed because the test statistic was obtained at an error level of 0.047. However, the distribution of data related to this variable's post-test was expected because this test's statistics were acquired at an error level higher than 0.05 and equal to 0.200. Since the test cannot consider out-of-date data in less than 50 items, the results of the Shapiro-Wilkes test were used. According to the results of this test, each data of the studied variable (subjects' resilience) had a normal distribution in both the pre-test and post-test stages because the statistics related to this variable have been obtained at an error level greater than 0.05 (0.052 and 163). These results indicated no significant difference in the levels of this variable (resilience), indicating the relevant data are normal.

The covariance test was used to test the research hypotheses.

The main hypothesis states that Yalom group psychotherapy and ACT group therapy have different effects on the resilience of COVID-19 hospital staff.

All assumptions of covariance analysis, including the absence of outlier data and the normality of residual distribution, were checked and confirmed. The homoscedasticity of variances was checked and confirmed by drawing a scatter plot with the help of SPSS software. The homogeneity of variances was checked by Levene's test as follows.

Levene's test results indicated homogeneity of variance in the resilience option of the subjects between the two experimental groups and one control group because Levene's statistic (0.994) was obtained at an appropriate significance level and an error higher than the standard of 0.05. These results did not show a significant difference between the two groups (0.611).

The data in Table 3 demonstrates that Yalom group psychotherapy and ACT group therapy differently affect the resilience of the studied subjects and have a statistically significant effect because the value of computational F statistic (106.722) has been obtained at an acceptable level (P=0.001 and P<0.05). Therefore, Yalom group psychotherapy and ACT group therapy changed resilience values differently. Thus, the research hypothesis is confirmed, and the null hypothesis is rejected. So, Yalom group psychotherapy and ACT group therapy have different effects on improving the resilience of medical staff. The rate of improvement due to Yalom group psychotherapy is higher than ACT group therapy.

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Table 1. The protocol of Yalom group therapy and ACT sessions

Session	Content	Duration
1st	Introduction of the group leader Statement of the objectives of the session Some intro about group therapy and its different types The encouragement the members to introduce themselves Reception of feedback (during the session, randomly from the members on the session procedure) Conclusion	90 minutes
2nd	Reception feedback from the members on the previous session Explanation and comparison of the "content" and "process" by the group leader Explanation of the group norms by the group leader and encouragement of the members to follow them Encouragement of the group members to give feedback on the life stories of other members considering the group norms Reception of the final feedback on the session and conclusion	90 minutes
3rd	Reception of feedback from the members on the previous session Explanation of the concept of "here and now" and its role in the group sessions Encouraging the members to concentrate on the here and now moment and express their momentary feelings Explanation of the "group as a small social example" by the group leader Reception of the final feedback on the session and conclusion	90 minutes
4th	Reception of feedback from the members on the previous session Encouraging the members to say the problems they have been dealing with from the past to the present and want to share them with others in the group To normalize and train the members, the group leader, as the first person, gives feedback on the problems of the volunteer member considering the group norms The group leader encourages other members to give feedback on the problems of the volunteer Reception of the final feedback on the session and conclusion	90 minutes
5th	Reception of feedback from the members on the previous session Review and conclusion of the problem of the previous session volunteer by the leader and other members (if his/her problem needs more discussion, it will be further discussed considering time for others) Review of the relationship between the leader and other members and the volunteer member of the last session during checking his/her problem (process) Encouragement of the new volunteer to say his/her problem and to self-disclose Reception of the final feedback on the session and conclusion	90 minutes
6th	Like the previous session	90 minutes
7th	Reception of feedback from the members on the previous session Review and conclusion of the problem of the previous session volunteer by the leader and other members (if his/her problem needs more discussion, it will be further discussed considering time for others) Review of the relationship between the leader and other members and the volunteer member of the previous session during checking his/her problem (process) Encouragement of the new volunteer to say his/her problem and to self-disclose (in final sessions, we usually ask the members who revealed themselves: "Why did you decide to discuss these issues with the group now?", then we take this issue as a point to focus on the process more and more) Reception of the final feedback on the session and conclusion	90 minutes
8th	Reception of feedback from the members on the previous session Review and conclusion of the problem of the previous session volunteer by the leader and other members (if his/her problem needs more discussion, it will be further discussed considering time for others) Review of the relationship between the leader and other members and the volunteer member of the last session during checking his/her problem (process) Encouraging the members to review their relationship with other members from the moment when the group started till now and to give feedback to each other Encouraging the members to talk about the impacts this group had on their lives and problems The final conclusion by the leader and wishing the bests for the members	90 minutes

