Original Article

Affect Regulation Training on Distress Tolerance and Psychological Hardiness in the Caregivers of Drug Abuse Patients (addiction treatment clinics in Iranshahr)

Samira Karimi[1], Behzad Rigi Kooteh[2], Sahar Attar[3]

[1] Master of Clinical Psychology, Faculty of Medicine, Islamic Azad University of Zahedan, Zahedan, Iran

[2]Assistant Professor and Faculty Member, Child and Adolescent Health Research Center, Department of Clinical Psychology, Zahedan University of Medical Sciences, Zahedan, Iran

Corresponding Author, Brkpsycho1988@gmail.com

[3] Master of Clinical Psychology, Faculty of Medicine, Zahedan University of Medical Sciences, Zahedan, Iran

Correspondence: Behzad Rigi Kooteh

ABSTRACT

This study aims to evaluate the impact of affect regulation training on the psychological distress tolerance of caregivers of drug abuse patients in Iranshahr treatment clinics.

Method: It was a quasi-experimental pretest-posttest research with a control group. All caregivers of drug abuse patients in Iranshahr treatment clinics In the fall of 2021 formed the statistical population for this study. The statistical sample was based on the research design and consisted of 30 individuals selected by convenience sampling and randomly distributed into two groups of 15 people, experimental and control. Simons and Gaher's (2005) Distress Tolerance Scale and Kobasa's Hardiness (1979) were utilized to gather information (1, 2). Based on Affect Regulation Training: Wheatley and Berking (2014), eight 60-minute sessions were conducted for this study.

Findings: After receiving emotion regulation group counseling, the average score of psychological hardiness in the caregivers of the intervention group was 163.66±22.92, significantly higher than the control group (151.80±14.67) (p=0.001). The mean score of distress tolerance in the caregivers of the intervention group (45.80 ± 8.48) was significantly higher than the control group (38.93 ± 5.88) (p=0.001).

Conclusion: Based on the results of this research, affect regulation training can improve psychological hardiness in caregivers of drug abuse patients in treatment clinics.

Keywords: Affect regulation training, Distress tolerance, Psychological hardiness, Caregivers of drug abuse patients

Introduction

Drug addiction, in various forms and with various forms of consumption, is one of the most significant and complicated social challenges of today's society, affecting a significant portion of the population of the globe as well as our country, Iran. At least three biological, psychological, and social aspects of the phenomena of addiction may be studied one another to understand better how to treat it (4). Drug abuse is one of the world's health, medical, and social concerns, affecting practically every society. According to the Iran Drug Control Headquarters, there are 1,150,000 primary drug abusers and 880,000 accidental drug users in Iran (who become addicted within six months). According to recent statements by this headquarters, drug usage often begins between 12 and 15, and addiction typically develops around 18. Based on previous surveys, 4% of those under 15, 24.4% between 15 and 19, and 56.3% of those under 24 had begun taking drugs (5). Alcohol, opium, and hashish usage that is unnatural or illegal results in addiction, a physical, mental, social, and family illness that makes a person

