Comparison of the Effects of Islamic and Conventional Approaches to Hope Therapy on Self-esteem and Life Satisfaction of Patients with Coronary Artery Disease

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Abstract

Background and Objectives: The decreased level of self-esteem and life satisfaction is prevalent among patients with coronary artery disease (CAD). The present study aimed to investigate the effectiveness of an Islamic approach to hope therapy on the promotion of self-esteem and life satisfaction in comparison with its conventional approach in patients with CAD.

Methods: The study was conducted in a quasi-experimental control group pretest-posttest design. The participants were 60 patients with CAD selected by convenience sampling method from one of Qom hospitals. Data collection tools included the Self-Esteem Scale, Satisfaction with Life Scale, and Hope State Scale. After collecting pre-test data, participants were divided into three peer groups, and the intervention was performed in eight sessions each lasting for 90-minute. An experimental group was exposed to Islamic hope therapy and the other received conventional hope therapy, while the control group received a stress management package. Finally, all the groups undertook the same posttests and the data obtained were analyzed in SPSS22 software using the Covariance test.

Results: Both Islamic and conventional hope therapy increased hope (7, 10.5), life satisfaction (9, 12.8), and self-esteem (7.5, 13.9) of the patients with CAD significantly. Moreover, it was found that Islamic hope therapy was more effective in the enhancement of self-esteem and life satisfaction, compared to conventional hope therapy.

Conclusion: Islamic hope therapy outperformed the conventional hope therapy in terms of increasing the self-esteem and life satisfaction of patients with CAD. Therefore, it is recommended to use Islamic hope therapy for patients with CAD and other similar chronic diseases.

Keywords: Coronary Artery Disease, Conventional Hope Therapy, Islamic Hope Therapy, Life Satisfaction, Self-esteem.

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Introduction

oday, cardiovascular diseases are a matter of great concern to individuals and the medical community (1). These chronic and debilitating diseases diminish self-esteem and fuel feelings of worthlessness and inadequacy. These patients with low levels of self-esteem often lament the past (2). Studies

have demonstrated that despair and feeling of inadequacy are the most formidable barriers to the rehabilitation of patients with coronary artery disease (3). Pessimism and despair negatively affect the treatment and aggravate the disease problems (4).

Individuals with despair and low self-

esteem feel that they have no power or control over their own health. Therefore, they are less motivated to follow medical advices in their medication, nutrition and exercise, resulting in the prolongation of disease (5). Therefore, it can be concluded that low self-esteem and life satisfaction are two commonly observed problems among patients with cardiovascular disease (6, 7). Self-esteem is defined as an individual's subjective evaluation of his/ her own abilities (8). People with strong selfesteem feel valued and empowered and are highly motivated to maintain their health through adhering to doctors' advices. Studies are indicative of the effect of hope on boosting self-esteem (9).

Life satisfaction is the most comprehensive assessment of one's own quality of life. Cardiovascular disease poses some major problems for the affected patients, thereby reducing their life satisfaction. On the contrary, hope prevents negative perceptions and reduces anxiety and depression (10), which in turn, increases life satisfaction (11). Studies suggest that positive psychological constructs increase mental well-being and life satisfaction among patients with cardiovascular disease. Hope as one of the paramount positive structures exerts a significant effect on the improvement of people's motivation and behavior and increases their adaptability to changing circumstances and environments (12).

Snyder et al. conceptualized hope in three main components: goal setting (thinking about one's goals), pathway thinking (ways to achieve those goals), and agency thinking (motivation to move towards the assigned goals). These three components reciprocally interact. Setting important goals leads to increased motivation and this in turn, results in an active search for plausible means to achieve the desired goals (13). Snyder designed a scale for hope which has been used in numerous studies (14).

