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Research Paper

Comparing the Effects of Islamic Spiritual Therapy and Stress Inoculation Training on Distress Tolerance and Anxiety of Patients With Stomach Cancer

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ABSTRACT

Background and Objectives: This study was conducted to assess the effects of Islamic spiritual therapy compared to cognitive-behavioral therapy based on stress inoculation training (SIT) on distress tolerance and anxiety sensitivity in patients with stomach cancer.

Methods: This research was a quasi-experimental study based on a pre-test and post-test design with a control group. The research population included patients with stomach cancer in Ardabil City, Iran in 2021. Sixty individuals were selected through convenience sampling and randomly divided into three groups (two experimental groups and one control group). The measurement tools were Simon and Gaher's distress tolerance scale and the Anxiety sensitivity index by Floyd et al., which were administered to all three groups before the group intervention and at the end of the tenth session. The first experimental group was exposed to Islamic spiritual therapy, the second test group received SIT and the control group did not receive any psychological treatment. Covariance analysis was used to analyze the data.

Results: The results of multivariate covariance analysis showed that the Islamic spirituality therapy and SIT had a significant effect on distress tolerance and anxiety sensitivity compared to the control group. However, Islamic spiritual therapy was more effective in improving distress tolerance (F=445.940) and reducing anxiety sensitivity (F=65.502) compared to the SIT group (P≤0.01).

Conclusion: It appears that the combination of Islamic spiritual therapy with SIT, despite its emphasis on irrational thoughts, is less effective than Islamic spiritual therapy alone in reducing negative thoughts.

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Introduction

Stomach cancer is considered one of the critical causes of death among other cancers worldwide, although its incidence has decreased during the last decade [1]. However, the death rate of stomach cancer has decreased significantly since 1930 in Western countries [2]. The diagnosis of cancer affects many physical, mental, psychological, financial and spiritual dimensions of the patient and causes increased spiritual problems in these patients [3]. Samiee and Kalhor [4] showed that 76% of cancer patients have a medium and low level of spiritual health. Also, in the study conducted by Moradi-Joo et al. [5], the level of spiritual health in more than 65% of the samples was reported as medium. On the other hand, the results of studies have shown that the lack or low level of spiritual health leads to severe pain and fatigue, increased disease burden, decreased quality of life (QoL), and also mental disorders, such as depression, hopelessness, and suicidal thoughts in cancer patients [6].

Another feature of psychology whose improvement can affect the process of cancer recovery is the increase in distress tolerance. Distress tolerance is the ability to withstand challenging events, high-pressure situations, and strong emotions, or to actively and positively confront these pressures [7]. Individuals with low distress tolerance first perceive excitement as unbearable and struggle to cope with their distress and confusion. Secondly, these individuals do not accept the existence of their emotions and feel shame and confusion about them because they underestimate their ability to cope with emotions. The third major characteristic of emotional regulation of people with low distress tolerance is their tendency to prevent negative emotions and to seek immediate relief from them [8]. During research, McEvoy and Mahoney [9] found that the cognitive-behavioral therapy group has played a role in increasing distress tolerance. Kajbaf et al. [10] concluded that the treatment based on Islamic spirituality had a significant effect on distress tolerance and anxiety in the post-test and follow-up stages.

Another feature that can be discussed in cancer patients is anxiety sensitivity, which refers to a person's concern about physical symptoms related to anxiety. In other words, the tendency to fear is a tragic interpretation of anxiety symptoms, and it is the primary reason for the persistence and maintenance of the most common disorders, especially anxiety disorders. This tendency contributes to increased anxiety responses and generates fear of stimulus-related triggers [11]. One of the characteristics of people with anxiety sensitivity is negative evaluation and fear of all the usual symptoms of distress. These common symptoms create more intense reactions in these individuals, which increases the intensity of anxiety symptoms [12]. Meanwhile, anxiety sensitivity, as a cognitive variable, reflects individual differences defined by a fear of anxiety (fear of fear) and indicates a tendency to catastrophize the consequences of such feelings [13]. Gholami et al. [14] reported that group counseling can reduce the symptoms of anxiety sensitivity (physical and mental) by the cognitive-behavioral method. Taheri [15] found that, in the post-test, anxiety sensitivity scores in subjects undergoing cognitive therapy based on mindfulness showed a significant decrease compared to those in the control group. Various studies have revealed that psychological stress caused by daily life events gradually weakens and inhibits the activity of the immune system. This weakening of the immune system can lead to increased susceptibility to infectious diseases and even cancer [16].

