



**Assessment of the Effectiveness of Positive Psychotherapy on Life
Quality of Patients with Cardiovascular Disease**

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**Assessment of the Effectiveness of Positive Psychotherapy on Life Quality of
Patients with Cardiovascular Disease**

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ABSTRACT

This study examines the effectiveness of positive psychotherapy on anxiety, depression and stress in patients with cardiovascular diseases. For this purpose, a sample of 56 cases of patient with cardiovascular disease, according to specified criteria and sampling were selected and divided into two groups of 28 into two control and testing groups. In order to collect data from New Mac Quality of Life Questionnaire was used. Also positive psychotherapy training sessions was used during 90-minute sessions in six weeks on the experimental group. Data were analyzed using covariance analysis by using Bonferroni correction. The results showed that positive psychotherapy is unable to explain the variance in quality of life and its components so that it has a significant effect on the pre-test and follow-up on quality of life and its components in cardiovascular disease.

Keywords: positive mental health, quality of life, cardiovascular disease



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1. INTRODUCTION

Nowadays, especially coronary heart disease and the leading cause of death in most countries is considered. Psychological factors - a large community in relation to coronary heart disease have been suggested as risk of increase (Srafyan, 2002). These factors include variables such as personality factors, lifestyle and stress are (Taylor, 2003). Bio, psycho-social, medical and psychosocial Bio two views to explain the integration of sickness and health. According to this model the biological factors can be genetic predisposition, light food and imbalances biochemical and cognitive factors behavior, personality and the social factors, including family members, family and events. Therefore we can accept the disease in terms of etiology and treatment multifactorial (Fyrvzbkht, 2007). Due to the high activity of the heart tissue needs blood. Three vessels called coronary arteries supply blood to the heart on Hdhdarnd task. About one-third of all people who die of coronary artery disease in Western societies by almost all cases of atherosclerosis and ultimately damage to the heart and the coronary arteries (Branvald, Zyps and Libya, 2001). Damage to the heart, in addition to symptoms and physical disabilities, mental status also leaves a negative impact on their quality of life so as to be substantially reduced. Quality of life means understanding each person place his life in the culture and environment in which lives in relation to goals, expectations, standards and concerns, and a range of objective needs of human beings in connection with personal understanding and spiritual people feel good being achieved (Hadi et al., 1389).). Heart in heart failure patients have symptoms such as shortness of breath, dizziness, palpitations and extreme fatigue is caused. This leads to symptoms of intolerance activity and changes in lifestyle that patient satisfaction and quality of life is negatively affected (Dandrdal et al., 2005). Reduced quality of life in these patients gradually lack of satisfaction with the current situation could lead to significant psychological trauma. Main Outcome and debilitating psychological problems in people with heart disease more dependent on others and the restrictions on the duties of the job, family, and community that eventually aggravate heart disease and mental health problems and social isolation of patients is (Dandrdal et al., 2005; Molly et al. , 2005). Non-drug treatments such as psychotherapy is effective. Among the various methods of psychotherapy, psychotherapy as a treatment of choice for the treatment of chronic diseases is in positive. Because positive psychology and mental Bhslamt looks at them and asks what could be the quality of life. Very few studies on the effect on heart disease in the world has been positive psychology is different between patients Brmtghyrhay results have been promising (Hoffman et al., 2011). Cardiovascular disease is also widespread in industrialized countries own again, and one of the main causes of death in developing countries is. In Iran, according to a study Burden of Disease, these diseases account for the greatest burden of disease in our country is (Nabavi, 2009). Myocardial infarction is the most common cause of death in people older than 35 years in Iran catalog (Kazemi et al., 2007). In the United States each year approximately 650,000 new cases and 450,000 people suffering acute stroke patients with a myocardial infarction (free et al., 2009) Estimates show that for every one thousand