Hope is associated with high levels of life satisfaction, adaptability, and positive management in chronic patients (15). A number of studies have pointed to the relationship between hope and life satisfaction and self-esteem (16). As the evidence implies, hope

therapy is one of the major positivist psychological interventions used for chronic diseases. It is a treatment program based on Snyder's theory of hope designed to enhance hopeful thinking and goal-pursuit activities (17).

Although hope therapy plays a significant role in increasing self-esteem and life satisfaction, the culture and religion of the patients should be also taken into account in order to increase its effectiveness (18). Religious attitudes contribute greatly to the interpretation of events and the experience of emotions. Some studies have touched on the positive role of spirituality and religiosity in psychotherapy (19). The majority of patients in need of therapy in Iran are Muslims with serious religious beliefs; therefore, it is of utmost importance to evaluate and enrich hope therapy with a religious perspective (20).

Some studies have documented the positive role of Islamic theology in the positive attitudes of Muslim patients and the enhanced effectiveness of psychotherapy (21). In the meanwhile, some other studies have highlighted the role of spirituality in the enhancement of hope levels among those with chronic diseases (20). Prayer to God, for instance, increases hope in patients with cardiovascular disease (22). Studies have also mentioned the contribution of hope to the spirituality of chronic patients (23). Therefore, hope and spirituality are seemingly interactively effective, and a package of hope and spirituality can be presented for patients with cardiovascular diseases.

In the light of the aforementioned issues, the present study aimed to evaluate the effectiveness of Islamic hope therapy in the enhancement of self-esteem and life satisfaction in comparison with conventional hope therapy in patients with coronary artery disease.

Methods

The study population consisted of CAD patients hospitalized in one of the hospitals in Qom. Their treating doctor accompanied by a cardiologist explained the objectives of the study, and individuals enrolled in the study. The sample size consisted of 70 pre-tested patients out of which 60 patients meeting the

inclusion criteria were selected and divided into three peer groups (n=20). To neutralize the effect of demographic variables, the three groups were matched for gender, age, and education. Each group consisted of 12 men and 8 women. The inclusion criteria were: 1) being Muslim, 2) a history of coronary artery disease, 3) no severe personality disorder, 4) the absence of psychotic disorder, and 5) the minimum age of 65 years old. To ensure the lack of personality and psychotic disorder, all the participants were examined by a psychologist at the pretest process. The researcher conducted a clinical interview in the event of any disturbing signs in the test or behavior of a person. The pretest was performed 2 weeks before the first session. The exclusion criteria included personal withdrawal or absenteeism in more than 4 sessions. Upon the completion of the period, all the participants took a post-test. The pre-test and post-test encompassed the questionnaires of self-esteem, satisfaction with life, and hope state. Finally, five participant in each group met were excluded and the data obtained from 15 participants were analyzed. The test was held one week after the last session.

Research tools

Self-Esteem Scale This 10-item questionnaire was designed by Rosenberg to measure overall self-esteem (24). Items are scored on a five-point Likert scale ranging from totally agree to totally disagree, the items 6-10 being reversely scored. The algebraic sum of the scores is considered as the self-esteem score and a higher score is considered a sign of higher self-esteem. The validity and reliability of the translated version of this scale has been confirmed in Iran (25).

Satisfaction with Life Scale: The scale was developed by Diener et al. (26) to assess the degree to which the respondent is satisfied with his/ her life. The scale is composed of five items that respondents rate on a seven-point Likert scale from 1= strongly disagree to 7= strongly agree. The scores of the items are then added together to determine the total level of life satisfaction. Therefore, the scores of this scale range within 5-35. Diener et al.

calculated the test-retest reliability coefficient of 0.82 for a 2-month interval, and its internal reliability was indicated 0.87 by Cronbach's alpha coefficient (26). In Iran, the Cronbach's alpha coefficient of the scale was calculated at 0.83 in a study by Bayani, Kouchaki, and Goodarzi (2007). Moreover, the reliability coefficient was obtained at 0.75 using the splithalf method, and 0.69 using the test-retest method with a 1-month interval (27).

