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## Study of Effectiveness of Spiritual Therapy on Life Satisfaction According to Coping Strategies in Patient with Cancer in Tehran

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### ABSTRACT

Encounter to Chronic diseases destroy the physical, psychic, economic, communicational, emotional balance of patient and his/her primary care and create new problems for the family members. The person is taken cancer diagnosis tolerate more physical and psychic pain than her/his family members. In this situation Existence of social protection like to give psychological interventions to patient and his/her primary care is need to increase positive emotions and decrease negative emotions. Spiritual therapy can be useful to arrive the goal. The aim of current study is comparison of effectiveness of spiritual therapy on life satisfaction according to coping strategies in patient with cancer. The study population included patients with cancer were hospitalized for treatment in tehran in octobr 2015. Sampling method was Accessible and voluntary. 20 person participate as sample in this study. The current study was Semi-pilot with pre test and post test and control group. There were one pilot group and one control group such that experimental group member Received spiritual therapy in period of staying in hospital. control groups member received no intervention. All persons participated in two groups filled out the life satisfaction questionnaire as pre test and post test. To determine Intermediate effect of coping strategy filled out Lazarus and Folkman coping strategies questionnaire. Proposed 2 hypotesis based on this study and data analized with ANOVA and Multivariate covariance. Based on multivariate covariance resultes hipotesis two rejected. Based on Anova hipotesis one accepted. This means that spiritual therapy directly increased life satisfaction in patient with cancer but the mediated effectiveness of it was not meaningful. According to effectiveness of narrative therapy on life satisfaction in patient with cancer it is necessary clinical psychologies presence in Oncology ward.

**Keywords:** Cancer, Life satisfaction, Spiritual therapy, and Coping strategy.

### INTRODUCTION:

One of the significant issues in the treatment of cancer is quality of life in cancer patients that could affect his/her survival and longevity. This concept covers the

various dimensions and can be different for each individual. Quality of life depends on cultural, socio-economic and educational variables and values in personal life (Christ *et al.*, 2015). Various aspects of

life including employment, marriage, housing, family, community, leisure, spiritual life, political, sexual, educational, ethnic, health, communication, intimacy, emotional dimension, efficiency and productivity, standards of living, personal growth and life expenses. According to Rath and Harter, (2010, quoted Syrgy, 2012), the following five dimensions, have priority: Career, social, financial, physical health, personal communication (Rath & Harter, 2010; Syrgy & Joseph, 2012). According to Van Praag and Ferrer Carbonell, (2008) dimensions of life satisfaction include: Job, well-being, financial well-being, welfare in housing, welfare in health, well-being and how to spend the amount of leisure, well-being in marriage and marital status, social well-being (Van Praag *et al.*, 2004, 2008). Satisfaction in these aspects is associated with life satisfaction.

Getting a cancer diagnosis for patients 20 to 39 years, has the effects of its own. Such a thing can interrupted person's identity, independence, person's worldview, spiritual exploration, individual performance and sexual health. People are at high risk of mental stress, including anxiety and depression which impairs performance. In patients 40 to 64 years old who have responsibilities and activities of the family, social and professional responsibilities, cancer creates dysfunction and creates the feel and performance challenges. Because these areas are related to identity, success, satisfaction with life and economic power (Christ *et al.*, 2015). Life satisfaction is overall assessment of feelings and attitudes that we have about life and is one of three components of welfare: Life satisfaction, positive and negative effects. Life satisfaction is a cognitive judgment process. Life satisfaction means that the person compares the current situation to the terms or conditions that thinks should be or to the standard of living and gets to cognitive assessment that determines the satisfaction of his life (Diener,1984) Spiritual therapy by adopting an approach that believes in God is a collection of religious and spiritual interventions and to advance therapeutic interventions provides guidance based on the conceptual framework (Richards *et al.*, 2004). Assumptions underlying this treatment strategy is that God exists, human beings are created by God and there is spiritual. This research deals with the

