Original Article

Spiritually-Oriented Cognitive Therapy in Reduction of Depression Symptoms in Mothers of Children with Cancer

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Objective: Some of the mothers of children with cancer suffer from reactive depression and confront existential crises, and benefit from their image of God in coping with it. The purpose of this study was to determine the effectiveness of spiritually-oriented cognitive therapy on reducing depression symptoms in mothers of children with cancer.

Method: A single case experimental design and an A-B form were used in this study. The participants were selected through purposeful sampling. We studied three of the mothers of children who had been admitted to the pediatric ward of 'Mofid Pediatric Hospital'. These children were aged under 12years; they suffered from any kind of cancer except brain tumor; cancer had not metastasized to other parts of the body; the mothers themselves had no history of psychiatric illness prior to their child's illness, and had mild to moderate depression at the time of screening. These mothers were subjected to spiritually-oriented cognitive therapy for 10 individual sessions, 90 minutes per week. The depression grade and the changes were measured with Beck Depression Inventory (BDI-II).

Results: Comparing the mothers' scores through 8 times of completing the inventory (three at baseline, three during the therapy and two follow-ups), and calculating the percent of recovery showed a decrease in depression scores.

Discussion: It seems that spiritually-oriented cognitive therapy can enhance the spiritual experience and reduce depression in cognitive and existential contexts.

Keywords: depression, spiritually-oriented cognitive therapy, spirituality, cancer, children, mothers, existential anxiety

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Introduction

One of the most devastating life experiences for parents is having their child or adolescent diagnosed with cancer (1). Although cancers during childhood are uncommon, they are the second reason of death in under 14-year-old children (2).

Life-threatening illnesses are known as family illnesses that are likely to seriously disturb most family members' daily lives (3). For parents, the diagnosis of these illnesses in a child is recognized as an intensive traumatic stressor. Hence, they can suffer from distress and depression during the process of the child's treatment (4). Cancer has always been resembled to the idea of death, pain and has been associated with a sense of uncertainty, confusion and powerlessness, by both patients and their families (5). Furthermore, during the process of treatment, they are usually confronted with multiple pervasive stressors including significant medical side effects, considerable changes in daily activities and disruption of social and family roles (6). As a result, it causes significant disorders in all dimensions of parents' personal, familial and social lives (7).

Substantial research demonstrates that parents of children with cancer, particularly mothers, experience heightened psychological distress including anxiety, depression, and posttraumatic stress symptoms (8). Moreover, caring for a child with fatal disease can cause significant changes in a mother's identity,

1- This study derived from Master thesis in counseling
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roles and responsibilities. Therefore, mothers, though not bother themselves, experience many of the consequences of chronic illnesses (9).

Furthermore cancer and its treatments can result in many other negative psychological outcomes, including disbelief, self-blame, fear, loneliness, and feeling out of control. Weisman and Worden have considered the above factors so significant that they have recognized the first several months after diagnosis as a critical period and named it as a period in which persons with cancer experience an ‘‘existential plight’’. These existential concerns triggered by cancer will often lead to search for meaning in life; to attempt to make sense of the illness, or to understand why they were struck with cancer. Such concerns can lead to psychological pathology such as depression or post-traumatic stress disorder (10).

Murata (11) uses the expression of “spiritual pain” in his description of existential crises to describe those patients’ psychological experience who were likely confronted with death. He refers to the suffering which people experience after becoming aware of their likely extinction of personal existence and self-meaning. Meaning in life refers to the value and purpose of life, important life goals, and for some, spirituality. This spirituality has been defined as being that “which allows a person to experience transcendent meaning in life’’ which is often expressed as a relationship with God. Illness often challenges or threatens existing beliefs (12). Likewise, Puchalski and O’donnell (13) have declared that during confrontation with the diagnosis of illness the things that used to give a person meaning and purpose in life are questioned, for instance religious or spiritual beliefs may be questioned and sometimes rejected. Some of these beliefs are: belief in the benevolence of the world, the extent to which individuals deserve the events that befall them, and the extent to which individuals are able to control negative events (14).