One of the ways to reduce or tolerate the distress of medical conditions is through the use of psychological treatments, such as spirituality therapy and cognitive-behavioral therapy based on stress inoculation training (SIT), which have significant effects. Also, many studies have shown the effectiveness of spiritual and religious interventions on anxiety [17]. Therefore, both approaches can be effective in reducing the psychological problems of cancer patients. However, evaluating the superiority of the spiritual approach over cognitive behavioral therapy is the main question of this research. Therapeutic spirituality involves considering the spiritual beliefs of a cancer patient in the treatment process—beliefs that, by creating unique experiences, lead to excellence and responsible ethics in individuals [18]. Research shows that all psychological approaches are effective for cancer patients; however, spiritual treatment emphasizes a person's relationship with themselves and their spiritual criteria. Studies indicate that spiritual interventions, especially when combined with behavioral structuralism, can reduce the psychological symptoms of these patients compared to conventional methods [19]. Stress levels can be reduced using stress management and relaxation techniques, which in turn can help maintain health and improve safety and social performance [20]. Based on this information, the present research was conducted to compare the effect of Islamic spirituality therapy with cognitive-behavioral therapy based on SIT on distress tolerance and anxiety sensitivity in stomach cancer patients.

Methods

Research method, statistical population, sample size and sampling method

This research quasi-experimental study was performed based on a pre-test and post-test design with a control group. The research population included patients with stomach cancer in Ardabil City, who were undergoing chemotherapy in 2021. The research sample included 60 patients who were randomly selected by convenience sampling method and divided into three groups: The first test group (Islamic spirituality therapy group), the second test group (cognitive-behavioral therapy group based on SIT) and the control group (which received only the usual treatment of chemotherapy).

The inclusion criteria included having a minimum age of 30 years and a maximum age of 70 years, a disease duration of six months to two years, a diagnosis of stomach cancer confirmed by the attending physician, willingness to cooperate and participate in the research, literacy in reading and writing, alertness and awareness of the disease, being Muslim, no history of mental disorders before the diagnosis of cancer, no chronic physical diseases other than cancer, no recent life crises unrelated to cancer (such as divorce or the death of loved ones), completion of a consent form to participate in therapy sessions, the ability to participate in group therapy sessions, and not being enrolled in other training programs simultaneously, as well as not being absent for more than three sessions in the training program. The exclusion criteria included mental issues, blindness, deafness, or a history of psychological problems, the individual's unwillingness to continue participation, absence from more than three sessions in the training program, and a worsening or critical condition of the patient during the experiment.

Procedure

In the process of conducting this research, first, two treatment centers in Ardabil City (Imam Khomeini Hospital and Shafa Parto Chemotherapy Center) were randomly selected from a total of five centers. Patients with stomach cancer who were referred to these two centers for treatment and chemotherapy were chosen voluntarily. The participants were assured that their information would be kept and used solely for scientific purposes, without any value judgments made about them. Subsequently, the consent of the eligible participants was obtained to participate in the research as a group, and they were given a schedule at the Kimia Counseling Center to participate in the group therapy sessions. It should be noted that in the first session, psychotherapy sessions were conducted with the coordination of the participants, and then the pre-test was administered to all participants. After this stage, the first group (Islamic spirituality therapy) and the second group (cognitive-behavioral therapy based on SIT) received their respective psychological treatments, while the control group did not receive any psychological treatment. In the final session, the post-test was administered to all three groups