dependent on these drugs and impairs their functioning on all these levels (6). Addiction has negative consequences on consumers' lives and the lives of their neighbors and family, exposing them to numerous hazards and damages in addition to its biological and social repercussions (7). Living with a person who requires direct care and continual monitoring is hazardous to the family's health, particularly the caregivers (8). Family caregivers are under a great deal of stress when a family member is addicted. It can induce anxiety, sadness, tension, mental illnesses, poor physical health, family issues, violence, isolation, mental disorder, low self-esteem, and scholastic and social problems in those who provide care to drug users (9). One of the psychological aspects that may be compromised in caregivers is distress tolerance, which, as an emerging concept in psychology, may be described as a person's actual or perceived capacity to suffer emotional anguish or stress without aggravating the situation (10). It is possible to deal with issues, survive during crises, and tolerate both short-term and long-term bodily and mental pains by developing the talent of distress tolerance (11). A mindset that transforms possible risks into chances for growth in challenging conditions is psychological hardiness, in addition to poor distress tolerance, which can serve as the basis for vulnerability. Thus, it aims to generate new experiences while making meaningful use of prior ones instead of the biased techniques of comprehending life by recalling the past (12). Providing practical training in emotion regulation is one of the most effective ways to improve the distress tolerance and psychological resilience of the caregivers of addicts. Affect regulation training is a complicated mix of a person's responses to emotional stimuli. These include comprehending and accepting emotional experiences, engaging in healthy techniques to manage difficult emotions when required, and exhibiting acceptable responses when uncomfortable emotions arise (13). Russell and Lincoln (2011), Sehati, Amin Nasab, Yousefian (2019), and Wood (2015) have all done separate studies on affect regulation, distress tolerance, and hardiness (14, 15) (16). Moreover, Asghari, Ghasemi Jubaneh, Hosseini Sediq, and Jamei (2016), who examined the effects of mindfulness training on emotion regulation and quality of life in women with addicted spouses, found that it significantly improved emotion regulation and quality of life in such women (17). Addiction has had unfavorable effects on various societies. Because family caregivers' distress tolerance and psychological toughness are crucial in the administration and management of the addiction issue, it is required to study this area and identify practical training. Affect control is one type of training that might be useful. Therefore, this study aims to evaluate the impact of affect regulation training on the psychological distress tolerance of caregivers of drug abuse patients in Iranshahr treatment clinics.

Method

The research was a quasi-experimental pretest-posttest research with a control group. All caregivers of substance misuse patients in Iranshahr treatment clinics In the fall of 2021 formed the statistical population for this study. A statistical sample of thirty individuals was examined since, according to scientific sources, the optimal group size for conducting group meetings is between six and fifteen individuals (18). The presence of a leader in such groups gives an excellent chance to communicate with others while also leaving little time for solo pursuits and a sense of importance in the group. A test sample of 30 caregivers of drug misuse patients in Iranshahr treatment clinics was used in the current study, and groups of 15 persons were formed to assess the effectiveness of affect regulation training. Participants were selected by convenience sampling and randomly assigned to experimental and control groups. Before the sessions, each group's members completed the pre-test. The experimental group was exposed to the independent variable and engaged in practical intervention sessions for affect regulation training. The pre-test and post-test were the only tests the control group took. Following the conclusion of the experimental period, the post-test was completed by both groups. Caregiver admission requirements for this study are as follows: A family member who is responsible for all health, treatment, care, and support obligations of the patient, be above 20 years old, able to converse vocally, has at least elementary school, not having severe mental disorders, residing in Iranshahr in order to access in the post-test, absence of an accident one month before to the study, and at the time of the study, solely the caregiver of a patient. The presence of one addict requiring care at home and the willingness of the caregiver to participate in the study. The following are the entrance requirements for an addicted individual in this study: having a primary diagnosis of drug dependence, not suffering from mental diseases such as psychosis-delusion-impulse control disorders, being between the ages of 20 and 50, and living in a family. Absence or non-participation in more than one training session, the conditions for the addict's exit, and release from the hospital are also caregiver exit criteria.

Research Tools

Hardiness Measurement

The Kobasa's Hardiness Questionnaire (1979) was prepared and adjusted from a personal viewpoint survey scale (1). This scale is a 50-item questionnaire based on the Likert scale and ranges from 1 to 5. (Not at all true) score 1, (A little true) score 2, (Neither true nor false) score 3, (Quite true) score 4, and (Completely true) score 5. Questions 6 to 22 and questions 28 to 50 have reverse marks. In the study by Ayubi, Teimuri, and Nayeri

(2010), the test's reliability was determined using Cronbach's alpha, and the resulting coefficient for the scale of psychological hardiness was 0.75. (19).

