Clinical Schizophrenia & Related Psychoses

Research Article

The Effectiveness of Acceptance and Commitment-Based Therapy on the Death Anxiety of Patients with Advanced Cancer

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Abstract

Introduction: There is evidence that social anxiety can disrupt the daily lives and relationships of individuals, especially students. The aim of this study was to determine the effect of group therapy based on acceptance and commitment with psychodrama components on social anxiety of undergraduate students of Torbat Heydariyeh University of Medical Sciences.

Methods: The present study is a randomized trial with a control group that was conducted in 1397 on 48 students with social anxiety disorder. Inclusion criteria were age greater than or equal to 18 years, no other mental illness, awareness, satisfaction and high social anxiety score, and exclusion criteria were the use of anti-anxiety drugs and not attending more than one session in the group. The treatment was selected by convenience sampling and randomly divided into one intervention group (12 patients) and three control groups (12 patients each). The intervention group (combined psychotherapy group) participated in the treatment course in 12 sessions of 90 minutes (2 sessions per week). Control groups included psychodrama therapy, acceptance-based therapy, commitment and no treatment. Data were collected through Connor Social Anxiety Questionnaire. Data were analysed using SPSS software version 20, analysis of variance and analysis of covariance.

Results: The results showed that 12 sessions of group therapy based on acceptance and commitment along with psychodrama components in pre-test and post-test reduced the amount of social anxiety in the intervention group so that this intervention had a significant effect (p=0/001).

Conclusion: Considering the importance of communication in the medical staff and the frequency of social anxiety among students, it can be said that finding an effective treatment method will improve interpersonal relationships.

Keywords: Acceptance and commitment therapy • Psychodrama • Social anxiety disorder

Introduction

Cancer is one of the most terrifying diseases that human beings suffer from, and people constantly feel at risk of cancer [1]. More than 15.5 million people are currently suffering from cancer, which is projected to increase to 20.3 million by 2026 [2]. People with cancer are at risk of increased mortality and disease recurrence, which in turn leads to reduced quality of life [3]. For example, cancer can even lead to a deep crisis in one's life that endangers his or her future [4]. It can also lead to chronic symptoms such as depression and anxiety, which are caused by the thought of death [5]. One of the great fears of human beings is the fear of death, which is seen in 80% of people with advanced cancers [6].

Fear of Death (FOD) occurs when people feel terrified, frightened, or overly anxious while thinking about the process of death or disconnecting from the world and what happens after death [7], which is a common phenomenon in all societies [8]. Death anxiety can be one of the most important psychological diagnoses in people with advanced cancer [9]. People react differently to death anxiety. For example; some people are emotionally detached, some may began to do insignificant works, and others may suppress or deny their thoughts [10]. As the disease progresses, people suffer from pain, loneliness, and decreased control, all of which have been reported as dimensions of death anxiety [11]. According to the

above statements, it can be said that people with death anxiety require emotional and social support that helps to maintain their quality of life [12]. The meaning of life for these people is correlated with the death anxiety [13]. Advanced cancer can lead to psychological distress and awareness of illness can lead to more symptoms. In patients, who experience these symptoms psychologically, the ability to cope with impending death and the resulting fear may be difficult, so they require psychotherapeutic interventions [14].

So far, various psychotherapeutic approaches such as cognitive-behavioral therapy and semantic therapy have been effective in reducing patients' death anxiety [15,16]. Among these, therapy that is based on the acceptance of death may create positive coping in cancer patients [17]. In the last two decades, the significant growth of studies in the field of third wave therapies, especially acceptance and commitment-based therapy, has emphasized on the effectiveness of this therapeutic approach in the treatment of several diseases [18]. Acceptance and commitment-based therapy is one of the third wave behavioural therapies, and is considered as an interdisciplinary treatment for medicine and psychology [19]. The main purpose of this treatment is to create psychological flexibility, which means to create the ability to make practical choices between different options that are more appropriate, rather than just taking action to avoid disturbing thoughts, feelings, memories, or desires, or actually imposing them on the

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individual [20].

