

Research Paper: The Effectiveness of Spiritual Group Therapy on Quality of Life and Life Satisfaction among HIV-Positive Patients



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ABSTRACT

Background: HIV Positive or AIDS is a complex disease that weakens the immune system and causes infection. Moreover, since in most societies it is known as a social taboo, all aspects of a patient's life being particularly affected with HIV. Also, AIDS is not only a health issue but also a social problem as well. The aim of this study was to evaluate the effectiveness of spiritual treatment on quality of life and life satisfaction in patients with AIDS.

Methods: This semi-experimental study performed by using the pretest - posttest, and control group. 30 AIDS patients who were referred to the DIC center in Kerman were selected with sampling methods and were assigned randomly to experimental and control groups. After completing the test, the experimental group received 12 sessions of group spiritual therapy. Measuring instruments include quality of life questionnaire (SF-36) and the Life Satisfaction Scale. Data were analyzed by multivariate analysis of covariance with SPSS software.

Results: The results showed that the mean scores of the experimental group scores on quality of life and life satisfaction had a significant increase compared to the previous studies and control group.

Conclusion: Based on these results, we can infer that the spiritual sense is effective on the quality of life and life satisfaction in patients with AIDS. Also, spiritual group therapy can be used as a useful method of intervention to enhance the quality of life and life satisfaction of patients with AIDS.

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Introduction

Religion and spiritual beliefs have a psychological force with a range of outcomes related to health, and social behaviors [1]. Religious psychology which is the study of religion and religious phenomena using concepts from psychology refers to the fact that religion and psychology affect each other. In the realm of religious psychology, there is a growing tendency to support theoretical perspectives by empirical researches. So, the increasing in research in various fields such as religiosity, the need for religion, the influence of religion on physical and mental health has been very impressive [2]. In the past two decades, the study of the psychology of religion and spiritual issues are increasingly interested by psychologists. Most studies in the psychological literature are based on the relationship between religion and spirituality with mental health. In the most of these studies, there is a positive relationship between religion and spirituality and human mental health. [3-4] Quality of life is a multi-dimensional and complex concept which includes objective and subjective factors and often is considered as the patients' personal understanding of the life satisfaction, physical health, social health and family, hope, etiquette and mental health [5]. In other definitions, quality of life has been defined as a set of cognitive emotional states on the physical, mental and social conditions [6]. Quality of life in medicine in the form of general quality of life or the sense of well-being is classified according to the impact of the health and illness on emotional well-being and life satisfaction [7]. After World War II, the concept of quality of life began to be investigated on diabetes and AIDS patients [8]. AIDS is a disease that has a profound impact on patients' quality of life. Health, family life, social activities, social, economic and personal developments are factors that affect the life quality of patients [9]. Regarding to the issue of HIV significant effect on the quality of life of patients, several studies have been carried out. Coreless et al demonstrated that the quality of life of women with AIDS is significantly lower than men with this disease [10]. Wig and colleagues found that the mean score of life quality of people with AIDS in the social, mental and physical aspects are significantly lower than healthy ones [11]. Wiese and Moradi showed that 17% percent of women living with HIV have a very low quality of life, 8.51 percent with low quality of life down and 2.31 percent with moderate quality of life [12]. Life satisfaction is defined as the level of individual consciousness or rather the cognitive assessment of quality of life which may be integrated into and reflect an overall assessment and evaluation as well as specific

areas of life (a person and own family) [13]. Diener et al defined satisfaction with life as a clear sign of a successful adaptation to changes. [14]. In Starks and Hughey's study it was found that spirituality plays a role in life satisfaction in middle-aged African women, regardless of age, income and education [15]. Brilhart's research on relationships between spirituality, and life satisfaction on people with spinal cord injury showed a significant positive correlation between life satisfaction and psychological factors [16]. Momeni and Shahbazi Rad believed that there is a positive relationship between spirituality and quality of life [17]. Asarrudi et al concluded that there is a significant positive correlation between spiritual well-being and quality of life [18].

Based on the above theory and research findings, the aim of this study was to determine the impact of spiritual therapy on the quality and satisfaction of the life of AIDS patients.