Distress Tolerance Scale (DTS)

This scale is a self-measurement index of emotional distress tolerance created by Simons & Gaher (2). This scale's items examine a person's capacity to tolerate emotional distress based on their mental assessments of distress, their attention to unpleasant emotions when they arise, and their ability to regulate their distress to relieve distress. This scale comprises 15 items and four subscales titled emotional distress tolerance, being absorbed by negative emotions, mental evaluation of distress, and modification of attempts to alleviate distress. A five-point Likert scale is used to rate the items on this measure. High scores on this scale suggest a high tolerance for distress. The alpha coefficients for these subscales are 0.72, 0.82, 0.78, and 0.70, whereas the alpha coefficient for the total scale is 0.82. The intraclass correlation was 0.61 after six months. Additionally, it has been found that this scale has strong initial convergence and criteria validity. This scale indicates a positive relationship with the acceptance of creativity and a negative correlation with the coping techniques scales of using alcohol and marijuana and utilizing them to improve (2). In Andami Khoshk's (2013) research, Cronbach's alpha of the total scale was 0.86 (20). Azizi, Mirzaei, and Shams (2009) also reported Cronbach's alpha and retested reliability of this questionnaire to be 0.67 and 0.79, respectively (21).

Affect Regulation Training

Based on Wheatley and Berking's affect regulation training (2014) and Abedi's translation (2020), this study was conducted in eight 60-minute sessions (3).

Table 1-3: affect regulation training protocol) Wheatley and Berking, 2014; Translated by (Abedi, 2020)

Session	Agenda
First	In this session, we addressed the nature of affect regulation training and the number of sessions and prerequisites for enrolling in the course. First, the nature of stress, unpleasant emotions, and bad moods and their function in producing a negative cycle were explored, followed by their link to a decline in psychological well-being and physical and occupational difficulties. The necessity of breaking this cycle and the function of emotion management skills in adjusting to emotions and the daily stress of life were emphasized. It provided techniques for controlling emotions, including 1) deep breathing, 2) non-judgmental awareness, 3) acceptance and tolerance, 4) self-support and compassion, and 5) emotion analysis. Respondents were asked to reflect on the abilities listed and provide their thoughts on them.
Second	A brief explanation of the location of the brain processes associated with emotion was given before asking the respondent how emotional reactions and emotions are produced in humans. The amygdala was introduced as a brain area, its link with the hippocampus was discussed, and the adaptive significance of amygdala signals and transmitting danger messages to the hypothalamus for fight-and-flight reactions were highlighted. The evolutionary role of emotions was examined, focusing on the client's comments and specific examples; the therapist provided the examples and requested the patients to provide further information on this subject. The presentation of these items was solely centered on current feelings, with no reevaluation of the person in a scenario of fury. The patients were educated on the significance of avoidance in the maintenance of addiction states, and stress models were used to explain the discontinuity of stress reactions in the absence of avoidance. The participant was provided with flashcards in preparation for the subsequent session. After presenting the participant with a flash card, including emotion management techniques like concern, avoidance, emotional repression, and medication, they were instructed to write down or describe the techniques with examples.
Third	The previous session discussed adjustment techniques and approaches for handling stress and schoolwork. Muscle tension and the vicious cycle of amygdala activation were envisioned in muscle and breathing release training. The muscles were separated into four sections: hands and arms, face muscles, shoulders and back, and hips and legs; in the first step, the patient tensed and released each of the four muscles as instructed by the therapist. The following action involved tightening and simultaneously relaxing all the muscles with a deep exhale. In the last phase, the patients just let out a deep exhale while relaxing their muscles without tightening them.
Fourth	The meeting's first 40 minutes were spent talking about the topics covered at prior gatherings, how well the attendees could control their emotions and any issues that came up during the process. Negative thoughts and amygdala activity were termed the vicious cycle in the brain. It was taught how to feel emotions without being judged and identify emotions. It described labeling and the role of frontal lobe activation and emotion reduction. The practice of relaxation