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people, 100 people aged over 65 suffer heart failure and its incidence is due to aging, mortality and recent advances in the treatment of myocardial infarction and congenital heart disease is increasing (Minasian and et al., 2013). According to the World Health Organization, heart disease kills more than 16000000 people annually, the figure is around 29% is allocated to the reasons for mortality (WHO, 2009). The diseases with the development of psychological and physical stressors such as pain, loss of health, loss of a job, sensory deprivation, a sense of impending death and varying degrees of psychological reactions such as frustration, fatigue and fear, feelings of worthlessness and decreased self-esteem the patient is (Fyvla et al., 2013). Considering that in the treatment of chronic diseases, treatment should be effective in the short term as possible so positive psychology can be a good choice to help these patients. Although Iran failed to realize that as a result of positive psychology research on heart disease and literature review further found that the effects of conventional therapy such as cognitive behavioral Iran (Bagher Zadeh, Arian oven and Lord, 1391). Therefore, in this study sought we evaluate the effectiveness of positive therapy on quality of life and its components in cardiovascular patients we discussed.

Depression, Anxiety and Stress (DASS): This scale by Lvynda (1995) made the 21 items, and each subject to be 1 per item. Very low 2. Low 3. 4 high. Very answers (Abolqasemi and Narimani, 1385). Cronbach's alpha for this scale in a normative sample of 717 people is obtained as follows. Depression / 81 ., 73 anxiety / stress . 81 / . . In a general population sample in the city of Mashhad (n = 400) Cronbach's alpha coefficient 70/0 for depression, anxiety, stress 66/0 and 76/0 is reported. Malachi method is used for calculation of correlation with the Beck Depression Inventory 66/0 depression, stress, anxiety 49/0 67/0 is significant (the owner et al, 1380).

Quality of Life Questionnaire Heart Disease: McNew quality of life questionnaire specifically for cardiac patients quality of life was created. The questionnaire contains 27 questions and three subscales: emotional functioning, physical functioning and social functioning, quality of life assesses the heart. Fourteen questions asked in physical functioning, emotional functioning in its 14 questions and 13 questions in the field of social performance. Five questions from the domain of physical function, symptoms evaluated. The classification of questions in the questionnaire so that any questions can be in one, two or all three areas considered. Thus, the person in physical function by calculating the of 14 questions in the same field, the emotional functioning by calculating the of 14 questions related to emotional functioning and social functioning by calculating the of 13 questions in the field of social performance is achieved. The final score is calculated using the calculated score all the questions. Each questionnaire has a seven-point scale call and call participants to each of the seven "always" statement, his position on the continuum that ranges from shows.



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The highest possible score on the "no" every field of seven and a minimum score of one is to represent the quality of life high and low quality of life is the questionnaire for heart disease in the city by Joseph and parsley in 1383 to standardize the (Jafari et al., 1381) . 94/0 reliability of the method is obtained Cronbach's alpha (Nekouei et al., 1389). Finally, after data collection, data statistics and standard deviation (the description) and test samples t-test and covariance analysis using Bonferroni correction using statistical software SPSS version 22 were analyzed.

2. RESULTS

Descriptive indicators of quality of life and its components in the control and experimental groups are presented in Table 1. The results show that the highest average in the variable quality of life of 39/185 and 61/162 respectively lowest average follow-up of the experimental group and the control group test track.

Table 1. The average and standard deviation of quality of life in cardiovascular disease control and experimental groups

Group		Evidence		Test	
Variable	Level	Mean	SD	Mean	SD
Emotional aspects of quality of life	Pre-test	51/93	16/644	56/07	16/957
	Post-test	52/57	16/217	62/29	14/927
	Fallow up	51/93	16/262	62/79	14/587
Physical dimension of quality of life	Pre-test	51/18	16/212	51/68	19/133
	Post-test	51/14	15/568	54/00	18/188
	Fallow up	50/86	15/615	54/11	18/136
The social dimension of quality of life	Pre-test	60/14	11/553	65/18	13/027
	Post-test	59/93	11/502	68/25	13/212
	Fallow up	59/82	11/069	68/50	12/718
Quality of Life	Pre-test	163/25	37/475	171/68	44/992
	Post-test	163/64	36/513	184/54	40/764
	Fallow up	162/61	36/810	185/39	39/889