relationship between spirituality interventions treatments with life satisfaction when we encounter something as big as cancer deals. Processes that maintain the link between God and man but we do not see them (Bergin,1980a). Life satisfaction was significantly negatively correlated with somatic symptoms, anxiety, insomnia and emotion-focused coping style and a significant positive correlation with the belief in the principles of religion, performing religious rituals, reverence, and the problem-focused coping. The results of stepwise regression showed that 45 percent of the variance in life satisfaction and depressive symptoms (25%), reverence (8%), coping with emotion-focused (7%), counter to avoid (3%) and social dysfunction (2%) (Christ *et al.*, 2015). Spirituality increase the well-being of patients with cancer (Ahmadi *et al.*, 2015; Musarezaie & amir, 2015). The need to respect, peace, meaning and purpose in life and uplift are the spiritual needs of patients with cancer. The 4 main requirement placed on the classification as follows: Social protection, natural treatment, relaxation and inner peace, seek forgiveness, hope, acceptance of reality, searching for meaning, good finish, the meaning of life, strengthen the spiritual beliefs, relationship with God and prayer (Hatamipour *et al.*, 2015). Spirituality has a direct and significant relationship quality of life of patients and their treatment (Bahreinian *et al.*, 2010). Spiritual therapy reduces anxiety, depression and distress in cancer patients Lotfi kashani *et al.*, 1392; Ghahari *et al.*, 2012) and reduces anxiety and frustration (Mohabat bahar & Sahar, 2014; Langroudi SSM., 2023).

Spiritual therapy increases the quality of life of cancer patients (Hamid *et al.*, 2011; Shafeei *et al.*, 2013) and also increase hope, happiness and life satisfaction. (Fallah, 2010) Depression, anxiety disorders and adjustment disorders are the most common mental disorders in cancer patients and their family members. In Some family members can also be seen prominent signs of confusion and anger (Koyama *et al.*, 2010). In a study by (Moradi *et al.*, 1392), the results showed that psychological distress was a significant negative correlation with quality of life. According to regression analysis using log were explained depression, anxiety and stress 15 each 24% of the

variance in physical health. Depression (16%), anxiety (9%) and stress (19%) explained mental health variance. The fourth depression (4%), anxiety (5%) and stress (6%) explained the variance of social relations. Finally, depression (21%), anxiety (12%) and stress (15%) explained variance of satisfaction environment. So stress is the strongest predictor of physical health, mental health and social relationships and depression was the strongest predictor of satisfaction with the environment (Moradimanesh *et al.*, 2011). In a study Ahady *et al.* (1390) carried out almost 60% of patients suffer from mild to severe depression and depression in cancer patients who are emotion -oriented coping is more than problem-oriented coping. Breast cancer than other cancers use emotion-oriented coping strategy (Ahadi *et al.*, 2011) Group psychotherapy can promote and increase the use of problem-focused coping and reduce the use of emotion-focused coping is to. (Shooaeh *et al.*, 2013) Learning how to deal with stress and anxiety in patients with certain diseases effectively reduce stress and depression (Fatemian *et al.*, 2013). Stress management interventions is effective on quality of life and coping strategies in cancer patients (Behzadipoor *et al.*, 2013). Stress management and relaxation training reduce negative affect and enhance the quality of life in women with breast cancer (Safarzadeh *et al.*, 2012).

With cancer, dimensions of one's life from his previous balance will out. The new status should be changed to cancer patients could somehow establish a mental link which continues to maintain his mental health. New position for a person with cancer is a challenge and effect on the areas of mental function, occupational, spiritual, relationships with family members, personal relationships and intimate, self-perception of their relationship with self, self-worth or lack of personal accomplishment, providing financial requirements during treatment and its side effects on the daily lives of patients and family members. The question of how to deal with the challenges of mental, physical, and spiritual communication and point of view towards this issue will be how, will determine the life satisfaction or dissatisfaction the person. The hypotheses of this study are:

- Spiritual therapy directly affects the satisfaction of life of cancer patients.
- Spiritual therapy through coping strategies affect life satisfaction in cancer patients.