Hope State Scale: This 12-item questionnaire was designed by Snyder to assess the level of hope in individuals (28). The items in this questionnaire are scored on a four-point Likert scale ranging from 1=definitely wrong, 2=wrong in most cases, 3=true in most cases, 4=definitely true. This scale consists of two subscales: pathway thinking (1, 4, 6, and 8) and agency thinking (2, 9, 10, and 12), and items 3, 5, 7, and 11 are fillers. The scores of this scale range within 8-34 with higher scores indicating higher levels of hope (29). Cronbach's alpha coefficient for total hope was calculated at 0.86 and the test-retest reliability coefficient for a 10-week interval was reported 0.82(30).

Training packages

Snyder Hope Therapy Package: This package is designed to promote hope through eight 1.5 hour sessions. Theoretically, hopeful thinking is an exchange process; therefore, its group implementation is more effective. At the outset, the participants were familiarized with the cycle of despair in cardiovascular disease, and the components of hope according to Snyder's theory were elaborated. Subsequently, these components were discussed in the group and they learned to apply these components in their personal lives and practice homework alongside them.

The intervention consisted of eight sessions each concentrating on a definite training objective including familiarizing and making a therapeutic relationship between patients and therapists; explaining the cycle of despair and hope; empowering the patients with skills needed for improving hope including goal-setting, self-motivation, strengthening purposefulness, solving the problems and dealing

with the obstacles encountered and finally preventing the recurrence of despair.

Hope therapy package with an Islamic approach

This package was developed based on the components of hope in the Holy Quran and the sayings of the infallible Imams concerning hope and was implemented in eight 1.5-hour group sessions. The package was designed by an Islamic ethics graduate with a master's degree in Islamic studies and a PhD student of psychology under the supervision of an Islamic ethics expert and a PhD in Psychology who was experienced in the psychology of religion, hope therapy, and group therapy.

The package was presented to 12 experts in the field of Islamic studies and psychology who affirmed its validity. The eight sessions were mainly in line with the conventional hope therapy package except that it was based on the meaning and purpose of life from an Islamic point of view. In this way, trust to Almighty God and seeking for His help was principal feature in this package. Consequently, spiritual motivation and a sense of spirituality in goals and processes was eminent in its different sessions with especial emphasis on effort for the sake of more and more closeness to the Almighty God.

Ethical Considerations

The study was approved at the 30th meeting of the Organizational Ethics Committee of Shahid Beheshti University of Medical Sciences, Tehran, Iran, on 21/5/20016. It gained the ethics code: (IR.SBMU.RETECH. REC.1395.845) provided that the informed written consent is taken and no additional cost is imposed on the participants.

The participants were provided with sufficient information about the research and its purpose. Moreover, they were assured of the confidentiality of their responses. They participated in the study voluntarily with full consent, and they could withdraw from the study at any stage they wished. Written consent was received from the participants, and attendance at the meetings was free of charge.

Result

The descriptive data (mean and standard deviation) of the variables of hope, self-esteem, and life satisfaction are shown in table 1. The data for any variable are presented in three groups of Islamic hope therapy, conventional hope therapy, and control and are compared in the pre-test and post-test stages.

As illustrated in table 1, the mean scores of self-esteem and life satisfaction in the posttest (after hope therapy) increased in both experimental groups. The mean post-test in the control group also increased, compared to the pre-test. The results of Levene's test was indicative of equal variance assumption (P < 0.05). Furthermore, the results of Box's M Test (homogeneity of variance-covariance matrices) confirmed equal covariance assumption in all analyses. In order to investigate the assumption of homogeneity of regression slopes, the interaction of dependent and covariate variables was assessed. The results that the assumptions showed of multivariate analysis of covariance test are met. Multivariate analysis of covariance was performed the results of which are presented in table 2.