	techniques and non-judgmental awareness was completed at the end of the session. From the contour of the face to the various emotions so that the patient can differentiate emotions and describe them without prejudice. The patients were asked to offer real-world instances for each emotion described and describe the most recent feeling they had experienced.
Fifth	The previous session's content was reviewed, and the relaxation chain - non-judgmental awareness- was implemented. Next, the function of avoidance in activating the amygdala was studied.
Sixth	The previous session's content was reviewed, and the skill chain of relaxation and non-judgmental awareness was again implemented. The patient was educated about the relationship between avoidance of amygdala activation and acceptance, tolerance, and its distinction from emotional surrender, the importance of tolerance, and ending the vicious cycle of avoidance of amygdala activation. The following phases of emotional acceptance were evaluated: 1) (acceptance and tolerance as a goal), 2) the patient's reasons for acceptance and tolerance, 3) witnessing emotions as his partner, 4) recalling his resilience in many situations, and 5) recalling the nature of emotions. The participants were then instructed to record their feelings till the following session.
Seventh	Reframing the patient's emotions was worked on and evaluated. Each of the emotions of guilt, pride, rage, humiliation, sorrow, disappointment, and depression was examined independently. The significance of each emotion's connotation was examined. The participant's resilience was increased using the good times-bad times' approach. This method demonstrated in a detailed chronology that they had undergone great stress at crucial times but could persevere. After the session, the skill chain consisting of relaxation, non-judgmental awareness, tolerance, and accepting skills was applied.
Eighth	The previous session's topic was reviewed, and the next vicious cycle, amygdala activation, and self-criticism/negative emotions were taught. In this session, it was discussed how important it is to value oneself and to express one's emotions. There was a strong emphasis on hearing the patients' judgments and feelings of guilt, even when they viewed themselves as successful. The participants' self-criticism and conditional love were addressed using various strategies since, in many circumstances, self-love is conditional. There were self-compassion exercises available.

Procedure

A library survey was utilized to gather data for the research literature, and a field method employing standard questionnaires was employed to gather information for the research questions.

First, the research title was determined with the supervisor's help, then presented to the Islamic Azad University of Zahedan. The university council approved the proposal and presented it to the ethics committee. This research has the code of ethics of the Islamic Azad University of Zahedan. IR.IAU.ZAH.REC.1400.025.

After the code of ethics was accepted, the first step of the field study was to get the appropriate permissions to conduct intervention classes. Then, thirty caregivers of drug misuse patients were recruited from the statistical community and divided into the control and the experimental groups. The control and experimental groups collected data from their pre-tests during this phase. The experimental group received eight 60-minute affect regulation training intervention classes, whereas the control group received no intervention.

Both groups were administered a post-test in the final phase. Following data collection, the information was examined. Two descriptive and inferential levels of analysis were conducted using SPSS software version 23. The MANCOVA and Levene's tests were employed to determine the equivalence of variances in the descriptive part (frequency, percentage, mean, and standard deviation) at the inferential level.

Findings

According to Table 1, the number of female caregivers of patients involved in drug abuse disorders under study was equal to 20 people with a percentage of 66.7, which is more than the male gender. The present study has ten male caregivers, or 33.3% of the total population. There were three single caregivers, with a proportion of 10.0, compared to 27 married caregivers, with a total of 90.0. The largest frequency of caregivers of patients diagnosed with drug use disorders with less than a high school diploma was 13 persons or 43.3%. Following it came the diploma with nine persons and 30.0%, the bachelor's degree with seven people and 23.3%, and the master's degree with one person and 3.3%. The mean age of the experimental group is 38.86 years, with a standard deviation of 11.41 years, whereas the mean age of the control group is 40.66 years, with a standard deviation of 12.09 years. Consequently, the mean age of both groups is comparable.