Methods

the present study is a semi-experimental one with pretest - posttest control group in which the impact of spirituality therapy group as the independent variable on the quality of life and life satisfaction as the dependent variables were examined. The research instrument was as:

Quality of Life Questionnaire (Short Form Health Survey-SF-36)

A 36 parts form designed War and Sherborn in the United States on 1992 to measure the quality of life in patients and healthy individuals [19]. Concepts that are measured by the questionnaire are not dedicated to the age group or a specific disease. Assessment of health state is both physical and mental one which can be achieved by combining the eight domains scores. The questionnaire includes 36 parts which evaluate eight domains of quality of life, physical functioning, general health, role limitations due to physical disorders, role limitation due to emotional disorders, bodily pain, social functioning, fatigue or vitality, and mental health. The lowest score on this scale is zero and the highest one is 100. Scores of each topic are calculated by it individual scores on the specific area. The reliability and validity of the questionnaire's Persian version is verified in Iran. In research of Montazeri et al, the convergent validity t-test was used to validate all the correlation coefficients, which all were 40% more than the recommended dose (range coefficients 0.58 to 0.95). Also, Cronbach's alpha coefficient between 0.77

and 0.90 was used to evaluate the reliability of internal consistency with Internal Consistency [20]. Also, Mahdizadeh and et al reported the Cronbach's alpha 0.87 to 0.89 for the reliability and face validity of the questionnaire, [21]. In the present study, Cronbach's alpha coefficient for the total scale was 0.82.

Satisfaction with Life Scale (Satisfaction with Life Scale)

The scale developed by Diener et al for all age groups [22] and revised by Pavot and Diener [23]. It is a 5-point scale (1 for totally disagree to 7 for totally agree). In which the ranges of possible scores will vary from 5 (low satisfaction) to 35 (high satisfaction). Diener et al in a 2 months study about the reliability coefficient of alpha and test-retest coefficient of the scale announced 0.87 and 0.82 respectively [24]. Also, in Hamid's study, which was conducted on 364 students, Cronbach's alpha for this scale was obtained 0.84 [25]. In the present study, Cronbach's alpha for this scale is 0.80.

The population was AIDS patients who referred to the DIC center and Razi center of Kerman city. The available sampling was used. In empirical research, at least 15 people are determined for each group [26].

After preparing a list of 50 people with HIV who were referred to our hospital, 30 of them selected and randomly assigned to an experimental group and a control one. Criteria for inclusion in this study were; having at least an associate degree, a minimum of 18 and maximum age of 60, Lack of clear diagnostic criteria for psychiatric disorders such as psychosis, major depression, obsessive-compulsive personality disorder, and lack of physical ailments that prevent a person from participating in the research program. Notably, absence of a patient more than twice causes existence and elimination of the study and course. Before starting treatment, in order to perform a test, quality of life and life satisfaction questionnaire completed by both groups. Then the experimental group received treatments for twelve weeks, in 120- minute session weekly. After 12 sessions of group therapy, once again, both groups were tested by means of research measures. To adjust the intervention plan, the model of spiritual care provided by Bulhary et al was used which its effectiveness has been confirmed [27]. Sessions' descriptions would be shown in Table 1. After evaluating the patient and ensure the conditions for participation in the study, treatment sessions were conducted in collaboration with the help of a therapist. The plan at all meetings according to Hartz was relaxation and Mediation

focused mindfulness (focusing on your breathing or a specific subject) was initiated [28]. Then, an overview of the previous session task, the meeting would be followed by discussion and training, the context of what was seen starts. At the end of the tasks that the subjects must be performed in time for the next session, and emphasize the use of relaxation techniques during the day, the meeting ended.

This study was conducted regarding permission from the DIC centers of Kerman and principles of morality and ethics. All participants attended in the study consciously, and they were assured that the information gathered will be used only for the purpose of research. Participants are also noted that are able to withdraw from the research process any time they want.

The collected data was analyzed by using Multivariate analysis of covariance (MANCOVA) and Levene's with SPSS-18.

The process and content of Spiritual Therapy sessions are as follows

Session 1: Participants will become familiar with each other, and ensure cooperation, the introduction of treatment and talk about the concept of spirituality and religion and its impact on people's lives. Session 2: Consciousness and connect to inner voice and listen to this inner voice. Session 3: Self-concept. Session 4: God prays or any other powers the clients beliefs in it. Session 5: Humanity and respect for human rights and other intellectual work as a team. Session 6: Relationship with the sacred. Session 7: Forgiveness, unforgiveness and guilt. Session 8: Forgiveness and mercy. Session 9: Death and fear of it. Session 10: Faith and trust in God and its effects. Session 11: Thanks, giving and gratitude. Session 12: checking members morale, review the topics learned in previous sessions.