Numerous individuals turn to religion or their spiritual beliefs to find meaning through the process of coping with such a serious illness (15). On the other hand, the choice of coping strategies may be influenced by stress and depressive symptoms and may prevent individuals from finding meaning in life (14). These depressive symptoms change information processing through Beck’s maladaptive schemas or Ellis’s unreasonable beliefs. Meaning, based on the schema-based theory proposed by Aaron T. Beck for depression, such life experiences activate maladaptive schematic representations of the self, world and the future. This situation leads to a prefer entail processing bias for schema-congruent information and a consequent dominance of negative or threat-related thoughts, images and interpretations (16). During the coping process, spirituality attempts to change negative core beliefs and cognitive evaluation maladjustments through targeting negative personal beliefs. It also helps an individual to evaluate negative events in a different manner to create a greater sense of control in various situations (17). Therefore, based on the fact that part of the depression pathology among these mothers falls under existential plight and they struggle to solve these anxieties and make meaning out of their experience through their spiritual beliefs, this study attempted to answer this question: can spiritually-oriented cognitive therapy reduce depression symptoms in mothers of children with cancer?

According to existent explanations of cognitive therapy (17), spirituality is a multi-dimensional phenomenon encompassing domains related to existentialism but also to faith-related questions. Therefore, spiritually-oriented cognitive therapy can be described as an interventional approach that recognizes and solves cognitive distortions which impede crystallization of spiritual feelings and experiences by using concepts and strategies from both cognitive and existential therapy approaches in psychopathology and psychotherapy.

Methods

Single case experimental design with three baseline evaluations (every 10 days) and two follow-ups (every 3 weeks) was used in this study. The result was also compared with other measurements during and at the end of the intervention (in the third, sixth and tenth sessions). Our study population was chosen from mothers of children who were admitted to the pediatric ward of ‘Mofid pediatric hospital’ in Tehran.

Three of these mothers who had attained a minimum score of 14 in the Beck Depression inventory (BDI-II) were selected through purposeful sampling. Respectively, these mothers were subjected to spiritually-oriented cognitive therapy for 10 individual sessions, 90 minutes per week. We collected our data with the Beck Depression inventory-Second edition (BDI-II). This scale is a 21-item scale and one of the most widely used self-report measures of depression. An alpha of 0.92 for the BDI-II was reported (18).

The inclusion and exclusion criteria used in this study were as follows: the children were under 12-years old, they had any kind of cancer except brain tumor; cancer had not metastasized to other parts of the body; the diagnosis should have been reached in a duration greater than 30 days; the mother should not have previously suffered from any other serious physical or mental disease; lack of full recovery or impending death of the child; lack of dependency on an institute's financial support, and mother's capability of relatively complex verbal communication (table 1).

Table 1. Characteristics of mothers and their children

	Participant A	Participant B	Participant C
Child's age (years)	4	11	8
Child's gender	Boy	Boy	Girl
Child's type of cancer	ALL, Blood cancer	Ewing's sarcoma	Colon tumor
Mother's Age	27	35	29
Mother's occupation	Housewife	Housewife	Packing worker
Mother's education	High School	Bachelor	Diploma
Mother's number of children	1	2	2
Mother's degree of depression	26	22	25

The spiritually-oriented cognitive therapy's protocol was developed in three stages: primary, intermediary, and final stage. The therapies were designed and performed with a particular focus on specific goals. The overall goals of the primary stage can be summarized as follows: first, to create a safe space for the participant to procure a sense of security; second, to establish a therapeutic relationship for preparing the groundwork for the participant's out-flowing thoughts, and third, to allow the participant's feeling and ideas to flourish, in order to evaluate cognitive distortions and then challenge them. The intermediary stage's goals were focused on preparation of the intervention. At these stage anxieties such as the unpredictability and uncontrollability of events, death, responsibility, and meaninglessness and the human vision of God and finally acceptance of suffering were addressed. The final stage was devoted to summarizing the content and evaluating the effect of the intervention and modified cognitive distortion on the amount of spiritual needs of existential anxieties that were met.

Like other single-subject designs, chart analysis was used to analyze the data. Also, the emerged changes were considered as the effect of independent variables on dependent variables.

Results

Participant A

Figure (1) shows the participant's depression level at 25-26 at the baseline level. These scores are severe rates of depression in BDI-II. She obtained a score of 22 at the end of session 3; and this reduction continued until the end of the intervention. In the last session, her second follow-up score was 11 in BDI-II. This result indicates a reduction in depressive symptoms. Her percentage of recovery from depression was 56%.

