Research Paper
Comparison of the Effectiveness of Acceptance and Commitment Therapy and Guided Imagery on the Resilience of Cardiac Disease Patients Referring to the Heart Rehabilitation Department

Abbasali Shahabi1, *Parvin Ehteshamzadeh2, Parviz Asgari2, Behnam Makvandi2

1. Department of Health Psychology, Khorramshahr - Persian Gulf International Branch, Islamic Azad University, Khorramshahr, Iran.
2. Department of Psychology, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran.

ABSTRACT

Aims: One of the most essential causes of mortality in the world is cardiovascular disease. Biological background and physical risk factors, types of stress and distress, ineffective interaction strategies, stressful life events, as well as low levels of resiliency contribute to the start and severity of the disease. The present research tends to compare the effectiveness of Acceptance and Commitment Therapy (ACT) and Guided Mental Imagery (GMI) on the resiliency in cardiovascular patients referring to cardiac rehabilitation ward through 2018-2019.

Methods & Material: This study is a quasi-experimental with pretest-posttest and follow-up with control group. The research samples were 45 participants selected using available method and completed the Conner-Davidson Resiliency Scale (CD-RIS). Interventions consisted of 8 sessions of 60 minutes each (ACT group) and 10 sessions of 45 minutes each (GMI group). Data analysis was performed using repeated measurement covariance analysis and Bonferroni test in SPSS V. 22 software.

Findings: The research findings showed the effectiveness of the two treatments of ACT and GMI on the increase in resiliency of cardiovascular patients. In other words, the results of Bonferroni test indicate the more effectiveness of ACT than GMI in increasing resiliency in cardiovascular patients (P<0.005). Therefore, it can be concluded that ACT, by focusing on psychological flexibility, is more effective than GMI on Resilience.

Conclusion: According to the results of this study, the ACT with the main acceptance factor, may expand the concept of acceptance by believing in lack of control over life in cardiovascular patients, and increase their resiliency. A one-month follow-up of the results showed its sustainability and strength.

Extended Abstract

1. Introduction

Chronic diseases are among the most common causes of death in the world. They persist for a long time and affect a person’s normal functions. Chronic disease is a serious health challenge that lasts for at least three months and requires hospitalization, home care, and medical care. Cardiac disease is among chronic diseases, which is the most common cause of death and is an important factor for disability and premature death [2].
Cardiovascular disease is one of the most common diseases in developed countries and is increasing rapidly in developing countries [3]. According to the latest study by the Ministry of Health and Medical Education of Iran, cardiovascular diseases are the leading cause of death in the country accounting for 378 deaths daily in Iran. It is estimated that by 2020, a total of 25 million people will die each year due to cardiac disease [3].

Psychological factors, such as defense mechanisms and maladaptive coping methods, stress, anxiety, depression, temperamental and communication disorders, aggression, generalized anxiety disorder, interpersonal hostility, obsessive-compulsive thoughts and behaviors, phobia, personality traits, and different types of psychological injuries play a role in both development and aggravation of cardiac disease [4].

Heart failure causes many symptoms leading to patients’ intolerance to several activities and changes in their lifestyle, which affect their tolerance and resilience [5]. Resilience is the ability of a person to adapt successfully to life-threatening conditions and stressors and is a form of self-healing that has positive emotional, affective, and cognitive results [6, 7]. Resilience does not simply mean that an individual is resilient to harm or threatening conditions, but he must actively and constructively participate in the environment [8]. People with high resilience have a lower level of avoidance and cope with the pain and suffering, and do not consider their disease to be catastrophic [9, 10].

Resilience has attracted the attention of many researchers over the past ten years. This factor is one of the psychological characteristics that is very important in health [11]. Resilient people are dynamic and flexible to deal with living conditions [6]. Psychological resilience is defined as the ability to overcome difficulties and life situations. From Newman’s point of view, psychological resilience has been mentioned as the ability to adapt to adversity. Resilience is not only increasing a person’s tolerance and adaptability to dealing with a problem but also considers maintaining mental health and promoting it [12].

Werner considers resiliency as a factor to change the negative consequences positively and maintain good health. In terms of the consequences of resilience, Jokar et al. in their research showed that resilience predicts a significant level of mental health and satisfaction. That is, increasing resilience leads to a reduction in emotional problems and stress, resulting in an increase in the level of an individual’s satisfaction [13].

Acceptance and Commitment Therapy (ACT) is one of the newest therapies for third-wave psychology, which its effectiveness has been confirmed in many chronic diseases. ACT is a form of clinical psychology and is committed to providing scientific treatment methods [14]. ACT does not cause a direct change in clients, but it helps them connect with their experiences in different ways and be able to fully engage with a meaningful, value-based life. ACT is rooted in a philosophical theory called functional contextualism and is based on the Relational Frame Theory (RFT), which is a research program on language and cognition [15].

The goal of this treatment is to increase psychological and behavioral flexibility in areas where Experiential Avoidance (EA) prevails and deprives the individual of basic life. Psychological flexibility increases a person’s ability to choose an action that is more appropriate among various options. It is also the ability to fully communicate with the present and change or maintain the behavior to achieve valuable and important life goals [16]. Psychological flexibility in the ACT is achieved through six main processes: acceptance, detachment, self as context, being present, valuing, and committed action [17].

Recent studies on ACT have shown its effectiveness for the treatment of depression [18], post-traumatic stress disorder [19], panic disorder [20], chronic pain [8], obsessive-compulsive disorder [23], breast cancer [24], multiple sclerosis [25], diabetes [26, 27], abnormal grief [28], and reducing job stress [22].

Hoffman et al. found that multiple therapeutic approaches, such as psychological interventions, had far shorter and longer-term effects on pain and improved daily and occupational functioning in individuals [29]. By examining acceptance-based interventions, such as ACT in patients with chronic pain, Viehoff et al. reported that although the above-mentioned new approaches were not more effective than the cognitive-behavioral approach, they were relatively effective and could be considered as alternative therapies [30]. Regarding the effectiveness of ACT in patients with chronic pain, Wells and McCracken showed that after implementing the treatment plan, factors, such as the level of the pain experience, depression, anxiety, disability, handicap, job status, and physical function significantly improved in patients compared with the pre-treatment stage [31]. Regarding the role of ACT in reducing the depression of type 2 diabetic patients, Hor et al. examined 30 patients and showed that this therapeutic method was effective in reducing their depression with a stable effect in the follow-up period [32].
The Guided Subjective Imagery (GSI) is another treatment for chronic diseases. GSI, as a mind-body technique, is based on the idea that mind and body are interconnected and can affect and strengthen each other in the treatment of diseases and creating health. Imaging activates the same area of the brain that is activated during the experience of a real event; that is, the individual creates precisely a stream of thought, in which he/she can see, hear, feel, or smell what he/she desires to feel at that time and also to visualize it in his/her imagination. In addition, guided imagery is a strategy that creates a sense of power and relaxation by emphasizing and use of images, landscapes, sounds, music, and words. In imaging, people are encouraged to take deep abdominal and diaphragmatic breaths, and then release the muscles and imagine landscapes, such as forests, the beach, and holy places, and pay attention to the surrounding sounds and smells. Studies have shown that focusing on visualization and positive thinking can lead to comfort and mood balance. Visualization reduces pain, tension, anxiety, and depression by creating a competitive focus and increases the feeling of well-being [35].