As displayed in table 2, the three groups were significantly different in terms of hope, self-

Table 1. Mean and standard deviation of research variables

Variable	Groups	Pre-test		Post-test	
v arrable	Groups	Mean	SD	Mean	SD
Hope	Experimental (conventional hope therapy)	13.6	2.1	32.6	5.1
	Control	13.8	2.1	29.5	4.3
	Experimental (Islamic hope therapy)	12.6	3.2	22.1	3.3
Self-esteem	Experimental (conventional hope therapy)	14.1	2.3	31.2	3.2
	Control	14.5	1.3	27.3	3.0
	Experimental (Islamic hope therapy)	15.4	2.7	18.3	4.4
Life satisfaction	Experimental (conventional hope therapy)	7.75	2.6	27.0	5.6
	Control	9.8	2.7	19.5	7.0
	Experimental (Islamic hope therapy)	5.9	1.2	13.1	1.7

Table 2. Results of multivariate analysis of covariance (MANCOVA) of research variables

Test	Value	Degrees of freedom	Degrees of freedom for error	F	Significance level	Eta squared
Pillai's Trace test	0.85	18.88	3.00	10.00	0.00	0.48
Wilks' lambda test	0.19	16.03 b	3.00	10.00	0.00	0.55
Hotelling's Trace	3.33	20.562	3.00	10.00	0.00	0.62
Roy's Largest Root	3.07	39.96 c	3.00	10.00	0.00	0.75

Table 3. Results of Analysis of Covariance (ANCOVA)

Dependent variable	Total squares	Degrees of freedom	Mean squares	F	Significance level	Eta squared
Hope	439.46	2	219.73	13.50	0.00	0.40
Self-esteem	754.89	2	377.44	34.41	0.00	0.62
Life-satisfaction	1149.35	2	574.67	21.54	0.00	0.72

Table 4. Results of the Bonferroni test

Variables	Group	Group	Mean difference	Significance
	Islamic hope therapy		3.50	0.07
Hope	Islamic hope therapy	Control	10.50*	0.00
	Conventional hope therapy	Control	7.00*	0.00
Self-esteem	Islamic hope therapy	Conventional hope therapy	7.47*	0.00
	Islamic hope therapy	Control	13.87*	0.00
	Conventional hope therapy	Control	6.40*	0.01
Life-satisfaction	Islamic hope therapy	Conventional hope therapy	3.92*	0.01
	Islamic hope therapy	Control	12.85*	0.00
	Conventional hope therapy	Control	8.93	0.00

esteem, and life satisfaction. In other words, all the participants receiving one of Islamic hope interventions, conventional hope therapy, or the stress management package in the post-test stage were significantly different at least in terms of one of the dependent variables. Analysis of covariance (ANCOVA) as illustrated in table 3, was performed to determine where the significant differences lied.

The results as depicted in table 3 point to a significant difference between the three groups regarding the adjusted post-test mean scores of hope, self-esteem, and life satisfaction. The effect of this treatment on the enhancement of hope, self-esteem, and life satisfaction was 40%, 62%, and 52% respectively. The pairwise comparison was performed using the Bonferroni test to find the different groups in the post-test stage. The results of this test are reported in table 4.

The results of the Bonferroni post hoc test showed that Islamic hope therapy and conventional hope therapy were more effective in the enhancement of hope, compared to the stress management package. Nonetheless, no significant difference was observed between Islamic and conventional hope therapy in this regard. Furthermore, Islamic hope therapy and conventional hope therapy were proved more effective in the enhancement of self-esteem and life satisfaction, compared to the stress management package. Moreover, Islamic hope therapy was more effective in the improvement of self-esteem and life satisfaction, compared to the conventional hope therapy, and there was a significant difference.