Continue to check the consistency group studied the research of independent samples t test (Pre-compliance with equal variances and the normality of the variables studied) to compare the scores of pre-test and control groups were used. Independent sample t-test results for grades pre-test to compare the quality of life and its components in both control and experimental groups are shown in Table 2. The results in Table 2 show no significant difference in the quality of life and its dimensions in the control group and the experimental group there.



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Table 2. Levin and independent samples t test results to investigate the homogeneity of variance in quality of life scores cardiovascular disease in both control and experimental groups

group	test لوين		test t					
	F	Significance level	t	Degrees of freedom	Significance level	Mean difference	mean control	mean test
Emotional dimension	0/001	0/975	0/923	54	0/360	4/143	51/93	56/07
Physical dimension	0/806	0/373	0/106	54	0/916	0/500	51/18	51/68
Social dimension	0/414	0/523	1/530	54	0/132	5/036	60/14	65/18
Quality of Life	1/504	0/225	0/762	54	0/450	8/429	163/25	171/68

To evaluate the effectiveness of psychotherapy positive on improving the quality of life and its components in cardiovascular disease among a group of one-way ANCOVA with Bonferroni correction (to reduce the risk of Type I error and adjust the significance level) were used. The results of a multivariate analysis of covariance (ANCOVA) on quality of life scores in experimental and control groups are shown in Table 3.

Table 3. Results of analysis of covariance (ANCOVA) on quality of life scores (pretest-posttest) control and experimental groups

test	Source of change	Sum of squares	Degrees of freedom	mean squats	F	Significance level	Effect size
post-test	pre-test	78379/544	1	78379/544	1673/799	0/000	
	group	2390/562	1	2390/562	51/051	0/000	0/491
	error	2481/849	53	46/827			
	total	1784169/000	56				
Follow up	pre-test	75786/227	1	75786/227	1068/511	0/000	
	group	3183/169	1	3183/169	44/880	0/000	0/459
	error	3759/130	53	70/927			
	total	1782270/000	56				

The results show, between control and experimental groups after adjusting for covariate (pre-test) scores post-test and follow-up test scores of the QOL of patients in the $01 / 0P <$ as well as the significance level obtained by correcting Bonferroni ($007 / 0P <$) there is a significant difference, in other words we can say positive mental health, quality of life, increased cardiovascular disease and about 1/49 percent of the variance in quality of life



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scores in the post-9 / 45% of the variance in quality of life at follow-up test experimental group can be explained by positive psychotherapy. The results of a

Table 4. Results of analysis of covariance (ANCOVA) on the emotional aspects of quality of life scores (pretest-posttest) control and experimental groups

test	Source of change	Sum of squares	of Degrees of freedom	mean squats	F	Significance level	Effect size
post-test	constant	85/388	1	85/388	19/175	0/000	
	pre-test	15239/418	1	15239/418	3422/263	0/000	
	group	79/516	1	79/516	17/857	0/000	0/252
	error	236/010	53	4/453			
	total	170360/000	56				
Follow up	constant	88/523	1	88/523	14/472	0/000	
	pre-test	15139/906	1	15139/906	2475/053	0/000	
	group	108/010	1	108/010	17/657	0/000	0/250
	error	324/201	53	6/117			
	total	169857/000	56				

Multivariate analysis of covariance (ANCOVA) on the emotional aspects of quality of life scores in experimental and control groups are shown in Table 4.