Saedi and Abolghasemi showed that mental imaging and gradual stress relief, along with biofeedback, are more effective and stable than drug therapy in reducing migraine headaches. It has shown that visualization is a pain management technique for the treatment of arthritis, fibromyalgia, cancer, headaches, acute coronary heart syndrome [28], acute and chronic pain, and other medical conditions [36]. In a study conducted to investigate the effect of sedation methods on the anxiety of patients with a heart attack in Tehran, the results showed that all three methods of indoctrination, visualization and speaking were effective in reducing patients’ anxiety, but speaking was more effective than the others [37]. In another study aimed at implementing a guided imagery program for patients undergoing heart surgery and its effects on anxiety levels, pain, duration of disease, hospital costs, and patient satisfaction, guided imagery reduced all these factors [28].

This research was conducted due to the increasing number of people with cardiovascular diseases and postoperative complications or other interventions, as well as considering the importance of psychological issues in the rehabilitation of these patients and the development of effective psychological therapies in chronic diseases, such as cardiac disease. We used two psychological therapies: 1. “ACT” that has contributed to the increased cognitive flexibility, tolerance, and resilience, and is helpful to improve the lives of these patients; 2. “guided imagery” that has had positive and significant effects on anxiety, pain, duration of illness, and hospital costs for chronic diseases. These two methods should be compared to better understand the effectiveness of them. No study has yet examined the effectiveness of ACT and guided imagery methods on the resilience of cardiovascular patients. Therefore, in this study aimed at investigating the effectiveness of ACT and guided imagery on the resilience of cardiac patients referring to the cardiac rehabilitation department and comparing these two methods.

2. Materials and Methods

This clinical trial (IRCT20190727044345N1) with Pre-test-Post-test design and follow-up and a control group was performed on cardiovascular patients referred to the cardiac rehabilitation department of Imam Reza Hospital, Mashhad in 2018. Samples were selected by the availability sampling method and random drawing and assigned to three groups (two experimental and one control). According to Borg et al. 15 people are sufficient for the sample size in each group in experimental and semi-experimental studies [38]. Based on a clinical interview, 45 cardiovascular patients were selected using the DSM-V criteria. Inclusion criteria were hospital admission for a heart problem in the cardiac rehabilitation department, consent of the patient to participate in the research, minimum literacy (secondary school) to understand the concepts of the treatment, the age range of 35 - 75 years, lack of other physical diseases, lack of severe mental illness, neurological disorders, such as epilepsy and Alzheimer’s disease, drug and alcohol addiction, and the approval of the treating physician on the feasibility of the patient’s participation in the study. Exclusion criteria were the patient’s dissatisfaction with continuing the research, concomitant use of psychedelics, arrhythmia and initiation of treatment, and conducting cardiopulmonary resuscitation during the intervention.

The research protocol was approved by the university’s Ethics Committee, registered at the Iranian Clinical Trial Database, and obtained permission from the officials of Imam Reza Hospital. The patients signed the informed consent form and were explained about the purpose of the study. After obtaining written consent, the demographic information form and the Connor-Davidson resilience questionnaire were completed. The intervention for the guided imagery group (10 sessions) was performed using the Nozari training package (quoted by Alifar and Nokani, 2013) [39]. Patients received two 45-min sessions per week (4 initial sessions on negative beliefs, thoughts, and ideas) and in the next 6 sessions (between 10 a.m. and 12 p.m.) in the cardiac rehabilitation department using a laptop and an audio player, they listened to a mental imagery file prepared by the researcher. To control the interfering factors and to use the audio file accurately, the researcher attended all the meetings. The intervention for the ACT group (8 sessions) was performed using the Hayes and Strosahl (2002) treatment package, quoted by Khamseh (2017) [40].
The patients were trained two sessions a week for 60 min (8 to 9 a.m.) by the researcher. The control group did not receive any treatment. They only did the exercises of the rehabilitation department under the supervision of the treating physician, and at the end of the sessions, they only completed the resilience questionnaire again. All sessions were performed in groups and only two participants were unable to attend 2 sessions due to their physical condition; therefore, four individual sessions were performed for them. It should be noted that these two subjects were in the ACT experimental group. The data collection tools in this study were as follows (Table 1 & Table 2).

### Personal data sheet

The personal data sheet was used to collect the test subjects’ information regularly, including age, gender, education, marital status, history of cardiac surgery, the time of the first arrhythmia, used medications, treating physician, treatment received, and duration of the disease.

### Connor-Davidson Resilience Scales

The Connor-Davidson Resilience Scale (CD-RISC) is a 25-item tool that measures the construct of resilience on a 5-point Likert scale from zero to four. The minimum resilience score on this scale is zero and the maximum score is 100. The results of a preliminary study on the psychometric properties of this scale confirmed its reliability and validity. According to the reports, internal consistency, retest reliability, and convergent and divergent validity of the scale were appropriate [40]. The psychometric properties of the CD-RISC (in the Persian language) have been investigated and confirmed in several studies conducted between 2005 and 2010 on patients (n=275) and normal (n=1123) samples [41]. In these studies, Cronbach’s alpha coefficients of each subscale ranged from 0.73 to 0.91 and from 0.81 to 0.93 for the whole scale.

Data were analyzed using SPSS V. 23 software and Levine’s test (to ensure homogeneity of the variances), Kolmogorov-Smirnov test (to ensure normality of the data), repeated measures ANCOVA (to measure the resilience), and Bonferroni post-hoc test (to compare the effectiveness of the two intervention methods).

### Results

In the present study, the mean age of the ACT, GSI, and control groups were 54.07±7.01, 55±9.47, and 57.93 ± 8.63 years, respectively. The gender frequency of the subjects was as follows: ACT group (8 males, 53.3%, and 7 females, 46.7%), GSI group (14 males, 93.3%, and 1 female, 6.7%), and the control group (12 males, 80% and 3 females, 20%). In all three groups, the highest level of education was diploma: ACT group (8 people, 53.3%), GSI group (5 people, 33.3%), and control group (11 people, 73.3%). The marital status of these three groups was as follows: ACT group (12 married people, 80%; one widow, 6.7%; and 2 single, 13.3%), GSI group (12 married, 80%; and 2 divorced, 20%), control group (10 married, 66.7%; two single, 13.3%; and 3 widows, 20%).

### Table 1. A summary of the Guided Subjective Imagery (GSI) training sessions

| Session | Interventions / Content |
|---------|-------------------------|
| First   | The subjects were introduced to each other, the plan and objectives of the research were discussed, and the subjects were justified. |
| Second  | The subjects were informed to identify their misconceptions and irrational thoughts. |
| Third   | The session began with explanations about the fact that negative thoughts, beliefs, and perceptions are the basis for the emotional disorder, decreased levels of resilience, and misperceptions about the disease. Also, guided imagery techniques and their steps were taught to the patients. |
| Fourth  | The patients were taught how to deal with negative thoughts and ideas. |
| Fifth to tenth | The subjects were taught to immerse themselves in relaxing imagery and perform the steps of guided imagery in three 15-min sessions. Step-by-step guide for mental imagery: Relax for a few minutes ... Take off your shoes, put on comfortable clothes, close your eyes, and take a few deep breaths. Imagine walking down a staircase. In each step, pay attention to the feeling that makes you more and more relaxed ... When you are completely relaxed, visualize a favorite scene ... When you feel comfortable in your desired scene, gradually turn your mind to the problem you want to solve ... If multiple images come to your mind, choose one of them to consider in the current session ... If no image comes to your mind, try turning to another sense ... Imagine that your problem will be completely resolved at the end of the session. This creates the initial healing plan inside you. At the end of the session, take a few more deep breaths and imagine yourself climbing an imaginary staircase ... while gradually becoming aware of the environment, open your eyes ... stretch your body, smile, and carry on your routine activities. |