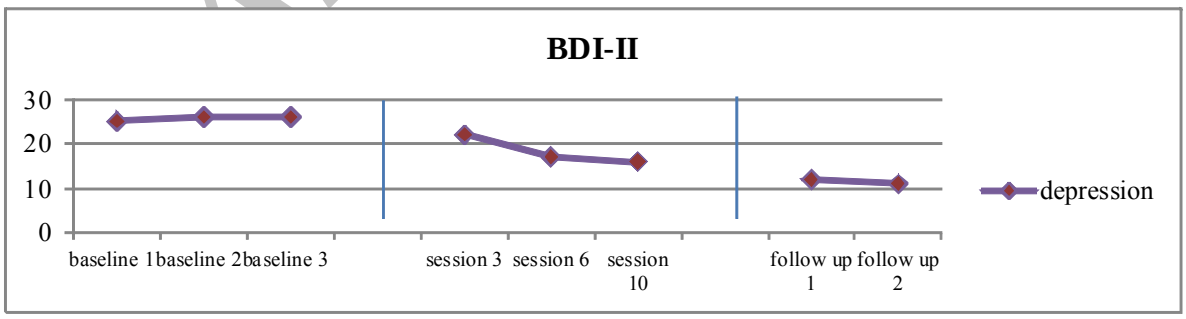

Figure 1. Depression trend of participant A

Participant B

Diagram 2 shows the participant's depression levels at 21-22 in BDI-II at the baseline. These scores indicate severe depression in BDI-II. She obtained a score of 19 at the end of session 3; and this reduction continued until the end of the intervention. Her score

was 14in follow-up 2, indicating a reduction in symptoms from severe to low level. Her percentage of recovery from depression was 40%. (Figure 2)

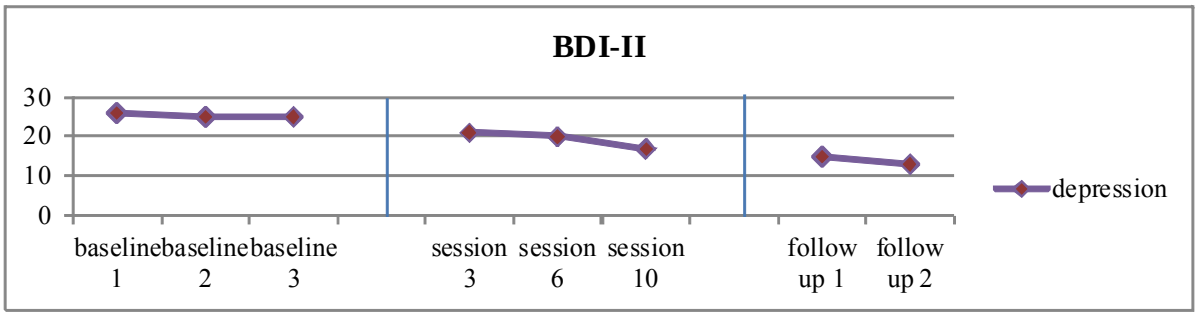

Figure 2. Depression trend of participant B

Participant C

Diagram 3 shows the participant's depression levels at 25-26 in BDI-II at baseline. These scores indicate severe depression in BDI-II. She obtained a score of 21 at the end of session 3; and this reduction continued until the end of the intervention. Her score in the last post-test measurement was 13, indicating a reduction in symptoms from severe to low level. Her percentage of recovery from depression was 50%. (Figure3).

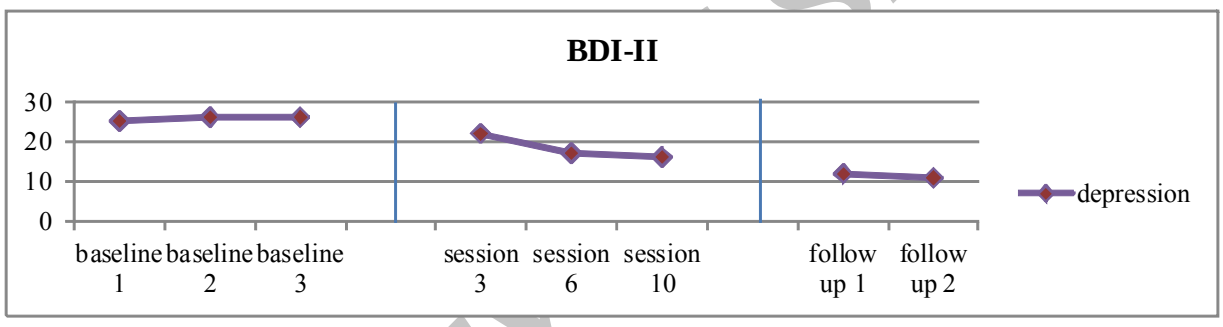

Figure 3. Depression trend of participant C

The trends of change in mothers' depression scores over the8 episodes of questionnaire completion are presented in the following table (2) and figure (4).