Research tools

The following tools were used:

Distress tolerance scale

The distress tolerance scale, developed by Simons and Gaher, is a self-assessment tool consisting of 16 items Subjects answered the questions on a five-point Likert scale (from completely agree to completely disagree). The scoring for each sub-scale ranges from "one" to "five". The α coefficient for this scale is 0.82, indicating good reliability [8]. Based on the results obtained from Azizi et al.'s research [21], the reliability coefficient (Cronbach's α) of the questionnaire was estimated to be 0.67. The correlations of the distress tolerance scale with problem-oriented coping methods, emotion-oriented coping methods, less effective coping methods and ineffective coping methods are 0.213, -0.278, -0.337 and -0.196, respectively.

Anxiety sensitivity index

The anxiety sensitivity index, developed by Floyd et al. is a self-report questionnaire with 16 items and is scored on a five-point Likert scale (very little [one] to very much [five]). The total score ranges from 16 to 80. A score between 16 and 26 indicates a low level of anxiety sensitivity, while a score between 26 and 33 indicates moderate anxiety sensitivity. A score higher than 33 indicates a very high level of anxiety sensitivity. Regarding the validity and reliability of the questionnaire, reliability and validity address the extent to which a measuring tool accurately assesses what it is intended to measure [22]. In this study, the validity of the questionnaire was evaluated in the research conducted by Mashhadi et al. [23]. The Cronbach's α coefficient calculated in the research [22] for this questionnaire was estimated to be >0.7.

Research protocols

Islamic spirituality therapy sessions were held during ten sessions, each lasting 90 minutes, for three months. A summary of the treatment protocol is provided below.

First session

Members were introduced to one another, and the reasons for forming the group were discussed. Participants were reminded to reflect on the implicit and personal meaning of spirituality and its definition from their individual perspectives. The session included an exploration of the belief in a superior and holy power among the members, as well as an examination of the therapy-seekers' perceptions and beliefs about spirituality.

Second session

This session focused on self-awareness and communication with oneself, encouraging participants to listen to their inner voice. It involved examining their needs and goals, enhancing self-knowledge and recognizing their abilities, practicing positive thoughts while avoiding negative ones, reviewing past successes and discussing whether there are other sources of knowledge and spiritual power to help solve their problems.

Third session

This session focused on giving meaning to life events regarding values, goals and faith. It included discussions about feelings of guilt, repentance, self-forgiveness, forgiveness of others and refraining from using vengeful methods toward others. Participants were encouraged to reflect on their experiences and express their memories, as well as their feelings after repentance. The session also involved describing the greatness and mercy of God, expressing gratitude for His blessings, discussing the impact of forgiveness on fellow human beings, and sharing personal examples of forgiveness, along with the feelings experienced afterward.

Fourth session

This emphasized self-care in maintaining awareness, hope, and expectation, as well as acceptance, patience, stability, tolerance, acting responsibly, and promoting personal and social utility.

Fifth session

This session focused on altruism, engaging in spiritual work within a group, gratitude and its effects, and spending time alone with the group while recalling individuals instead. It also involved teaching the importance of smiling and kindness, creating enlightenment and insight to discover the internal and external gifts of God that we possess and fostering wise thinking to reflect on these gifts, ultimately leading to satisfaction and its effect on improving self-confidence, self-reliance, and self-esteem.

Sixth session

This session emphasized increasing self-control in maintaining awareness, fostering hope and expectation, acceptance, patience, stability, tolerance, responsible action and personal and social utility.

Seventh session

This session involved discussing and experiencing the presence that arises from a purposeful mind and learning to control automatic thoughts that lead to negative feelings and impulsive actions. It aimed to strengthen intellect, wisdom, and alertness, while also addressing the effects of prayer and admonition on mental health. Participants learned how to pray, for whom to pray, the content of prayers, and how to express their deep sufferings to God with a positive focus on God's wisdom.