Table 1: Respondent frequency by demographic variables

		Frequency	Percent	Percentage frequency	Cumulative frequency
Demographic variable (gender)	Female	20	66.7	66.7	66.7
	Male	10	33.3	33.3	100.0
	Total	30	100.0	100.0	
Marital status	Married	27	90.0	50.0	50.0
	Single	3	10.0	10.0	100.0
	Total	30	100.0	100.0	
Education degree	Masters	1	3.3	3.3	3.3
	Bachelor	7	23.3	23.3	26.7
	Diploma	9	30.0	30.0	56.7
	Under high school diploma	13	43.3	43.3	100.0
	Total	30	100.0	100.0	

		Mean	Standard deviation	SEM
Age	Experimental	38.86	11.41	2.94
	Control	40.66	12.09	3.12

According to Table 2, the mean pre-test psychological hardiness in the experimental group is 144.466, and the standard deviation is 8.58; this is the mean score of psychological hardiness based on the normalized overall mean of the questionnaire. Based on the normalized mean of the questionnaire, the psychological hardiness variable's mean in the control group is 156.400 with a standard deviation of 11.28, regarded as an average score. In general, the mean pre-test scores between the two groups are comparable.

Table 2 - Mean and standard deviation of the psychological hardiness variable in the experimental and control groups in the pre-test

Variable		Number	Mean	Standard deviation	SEM
Psychological Hardiness	Experimental	15	144.466	8.58	2.21
	Control	15	145.400	11.28	2.91

According to Table 3, the experimental group's mean post-test psychological hardiness score is 163.66%, and the standard deviation is 22.92, demonstrating a shift in post-test psychological hardiness mean scores compared to pre-test scores. The mean demonstrates that affect regulation training has improved the psychological hardiness of caregivers working with patients with drug abuse problems. In the control group, the post-test mean of the psychological hardiness variable is 151.80 with a standard deviation of 14.67, and the post-test mean of psychological hardiness is lower than in the control group. The mean post-test scores are different overall between the two groups.

Table 3 - Mean and standard deviation of the psychological hardiness variable among caregivers of drug abuse disorder patients

Variable		Number	Mean	Standard deviation	SEM
	Experimental	15	163.66	22.92	5.91
Psychological Hardiness	Control	15	151.80	14.67	3.78

According to Table 4, affect regulation training affected caregivers' psychological hardiness level in the experimental group compared to the control group in the post-test stage ($p = 0.001$). On the dependent variable, psychological hardiness, there is a significant difference between the control and experimental groups based on the intervention. Consequently, the study hypothesis has been confirmed. In addition, the difference between the experimental and control groups' post-test scores suggests that the experimental group's psychological hardiness has grown considerably compared to the control group. As a result, affect control training has proven to strengthen caregivers' psychological hardiness. Affect regulation training has an impact level of 0.33. The power of a test is equal to 0.94, indicating a 0.94 percent chance of getting a particular outcome from the treatment if the test is repeated 94 times.

Table 4 - ANOVA results on psychological hardness scores of caregivers of drug abuse disorder patients

Variables	Sum of Squares	Degrees of freedom	Mean square	F	Significance level	Eta-squared	Power of a test
Pre-test	9.253	1	9.253	0.034	0.85	0.001	0.054
Group	3415.301	1	3415.301	13.302	0.001	0.330	0.940
Error	6932.392	27	256.755				

According to the results of Table 5, when the mean of the experimental and control groups is compared pairwise, the difference between the two groups in the variable of psychological toughness is significant. Therefore, regulation training has increased the tenacity of caregivers involved in drug abuse disorder patients.

Table 5 - Pairwise comparisons of the mean psychological hardiness of caregivers between the two experimental and control groups

Groups	Mean difference	Standard error	Significance level	0.95 CI for the DIFFERENCE	
				Low range	High range
Experimental-Control	25.065	6.87	0.001	10.964	39.166
Control-Experimental	- 25.065	6.87	0.001	- 39.166	- 10.964

According to Table 6, the mean pre-test distress tolerance score in the experimental group is 38.66, with a standard deviation of 8.78. It is the mean score in distress tolerance based on the normalized general mean of the questionnaire. In the control group, the mean of the distress tolerance variable corresponds to the standard deviation of 7.28, which is the mean score based on the normalized overall mean of the questionnaire. The mean scores on the pre-test are generally comparable across the two groups.