Shahabi A, et al. ACT and Guided Imagery on the Resilience of Cardiac Disease Patients Referring. The Horizon of Medical Sciences. 2020; 26(3):276-297.
| Sessions  | Interventions / Content                                                                                                                                                                                                                                                                                                                                 |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-     | Getting acquainted with the authorities and establishing a proper relationship with the aim of filling out the questionnaires correctly and building trust; implementing a demographic questionnaire, filling the consent form, and implementing the pre-test.                                                                                          |
| First    | Introducing the therapist; introducing the members of the group to each other and establishing a therapeutic relationship; introducing ACT, its main goals and dimensions; determining the rules governing treatment sessions; providing information about cardiac patients and their categories; reviewing treatments for cardiac patients, their costs, and benefits; having a break; having some refreshments; assigning homework. |
| Second   | Reviewing previous session experiences and receiving feedback from the patients; discussing experiences and evaluating them; assessing the person’s willingness to change; ACT review on creative disability; having a break and some refreshments; summarizing the discussions raised in the meeting, and assigning homework. |
| Third    | Reviewing previous session experiences and receiving feedback from the patients; recognizing dysfunctional control strategies and identifying their futility; explaining the concept of acceptance and how it differs from the concepts of failure, despair, denial, resistance, etc.; explaining that acceptance is a permanent process; discussing the problems and challenges of cardiac patients about accepting their disease; explaining about avoiding painful experiences and being aware of the consequences of avoidance, discovering the avoided situation and communicating with it through acceptance; defining coping and explaining the efficient and inefficient coping strategies; having a break; having some refreshments; summarizing the discussions and reviewing the practice of the next session; assigning homework. |
| Fourth   | Reviewing previous session experiences and receiving feedback from the patients; discussing behavioral obligation and commitment; introducing and explaining about the fusion of self-conceptualization and detachment; applying cognitive detachment techniques; intervening with the performance of problematic chains of language and metaphors; minimize wasting time with thoughts and emotions; having a break; having some refreshments; summarizing the discussions and reviewing the practice of the next session; assigning homework. |
| Fifth    | Reviewing previous session experiences and receiving feedback from the patients; demonstrating separation between self, inner experiences, and behavior; considering oneself as a context; weakening of self-conceptualization and self-expression (explaining the concepts of the role and background, considering oneself a context and making contact with oneself using allegory, awareness of different sensory perceptions, and separation from senses that are part of mental content). In these exercises, participants learn to focus on their activities (such as breathing, walking, etc.) and to always be aware of their condition and no judgment when processing emotions, feelings, and cognitions. That is, they learn to pay attention to their thoughts and feelings and no stick to their content; having a break; having some refreshments; summarizing the discussions and reviewing the practice of the next session; assigning homework. |
| Sixth    | Reviewing previous session experiences and receiving feedback from the patients; identifying the values of patients’ lives and specifying and focusing on these values and paying attention to their decision-making skill; using mindfulness techniques with an emphasis on the present; having a break; having some refreshments; summarizing the discussions and reviewing the practice of the next session; assigning homework. |
| Seventh  | Reviewing previous session experiences and receiving feedback from the patients; examining the values of the individual and deepening previous concepts; explaining the differences between values, goals, and common mistakes in value selection; discussing possible internal and external barriers to pursue values; listing the most important values and possible barriers to follow-up by the members and sharing them with the other members; discussing objectives related to values and characteristics of the (specific, measurable, realistic, and aligned with personal values) goals. identifying three of the most important values by the members and setting goals that they wanted to pursue; identifying the tasks/behaviors they intended to pursue to achieve those goals; demonstrating the risks of focusing on results. |
| Eighth   | Understanding the nature of desire and commitment (teaching about commitment to action); identifying behavioral plans according to the values and making a commitment to act on them; explaining some points concerning the concept of recurrence and readiness to deal with it; reviewing assignments and summarizing meetings; sharing the experiences of the members of the group with each other and the achievements and expectations that were not met; thanking the patients for participating in the group; performing the post-test. |
The results of Table 3 showed that the mean resilience score in the experimental groups (ACT and GSI) and the control group in three stages was significantly different. According to the results of the Box’s M test to check the equality of covariance matrices and considering the value of F, the null hypothesis was rejected; that is, the covariance matrices observed between different groups were equal (Box’s M=19.49, F=1.45, P<0.01). Also, based on the Levine’s test results on the equality of error variances, the assumption of the equality of variances was confirmed and the error variance of the dependent variables in all groups

### Table 3. Mean±SD of three times measurements of resilience scores in the experimental and control groups

| Variable       | Group          | Number | Mean±SD          |
|----------------|----------------|--------|------------------|
|                |                |        | Pre-test | Post-test | Follow-up |
| Resilience     | ACT            | 15     | 31.47±3.96 | 67.27±5.45 | 65.47±5.42 |
|                | Guided imagery | 15     | 30.87±2.87 | 61.13±6.17 | 56.40±4.54 |
|                | Control        | 15     | 32.73±2.73 | 33.0±3.83  | 31.3±4.16  |
|                | Total          | 45     | 31.69±3.26 | 53.8±15.93 | 51.07±15.31 |

### Table 4. Results of between-subjects and within-subjects repeated measures ANCOVA of the resilience scores

| Scale          | Source of Effect | Sum of Squares | Degree of Freedom | Mean Squares | F       | Significance | Eta Squared |
|----------------|------------------|----------------|-------------------|--------------|---------|--------------|-------------|
|                |                  |                |                   |              |         |              | GSI         | ACT         |
| Resilience     | Level            | 29.279711      | 1                 | 29.279711    | 89.8665 | 0.001        | 0.82        | 0.88        |
|                | Group            | 39.12319       | 2                 | 69.6159      | 83.190  | 0.001        |             |             |
|                | Error            | 64.1355        | 42                | 32.277       |         |              |             |             |

### Table 5. Bonferroni post-hoc test results for comparison of resilience scale in the three groups

| Group                              | Compared to the Group | Levels     | Mean Difference | Significance Level |
|------------------------------------|-----------------------|------------|-----------------|--------------------|
| Acceptance and commitment therapy  | Control               | Pre-test   | -1.26           | 0.87               |
| Guided imagery                     | Control               |            | -1.86           | 0.36               |
| Guided imagery                     | Control               | Post-test  | 34.26*          | 0.001              |
| Guided imagery                     | Guided imagery        |            | 6.13*           | 0.008              |
| Guided imagery                     | Control               | Follow-up  | 28.13*          | 0.001              |
| Acceptance and commitment therapy  | Control               | Follow-up  | 34.13*          | 0.001              |
| Guided imagery                     | Guided imagery        |            | 9.067*          | 0.001              |
| Guided imagery                     | Control               |            | 25.06*          | 0.001              |

*P<0.05
was equal (F=0.35, 0.21, 0.63). Mauchly’s sphericity test also showed that the compound symmetry was acceptable. In other words, there was a significant difference between resilience scores (of pre-test, post-test, and follow-up) among the ACT, GSI, and control groups (P<0.001). These results indicate the effectiveness of the ACT and guided imagery on the resilience of cardiac patients. Also, the higher resilience score in the ACT experimental group compared with the GSI group indicates greater effectiveness of this treatment. Therefore, the resilience level of cardiac patients participating in these two therapeutic groups increased significantly (Table 4).

The results of the Bonferroni post-hoc test showed that the scores of the resilience variable in both experimental groups in the post-test stage increased significantly compared with the control group. In other words, the ACT had a greater effect on increasing the resilience level of cardiac patients in post-test and follow-up (34.26, 34.13) than the guided imagery (28.13, 25.06). This means that changes in the ACT experimental group were more effective and sustainable. Also, the eta-squared values indicated greater effectiveness of ACT treatment than GSI (Table 5).

4. Discussion

The aim of this study was to compare the effectiveness of the ACT and guided imagery methods on the resilience of cardiac patients referred to the cardiac rehabilitation department in Mashhad City. The results of the study showed that ACT-based intervention was effective in increasing the resilience level of cardiac patients.