Eighth session

This session emphasized reality and the need for meaning and growth in life to maximize motivation for change by establishing a relationship based on empathy and mutual trust. It focused on achieving lofty, growing, and meaningful goals while accepting God's wisdom in issues that cannot be changed, incorporating practical exercises, and creating a model of recovery.

Ninth session

This session involved spiritual autonomy, which involves dominating rational powers over other influences, seeking help from God and addressing how to align all dimensions of human existence under the control of reason and Sharia.

Tenth session

This session involved discussion about death, addressing the reasons for fearing death, resurrection, and life after death. This session includes themes of gratitude,

faith, and trust in God, along with practices and conversations on how to express gratitude and trust. Participants drew a representation of their ideal perspective without focusing on the clock, creating a beautiful image while disregarding time [23].

A summary of the content of cognitive-behavioral therapy sessions based on the SIT

First session

Presenting general information about the program and its goals, reviewing stressors, discussing the physical effects of stress, outlining the possible consequences of chronic stress on health, training and implementing gradual muscle relaxation for various muscles (left wrist and forearm muscles, right wrist and forearm muscles, forehead, eyes, jaws, neck, lips, shoulders, stomach, left leg and right leg).

Second session

Continuing with gradual muscle relaxation, discussing stress and awareness, teaching gradual muscle relaxation for eight muscle groups, completing the second checklist of stress signs and reviewing the effects of stress, including the occasional increase in physical symptoms related to stress.

Third session

Breathing, imagery, gradual muscle relaxation, connection of thoughts and emotions, introduction of diagrammatic breathing, gradual muscle relaxation training for four muscle groups, practicing visualization and relaxation, reviewing the signs and effects of stress, investigating the relationship between thoughts and feelings, and training the power of thought.

Fourth session

Breathing, visualization, gradual passive muscle relaxation, negative thinking and distortions, a combination of diaphragmatic breathing with visualization, gradual passive muscle relaxation along with imagery of a special place, examination of negative thinking and cognitive distortions, the effect of negative thinking on behavior, and the practice of recognizing negative thoughts.

Fifth session

Autogenic training for heaviness and heat, replacement of logical thoughts with logical ones, introduction to autogenic training and presentation of its instructions, implementation of autogenic training for heaviness and heat, examination of the difference between logical and illogical self-talk, introduction of the steps for substituting illogical thoughts with logical ones and exercises for substituting illogical thoughts.

Sixth session

Autogenic training for heartbeat, breathing, abdomen, and forehead, efficient coping, introduction to diaphragmatic breathing, performing autogenic training for heartbeat, breathing, abdomen and forehead, discussion about integrating stress management and relaxation, defining confrontation, introducing the types of efficient and inefficient confrontation, and discussing counter strategies.

Seventh session

Autogenic training along with visualization and self-introduction, implementing effective confrontational responses, performing autogenic exercises along with visual imagery and positive self-inductions, practicing efficient confrontation, introducing the softening technique for powerful stressors and practicing this technique.

Eighth session

Mantra meditation, anger management, introduction to mantra; presentation of mantra body states and practice of mantra meditation, discussion about the benefits of regular practice, exploration of the concept of anger and responses to anger, assisting with self-assessment of members regarding anger, discussion about anger awareness, and anger management training.

Ninth session

Breathing counting mediation, training, implementation of breath counting mediation, and sun mediation with autogenic techniques, introduction of interpersonal styles, discussion about non-expressive behavior, presentation of the components of expressiveness, discussion about using problem-solving for conflicts, and examining the steps for more expressiveness behavior.

Tenth session

Visualization and meditation, discussion of social support and program review, practice of relaxation, implementation of imaging a beach scene and breath counting meditation, discussion about social support and its benefits, discussion about the obstacles to maintaining social support, teaching stress management techniques

Table 1. Mean pre-test and post-test scores of distress tolerance and anxiety sensitivity in three groups of patients with stomach cancer

Parameter	Stage	Mean±SD		
		Islamic Spirituality Therapy Group	Cognitive-behavioral Therapy Based on SIT Group	Control Group
Distress tolerance	Pre-test	30.90±7.46	28.60±5.76	28.05±4.19
	Post-test	56.15±1.83	47.10±10.82	27±3.27
Anxiety sensitivity	Pre-test	55.45±10.03	53.65±14.01	56.60±15.17
	Post-test	29.35±7.34	34.90±8.22	56.35±15.20

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to sustain social support, review of the entire program, and assistance for group members in creating a personal stress management program.