Table 6 - Mean and standard deviation of the distress tolerance variable in the experimental and control groups in the pre-test

Variable		Number	Mean	Standard error	SEM
Distress tolerance	Experimental	15	38.66	8.78	2.26
	Control	15	41.60	7.28	1.88

According to Table 7, the experimental group's post-test mean distress tolerance is 45.80, and the standard deviation is 8.48, showing a shift in the post-test mean distress tolerance scores compared to the pre-test. The mean indicates that affect regulation training has raised the distress tolerance of caregivers engaged in the group for substance addiction disorder. In the control group, the post-test mean of the distress tolerance variable is 38.93 with a standard deviation of 5.50, and the post-test mean distress tolerance is lower than in the control group. Both groups have significantly different mean post-test results.

Table 7 - The mean and standard deviation of the distress tolerance variable of caregivers of people involved in drug abuse disorder in the post-test, separated into two groups

Variable		Number	Mean	Standard error	SEM
Distress tolerance	Experimental	15	45.80	8.48	2.19
	Control	15	38.93	5.88	1.51

According to Table 8, affect regulation training had a significant post-test impact on the caregivers' distress tolerance in the experimental group over the control group ($p = 0.001$). The intervention on the dependent variable, distress tolerance, differed significantly between the control and experimental groups, supporting the research hypothesis. In the post-test phase, the experimental group's distress tolerance has grown considerably relative to that of the control group, based on the difference in scores between the experimental and control groups. In other words, training in emotion control has greatly enhanced caregivers' distress tolerance. The level of effectiveness of affect regulation training is 0.430. The power of a test is 0.992; by repeating it 99 times, the likelihood of achieving such a result from the therapy is expected.

Table 8 - ANOVA results on distress tolerance scores of caregivers of patients with a drug abuse disorder

Variables	Sum of Squares	Degrees of freedom	Mean square	F	Significance level	Eta-squared	Power of a test
Pre-test	297.716	1	297.716	6.313	0.056	0.568	0.519
Group	555.404	1	555.404	20.374	0.001	0.430	0.992
Error	736.026	27	26.260				

Based on table 9, the mean difference between the two groups in the distress tolerance variable is significant by examining the pairwise comparisons of the experimental and control groups. Therefore, affect regulation training has increased the distress tolerance of caregivers involved in drug abuse disorder patients.

Table 9 - Pairwise comparisons between the two experimental and control groups in the mean tolerance of caregivers' distress

Groups	Mean difference	Standard error	Significance level	0.95 CI for the DIFFERENCE	
				Low range	High range
Experimental-Control	8.756	1.940	0.001	4.776	12.737
Control-Experimental	- 8.756	1.940	0.001	- 12.737	- 4.776

Discussion

The rapid increase in the number of drug users, the increase in the number of convicts for drug-related crimes, the spread of AIDS, the breakup of many families, and the excessive human and financial expenses are among the most significant drug problems in the country and generate numerous psychiatric problems for caregivers and drug abuse patients. This study investigated the effect of emotion regulation training on psychological distress tolerance among caregivers of drug abuse patients admitted to Iranshahr addiction treatment clinics. The results demonstrated that carers of substance addiction disorder patients had greater distress tolerance and tenacity after receiving affect regulation training. This finding is consistent with the research results of Conway et al. (2020), Mardukhi (2016), (22, 23) and implicitly with the research of Mardukhi (2016) and Jafari Roshan et al. (2011) (23, 24). Conway et al. (2020) .'s study found that emotion regulation significantly decreases depressive symptoms and suicide risk in persons with mental health issues (22). According to Mardukhi's (2017) research, affect regulation training can successfully boost substance-dependent women's self-efficacy, psychological well-being, independence, mastery of the environment, personal growth, positive relationship with the environment, purposefulness in life, and self-acceptance (23). According to Jafari Roshan et al. (2012), positive psychotherapy training, resilience, and happiness improve women's general health. Consequently, they are protected from mental disorders, drug abuse, and misbehavior (24). According to Mardukhi (2017), affect regulation training promotes self-efficacy, psychological well-being, independence, mastery of the environment, personal progress, positive relationship with the environment, life purpose, and self-acceptance of drug-dependent women (23).