Our results were compatible with the research of Molina et al. [42], Ghorbani et al. [43], Qomian and Shayeri [44], Rahimian Booger [45], Saeed Nouri, Akbari and Salari [12], Besharat and Ramesh [41], Momeni et al. [46], Fazeli Kebriga et al. [47], Doostdar Tusi and Golshani [48].

Regarding the effectiveness of the ACT, it should be noted that this type of therapy aimed at making patients informed how to get rid of mind control strategies, how do not mingle with annoying thoughts, and how to tolerate more unpleasant emotions, such as anxiety. In fact, the use of detachment and acceptance techniques reduced the severity of these situations for the patients, and although this treatment did not directly improve the condition of the cardiac patients, according to Forbes, reduced the anxiety of stressful situations by using detachment and acceptance techniques, led to increased resilience [54]. In other words, ACT, in the first place, allows patients to change relationships with their inner experiences, reduce experiential avoidance, increase flexibility, and take more action in valuable paths. The results of Barros’ research showed that ACT led to greater adherence to values and improved quality of life and satisfaction. Also, Goodwin et al. showed that behavioral therapy based on ACT effectively and significantly improved the quality of life of chronic cardiovascular patients and their adherence to positive life changes [55]. In the ACT, behavioral commitment exercises along with detachment and acceptance techniques, as well as detailed discussions about one’s values and goals and the need to clarify values, led to the regulation of emotions and increased resilience and better perception of the disease. By substituting themselves as the context, clients were able to easily experience unpleasant inner events in the present and were able to detach themselves from unpleasant reactions, memories, and thoughts [25].

Pursuing valuable goals in life and commitment to achieve these goals can lead to improved performance and reduced psychological distress in the clients [56]. ACT puts emphasis on accepting as many unpleasant feelings as possible, concentrating on the present moment, and engaging in activities that are in line with personal values related to behavioral goals [14]. Also, cardiac patients feel death more than ever before. This treatment helps the patient to deal with stressful situations by increasing mindfulness, cognitive distancing (observation of thoughts), active involvement in the outside world, and striving to achieve a meaningful and genuine life to increase psychological resilience [25].

The results also showed that guided imagery was effective in increasing the resilience level of cardiac patients, which is consistent with the results of Hollier et al. [52], Menzies et al. [53], Penzien et al. [54], and Abdoli et al. [55].

In explaining the effectiveness of guided imagery therapy, it can be said that mental image is the main theme of human personality and behavior. A change in the mental image can change a person’s personality and behavior. All our actions, feelings, behaviors, and even abilities are shaped by this mental image [57]. Dibbets and Arentz believe that techniques, such as mental rotation, mental screening, muscle relaxation, and cognitive retrieval are skills that not only target a particular subject, image, and thought but also by replacing positive mental thoughts and images with negative thoughts and images, they play an important role in increasing psychological well-being, resilience, and quality of life, as well as reducing internal conflict. Some theories suggest that positive mental imagery weakens the hormonal and psychoneuroimmunological pathways that affect stress responses. According to the gate control theory, only one impulse can travel from the spinal cord to the brain at the same time, and if this pathway is occupied by the imagination, the sensation of pain cannot go to the brain; therefore,
the pain is reduced [58]. In this regard, Motahhari et al. consider mental imaging as a factor in improving the activity of patients with multiple sclerosis [59]. Guided mental imagery is effective in diverting the patient’s mind from annoying stimuli, creating relaxation, affecting the patient’s mood, and increasing resilience.

The greater effectiveness of ACT than guided imagery is explained by the fact that in guided imagery, more emphasis is placed on changing mental images in the direction of recovery, while in the ACT the emphasis is on disease acceptance, commitment to disease acceptance, and reassessment of goals. In this treatment, the main issue is the active and conscious acceptance of unpleasant life experiences. The patient can learn how to eagerly deal with his/her emotions, memories, physical feelings, and thoughts, how to avoid physical and psychological problems, and have a more active role in his/her life. Given that the problems and limitations caused by the disease cause patients to ignore their values; therefore, this method informs them about their usual solutions, sets goals for them, and motivates them to face more obstacles. In general, the goal of this type of treatment is to perform practical exercises and increase psychological flexibility, acceptance, cognitive defusion, and mindfulness. By doing these exercises, the patients get rid of the unpleasant experiences of the past, and by changing the reassessment of the current situation, their adaptation increases and their resilience improves.

Considering the effectiveness of ACT-based group therapy in improving cardiac patients, to generalize the results, it is recommended that this treatment be used as selective and complementary psychotherapy along with providing medical and pharmacological treatment to reduce psychological symptoms of cardiac patients and improve their living standards. It is also recommended that this method be used for the treatment of psychological disorders of other chronic patients and clinical disorders in different age and cultural groups, and the results be compared with drug therapy, either individually or in groups. Third, in the clinical context of cardiac patients, resilience components and coping strategies should be taught so that the affected patients can overcome the problems and pain caused by this disease. Fourth, in the implementation of treatment protocols, especially ACT, local allegories and metaphors should be used in accordance with the culture of the region.

5. Conclusion

Since the cardiac disease is one of the most common diseases in today’s society and has psychological backgrounds; thus, according to the results of this study, psychological interventions, such as the ACT and guided imagery can significantly increase the resilience of cardiac patients and improve their physical and mental condition. This type of treatment is an effective non-pharmacological method in the psychological management of this disease and it is necessary to be considered as an effective treatment along with drug therapy. By recognizing their feelings and emotions, clients can continue their valuable cognitive and behavioral activities away from the exaggerated evaluation of their inner experiences. At the same time, they can reduce their stress levels, leading to an increase in their quality of life.

Ethical Considerations

Compliance with ethical guidelines

This paper approved by Ahvaz Branch, Islamic Azad University Ethics Committee Code: IR.IAU.AHVAZ.REC.1398.012). The study also has been registered in the Clinical Trial Registration Center of Iran on 06/26/2009 (Code: Number IRTCT20190727044345N1). Also, this research has obtained legal permissions from the director of Imam Reza Hospital in Mashhad. Training sessions were held to inform participants of the way of conducting the research and to keep personal and related information confidential, to allow them to leave research whenever they wished. A written consent obtain from participants. They were given questionnaires before treatment intervention, and participants’ rights were explained for them.

Funding

This article is part of a PhD. dissertation of the first author entitled “Comparison of the Effectiveness of ACT and Guided Imagery on Disease Perception, Resilience, and Emotional Regulation (Positive and Negative) of Cardiac Patients Referred to the Cardiac Rehabilitation Department” approved by the Persian Gulf International, Khorramshahr-Khalije Fars Branch, Islamic Azad University, Khorramshahr, Iran.

Authors’ contributions

Final compilation: All authors; Research design, data collection, writing the initial version, final review: Abbas Ali Shahabi; Main idea, writing the original edition, final review: Parvin Ehteshamzadeh; Interpreting data, writing the original version, final review: Parviz Asgari; Interpreting data, writing the original edition, final review: Behnam Makvandi.

Conflicts of interest

The authors declared no conflict of interest.
Acknowledgements

We would like to thank all the patients and the staff of Imam Reza Hospital in Mashhad City (cardiac rehabilitation department) for their cooperation in this research.
مقایسه اثری خصوصی درمان مبتنی بر پذیرش و تعهد و تصویرسازی ذهنی هدایت گزارش تاب آوری بیماران قلبی مراجعه کننده به بخش بازتوانی قلب

عباس شهابی

1. دکتر پروین احتشام زاده

اهواز، دانشگاه آزاد اسلامی، واحد اهواز، گروه روانشناسی.