Results

Most participants across all three groups had the highest frequency of disease duration of two and three years, while the lowest frequency was observed for a disease duration of five years.

Using descriptive indices, the Mean±SD of the research variables were investigated.

According to the results in Table 1, for patients with stomach cancer, the mean pre-test score of distress tolerance was 30.90 ±7.46, 28.60±5.76 and 28.05±4.19, while in the post-test, it was 56.15±10.83, 47.10±10.82, and 27±3.27, in the Islamic spirituality therapy group, Cognitive-behavioral therapy based on sit group and control group groups, respectively. The mean pre-test score of

Table 2. Results of univariate covariance analysis regarding the difference in the effect of three treatment methods on distress tolerance with pre-test control

Source of Change	SS	df	MS	F	P	Eta Coefficient	Test Power
Distress tolerance (pre-test)	758.001	1	758.001	55.669	0.001	-	-
Group	3881.252	2	7762.505	10.872	0.002	0.163	1
Error	3904.349	56	69.721				

SS: Sum of squares; MM: Mean squares.

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P≤0.01.

Table 3. Results of Bonferroni's post hoc test to compare the mean scores of the studied groups in distress tolerance with pre-test control

Groups		Mean Difference	Error	P
Islamic spirituality therapy	Cognitive-behavioral therapy based on SIT	4.643	2.675	0.018
	Control	27.407	2.693	0
Cognitive-behavioral therapy based on SIT	Islamic spirituality therapy	-7.643	2.675	0.018
	Control	19.764	2.642	0
Control	Islamic spirituality therapy	-27.407	2.693	0
	Cognitive-behavioral therapy based on SIT	-19.764	2.642	0

P≤0.01.

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Table 4. Results of univariate covariance analysis regarding the effect of three treatment methods on anxiety sensitivity with pre-test control

Source of Change	SS	df	MS	F	P	Eta Coefficient	Test Power
Anxiety sensitivity (pre-test)	3508.607	1	3508.607	61.510	0.000	-	-
Group	7472.602	2	3736.301	65.502	0.000	0.523	1
Error	3194.293	56	57.041				

SS: Sum of squares; MM: Mean squares.

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P≤0.01.

distress tolerance was 55.45±10.03, 53.65±14.01 and 56.60±15.17, while in the post-test, it was 29.35±7.34, 34.90±8.22 and 56.35±15.20 in the Islamic spirituality therapy group, cognitive-behavioral therapy based on sit group and control group, respectively.

When controlling for the pre-test, the three treatment methods (control group, cognitive-behavioral therapy based on SIT and Islamic spirituality therapy) had significantly different effects on distress tolerance, as the calculated F (445.940) is significant at the level of P≤0.01. Based on the Table 2 Eta coefficient (0.163), it can be concluded that the differences among the three treatment methods (control group, cognitive-behavioral therapy based on SIT and Islamic spirituality therapy) explained 16% of the variance in distress tolerance observed in this study. Therefore, the answer to the research hypothesis was positive (Table 2).

Table 3 indicates that the Islamic spirituality therapy group scored higher than the control group in terms of distress tolerance because the difference between the mean scores of these two groups was significant at the P≤0.01 level in favor of the Islamic spirituality therapy group. In addition, the cognitive-behavioral therapy based on SIT group scored higher compared to the control group regarding distress tolerance, with a difference of 19.764 between the averages of these two groups at the P≤0.01 level in favor of the cognitive-behavioral therapy group. Also, both the groups receiving cognitive-behavioral therapy based on SIT and Islamic spirituality therapy scored higher than the control group in distress tolerance, as the difference between the averages of these two groups at the P≤0.01 level favors the treatment group. Therefore, the Islamic spirituality therapy method and the cognitive-behavioral therapy method based on SIT were more effective in distress tolerance than the control group.