Drug use disrupts the brain's reward system, motivation, and memory, leading to biochemical, physiological, social, and psychological difficulties (25). The current study's results indicate that affect regulation training increases caregivers' distress tolerance. Emotions, according to James, are the core of our psychological economy; consequently, managing feelings helps individuals understand their emotions, who has them, and how they experience and express them (26). Affect regulation training addresses how individuals react to their emotional situations. People who struggle to control their emotions sometimes resort to impulsive and dangerous activities to control the strength of their feelings (27). Affect regulation training aids in the management and control of all internal and external systems responsible for displaying, assessing, and characterizing emotional responses. If individuals can learn to begin, encourage, and arrange appropriate activities while suppressing stressful levels of negative emotions and improper behaviors, their ability to adapt to the environment and its events will be strengthened (28). Affect regulation training might allow caregivers of drug abuse patients to effectively control and manage their emotions when confronted with challenges related to care and maintenance, thereby increasing their distress tolerance.

A second reason for this finding is that affect regulation training is beneficial in enhancing the psychological resilience of drug abuse patient caregivers; according to the paradigm of Lazarus et al. (1980), coping practices assist people in coping with demanding experiences and stressful situations, therefore protecting them from the psychological damage that such events may cause (29). Based on this paradigm, when people engage with their surroundings, they evaluate factors such as the stressful situation and the available resources to cope with it. Then, they refer to the capability of their adaptive behaviors so they may prepare to adjust to the circumstance and employ one of the right behaviors (30). People will be better equipped to handle stressful situations if they can regulate and control their emotions. Therefore, affect regulation training will assist caregivers of drug users in learning self-awareness techniques for coping with stressful situations, promoting mental peacefulness. It seems that the skill in emotion regulation will make the caregivers of drug abuse patients, with the ability to manage their negative emotions, feel more in control of the stressful events around them, increasing their psychological hardiness.

Affect regulation training increases the distress tolerance of caregivers involved in the substance abuse disorder patient; distress tolerance is a factor that can protect people from internal stress, such as negative emotions and unpleasant physical sensations, and prevent psychological damage caused by such situations (31). According to the present study, caregivers of substance addiction patients who have received training in affect regulation have a greater capacity to tolerate suffering. Defects in emotion regulation abilities allow people to be constantly involved with unpleasant emotions and feelings, and their inconsistent efforts to manage destructive emotions and feelings will lead to several mental disorders (32). Therefore, the capacity to control and manage emotions substantially lowers unpleasant emotions and enhances people's resilience. Affect regulation is initiating, sustaining, regulating, or altering the incidence, intensity, or duration of inner emotion and arousal associated with social, psychological, and physical processes involved in achieving goals. This skill enables individuals to identify their and others' emotions and respond appropriately to them (33). If drug addicts' caregivers receive training in affect management, they will be able to identify their own emotions accurately and those of their patients, respond

appropriately to these emotions and develop a healthy connection with drug addicts. As a result, they also experience a great deal of mental peace, which significantly aids in the improvement of their conditions, and the accompanying mental calm will likely raise the caregivers' distress tolerance.