Results

The mean age of total participants was 26 years old with a range from 18 to 37 years (SD= 6.13). 25 participants (83%) were single and 5 participants (17%) were married. 18 participants (60%) were Under Diploma, 8 participants (26.6%) were Diploma and 4 participants (13.4%) were Bachelor of science.

Homogeneity of regression slopes was another basic assumption in this analysis which in order to test this assumption, the covariance between the effects of the test subjects was conducted. The final results are summarized in Table 2. According to table 1, the interactive

effect of pretest and groups was not significant in the variables ($P > 0.05$). Based on the results obtained, it can be noted that there were no significant interaction vectors resulting regression coefficients in equal groups.

Table 1. Mean and SD scores of Descriptive indicators in pretest and post-test on studied groups

Variables	Pre-test			Post-test			Levene's test	
	SD	mean	number	SD	m	n	P	F
Life satisfaction	5.61	15.67	15	4.01	26.46	15	0.939	0.006
	5.1	16.27	15	4.4	17.47	15		
Life quality	9.66	87	15	6.44	115.27	15	0.244	1.41
	11.93	91.67	15	9	94.4	15		
General health	4.74	14.2	15	3.22	22.73	15	0.268	1.28
	5.58	16.07	15	4.1	17.40	15		
Body performance	3.86	20.4	15	1.07	28	15	0.255	1.35
	4.77	22.73	15	3.7	23.33	15		
Role limitations due to physical disorders	1.03	5.27	15	0.64	7.53	15	0.337	0.954
	1.12	5.4	15	1.1	5.93	15		
Role limitations due to emotional disorders	0.96	32.93	15	0.72	5.67	15	0.329	0.985
	0.88	4.27	15	0.82	4.4	15		
Body pain	2.03	7.4	15	1.94	3.93	15	0.821	0.052
	1.93	6	15	2.03	5.4	15		
Social performance	0.46	5.93	15	1.75	8.27	15	0.119	2.58
	0.72	6.33	15	1.35	6.6	15		
Happiness	2.38	16.33	15	1.88	17.47	15	0.816	0.055
	2.33	14.2	15	2.6	14.73	15		
Psychological health	3.54	16.53	15	2.82	21.67	15	0.119	2.58
	3.35	16.67	15	3.67	16.93	15		