Table 4 shows that with the pre-test control, three treatment methods (the control group, cognitive-behavioral therapy based on SIT and Islamic spirituality therapy) had significantly different effects on anxiety sensitivity, as the calculated F (65.502) was significant at the P≤0.01 level. According to the calculated Eta coefficient of 0.523, it can be concluded that the differences among the three treatment methods (the control group, cognitive-behavioral therapy based on SIT and Islamic spirituality therapy) explained 52% of the variance or changes in anxiety sensitivity in the present study with

Table 5. Results of the Bonferroni post hoc test to compare the mean scores of the studied groups in anxiety sensitivity with the pre-test control

Groups		Mean Difference	Error	P
Islamic spirituality therapy	Cognitive-behavioral therapy based on SIT	-6.115	1.894	0.006
	Control	-25.684	1.892	0
Cognitive-behavioral therapy based on SIT	Islamic spirituality therapy	6.115	1.894	0.006
	Control	-19.569	1.898	0
Control	Islamic spirituality therapy	25.684	1.892	0
	Cognitive-behavioral therapy based on SIT	19.569	1.898	0

P≤0.01.

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full power [1]. Therefore, the answer to the research hypothesis was positive.

Table 5 shows that the Islamic spirituality therapy method based on cognitive-behavioral therapy using SIT was more effective than the cognitive-behavioral therapy method in reducing anxiety sensitivity. Additionally, the Islamic spirituality therapy method was more effective in addressing anxiety sensitivity compared to both the cognitive-behavioral therapy based on SIT and the control group. The difference between the averages of these two groups in anxiety sensitivity was -6.115, which is significant at the P≤0.01 level in favor of the Islamic spirituality therapy group. Therefore, the Islamic spirituality therapy was more effective than the cognitive-behavioral therapy based on SIT and also this group scored higher than the control group.

Discussion

We compared the effect of Islamic spirituality therapy with cognitive-behavioral therapy based on SIT on distress tolerance and anxiety sensitivity in stomach cancer patients. The results showed that groups receiving the Islamic spirituality therapy and cognitive-behavioral therapy based on SIT and both methods performed better than the control group regarding reducing anxiety and distress tolerance. Therefore, it can be said that the hypothesis of the research was confirmed. This result is consistent with the results of previous studies, including the studies by Narimani et al. [24], Bani Hashem et al. [25] and Kalhornia-Golkar et al. [26]. Kajbaf et al. [10] concluded that both the QoL therapy and the therapy based on Islamic spirituality had a significant effect on distress tolerance, stress and depression in the post-test and follow-up stages. However, the effectiveness of spiritual therapy in reducing anxiety and depression in the post-test was greater than that of the QoL therapy. However, No significant difference was observed between the two intervention groups regarding distress tolerance and depression in the post-test. In addition, Lotfikashani et al. [27] concluded that spiritual therapy spirituality is effective in reducing stress and anxiety in women with breast cancer.