The results presented in Table 4 shows positive mental health, emotional aspects of cardiovascular disease has increased the quality of life and about 5/38 percent of the variance in test scores emotional aspects of quality of life and 3/34% of the variance emotional aspects of quality of life at follow-up test experimental group can be explained by positive psychotherapy. The results of a multivariate analysis of covariance (ANCOVA) on quality of life scores for physical control and experimental groups are shown in Table 5.



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Table 5. The results of analysis of covariance (ANCOVA) on the physical dimension of quality of life scores (pretest-posttest) control and experimental groups

Effect size	Significance level	F	mean squats	Degrees of freedom	Sum of squares	Source of change	test
0/385	0/000	25/228	376/199	1	376/199	constant	post-test
	0/000	826/591	12326/229	1	12326/229	pre-test	
	0/000	33/151	494/347	1	494/347	group	
			14/912	53	790/342	error	
				56	199128/000	total	
0/343	0/000	19/970	523/608	1	523/608	constant	Follow up
	0/000	438/416	11494/950	1	11494/950	pre-test	
	0/000	27/704	726/372	1	726/372	group	
			26/219	53	1389/621	error	
				56	198766/000	total	

The results indicate positive mental health, physical dimension has increased the quality of life for cardiovascular disease And about 2.25% of the variance in test scores and the physical quality of life for 25 percent of the variance in physical quality of life at follow-up test after test groups can be explained by positive psychotherapy.

Table 6. Results of analysis of covariance (ANCOVA) on the social dimension of quality of life scores (pretest-posttest) control and experimental groups

test	Source of change	Sum of squares	Degrees of freedom	mean squats	F	Significance level	Effect size
post-test	constant	4/257	1	4/257	2/117		
	pre-test	8178/537	1	8178/537	4067/399	0/000	
	group	145/050	1	145/050	72/137	0/000	0/576
	error	106/570	53	2/011			
	total	239271/000	56				
Follow up	constant	33/620	1	33/620	11/705		
	pre-test	7522/876	1	7522/876	2619/129	0/000	
	group	198/991	1	198/991	69/280	0/000	0/567
	error	152/231	53	2/872			
	total	239259/000	56				

The results show both control and experimental groups after adjusting for covariate (pre-test) scores post-test and follow-up test scores on the social dimension of quality of life in the 01 / 0P <as well as the significant level obtained by correcting Bonferroni (007 /



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OP <) there is a significant difference, in other words we can say positive mental health, the social dimension has increased the quality of life for cardiovascular disease and about the social dimension of quality of life in 6/57 percent of the variance in scores posttest and 7/56 percent of the variance in the social dimension of quality of life at follow-up test experimental group can be explained by positive psychotherapy.

3. DISCUSSION AND CONCLUSION

To evaluate the effectiveness of psychotherapy positive covariance between unilateral cases with Bonferroni correction (to reduce the social event of Khtay first type and adjust the significance level) Subject to the assumptions required, including study the homogeneity of the studied groups were used. The results showed that positive psychology has managed to 1/49 percent of the patients' overall quality of life in the post-test and follow-up 9/45 percent of these changes explain. This means that positive mental health, leading to increased quality of life for patients with cardiovascular and mental health as well as follow-up work has not gone away. The results also show that positive psychology has been able to change the dimensions of emotional, physical and social quality of life also in the process of post-test and follow-up to explain the positive psychology leads to enhanced quality of life in all its dimensions is so that the effect of the follow-up it has survived. This Ntyaj with holiness, F, Aqajani and Free (1392), Grossman and colleagues (2010), Irwin et al. (2011), Hvgvt et al (2012) in his research the effects of psychotherapy on improving the quality of life for heart patients to prove have aligned and consistent.