#### **METHODOLOGY:**

This research was quasi-experimental with pretest-posttest control group. The sampling method was for sampling and voluntary and population including cancer patients who were hospitalized for treatment in 1394 in Tehran. In this study were an experimental group and a control group. As the number of members of each group were 10 people. The Satisfaction life Scale, (1985) was used as a pre-test and post-test. Satisfaction with Life Scale was a questionnaire of 5 questions about a person's overall life satisfaction measures.

The 7-point Likert scale test to be answered. Diener *et al.* (1985) have validated the test on 186 students. The results are as follows: average and standard deviation was respectively 0.87 and 0.82. Test-retest reliability of the test interval of two months is 0.84 and Cronbach's alpha coefficient is obtained 0.87. This test has content validity. Reliability with Cronbach's alpha is 0.71. Sheikhi *et al.* (1390) validated Diener life satisfaction scale on 400 students. The results showed that the internal consistency and test-retest reliability were respectively 0.85 and 0.77. Factor analysis showed that this scale was single factor and is valid to measure life satisfaction among students (Sheikhi *et al.*, 2011). Inventory of coping by Lazarus & Folkman, (1984) has been designing and validating. It has 66 questions and measures 8 strategies. Lazarus have earned internal consistency of 0.66 to 0.79 for each of the eight strategies. Cronbach's alpha coefficient was 0.86 for coping strategies for emotion-focused coping was 0.72, for problem-focused coping was 0.79 and Cronbach's alpha coefficient was 0.77 for prototype 148 people. This questionnaire has face validity (Sheikhi *et al.*, 2011). Data obtained from the questionnaires with multivariate analysis of covariance and one-way analysis of covariance was analyzed.

#### **RESULTS:**

Data obtained from the Satisfaction Life Scale, (1985) and coping strategies Lazarus & Folkman, (1984) were analyzed using descriptive and inferential statistical

analysis. Inferential statistics used in this study consists of a one-way analysis of covariance and multivariate analysis of covariance.

**Table 1:** Descriptive statistical data of the pre-test and post-test experimental and control groups.

The lowest score	The highest score	Extension	Skewness	variance,	standard deviation	Middle	Averages	number		
6	28	3.23	-1.196	32.9	5.736	19.5	19.3	10	Spirituality therapy	Pretest
5	27	0.898	-0.041	37.067	6.088	16	16.2	10	control	
10	33	4.116	-1.664	43.211	6.573	26	26.1	10	Spirituality therapy	Post test
5	25	0.060	-0.206	39.778	6.306	15.5	16	10	control	

The statistical method used in this section is a one-way analysis of covariance and multivariate analysis of covariance. Functional assumptions of analysis covariance include the normal distribution of scores, homogeneity of variances groups, regression slope homogeneity, and linearity. After Kolmogorov-Smirnov test for normal distribution of scores, The significance level for the pre-test and post-test are obtained: 0.687 and 0.222, these values are greater than 0.05. The distribution of scores is normal. After Levine test for homogeneity of variances, significance level equal to 0.850 and 0.769. This amount is larger than 0.05. We can say that the variance is

homogeneous groups. After Levine test for equality of variances error, the significance level obtained is equal to 0.443. This amount is more than .005, the data have not questioned the assumption of equality of variance error. After charting pre- and post-test in experimental and control groups was seen, both were linear graph. So we can say that the variance is homogeneous for experimental and control groups. According to the results of the test Kolmogorov-Smirnov, Levene test and the chart pre- and post-test of experimental and control groups, data obtained from a questionnaire of life satisfaction in the experimental group and control do have all assumptions the analysis of covariance.