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Session	Content	Duration
Acceptance and Commitment Therapy (ACT) Protocol		
Session 1: Introduction and the primary basis of therapy	1- Introduction and familiarity, 2- Rules governing the sessions, 3- Examining patients' expectations from treatment, 4- Review of stress therapies and acceptance, 5- Review of therapy and goals of this program, 6- Homework	90 minutes
Session 2: Options and preparation for therapy	1- Homework review, 2- The relationship between stress and parental acceptance and care, 3- Parental acceptance, 4- Summarizing the discussions raised in the second session and presenting homework	90 minutes
Session 3: Learning to live with stress	1- Accepting stress, 2- Realizing the values of life, 3- Practicing acceptance and care, 4- Summarizing the discussions raised in the third session and presenting homework	90 minutes
Session 4: Values and actions	1- Clarifying values, 2- Obstacles to values, 3- Goals and actions (behaviors), 4- Summarizing the discussions raised in the fourth session and presenting homework	90 minutes
Session 5: Tendencies, thoughts, and emotions	1- Reviewing homework and starting activity, 2- Psychological tricks, 3- Summarizing the discussions raised in the fifth session and presenting homework	90 minutes
Session 6: Action - getting started	1- Feedback, 2- Action planning, 3- Self-observer, 4- Summarizing the discussions	90 minutes
Session 7: Commitment	1- Willingness, 2- Commitment to action and values despite obstacles, 3- Summarizing the discussions in the seventh session and presenting homework	90 minutes
Session 8: Maintaining the achievements of therapy	1- Commitment, 2- Recurrence, 3- Farewell, 4- Permanent task	90 minutes

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Table 2. Frequency distribution of subjects' resilience in the pre-test and post-test by study group (n=15)

Variable	Time	Group	Minimum	Maximum	Mean±SD
Resilience rate	Pre-test	Control	38	44	41.73±2.086
		ACT	37	45	41.67±2.289
		Yalom group psychotherapy	38	45	41.87±2.416
	Post-test	Control	38	45	42.87±2.031
		ACT	44	54	48.87±2.378

ACT: Acceptance commitment therapy

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Table 3. Analysis of covariance to compare Yalom and ACT group psychotherapy on medical staff resilience

Source	Sum of Squares	df	Mean of Squares	F	Sig.
Correction model (column)	1528.205	3	509.402	75.936	0.001
Row	74.159	1	74.159	11.055	0.002
Self- efficacy	77.361	1	77.361	11.352	0.002
Study groups	1431.839	2	715.92	106.722	0.001
Error	275.039	41	6.708	-	-
Total	112015	45	-	-	-
Total correction	1803.244	44	-	-	-

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Table 4. The covariance results for Yalom and ACT group psychotherapy on medical staff resilience

Yalom Group Psychotherapy					
Source	Sum of Squares	d_f	Mean of Squares	F	Sig.
Correction model (column)	1509.36	2	754.68	162.438	0.001
Row	36.276	1	36.276	7.808	0.009
Variable	67.226	1	67.226	14.47	0.001
Study groups	1421.83	1	1421.83	306.037	0.001
Error	125.44	27	4.646	-	-
Total	76036	30	-	-	-
Total correction	1634.8	29	-	-	-
ACT Group Therapy					
Source	Sum of Squares	d_f	Mean of Squares	F	Sig.
Correction model (column)	313.929	2	156.965	24.422	0.001
Row	37.325	1	37.325	5.807	0.023
Variable	43.929	1	43.929	6.835	0.014
Study groups	273.375	1	273.375	42.533	0.001
Error	173.537	27	6.427	-	-
Total	63600	30	-	-	-
Total correction	487.467	29	-	-	-

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The sub-hypothesis 1 states that Yalom group psychotherapy affects the medical staff's resilience.

The result of Levene's test indicated a homogeneity of variance in the resilience option of the subjects between the two experimental groups and one control group because Levene's statistic (1.56) has been obtained at the appropriate significance level and error higher than the standard of 0.05, showing no significant difference between the two groups (0.442).

The information in Table 4 shows that Yalom group psychotherapy has an effect on the resilience of the experimental group in general and has a statistically significant effect because the value of the computational F statistic (306.0337) has been obtained at an acceptable level of significance (P=0.001 and P<0.05). Therefore, Yalom group psychotherapy affects the staff's resilience. Hence, the null hypothesis is rejected, and the research hypothesis is confirmed: Yalom group psychotherapy affects the medical staff's resilience.

Sub-hypothesis 2 states that ACT group therapy training affects the medical staff's resilience.

The average for the ACT=0 group equals 41.67; for the ACT=1, the group equals 48.87, as indicated in Table 2. These two averages, therefore, differ from one another numerically. But the difference in the standard deviation of necessitates doing the covariance analysis. Because both groups' samples differ in terms of deviation and size or volume, we should be able to use a statistical test to link the samples' variations to societal variations. Since the equality of variance among groups is required for covariance analysis, we ran Levene's test to see whether this was the case. The assumption of the error term having an identical variance at the level of the factor variable is rejected based on the significance value (0.0360.05). The assumption that the variances were equal will, therefore, be rejected. However, given that the difference in variances (standard deviation) is so slight, this problem could be more significant.