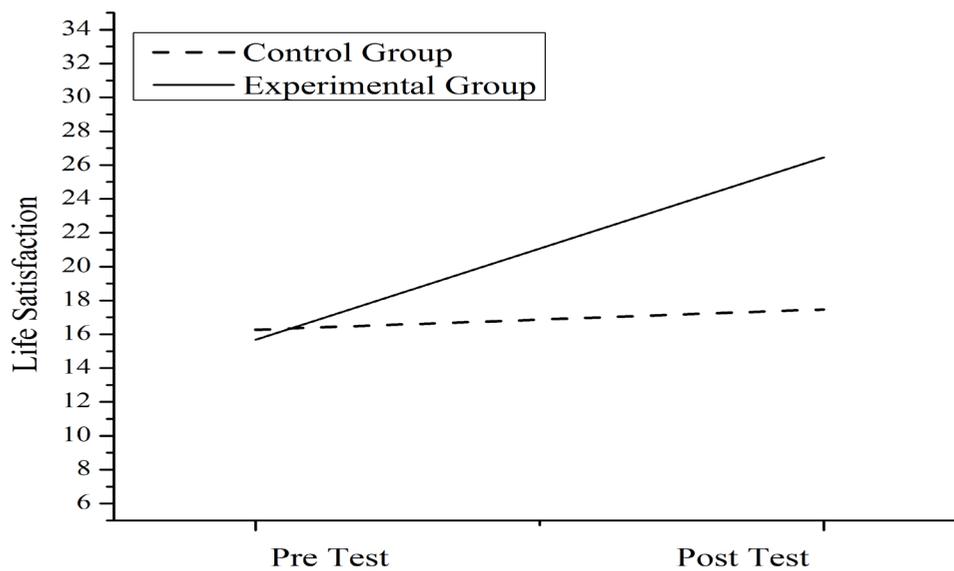


Figure 1. Life satisfaction scores of both groups in pre-test and post-test

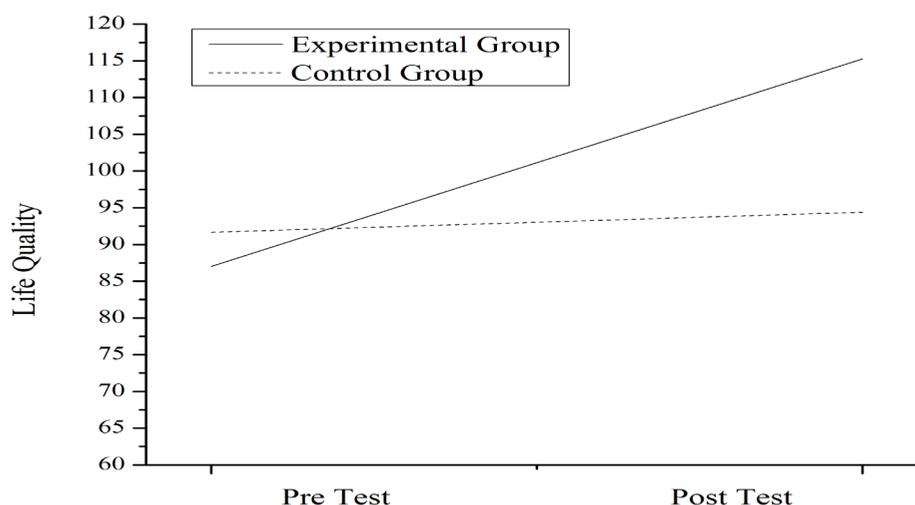


Figure 2. Life Quality scores of both groups in pre-test and post-test

Table 2. The results of tests on the effect of pre-test Life satisfaction and Life quality

Pre-test, groups	F	P
Life satisfaction	15.47	0.298
Life quality	3.61	0.079
General health	0.559	0.265
Body performance	0.577	0.469
Role limitations due to physical disorders	0.383	0.767
Role limitations due to emotional disorders	0.998	0.412
Body pain	0.212	0.918
Social performance	1.23	0.312
Happiness	0.557	0.757
Psychological health	0.516	0.804

To investigate the difference, one-way ANCOVA was conducted on the dependent variables in the MANCOVA field (Table 3).

The results in Table 3 show that the variable quality of life in one-way ANCOVA analysis ($F= 53.33$, $P= 0.001$), and life satisfaction ($F= 41.74$, $P= 0.001$) were significant. Comparison of experimental and control group scores for each of the dependent variables showed that there is a significant difference between the mean score of quality of life post-treatment group (44.6 ± 47.115) and controls (2.9 ± 4.94), Which represents a significant increase in post-test mean of the experimental group compared with the control group. Also, there is a significant difference in the average life satisfaction score in test groups (1.4 ± 46.26) and control group (4.4 ± 47.17), which represents a significant increase in post-test mean of the experimental group

compared with the control group. In conclusion we can say that spirituality group therapy had an impact on quality of life and satisfaction of life of patients with AIDS.

Also, The results are shown in Table 3, which deals one way ANCOVA analysis in public health variable ($F= 15.61$, $P= 0.001$), physical functioning ($F= 22.06$, $P= 0.001$), role limitation due to physical ($F= 23.72$, $P= 0.001$), role limitations due to emotional ($F= 19.90$, $P= 0.001$), social functioning ($F= 8.5$, $P= 0.007$), vitality ($F= 10.84$, $P= 0.003$) and mental health ($F= 15.67$, $P= 0.001$) were significant, but bodily pain ($F= 4.09$, $P= 0.053$) was not significant. Comparison of experimental and control group scores for each of the dependent variables in Table 1 show that there is a significant difference between the experimental group and control group in the mean score of the test variables of gen-

eral health, physical functioning, role limitations due to physical, role limitation due to emotional, social functioning, vitality and, mental health. In conclusion we can state that spirituality group therapy had an impact in improving the quality of life and general health, physical functioning, role limitations due to physical, role limitation due to emotional, social functioning,

vitality and mental health of patients with AIDS, but spirituality group therapy had no significant effect on improving the physical pain of AIDS patients.

To investigate the difference, one-way ANCOVA was conducted on the dependent variables in the MANCOVA field.

Table 3. One-way ANCOVA test results to compare the quality of life and life satisfaction.