**Table 2:** Results of one-way analysis of covariance for the first hypothesis.

Eta coefficient	significant level	F	Mean square	degrees of freedom,	sum of squares	
.661	.000	33.193	493.932	1	493.932	pretest
.498	.001	16.886	251.267	1	251.267	group
			14.880	17	252.968	error
				20	10119.000	total
				19	1256.950	Total corrected

Thus for the first hypothesis, significance level is obtained 0.001 for the group. This amount is less than 0.01. So the null hypothesis of no effect of spirituality on health and life satisfaction cancer patients will be

reject and the first hypothesis is confirmed. So the spiritual therapy has an effect on the satisfaction of life in cancer patients.

**Table 3:** Results of multivariate analysis of covariance for the second hypothesis.

ETA	significant level	degrees of freedom	degrees of freedom hypothesis	F	value	
0.032	0.865	9	2	0.148	0.968	Lambda Wilks Meet face to face
0.150	0.481	9	2	0.796	0.850	Lambda Wilks Avoid saving
0.073	0.711	9	2	0.355	0.927	Lambda Wilks Continenence
0.224	0.320	9	2	1.295	0.776	Lambda Wilks Find social support

0.095	0.638	9	2	0.472	0.905	Lambda Wilks Being responsible
0.340	0.154	9	2	2.317	0.660	Lambda Wilks Getaway - Avoid
0.282	0.225	9	2	1.769	0.718	Lambda Wilks Thoughtful solve the problem
0.014	0.937	9	2	0.065	0.986	Lambda Wilks Positive reappraisal
0.479	0.053	9	2	4.137	0.521	Lambda Wilks group

In the second hypothesis significance level is 0.053 for the group. This amount is more than 0.01. Therefore, the null hypothesis is confirmed and the second hypothesis is rejected. The null hypothesis is that the

lack of therapeutic effect of spirituality considering the mediating role of coping strategies on the satisfaction life in cancer patients.

**Table 4:** Results of multivariate analysis of covariance for the second hypothesis.

Eta coefficient	significant level	F	Mean square	degrees of freedom	sum of squares		
.012	.734	.122	3.712	1	3.712	pretest	Meet face to face
.030	.591	.308	14.463	1	14.463	Post-test	
.078	.380	.844	25.668	1	25.668	pretest	Avoid saving
.148	.218	1.730	81.375	1	81.375	Post-test	
.007	.791	.074	2.262	1	2.262	pretest	Continance
.009	.767	.092	4.346	1	4.346	Post-test	
.143	.226	1.668	50.757	1	50.757	pretest	Find social support
.012	.739	.118	5.539	1	5.539	Post-test	
.038	.543	.396	12.057	1	12.057	pretest	Being responsible
.090	.344	.986	46.366	1	46.366	Post-test	
.311	.059	4.524	137.621	1	137.621	pretest	Getaway - Avoid
.125	.261	1.422	66.889	1	66.889	Post-test	
.180	.169	2.199	66.903	1	66.903	pretest	Thoughtful solve the problem
.013	.725	.131	6.143	1	6.143	Post-test	
.000	.984	.000	.013	1	.013	pretest	Positive reappraisal
.005	.832	.047	2.226	1	2.226	Post-test	
.010	.762	.096	2.935	1	2.935	pretest	group
.205	.139	2.586	121.626	1	121.626	Post-test	

To run the Bonferroni correction, the significance level of 0.01 divided by the number of dependent variables. So for the significance of the effects of covariates, a significant level must be smaller than 0.005. For the group, the significant level is obtained 0.139. This amount is greater than 0.005. Therefore, the null hypothesis is confirmed and the third hypothesis is rejected. The null hypothesis is that the lack of therapeutic effect of spirituality considering the mediating role of coping strategies on the satisfaction life in cancer patients. Due to significant levels obtained for 8 coping strategies, significant levels is

greater than 0.005 at all. So the effect of coping strategies in cancer patients, satisfaction of their lives, there was no significant difference among treatment groups spirituality and control groups.