نشانی:

+98 (61) 33348336:

تلفن

ehtesham@iauahvaz.ac.ir:

پست الکترونیک

یکی از مهم‌ترین عوامل مرگ و میر در جهان، بیماری قلبی-عروقی است. درمان‌های بهینه، خستگی و مشاوره جسمانی، هم‌مانند تغییرات در رفتار و فکری بیمار، نقش محرکی در پیشگیری از بیماری قلبی-عروقی و هم‌مانند درمان‌های فیزیولوژیکی برای بیماران کلینیکی نقش مهمی دارند. بهترین روش برای پیشگیری از بیماری قلبی و عروقی، ممکن است به صورت یکی از کنترل‌های زیستی بویه از جمله ارتباط بازتوانی باشد.

هدف پژوهش حاضر مقایسه اثربخشی درمان مبتنی بر پذیرش و تعهد و تصویرسازی ذهنی هدایت شده بر تاب آوری است.

1398-1397 تاب آوری بیماران قلبی مراجعه کننده به بخش بازتوانی قلب در سال 45 نفر به عنوان نمونه انتخاب گردیدند. مداخلات شامل هشت جلسه (CD-RIS) را تکمیل کردند که پژوهش به روش پیش آزمون پس آزمون و پیگیری با گروه کنترل انجام شد. کارایی غیر کارآمد، رویدادهای پر استرس زندگی و همین‌طور سطح پایین تاب آوری در بروز و تشدید این بیماری نقش مؤثری دارد. هدف پژوهش حاضر مقایسه اثربخشی درمان مبتنی بر پذیرش و تعهد و تصویرسازی ذهنی هدایت شده بر تاب آوری است.

مواد و روش‌ها

داده‌ها از تحلیل اندازه‌گیری مکرر و آزمون بونفرونی در نسخه 45 (گروه درمان مبتنی بر پذیرش و تعهد) شصت دقیقه ای و ده جلسه (گروه تصویرسازی ذهنی هدایت شده) اتفاق داشت. SPSS نرم‌افزار نسخه 22 را تجزیه و تحلیل داده‌ها از تحلیل اندازه‌گیری مکرر نشان از اثربخشی معنادار هر دو روش بر افزایش تاب آوری بیماران قلبی دارد. همچنین، مقایسه زوجی گروه‌ها با استفاده از آزمون مقايسه‌ای چندگانه بهترین تغییرات در نهایت بهترین گروه کارآمد بود.

کلیدواژه‌ها:

درمان مبتنی بر پذیرش و تعهد، تصویرسازی ذهنی، تاب آوری، بیماران قلبی

مقام‌های

پژوهش‌های محدود نشان داده که نتایج تغییراتی در یک مسیر محسوب می‌شود. پژوهش‌های محدود بیماران قلبی مبتلا به فشار خونی و ریوی، بهترین روش‌ها برای بستگی به بازار، درمان و بازاریابی فرآیند بهبودی و تکامل بهبودی مشخص می‌کنند. تحقیق‌های انجام شده نشان می‌دهد که نتایج تغییراتی در یک مسیر محسوب می‌شود. پژوهش‌های محدود نشان داده که نتایج تغییراتی در یک مسیر محسوب می‌شود.

پژوهش‌های محدود نشان داده که نتایج تغییراتی در یک مسیر محسوب می‌شود.
است تا یواندان به روی‌های متغیری انجام می‌آورند ولی به‌طور کلی، با یک دانی، مطالعات مشابه در مورد یک‌دیگر که در این مطالعات می‌تواند به فضاهای عاملی مرتبط با مورد به کار بردن روش‌های فنلی به شکل دوگانه عاملی مورد بررسی قرار گرفته و شاخص‌ها است که نظریه‌نگارانی با رویکرد به‌طور کلی بر یک پدیده تحقیقاتی در مورد زندگی و شاخص‌های وابسته درمیان است. 

1. Resilience
2. Acceptance and Commitment Therapy

| 3. Psychological flexibility |
| 4. Self as context |
| 5. Being present |
| 6. Valuing |
| 7. Committed action |

درمان مبتنی بر پذیرش و تعهد ریشه در یک نظریه و قادر شد تا به طور کامل با زندگی معنادار و مبتنی بر ارزش است تا بتواند به روش‌های متفاوتی با تجارب ارتباط برقرار کند. 

ویهوف و همکاران با بررسی طولانی‌ریزی سطح سلامت روان شناختی، رفتاری در زمینه‌هایی است که اجتناب تجربه و زمان حال و تغییر یا حفظ رفتار در خدمت اهداف مناسبتر است، افزایش می‌دهد. همچنین توانایی برای ارتباط در بین گزینه‌های مختلف را حفظ می‌فرما و درمان مبتنی بر پذیرش و تعهد را بهبود می‌بخشند. 

درمان مبتنی بر پذیرش و تعهد، با بررسی سی‌بیمار نشان داد که نقش پذیرش و تعهد درمانی در وضعیت شغلی و عملکرد فیزیکی بهبود معنی‌داری را نسبت به از قبیل میزان تجربه درد، افسردگی، اضطراب و ناتوانی و معلولیت، نشان دادند که پس از اجرای طرح درمانی، بیماران در شاخص‌های پذیرش و تعهد درمانی بر درمان بیماران مبتلا به دردهای مزمن و همکاران در رابطه با اثربخشی از اثربخشی قابل قبولی برخوردارند و می‌توانند به عنوان درمان‌های نوین نام برده با اینکه از رویکرد شناختی رفتاری اثربخش تر نیستند، از اثربخشی قابل قبولی برخوردارند و می‌توانند به عنوان درمان‌های نوین نام برده با اینکه از رویکرد شناختی رفتاری اثربخش تر نیستند، از اثربخشی قابل قبولی برخوردارند و می‌توانند به عنوان درمان‌های ویهوف و همکاران با بررسی تحقیقاتی در مورد زبان و شناخت است که نظریه‌نگارانی با رویکرد به‌طور کلی بر یک پدیده تحقیقاتی در مورد زندگی و شاخص‌های وابسته درمیان است. 

1. Resilience
2. Acceptance and Commitment Therapy

| 3. Psychological flexibility |
| 4. Self as context |
| 5. Being present |
| 6. Valuing |
| 7. Committed action |
نمونه 

رضایت آگاهانه 

تابستان

شماره 26

نامه کتبی، فرم مسئولان بیمارستان امام رضا (ع) شهر مشهد، فرم پژوهش در پایگاه کارآزمایی بالینی ایران و کسب پس از تأیید موضوع پژوهش توسط کمیته اخلاق درمان، ادامه پژوهش، معیارهای تأیید ابتلا به بیماری‌های با منشأ عصبی، عدم ابتلا به بیماری جسمی دیگر، عدم درمانی، دامنه موافقت بیمار برای شرکت در پژوهش، داشتن مشکل قلبی و پذیرش انتخاب شدند.

بیمار قلب و همکاران حجم نمونه در پژوهش تجربی و نیمه تجربی آزمایش و یک کنترل) تقسیم شدند. از نظر صورت تصادفی بر اساس قرعه کشی ها به روش نمونه گیری پس آزمون در سال کننده و تعهد و تصویرسازی ذهنی هدایت شده بر تاب آوری بیماران قلبی.