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Table 5. Multivariate regression analysis of Yalom and ACT group psychotherapy

Parameter	B	S.E	T	P
Intercept	4.125	0.873	5.214	0.000
ACT=0	-4.023	1.118	-4.199	0.001
ACT=1	0			
Psychotherapy	2.210	0.184	16.257	0.000
ACT=0 psychotherapy	-0.180	0.127	-0.761	0.501
ACT=1 psychotherapy	0			

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The results of Levene's test indicated a homogeneity of variance in the self-efficacy option of the subjects between the two experimental groups and one control group because Levene's statistic (1.941) has been obtained at the appropriate significance level and error higher than the standard of 0.05, showing no significant difference between the two groups (0.406).

The data in Table 4 showed that ACT group therapy affects the resilience of the experimental group in general and has a statistically significant effect because the value of the computational F statistic (42.53) has been obtained at an acceptable level of significance (P=0.001 and P<0.05). Therefore, it can be accepted that ACT group therapy affects the resilience of medical staff. Thus, the null hypothesis is rejected, and the research hypothesis is confirmed: ACT group therapy affects the medical staff's resilience.

The information in Table 5 shows that the y-intercept for the regression model is equal to 4.125, which means that if we do not consider the value of the factor variable, with the increase of each unit to Yalom group psychotherapy after the test, 4.125 units of Yalom group psychotherapy will increase. However, the difference in the psychotherapy of those who chose the ACT=0 method compared to those who used the ACT=1 method is 4.023 units less, provided that we leave aside the effect of Yalom group psychotherapy before the plan. Therefore, we reject the null hypothesis that Yalom group psychotherapy is ineffective.

4. Discussion

Findings from this study indicate that independent variables have effectively increased the subjects' resilience, and their effects are different. This means that Yalom group psychotherapy and ACT group therapy affected the resilience of medical staff caring for patients with COVID-19, and the increase in resilience due to Yalom group psychotherapy was higher than the ACT group.

This research showed that ACT group therapy increased resilience in the medical staff. Although not precisely the same studies have been performed, Hughes et al., Vahabi et al., and Barmherzig et al. studies were relatively consistent with the present study [10, 13, 21].

In explaining this finding, ACT helped the medical staff establish a new relationship with negative emotions, thoughts, and feelings. This therapy aims to clarify each person's core values rather than eliminate bad experiences. ACT enables people to stick to their values in the face of challenges at work, unsettling feelings brought on by the coronavirus epidemic, and the passing of loved ones, patients, and co-workers. In addition, instead of focusing on what they cannot change, they try to focus on the issues they control [10, 22], which will ultimately increase resilience.

Also, the findings of this study indicated that Yalom group psychotherapy increases the resilience of the medical staff. Studies consistent with the results of this study include the investigations of Haddadi and Ebrahimi, Haddadi et al., and Sousa et al. [8, 23, 24].

In explaining this result, Yalom group psychotherapy provides an environment where people can build rich relationships, listen to each other, empathize, and express their problems. People see how others deal with their issues and learn from them. In these group therapy sessions, people are motivated by each other's progress and encourage and support each other [7]. Therefore, these sessions help them to better deal with external problems, difficulties, and stressors, and as a result, their resilience increases.

Finally, the findings of this study showed that the effect of Yalom group psychotherapy in increasing the resilience of medical staff is more than that of ACT group therapy. However, there is no similar study comparing these two treatments. As to why Yalom group psychotherapy significantly affects the resilience of the studied medical staff more than ACT group therapy, it can be said that Yalom group psychotherapy is based on creating solid interpersonal relationships between group members. In contrast, ACT group therapy is less critical for building deep relationships between members. In Yalom group psychotherapy, members are emotionally encouraged to be more active in treatment sessions by sharing basic emotions they experience in the workplace and during treatment. However, ACT sessions are more complex based on teaching some techniques and following some treatment protocols, which can be a kind of homework for members, making them less motivated to participate in the treatment process. The crucial point to consider is that if we try to focus on building deep relationships between members first in ACT sessions and then do treatment protocols, will we still have the same results as the current study?

5. Conclusion

Medical staff who endure harsh conditions in the workplace were increasingly exposed to external stressors during the coronavirus pandemic. Resilience is one of the essential factors that help these people cope with external stresses and stressors. The results showed that Yalom group psychotherapy and ACT group therapy increased the staff's resilience. Accordingly, the Yalom group psychotherapy was more effective than the ACT. Therefore, Yalom group psychotherapy can increase resilience and ultimately maintain the medical staff's mental health.

One of the limitations of this study was the study of a specific and small community population. Also, due to the busy schedule of the medical staff, it was challenging to convince them to cooperate and participate in the sessions. For more accurate results, follow-up studies and re-measurement of resilience were required, which the research team could not do due to limitations. Finally, the control group did not receive any intervention, so the placebo effect of the treatment is unknown. Due to the mentioned limitations, additional research with larger communities in other cities should be done along with follow-up studies to generalize the results to the community more confidently.

Ethical Considerations

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