**DISCUSSION:**

According to data obtained as a result of one-way analysis of covariance in **Table 2**. The first hypothesis is confirmed. According to research background in the field of psychological interventions with cancer patients, the results of this study is consistent with the results Ahmadi, (2015). These people conducted meta-analysis assessment for the effect of spirituality and



religion on the well-being of cancer patients and examined 16 studies in this area. Of the 16 studies reviewed, 10 studies demonstrates a positive relationship between spirituality and well-being (Ahmadi *et al.*, 2015). Musa Rezaii *et al.* (2015) examined the effectiveness of interventions based on spirituality on well-being in 64 patients with leukemia (Musarezaie, amir *et al.*, 2015). The intervention and the subjects of this study are consistent with the research. Research Musa *et al.* (2015) was a kind of trial and the results of the analysis indicate the effectiveness of spirituality on increase well-being in cancer patients. In this study, as in the present study, has been raised the direct effect of spirituality on increasing well-being in cancer patients. In the research that has been done in other countries, the findings of the present study is consistent with researches of (Krvzynga *et al.*, 2015; Kyslas Grove, fonts & Vives, 2013; Wyatt Ford & Oliver, 2011; Bvrvv *et al.*, 2015; Kruizinga *et al.*, 2015) Based on the data collected and the results of multivariate analysis of covariance in **Table 3**, the second hypothesis is rejected. Spiritual therapy through coping have no effect on life satisfaction in cancer patients. Hatamipour *et al.* (2015) studied 18 spiritual needs of cancer patients. These needs include the need to respect, peace, meaning and purpose in life and excellence.

The 4 main requirement was classified as follows: Social protection, natural treatment, relaxation and inner peace, seek forgiveness, hope, acceptance of reality, searching for meaning, good finish, the meaning of life, strengthen the spiritual beliefs, relationship with God, praying (Hatamipour *et al.*, 2015). Meet the needs of the patient are considered as emotion-focused coping strategies. Ahadi *et al.* (2011) looked at strategies to deal with stress and depression in 3 groups of cancer patients with a sample size of 88 people. The results showed that almost 60% of patients suffer from mild to severe depression and depression in cancer patients who are emotion - oriented coping is more than problem-oriented coping. Breast cancer than other cancers use emotion-oriented coping strategy (Ahadi *et al.*, 2011) Emotion-oriented coping strategies can be used incorrectly. Actions such as "establishing and maintaining destructive

relationships, search for meaningless spiritual support, wishful infertility thinking and long-term denial are emotion-oriented coping strategies ineffective."(kar, 2013). Since patients with cancer has high tension and a lot of pressure is on him, probably one of the coping strategies used inefficiently. Another reason could be the pressure from the financial effects of the disease on the patient's life. Explanation that can be said for the second hypothesis would be that effects of cancer on a person's life and his family are absolutely concrete that person's life changes before and after diagnosis. That's why a person returns mental focus solely on coping strategies on concrete issues of life and these issues are so large that one's focus remains on it for a long time.

This can be one of the reasons that cancer patients don't have shown mediating role of coping strategies in their satisfaction with life while the spiritual therapy directly could increase their life satisfaction. Probably will be reduced the amount of mood disorders by addressing other aspects of life that are out of balance. It is recommended for the treatment of mood disorders in cancer patients, checked secondary effects of the disease on other aspects of one's life and his family and take measures to solve them. These measures may include family therapy, financial assistance for the cost of treatment, job security after the patient received a course of medication.

#### **AUTHOR CONTRIBUTIONS:**

M.A. conceptualization, methodology, writing the manuscript, M.A. contributed in data analysis. M.A.; and M.A. finally checked the manuscript and editing, Data Curation, and Formal Analysis. Both authors who are involved in this research read and approved the manuscript for publication.

#### **CONCLUSION:**

Regarding the effectiveness of Spiritual Therapy on improving life satisfaction in cancer patients so permanent presence of clinical psychologist for psychotherapy and primary care to patients in the blood treatment is necessary.

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### CONFLICTS OF INTEREST:

Conflicts of interest are declared obviously in the manuscript. Authors also state separately that they have all read the manuscript and have no conflict of interest.

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