About another explanation for this finding, Thompson (2006) suggests that affect regulation involves internal and external systems responsible for assessing, regulating, and correcting a person's emotional responses in order to attain their goals (34). Therefore, while dealing with emotional events, optimism and positive feelings alone will not be sufficient to manage emotions, and individuals must be able to employ their best cognitive function to demonstrate acceptable behaviors and adapt to the situation (35). Based on this, affect regulation will assist in lessening unpleasant emotional reactions and accepting them, and it will give individuals in bad and challenging situations more capacity to tolerate the negative feelings induced by these circumstances. The capacity to regulate emotions enables individuals to recognize their habitual thoughts and exert more control over them. As a result of developing their capacity to regulate their emotions, people will experience less tension and concern in various situations and will be better able to comprehend the feelings of others. It alters an individual's perspective of their surroundings and provides them more influence over their circumstances (36). Therefore, caregivers of substance abusers might lessen their stress and anxiety by enhancing their emotional regulation abilities. By gaining more control over their environment, people will be able to lessen their ineffective thoughts, and, as a result, their discomfort tolerance will likely grow.

Regarding the beneficial effect of regulation training, it promotes the psychological hardiness of caregivers dealing with opioid use disorder patients. Individuals with high psychological hardiness are highly interested in having meaningful experiences in their life and recognize that change is natural and may contribute to growth and development. These people show more endurance against challenges and will experience more peace and mental health (37). The current research revealed that delivering affect regulation training boosted psychological hardiness in caregivers of drug users. Numerous studies have demonstrated that incorrect emotional responses to challenging life events and psychological demands, such as emotions of discomfort, grief, and poor emotion regulation strategies, result in emotional distress. Choosing inadequate and self-disabling coping strategies in cognitive, emotional, and behavioral dimensions, as well as expanding the use of incompatible emotional coping methods, negatively impacts mental health and decreases psychological well-being (38). Affect regulation will significantly aid individuals in coping and enhancing their ability to react correctly, improving their capacity to regulate their interaction with the environment (26). Caregivers of drug-using patients develop the capacity to regulate their sentiments, arousal, and objectives about the surroundings and adjust to the current circumstance by employing affect regulation. It reduces the negative feelings that caregivers may experience when treating drug misuse patients and is likely to boost their psychological resilience.

Since psychological resilience can be taught, individuals can have a greater sense of efficiency and control over their environment and its occurrences in the face of adversity (39). Therefore, if the caregivers of drug-using patients receive training in affect control and learn to manage and regulate their emotions, they will be able to control the life-altering events. As a result, they will be able to adapt to the existing situation and use it for their progress (39). It will probably reduce negative feelings, anxieties, and tension from these individuals and make the caregivers of the patients more robust against current issues and obstacles, as well as increase their psychological hardiness.

Conclusion

This study revealed that affect regulation training substantially impacted caregivers of substance addiction patients in both the intervention and control groups regarding their distress tolerance and psychological hardiness. Therefore, with the application of the affect regulation training package to promote distress tolerance and psychological hardiness by the psychologists in addiction treatment camps, a practical step was taken for the relatives of such patients. In addition, psychologists and psychiatrists in addiction treatment clinics are likely to instruct patients in affect regulation training techniques.

Limitations

This research is based on a sample of 30 caregivers of drug abuse patients in Iranshahr treatment clinics in the fall of 2021; therefore, caution is required when extrapolating the results to a larger sample. Another limitation of this research is the inability to control contextual and individual characteristics, such as personality traits, educational attainment, access to welfare and recreational services, and fleeting emotions. In addition, the absence of gender separation may restrict the generalizability of the results to men and women. Lastly, failing to implement the follow-up period might limit the generalization of the study.

Recommendations

Given that the statistical population is confined to caregivers of substance misuse patients in Iranshahr treatment clinics in the fall of 2021, it is recommended that this research be conducted in other areas with different demographic features to ensure the generalizability of the results. Due to the absence of a follow-up period in the current investigation, it is

recommended that future studies include a follow-up period to establish the stability and durability of the intervention approach over time. The current research's limitations and the probable decline in training due to COVID-19 propose repeating the research after the pandemic. Finally, because it is critical to understand other characteristics of treatment approaches impacting distress tolerance and psychological hardiness in caregivers of drug misuse patients, it is advised that alternative interventions, such as positive psychotherapy, acceptance, and commitment therapy, mindfulness-based therapy, and other intervention methods, be used in the future study.

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