Various studies have examined the role of acceptance and commitment-based therapy in improving pervasive anxiety, and their results show that creation and cultivation of commitment and acceptance in patients, especially those suffering from social anxiety, reduces their stress and problems [21]. It also reduces death anxiety in people with AIDS [22]. Similarly, various studies have shown the effectiveness of this treatment in improving depression, social phobia and empathy [22,23]. In another study, the effectiveness of acceptance and commitment-based therapy in improving stress and promoting health among women with physical disabilities, including spinal cord injury and multiple sclerosis, was evaluated and the results showed that this treatment is effective in reducing stress [24]. Supportive and empowerment-based interventions play an important role in the positive coping of patients and caregivers [25,26].

Therefore, according to the needs of patients with advanced cancer and also the psychological effects of death anxiety, in this study we decided to investigate the effect of acceptance and commitment-based therapy on the death anxiety of patients with advanced cancer.

Methods

This is a control clinical trial study with pre-test and post-test design to control the factors undermining internal validity. The population in this study comprised of 120 cancer patients referred to the palliative therapy center of Torbat-e Heydariyeh University of Medical Sciences in 2019 to undergo chemotherapy. The sampling was done by convenience method.

Inclusion criteria: Inclusion criteria included the confirmed diagnosis of cancer by physician and age of over 18 years. Exclusion criteria were; inability to communicate and unwillingness to participate in the study.

Accordingly, 60 patients who had the necessary criteria were invited to enter the study. The sample size in this study was calculated to be 15 subjects in each intervention and control groups, so 30 individuals were selected from the eligible patients, and then were allocated into the intervention and control groups by simple random method.

The present study has been approved by the Ethics Committee of Torbat-e Heydariyeh University of Medical Sciences (Code: IR.THUMS. REC.1397.0019). Before the study, its general objectives were explained to the cancer patients and they were assured that their information would remain confidential. All ethical principles have been observed in this study. The participants were allowed to leave the study at any time, and the control group received the intervention at the end of the study.

The Templer's Death Anxiety Scale (TDAS) was used in this study for data collection. This tool was designed by Professor Donald Templer in 1970, and has been used as a valid tool to measure death anxiety for about 40 years. The validity and reliability of this tool have been proven in different countries and articles, and it has also been translated and validated in Iran.

This scale consists of 15 items with the correct and incorrect responses. In 9 out of 15 items, the choice of correct response is given a score of 1, and in 6 items, the choice of incorrect response is given a score of 1. The total score of this scale ranges from 0 to 15, with higher score indicating higher death anxiety.

The Templer's Death Anxiety Scale is a valid and standard scale that has been used repeatedly to measure death anxiety in various studies around the world [1,27]. This fact was adequate to confirm the validity of this tool for this study. The reliability of this tool was confirmed in the study of Masoud Zadeh et al. with a correlation coefficient of 0.95 [28].

The intervention group underwent acceptance and commitment-based therapy on a weekly basis for eight sessions (each season was 60 minutes). Therapeutic sessions were held at the palliative therapy center of Torbat-e Heydariyeh University of Medical Sciences. The description of therapy sessions is given in Table 1. Samples in the intervention and control groups completed the TDAS tool at pre-test and post-test.

Chi-square test, Fisher's exact test, independent t-test and analysis of covariance (ANCOVA) were used for statistical analysis and study hypothesis with the help of SPSS software version 21. Also, a significant level of 0.05 was considered in all tests.

Results

The mean age of patients in the intervention group was 55.13 ± 20.27 years and in the control group was 53.83 ± 17.36 years, and statistically, independent t-test did not show a significant difference between the two groups in this regard. Chi-square test did not show a significant difference between the two groups in terms of gender (P=0.7). Fisher's exact test did not show a significant difference between the two groups in terms of income level (P=0.86) and education (P=0.74) (Table 1).

The score of death anxiety before intervention in the intervention group was 8.3 ± 1.53 and in the control group was 7.3 ± 1.46. Independent t-test did not show a significant difference between the two groups in terms of the death anxiety score before the intervention (P=0.41). However, after the intervention, the death anxiety score in the intervention group was 6.3 ± 2.77 and in the control group was 8.3 ± 1.18, and independent t-test showed a significant difference between the two groups in this regard (P<0.01). Also, paired t-test showed a significant difference between the mean scores of death anxiety before and after the intervention in the intervention group (P<0.01), but it did not show a significant difference in the control group (P=0.31) (Table 1).