پژوهش حاضر بررسی اثربخشی و مقایسه درمان مبتنی بر پذیرش و تعهد و تصویرسازی ذهنی هدایت شده بر تاب آوری بیماران قلبی عروقی نپرداخته است، بنابراین در این درمان مبتنی بر پذیرش و تعهد و تصویرسازی ذهنی هدایت شده با توجه به مرور پیشینه پژوهشی، هیچ مطالعه ای به بررسی تأثیر و جهت درک بهتر نسبت به اثربخش بودن این دو درمان لزوم هزینه بیمارستانی بیماری‌های مزمن داشته است، انتخاب معنی‌داری که تاکنون بر اضطراب، درد، طول مدت بیماری و تصویرسازی ذهنی هدایت شده نیز با توجه به نتایج مثبت و تاب آوری و کمک به بهبود زندگی فردی این بیماران داشته به تأثیری که بر افزایش انعطاف پذیری شناختی، سطح تحمل و توانایی کنترل بیماران نسبت به اضطراب و درد خود نشان داده و یکی از این روش‌ها می‌تواند بر افزایش سایر شرایط پزشکی شانه‌های شده است. به علاوه، تصویرسازی ذهنی تدریجی همراه با بازخورد موثر بوده و تأثیر این درمان در دوره پیگیری نیز ماندگار بود.

در مطالعه‌های دیگری که با هدف اجرای برنامه تجسم و صحبت درمانی موجود بود، موارف عامه به عنوان یک استراتژی ست که با تأکید بر تمرکز و استفاده از تصاویر، مناظر، صدا، موسيقى و لغات، احساس قدرت و آرمیدگی را منجر می‌کند. تحقیقات نشان داده اند که تجسم به عنوان یک تکنیک مناسبی در کاهش سردرد بیماران مبتلا به میگرن مؤثرتر و یکی دیگر از روش‌های درمانی مؤثر بر بیماری‌های مزمن، به عنوان یک تکنیک مناسبی در کاهش سردرد بیماران مبتلا به میگرن موثرتر و به منظور بررسی تأثیر روش‌های آرام سازی بر اضطراب بیماران، مشخص شد.

درمانی مبتنی بر بیماری معیارهای ورود به مطالعه و پیگیری با گروه کنترل است.

همچنین با توجه به میزان احساس بدن و احساس آرامی و ارزیابی این تجربه، به طرفی بر اساس مقدار و رنگ پیام و صحبت های زنده نیز این گروه نیز افراد قلبی شدید را شامل نمی‌شود. معیارهای ورود به مطالعه شامل فشار خون، ثانیهای قلبی، سکته قلبی، سکته مغزی، سکته عصبی و بروز بیماری‌های قلبی در بخش بازتوانی قلب است.

در مطالعه دیگری که با هدف اجرای برنامه تجسم و صحبت درمانی می‌شناسیم که این روش درمانی در کاهش افسردگی بیماران دیابتی مؤثر بوده و تأثیر این درمان در دوره پیگیری نیز ماندگار بود.

8. Guided Subjective Imagery
در ادامه ابزار گردآوری اطلاعات در این پژوهش شرح می‌دهند.

| جلسه | محتوای جلسات |
|-------|----------------|
| 1     | آشنایی آزمودنی‌ها با هم و مصاحبه کردن راجع به پرهجی و اهداف پژوهش و توصیه آزمودنی‌ها |
| 2     | به آزاد کردن شده تا یاربندی، احساس گرفتاری نظری و حرکت در پایین خوده |
| 3     | راهنمای تکنیک تعمیری مناسب راجع به تبادل گردش و کنترل کشیده و مراحل این تکنیک به پیمان آموزش داده شد. |

اطلاعات جمعیت شناختی و پرسش نامه تاب آوری کانر (Connor-Davidson)، دیویدسون، یک ابزار گردآوری نظری به اسکال لیکرت از صفر تا پنج که سازه تاب آوری را در اندازه‌های می‌سنجد. حداقل نمره تاب آوری در این مقیاس صفر و حداکثر نمره صد است. نتایج مطالعه مقدماتی مربوط به ویژگی‌های روان‌سنجی این مقیاس، پایایی و روایی آن را تأیید کرده است.

همسانی درونی، پایایی بازآزمایی و روایی همگرا و واگرای مقیاس. ویژگی‌های روان‌سنجی فرم فارسی این مقیاس کافی گزارش شده است.

مقایسه اثربخشی درمان مبتنی بر پذیرش و تعهد و تصویرسازی هدایت شده بر تاب آوری بیماران قلبی به‌طور زمین‌های کاهشگر بهره‌مند بود.

می‌تواند نشان دهد که فرم اطلاعات فردی که برای جمع‌آوری اطلاعات آزمودنی‌ها استفاده شد، شامل سن، جنسیت، تحصیلات، تأهل و سابقه انجام عمل جراحی قلب، زمان اولین بروز آریتمی، داروهای مصرفی، پزشک مراقب و درمان‌های دریافت شده، در دوره پنج ساعت؛ برای ساعت نه تا ساعت چهار صبح در درمانی پژوهشگر آموزش داده شدند. گروه کنترل نیز هیچ‌گونه ورزش در بخش دریافت نکردند و فقط زیر نظر پزشک معالج از آب‌سوزی و پرسشنامه انتخاب شدند.

نتایج نشان دادند که بیش از ۲۳٪ داروهاگر، که در پایان جلسه تاب آوری را مجدد تکمیل کردند. کلیه از شرکت‌کنندگان با توجه به شرایط اجرا شد و فقط دو نفر نتوانستند در دو جلسه شرکت کنند؛ بدین جسمی، چندین آزمودنی در گروه آزمایش درمان مبتنی پذیرش و تعهد نیز فقط پرسشنامه برجا گذاشتند و در پایان جلسه هیچ پرسشنامه انتخاب نشده بود. 9. Connor-Davidson

شماره ۲۶ دوره ۱۳۹۹ تابستان
یافته‌ها
در پژوهش حاضر میانگین و انحراف معیار سنی آزمودنی‌ها 9/47 و 55/31، GSI، 7/01 و 54/07: ACT به ترتیب در گروه آزمایش و کنترل بوده است. فراوانی جنسیت در گروه 8/63 و 93/57: و کنترل 46/7 و 93/3 درصد مردان و 8/63 و 93/57: در درصد زنان؛ در گروه آزمایش 20/7 و 3 درصد بیشترین درصد مربوط به سطح تحصیلات دیپلم با هشت نفر، بیشترین درصد مربوط به GSI درصد می‌باشد.

خلاصه محتوای جلسات آموزشی
| جلسه 1 | جلسه 2 | جلسه 3 | جلسه 4 | جلسه 5 | جلسه 6 | جلسه 7 | جلسه 8 |
|---------|---------|---------|---------|---------|---------|---------|---------|
| پیش جلسه | جلسه اول | جلسه دوم | جلسه سوم | جلسه چهارم | جلسه پنجم | جلسه ششم | جلسه هفتم |
نحوه 2 میانگین و احتمال استفاده سیستم آزمایشگری تقدم تاب آوری در گروه‌های آزمایش (ACT) و کنترل

جدول 2. نتایج تحلیل گروه‌یابی بین آزمون‌های تاب آوری در سه گروه

| متغیر         | گروه         | مجموع مراتب | میانگین سطح | درصد تاهل | درصد بیوه | درصد مجرد |
|----------------|--------------|-------------|--------------|------------|----------|----------|
| تاب آوری       | گروه آزمایش | 18          | 277.89       | 31         | 80       | 10       |
|                     | گروه کنترل   |             |              |            |          |          |
| میانگین و انحراف معیار | گروه آزمایش | 75.69       | 78.72        | 31         | 80       | 10       |
| میانگین و انحراف معیار | گروه کنترل   |             |              |            |          |          |
| میانگین و انحراف معیار | کل           | 105.48     | 81.43        | 31         | 80       | 10       |

نتایج نشان می‌دهد که میانگین و انحراف معیار تاب آوری در گروه آزمایش (ACT) و گروه کنترل در سه مرحله تفاوت معنی‌داری دارد.