Dependent variable	Sum of squares	Freedom degree	Squares mean	F	P
Life quality	3265.63	1	3265.63	53.33	0.001
Life satisfaction	896.53	1	896.53	41.74	0.001
General health	213.33	1	213.33	15.61	0.001
Body performance	163.33	1	163.33	22.06	0.001
Role limitations due to physical disorders	19.2	1	19.2	23.72	0.001
Role limitations due to emotional disorders	12.33	1	12.33	19.90	0.001
Body pain	16.33	1	16.33	4.09	0.053
Social performance	20.83	1	20.83	8.5	0.007
Happiness	56.03	1	56.03	10.84	0.003
Psychological health	168.03	1	168.03	15.67	0.001

Discussion

Review of available studies showed that no research on the effect of treatment on quality of life and spiritual life satisfaction have been conducted in patients with AIDS so far and most studies have examined the quality of life of AIDS patients. The results showed that the group spiritual therapy was effective in increasing quality of life and satisfaction of life of AIDS patients. In other words, increased spirituality can influence various psychological factors the course of disease in patients with AIDS. It is noteworthy that in the present study in the area of spirituality training specifically, patients with conditions such as the type of thoughts, fears and problems that may arise in the course of the study, were considered. In many researches, low quality of life of AIDS patients has confirmed [12, 13, and 17]. Brillhart's research on relationships between spirituality, and life satisfaction on people with spinal cord injury showed a significant positive correlation between life satisfaction and psychological factors [25]. In Starks and Hughey study it was found that spirituality play a role in life satisfaction in middle-aged African women regardless of age, income and, education [24]. Asarrudi et al concluded that there is a significant positive correlation between spiritual well-being and quality of life [28]. Results of the findings on the impact of spirituality on improving quality of life are aligned with satisfaction of life of AIDS patients.

According to Richards and Bergin Spirituality is an

individual's sense of identity and its value in relation to God and his place in the universe [29].

As a result, at the spiritual life point of view, life can be meaningful, under any circumstances. In explanation for this finding it could be said that, one of the reasons for these changes may be due to the presence of the person in the group. Group raises patients' awareness about themselves, the interaction with other members and gets feedback from them. Also, it improves interpersonal skills, social and individual adaptation with environment. This situation creates social support to members of the group. Also, by seeing the other patient persons, realizes problem is not unique and this fact it gives hope for person. Another reason is due to the characteristics of patients with AIDS, so that crises and illnesses usually take a part a man of routine life, and he notices the temporary nature of the routine goals and values of the. In this case the person needs to find a lasting solution to the goals and values and the courses of spiritual group therapy are more likely to give this opportunity to them. Also, it can be said that some of the techniques have been effective in the course of medical treatment including mindfulness and relaxation techniques that can be used for psychological and spiritual abundance. For example, studies have shown that mindfulness can also reduce high blood pressure, the arousal of the sympathetic nervous system and cortisol levels [27] which can reduce the psychological factors such as anxiety and depression, and ultimately improve the quality of life and satisfaction

with life. The results of this study and other studies in this area showed that religion is the most effective psychological support in our society, which is able to provide all the meaning of life and save the person of meaninglessness. Especially in times of crisis can be an important help [30,31].

But in not being significance of spiritual healing on the physical pain which is a component of quality of life, it can be noted that the existence of external conditions such as physical pain and illness occur when these conditions exist, and due to this, physical pain starts. Although the sample was exposed to the favorable impact of the disease according to group therapy, but it is natural that the external conditions remain the same throughout the course of the disease. Also, in this study a short course of treatment was applied, while a longer term one is needed for patients. Because these patients require more psychological and behavioral follow-ups to learn from their mistakes and learn the ways of the intellectual roots of correct behavior, in order to change their attitude toward the disease. Also, due to the limitations of the study population, for researchers interested in this field, it is recommended that interested researchers replicate this study in a larger target population.

Conclusion

According to the results of this study, Spiritual Group Therapy can be suggested as a selective and complementary therapeutic approach to increasing the quality of life and Life Satisfaction in HIV-Positive Patients

Ethical Considerations

Compliance with ethical guidelines

This study has a code of ethics (E.A.96.3.9.01) in the Psychology Department of Shahid Bahonar University of Kerman.

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Authors' contributions

Study design: Ghasem Asgarizadeh, Mohammadreza Babayi; Data collection and analysis: Ghasem Asgarizadeh, Mohammadreza Babayi, Mahsa Karamoozian; Manuscript preparation: Mohammadreza

Babayi, Mahsa Karamoozian.

Conflict of interest

The authors declared no conflict of interest.

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