The ANCOVA test, by controlling the score of death anxiety before the intervention, showed a statistically significant difference in the mean scores of death anxiety in both groups after the intervention (P=0.03), (Table 2). The results of this study showed that intervention was able to reduce the level of death anxiety in patients.

Table 1. Comparison of death anxiety score in the two groups.

Variable		Before intervention	After intervention	P-Value
		Mean ± SD	Mean ± SD	
Death anxiety score	Intervention group	8.3 ± 1.53	6.3 ± 2.44	P<0.01
	Control group	7.3 ± 1.46	8.3 ± 1.18	P=0.31
		P=0.41	P<0.01	

Table 2. The effectiveness of acceptance and commitment-based therapy on the death anxiety of patients with advanced cancer.

	F-value	Significance
Pre-test	16.96	P<0.001
Groups	4.8	P=0.03

Discussion

The aim of this study was to evaluate the effectiveness of acceptance and commitment-based therapy in reducing the death anxiety of cancer patients. Subjects in the intervention group reported a significant reduction in their death anxiety compared to those in the control group after receiving the intervention. Findings of this study are in line with the study of Pourfarahani et al. which examined the effectiveness of acceptance and commitment-based therapy in reducing the social anxiety of adolescent girls and showed a significant reduction in their social anxiety (P<0.05) [21]. The study of Mirzaeian et al. which examined the effectiveness of acceptance and commitment-based therapy in reducing death anxiety and increasing mental health in women with AIDS, also showed the positive effect of this treatment [22]. Zarei et al. conducted a similar study on pregnant women and obtained the same results [23]. The results of another study by Hoffman et al. indicated the positive effect of acceptance and commitment-based therapy on health anxiety and psychological flexibility of individuals [29]. Acceptance and commitment-based therapy does not directly reduce the anxiety of patients with chronic diseases such as AIDS, but since the psychological suffering of affected patients' stems from their dysfunctional thoughts and feelings, this treatment reduces their connections with these thoughts and dysfunctional feelings, and consequently reduces their psychological distress, anxiety and depression and increases their mental health [30].

Acceptance and commitment-based therapy eliminates psychological inflexibility in two ways. On the one hand, acceptance and commitment-based therapy, by strengthening the processes of mindfulness, including acceptance, commitment and communication with the present time (active contact with internal and external stimuli, without trying to change their shape or frequency), helps patients to respond to internal and external stimuli without avoiding internal and external experiences. On the other hand, in acceptance and commitment-based therapy, therapists are committed to respect patient's values and patients are encouraged to explore and identify what is important to them in different aspects of life [22]. In fact, values are general and abstract concepts that show a person the important directions in life. In acceptance and commitment-based therapy, the therapist challenges clients to identify what is important to them in life, including marriage and intimacy, family relationships, friendships and social interaction, careers and Jobs, personal and educational growth and development, recreation and leisure, religion and spirituality, citizenship behaviour, and physical-mental well-being [24]. One of these values and dimensions is spirituality and religion. Various studies have emphasized on the negative relationship between religious affiliation, spirituality and death anxiety. This means that the more religious and spiritual beliefs a person has, the less anxiety he or she experiences [22]. The use of spiritual dimensions plays an important role in patient adjustment and reduction of suffering [31,32]. Therefore, nurses can use interdisciplinary therapies in their nursing practice and also, by taking into account the mental and psychological needs of patients, implement effective nursing care for patients. One of the limitations of present study was the lack of follow-up period (due to time constraints) to evaluate the effectiveness of this treatment in long term. Another limitation that can be mentioned is the use of death anxiety self-assessment tool, which is a self-reporting tool that may cause the subjects to show a more favourable image of them. According to the results of this study, it is suggested that a study with this therapeutic approach be performed in other diseases over a longer period of time.

Conclusion

Due to the effectiveness of acceptance and commitment-based therapy, this treatment method can be used as a complementary, effective and low-cost treatment method in nursing care. Therefore, it is suggested that managers and health care providers play an important role in promoting health and reducing patients' anxiety by considering such methods and train the treatment staffs such as nurses and caregivers about the use of these complementary methods.

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