جدول 2. نتایج آزمون تعمیری پیوستن برای مقایسه مقیاس تاب آوری در سه گروه

| مقیاس         | گروه         | مجموع مراتب | میانگین سطح | درصد تاهل | درصد بیوه | درصد مجرد |
|----------------|--------------|-------------|--------------|------------|----------|----------|
| تاب آوری       | گروه آزمایش | 18          | 277.89       | 31         | 80       | 10       |
|                     | گروه کنترل   |             |              |            |          |          |
| میانگین و انحراف معیار | گروه آزمایش | 75.69       | 78.72        | 31         | 80       | 10       |
| میانگین و انحراف معیار | گروه کنترل   |             |              |            |          |          |
| میانگین و انحراف معیار | کل           | 105.48     | 81.43        | 31         | 80       | 10       |

نتایج نشان می‌دهد که میانگین و انحراف معیار تاب آوری در گروه آزمایش (ACT) و گروه کنترل در سه مرحله تفاوت معنی‌داری دارد.
درمان دچار تاب آوری، به هدف افزایش سطح تاب آوری بیماران قلبی، باید به توجه داشت که این بیماران به دلیل تجربه‌های درونی، ممکن است نتوانند از واکنش‌ها، خاطرات و اهداف فردی خود برخوردار باشند. همچنین منجر به نیازمندی برای تغییر روابط و رفتارهای آن‌ها می‌شود. پژوهشکده نیز نشان داده است که بیماران قلبی مراجعه کننده به بخش بازتوانی قلب در شهر مشهد به هدایت شده بر تاب آوری باید برای افزایش سطح تاب آوری، درمانی مبتنی بر پذیرش و تعهد، و تصویرسازی ذهنی هدایت شده برای آن‌ها ارائه داده شود.

بررسی مقایسه اثربخشی درمان مبتنی بر پذیرش و تعهد و تصویرسازی ذهنی هدایت شده بر تاب آوری بیماران قلبی، با استفاده از آزمون‌های ACT و GSI نشان می‌دهد که درمان مبتنی بر پذیرش و تعهد، و تصویرسازی ذهنی هدایت شده بر تاب آوری بیماران قلبی، نسبت به ترکیب دو گروه دیگر، بهتر عمل می‌کند.

نتایج آزمون‌های مقایسه‌ای نشان می‌دهد که درمان مبتنی بر پذیرش و تعهد، و تصویرسازی ذهنی هدایت شده بر تاب آوری بیماران قلبی، بهتر عمل می‌کند.

\[ \text{ACT گروه} = 34 \]
\[ \text{GSI گروه} = 28 \]

\[ \text{ACT بیماران قلبی} = 34 \]
\[ \text{GSI بیماران قلبی} = 28 \]

\[ \text{ACT گروه} = 34 \]
\[ \text{GSI گروه} = 28 \]

\[ \text{ACT بیماران قلبی} = 34 \]
\[ \text{GSI بیماران قلبی} = 28 \]

\[ \text{ACT گروه} = 34 \]
\[ \text{GSI گروه} = 28 \]

\[ \text{ACT بیماران قلبی} = 34 \]
\[ \text{GSI بیماران قلبی} = 28 \]

\[ \text{ACT گروه} = 34 \]
\[ \text{GSI گروه} = 28 \]

\[ \text{ACT بیماران قلبی} = 34 \]
\[ \text{GSI بیماران قلبی} = 28 \]

\[ \text{ACT گروه} = 34 \]
\[ \text{GSI گروه} = 28 \]

\[ \text{ACT بیماران قلبی} = 34 \]
\[ \text{GSI بیماران قلبی} = 28 \]
پیکتی و یکی از روش‌های درمانی فیزیولوژیک کارآمد در مدیریت شروک و اثرات انگیزشی درمانی مستند به صورت دوگانه، بیشتر این می‌باشد که به نحوی که کم‌درمانی در کلارک حرکت‌های حرکتی مربوط به تغییر قرار دارند، بلکه با جایگزین کردن افکار و تصاویر ذهنی مثبت به جای افکار و تصاویر ذهنی منفی، نقش بسیار مهمی در افزایش بهزیستی روان شناختی، افزایش سطح تاب‌آوری، کیفیت زندگی و کاهش شیوع نقش دارد. برخی از نظریه‌ها بیانگر این است که تصویرسازی ذهنی مثبت نقش مهمی در تقویت سلامتی مزمنی، سیستم‌های هورمونی و سایکوپارسیاتریک می‌گویند. اینکه تصویرسازی ذهنی مثبت، مزمنی و سایکوپارسیاتریک می‌گویند می‌تواند در این راستا نقش مهمی در بهبود سلامتی اجتماعی داشته باشد.

پیشنهاد می‌شود به منظور ترکیبی در تمرین های تاریخی، توجه به بهبود کیفیت زندگی بیماران و بهبود صورت‌پوستی در بازار بهبود نشان دهنده بود، تاب آوری را به‌طور مداوم به عنوان یکی از افراد مهم در کمک به بهبود بیماران در مواجهه با مشکلات و محدودیت‌های جسمانی و روانی و بهبود کیفیت زندگی و روانی آنها در نظر گرفت.

نتیجه‌گیری
از آنجایی که بیماری قلبی یکی از بیماری‌های شایع در جامعه امروزی و در زمان‌های جدیدی، از جمله با استفاده از روان‌شناختی و چالش‌های جامعه‌ای، استفاده از روان‌شناختی و شناخت‌های جامعه‌ای در درمان بیماران قلبی می‌تواند نقش مهمی در درمان و بهبود بیماران و افزایش سطح تاب‌آوری و کیفیت زندگی آنها داشته باشد. این نشان می‌دهد که توجه به بافت کلینیکی بیماران و همچنین اهمیت آنها در بهبود بیماران و بهبود زندگی آنها در مواجهه با مشکلات و محدودیت‌های جسمانی و روانی اهمیت بالایی دارد. به طور کلی، این نتیجه‌گیری نشان می‌دهد که توجه به بافت کلینیکی بیماران و بهبود زندگی آنها در مواجهه با مشکلات و محدودیت‌های جسمانی و روانی اهمیت بالایی دارد.
و تصویرسازی ذهنی هدایت شده بر ادراک بیماری، تاب آوری و تنظیم هیجده (مثبت و منفی) بیماران قلیبی مراجعه کننده به خشکی پزشکی کلینیک در مشهد در آزاد اسلامی واحد مشهد ملی خرمشهر خلیج فارس است.

مشارکت نویسندگان
نویسنده ترسیم دوای و باریکی نهایی و مهیasis نویسندگان تفسیر داده‌های پژوهش و استانداردی ایده اصلی پروین تکی؛ ایده اصلی پروین است. 

تعارض منافع
بنابر اظهار نویسندگان، این مقاله عهده منافع تدار. 