Table 2. Mothers' depression scores

Depression	Baseline 1	Baseline 2	Baseline 3	Session 3	Session 6	Session 10	Follow-up 1	Follow-up 2
Participant A	25	26	26	22	17	16	12	11
Participant B	22	21	22	19	17	17	14	14
Participant C	26	25	25	21	20	17	15	13

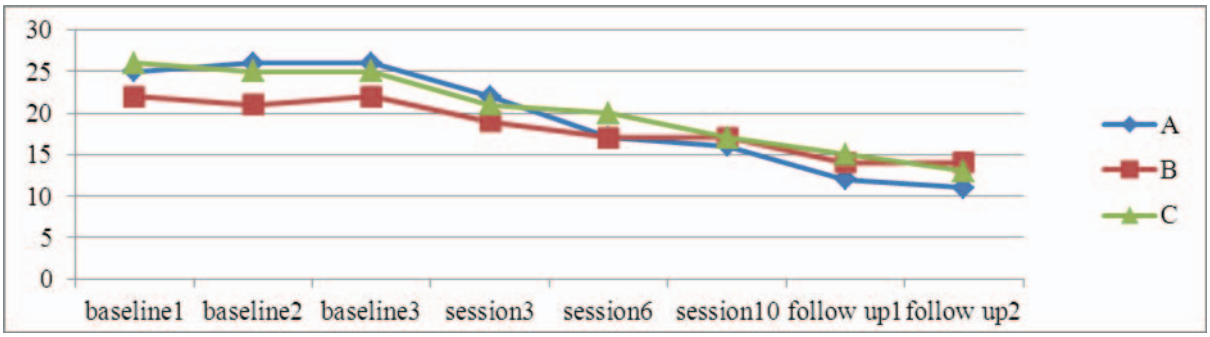

Figure 4. Change trend in mothers' depression scores

Table (2) and figure (4) depict a decline in the mothers' depression scores in the Beck Depression Scale from severe depression to moderate and low depression. In conclusion, we can say our hypothesis which is based on the effectiveness of spiritually-oriented cognitive therapy in decreasing the depression symptoms in mothers of children with cancer, has been proved.

Discussion

The decreasing trend of depression scores can be perceived as the effectiveness of spiritually-oriented cognitive therapy on mothers with depressive symptoms. This hypothesis can be proven with the following discussion: maladjusted schemas, negative automatic thoughts and cognitive distortions of depression in these mothers revolving around the overwhelming feeling of guilt, self-punishment, self–worthlessness, and self-blame for the lack of adequate child care. Moreover, the feeling of loss which is a common experience among depressed people is dominantly focused on losing children among these mothers. This feeling was completely pervasive in them. Therefore dealing with it quickly led to activation of the negative cognitive triangle in mothers who had previous negative dysfunctional thoughts.

The consequences of the fear of losing a child can manifest as death, unpredictability and uncontrollability of events, loneliness and meaninglessness in mothers. In this regard Yang et al. (18) perceived that there are many things and events that cannot be understood or controlled in an active and rational way in human existence. They cannot be interpreted within an existing system of meaning. Hence mothers will lose the previous meaning which they used to give purpose and direction to in their lives.

This lack of meaning and feeling of loneliness with other activated existential crises led them into an existential/faith crisis. In order to deal with it they needed to experience a meaning as being embedded within a larger, more capable and more sacred whole. They needed this experience of meaning beside an authentic response to existential needs, to eliminate cognitive errors from information processing and change irrational beliefs which affect the process of recreating meaning through compilation of cognitive and existential approaches. In other words, mothers needed to move toward God and use their spiritual principles for estimating the future and curbing events that were beyond their psychological world.

Experiencing oneself as part of a larger context seems to substantially diminish the immediate threat to an individual's existence. One perceives a new meaning in his/her existence, and no longer places herself at the center of the universe. As a consequence, one can accept that things happen beyond one's control. Therefore, the feelings of frustration, helplessness and being out of control disappear.

However, since their image of God was distorted due to their cognitive distortions and conscience, this connection hadn't been made correctly, so they couldn't experience an authentic meaning. To resolve this, the spiritually-oriented cognitive therapy approach was applied by addressing spiritual needs of existential anxieties in a cognitive context with the possible following results: First, to minimize maladaptive cognitive schemas and distortions; Second, to facilitate the process of finding new meaning suitable to their situations; and third, to achieve a sense of control through communication with a further source. These factors led to the elimination of the crystallized barriers against spirituality in mothers, the spirituality which was the product of the mothers' knowledge of unavoidable existential needs.

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