Discussion

The present study aimed to assess the effect of the Islamic hope therapy package in comparison with conventional hope therapy on hope, self-esteem, and life satisfaction among patients with coronary artery disease. As the results show, both Islamic and conventional hope therapy interventions significantly increased self-esteem and life satisfaction in patients. Although there was no significant difference between the outcomes of the two approaches in enhancing their hope, the study showed the greater capacity of Islamic hope therapy in the enhancement of self-esteem and life satisfaction, in comparison with the conventional approach. The results conveying the significant effect of hope therapy on increasing hope, self-esteem, and life satisfaction are consistent with some studies (9).

Furthermore, the findings are in line with a number of studies regarding the positive consequences of spiritual and religious interventions (31, 32), that seemingly provide a spiritual support for patients. Patients with chronic artery disease are in risk of losing their motivation and becoming frustrated, which in turn may result in reduced self-esteem and life satisfaction. Hope therapy interventions help them acquire more motivation and adopt new strategies to maintain their motivation and use alternative ways in the face of obstacles (17) and thus, reaching to an enhanced sense of empowerment and self-esteem.

The majority of patients with cardiovascular diseases have difficulty in achieving their desired goals and, as a result, they experience more negative emotions. It seems that hope therapy increases the feeling of progress by strengthening the goal-setting skill and setting clear, logical, and measurable goals. It also helps people consider various strategies and paths to achieve the goal and maintain their motivation, thus experiencing more success (33).

Both Islamic and conventional hope therapy seek to correct the wrong patterns and raise the level of hope and reduce the patients' vulnerability. What is different in the Islamic hope therapy, is its spiritual dimension which boosts one's motivation through transcendent goals. In Islamic hope therapy, one adds a welcome touch of spirituality to his/ her goals and, as a result, spiritual goals and yearning to attain them enrich the meaning to life and puts them on the path of effort and perseverance. In addition, behavioral strategies can activate the person and help him/her to actively pursue the set goals. The engagement in activities brings a sense of usefulness and purpose that leads to self-esteem (9). Some studies have pointed to the relationship between spirituality and self-esteem, and some other studies have specifically highlighted the role of religious spirituality and religiosity in self-esteem (34). Koening (2015) reported a significant and positive relationship between spirituality and self-esteem by reviewing various studies (35).

Highlighting the importance of spiritual growth, Islamic hope therapy gives meaning and purpose to life and enables human beings to show great endurance in the face of life

challenges (36). It gives people in challenging situations the energy they need to cope with adversity, achieve the goals, and adapt to the situation (37). Islamic hope therapy emphasizes reliance on God. Trust in God or "Tawakkol" as it is called in the Holy Quran, gives human beings a sense of Divine support, leading to increased hopefulness. It endows the patient new capabilities that exceed the amount needed to overcome a problem. Therefore, trust and reliance on Almighty God, who has infinite power and ability, is a source of great hope for human beings (21). Moreover, prayer, pleading with God, and a sense of personal connection with a higher power bring a positive outlook on life (38) and gives meaning to life (39). Therefore, the Islamic hope therapy package outperforms conventional hope therapy in terms of increasing self-esteem and life satisfaction through promoting reliance on God's power.

A limitation of the study was the lack of follow-up inquiries. Therefore, it is recommended that long-term follow-up be performed in future studies to evaluate the durability of the effects of the intervention. Furthermore, since the participation was voluntary, intrinsic motivation and religious inclination of the participants cannot be undermined in their improvement.

Conclusion

Hope therapy instills hope in patients with cardiovascular disease by their engagement in an ongoing positive inner dialogue on their ability to accomplish tasks. They eventually experience more life satisfaction with this hopeful conversation. Along with the emergence of their disease symptoms, they can direct their thoughts towards hopefulness so that they can overcome despair and increase life satisfaction. Moreover, it increases the sense of empowerment and self-esteem. Based on the findings of the present study regarding the effect of Islamic hope therapy on increasing hope and improving self-esteem and life satisfaction, it is suggested that patients with coronary artery disease be provided with an Islamic hope therapy package along with medical services.

Conflict of interest

The authors declare that they have no conflict of interest regarding the publication of this article.

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