تشکر و قدردانی
در پایان از تمامی بیماران و همچنین از کارکنان محترم بیمارستان یاد رضا (ع) مهربان (بخش پزشکی کلینیک) برای همکاری در این پژوهش تشکر می‌شود.
Ghanei Gheshlagh R, Sayehmiri K, Ebadi A, Dalvandi A, Dalvand S, Noori S A, Akbari B, Salari A. [Comparing the psychological resiliency of patients with type II diabetes, The Horizon of Medical Sciences. 2017; 23(2):135-140. [DOI:10.18869/acapub.hms.23.2.135]

Jiang G, Wang D, Li W, Pan Y, Zheng W, Zhang H, Sun YV. Coronary heart disease mortality in China: age, gender, and urban-rural gaps during epidemiological transition. Revista Panamericana de Salud Pública. 2012; 31:317-24. [DOI:10.1590/S1020-4989201200000008] [PMID]

Yousefi R, Aghahi H, Toghyani E. [Comparison of early maladaptive schemas and cognitive emotion regulation in cardiac patients and normal individuals (Persian)]. Journal of Advances in Medical and Biomedical Research. 2016; 107:130-43. http://zums.ac.ir/journal/article-1-3781-en.html

Mohammad Pour S, Rahimian A, Mohammad Rezaei A. [The role of resilience in adjustment to stressful life events and psychiatric symptoms in patients with coronary artery disease (Persian)]. Journal of Zanjan University of Medical Sciences and Health. 2014; 23:48-60. http://zums.ac.ir/journal/article-1-3087-fa.html

Dunderdale K, Thompson DR, Miles JN, Beer SF, Furze G. Quality-of-life measurement in chronic heart failure: Do we take account of the patient perspective? European Journal of Heart Failure. 2011; 13(4):572-82. [DOI:10.1016/j.ejheart.2010.04.006] [PMID]

Karoly P, Ruehlman LS. Psychological “Resilience” and its correlates in chronic pain: Findings from a National Community Sample. The Journal of Pain. 2006; 123:90-7. [DOI:10.1016/j.jpain.2006.02.014] [PMID]

Inzlicht M, Aronson J, Good C & McKay L. A particular resiliency to threatening environments. Journal of Experimental Social Psychology. 2005; 41(6):389-98. [DOI:10.1016/j.jesp.2005.06.005]

Brinkborg H, Michanek J, Hesser H, Berglund G. Acceptance and Commitment therapy for the treatment of stress among social workers: A randomized controlled trial. Behaviour Research and Therapy. 2011; 49(6):389-98. [DOI:10.1016/j.brat.2011.03.009] [PMID]

Ong AD, Zautra A J, Reid MC. Psychological resilience predicts decreases in pain catastrophizing through positive emotions. Psychology and Aging. 2010; 25(3):516-23. [DOI:10.1037/a0019384] [PMID] [PMCID]

Newton-John TR, Mason C, Hunter M. The role of resilience in adjustment and coping with chronic pain. Rehabilitation Psychology. 2014; 59(3):360-5. [DOI:10.1037/a0037023] [PMID]

DoustdarTousi S, A Golshani S. [Effect of resilience in patients hospitalized with cardiovascular diseases (Persian)]. Journal of Mazandaran University of Medical Sciences. 2014; 24(116):102-9. https://www.researchgate.net/publication/289352389_Effect_of_resilience_in_patients_hospitalized_with_cardiovascular_diseases

Noori S A, Akbari B, Salari A. [Comparing the psychological resiliency in patients with coronary artery disease and normal subjects (Persian)]. Journal of Guluin University of Medical Sciences. 2014; 23(91):47-52. file:///C:/Users/Negah-02/Downloads/67413977805%20(1).pdf

Ghani Emeshlagh R, Sayehmiri K, Ebadi A, Dalvandi A, Dalvand S, Bagher Maddah S, et al. The Relationship between Mental Health and Resilience: A Systematic Review and Meta-Analysis. Iranian Red Crescent Medical Journal. 2017; 19(6):e13537. [DOI:10.5812/rcmj.13537]

Abedi MR, Izady R. Acceptance and commitment therapy. Tehran: Jangal; 2013.

Baghban Baghestan A, Aref Sheibani Kh, Javadani Masrur. Acceptance and Commitment based therapy on disease perception and psychological capital in patients with type II diabetes. The Horizon of Medical Sciences. 2017; 23(2):135-140. [DOI:10.18869/acapub.hms.23.2.135]

Izadi R, Abedi MR. [Alleviation of obsessive symptoms in treatment-resistant obsessive-compulsive disorder using acceptance and commitment-based therapy (Persian)]. Feyz. 2013; 17(3):275-86. http://feyz.kaums.ac.ir/article-1-1963-en.html

Hayes SC, Luoma JB, Bond FW, Masuda A, Lillis J. Acceptance and commitment therapy: Model, processes and outcomes. Behaviour Research and Therapy. 2006; 44(1):1-25. [DOI:10.1016/j.brat.2005.06.006] [PMID]

Orsillo SM, Batten SV. Acceptance and Commitment Therapy in the treatment of posttraumatic stress disorder. Behavior Modification. 2005; 29(1):95-129. [DOI:10.1177/0145445504478076] [PMID]

Irandoost F, Neshat doost H T, Nadi M A, Safary S. The effectiveness of Acceptance and Commitment Therapy (ACT) on the rate of chronic pain and pain catastrophizing in women with chronic low back pain. Journal of Research in Psychological Health. 2014; 8(3):31-40. http://rph.kh. ac.ir/article-1-2226-en.html

Hulbert-Williams NJ, Storey L, Wilson KG. Psychological interventions for patients with cancer: psychological flexibility and the potential utility of Acceptance and Commitment Therapy. European Journal of Cancer Care. 2015; 24(1):15-27. [DOI:10.1111/ecc.12223] [PMID]

Izadi R, Abedi MR. [Alleviation of obsessive symptoms in treatment-resistant obsessive-compulsive disorder using acceptance and commitment-based therapy (Persian)]. Feyz. [Journal of Kashan University of Medical Sciences]. 2013; 17(3):275-86. http://feyz.kaums.ac.ir/article-1-1963-en.html

Parsa M, Sabahi P, Mohammardar MA. [The effectiveness of acceptance and commitment group therapy on anxiety and depression in women with MS who were referred to the MS association (Persian)]. Journal of Clinical Psychology. 2014; 6(1):29-38. [DOI:10.22075/ JCP.2018.11686.1156]

Hor M, Aghaei A, Abedi A, Attari A. [The effectiveness of acceptance and commitment therapy on depression in patients with type 2 diabetes (Persian)]. Journal of Research in Behavioural Sciences. 2013; 11(2):121-8. https://www.sid.ir/en/Journal/ViewPaper. asp?ID=338209

Behrouz B. [The effectiveness of group-based acceptance and commitment therapy on post-traumatic stress disorder, coping styles, and self-efficacy in girls with abnormal grief (Persian)]. Journal of Clinical Psychology. 2016; 7(28):81-91. https://www.sid.ir/en/Journal/ViewPaper. asp?ID=532986

Mohammadi Khashouei M, Ghorbani M, Tabatabaei F. The effectiveness of Acceptance and Commitment Therapy (ACT) on Self-Efficacy, Perceived Stress and Resiliency in Type II Diabetes Patients. Global Journal of Health Science. 2017; 9(5):18-26. [DOI:10.5539/gjhs.v9n5p18]

Tavakolizadeh J, Kianmehr M, Basiri Moghadam M, Pahlavan M. Effect of guided visualization on anxiety of patients with acute coronary syndrome admitted to the cardiac intensive care unit. The Horizon of Medical Sciences. 2015; 21(3):147-53. [DOI:10.18869/acapub.hms.21.3.147]
Chronic tension type headache. Scandinavian Journal of Caring Sciences. 2012; 26(2):254-61. [DOI:10.1111/j.1471-6712.2011.00926.x] [PMID]

[56] Hayes SC, Masuda A, Bissett RT, Luoma J, Guerrero LF. DBT, FAP and ACT: How empirically oriented are the new behavior therapy technologies? Behavior Therapy. 2004; 35(1):35-54. [DOI:10.1016/S0005-7894(04)80003-0]

[57] Hart J. Guided imagery. Alternative and Complementary Therapies. 2008; 14(6):295-9. [DOI:10.1089/act.2008.14604]

[58] King K. A Review of the Effects of Guided Imagery on Cancer Patients with Pain. Complementary Health Practice Review. 2010; 15(2):98-107. [DOI:10.1177%2F1533210110388113]

[59] Özü Ö. Guided imagery as a psychotherapeutic mind-body intervention in health psychology: A brief review of efficacy research. Europe’s Journal of Psychology. 2010; 6(4):227-37. [DOI:10.5964/ejop.v6i4.232]