The Islamic spirituality therapy with cognitive-behavioral therapy based on SIT and both methods are more effective than the control group. Therefore, it can be said that the hypothesis of the research was confirmed, and this result is consistent with the findings of previous studies, including the research conducted by Oraki et al. [28], Haddadi Kuhsar et al. [29], Mohammadian Ekardi et al. [30], Koszycki et al. [31], Ellison et al. [32], Richard et al. [33], Barrera et al. [34] and Basaknejad et al. [35]. In explaining this result, it can be said that both treatment methods deal with the thought process and beliefs. Cognitive behavior therapy deals with people's thought processes and irrational beliefs, emphasizing the verbal behavior and mental images that stomach cancer patients hold about themselves, the world around them, and the future. Cognitive and intellectual changes are also considered in spiritual therapy; that is, clients achieve a conscious and logical understanding of the universe, humanity, God, the afterlife and their relationships with each other. Additionally, both treatment methods emphasize behavioral and emotional aspects. In cognitive-behavioral therapy based on SIT, the way of functioning or behavior strongly influences the patterns of thoughts and emotions. Behavioral and emotional changes are also discussed in Islamic spirituality therapy. This means that clients' actions become more constructive and fulfilling for themselves and others, leading to the development of positive, enjoyable, pleasant, hopeful, and joyful emotions. It can be said that both cognitive-behavioral therapy and the focus on religion primarily involve a form of realism that individuals present regarding their unhappy lives, followed by efforts to change their lifestyles. However, differences exist in these two treatment methods that distinguish them from each other. First, the goal of cognitive-behavioral therapy is cognitive reconstruction and that is to help clients change wrong thought patterns. However, the main and ultimate goal of spiritual-religious treatment is the same as mentioned in religious texts for creation, that is, faith in God and worshiping Him. Achieving this goal, which is pursued as a final goal in spiritual-religious treatment, leads to the revelation of the essence of life and finding the central motivation in life that will unify the individual's existence. Secondly, cognitive-behavioral therapy pays no attention to values and morals, which are among cultural factors, but values and morals play an important role in counseling and spiritual therapy. Therefore, despite the difference between the two treatment methods, a great similarity exists between these two methods, which can justify the first hypothesis of this research. The use of therapeutic techniques, such as relaxation and exposure to anxiety-causing stimuli as well as the use of regular desensitization techniques in the present study helped the subjects to reduce their physical symptoms of anxiety and the physical symptoms of anxiety sensitivity to be reduced in them.

Conclusion

The Islamic spiritual therapy is more effective than the cognitive-behavioral therapy based on SIT in reducing anxiety and stress tolerance and the groups receiving these methods acted better than the control group. The strengths of the study are as follows:

Focusing on spiritual therapy: This study examined the effect of spiritual therapy on stomach cancer patients, which has been less studied in scientific research. Therefore, this study can help introduce and evaluate the effectiveness of this method in the treatment of gastric cancer patients.

The use of comparative method: In this study, spiritual therapy was compared with conventional treatment methods. This comparative method allows for the assessment of the results and effects of these two methods, helping to determine the effectiveness of spiritual therapy in improving distress tolerance and anxiety sensitivity in stomach cancer patients.

The use of real patient samples: In this study, real patients treated for gastric cancer were used as samples. This enhances the generalizability of the study's results to the broader population of gastric cancer patients.

Measurement of several variables: In this study, stress tolerance and anxiety sensitivity were two important variables in gastric cancer patients, on which the effect of spiritual therapy was measured. These measurements allow for a precise comparison of the effectiveness of this method in addressing these issues.

This research, like many other studies, faced limitations and challenges that certainly resulted in shortcomings. Considering its design and comparing the groups' results in the end, individual changes were overlooked. Self-report questionnaires were the only means of data collection in this research, which raises the possibility of bias in the responses. It is recommended to follow up with the samples in future studies. Considering the effectiveness of spiritual therapy combined with cognitive-behavioral therapy based on SIT for patients, as well as their cost-effectiveness in terms of both time and finances, experts need to pay more attention to this treatment method for patients experiencing conflicts. It is also suggested that this treatment method be used as an adjunct to other treatments and recommendations for patients facing challenges.

Ethical Considerations

Compliance with ethical guidelines

This study was approved by the Ethics Committee of Urmia Branch, Islamic Azad University, Urmia, Iran (Code: IR.IAU.ARDABIL.REC.1400.071). Cancer patients participated in the study by signing an informed consent form. Participants were informed about the goals of the research, the confidentiality of their identity information, their right to withdraw from the study, and other ethical requirements related to the research, all of which were fully observed.

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Authors' contributions

All authors equally contributed to preparing this article.

Conflict of interest

The authors declared no conflicts of interest.

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