In line with the findings of this study Irwin et al (2011) Effect of eight weeks of psychotherapy in dealing with gender on heart patients are examined. In this study, patients who underwent cardiac surgery were randomly assigned to the first two groups were exposed. Hospital Anxiety and Depression Inventory, Events, anxiety panic and quality of life in patients after surgery, six months and twelve months later was measured. The group has been under psychological evaluation at all stages of mental anxiety and depression and less anxiety and higher quality of life were reported. In this regard, Hoffman et al. (2011) on thirty patients with cardiovascular disease in positive articles about the effectiveness of psychotherapy did. The aim of this study is to provide treatment for these thirty patients in positive mental health through eight weeks for patients in the hospital. The main goals of treatment include increased positive mood and hope in patients.

The results of this study showed significant improvement in their quality of life by increasing positive emotions in positive psychotherapy own again, and anxiety and depression in patients with cardiovascular disease can significantly affect. In explaining this finding can be given that the main objective of positive psychology, understanding and facilitate mental health and in this context, and happiness both to feel positive, happiness and peace of mind and therefore positive, like the fascination and attachment is included, refer to note positive psychology as a scientific method to understand and



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explain the happiness and mental health and to accurately predict factors focuses on such cases affect (Pashashryfy , 1385), positive psychotherapy in this study has been able to feel happiness and mental health in a way for disease The heart explain that they are more satisfied with their lives in their perception of the same disease.

Another point to be noted is that according to the new definition of quality of life as "the difference between the expectation and the reality" and that the difference is less than the higher quality of life will be smooth therapeutic positive considering its features has been able to demonstrate the reality and clean it with expectations and dampen expectations of heart patients, this difference to a minimum so that patients in sessions of psychotherapy positively contributed to higher quality of life have reported. Regarding the research and theoretical background as well as the results of this study it can be concluded that positive psychology can be a significant impact in improving the quality of life of patients is cardiovascular. With this approach, patients have a better understanding of real life and expectations about themselves and life and people become more reasonable And thus gain more satisfaction from various aspects of their lives. Finally, it is proposed to generalize the results of the research done by other communities as well as the factors (social, economic, cultural, age, gender, etc.) the quality of life for these individuals to be investigated. Also according to the results of this study suggested that workshops be held psychotherapy for these patients to reduce the problems of our people. Of all those who have helped us in this study, especially with the development of early cardiovascular disease that have participated in psychotherapy sessions, we have the fullest appreciation.

REFERENCES

- BAGHERZADEH Atta Ullah, Rynfr, angel and master, Muhammad. (1391). The effect of cognitive-behavioral interventions on mental health in patients with intracardiac defibrillator. Faculty of Medicine, Tehran University of Medical Sciences. 70 (1): 33-40
- Holiness, M., F., R.; Aqajani, Mohammed and free-F. (1393). The effect of cognitive therapy on mental health patients with heart failure. Scientific bimonthly Faiz, 18, 1, 58.
- Abolqasemi, Narimani (1385). Psychological tests. Tehran: Publication pleasure garden.
- This Hadi, Ali Montazeri, the better. (1389). Mental health-related quality of life in chronic liver disease, monitoring; 9 (2): 75-92.
- Braunwald, E., Zipes, D., & Libby, P. (2001). Heart Disease: a Text Book of Cardiovascular Medicine. 2nd ed. Philadelphia, S aunders Company, PP: 153-177.
- Crössmann A1, Schulz SM, Kühlkamp V, Ritter O, Neuser H, Schumacher B, Bauer W, Pauli P.A. (2010). Randomized controlled trial of secondary prevention of anxiety and distress in a German sample of patients with an implantable cardioverter defibrillator. Psychosom Med. 72(5):434-41
- Dunderdale k. Thompson DR, milesjN, Beer sf, furze G (2005). Quality of- life measurement of the chronic heart failure. Do we account of the patient perspective? Eur Journal of Heart. 7(4):572-82.



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- Dunderdale K, Thompson DR, Miles JN, Beer SF, and Furze G. (2007). Quality of life measurement in chronic heart failure do we take account of patient's perspective? *Euro J Heart Fail*, 7(4): 572-820.
- Feola M, Garnero S, Vallauri P, Salvatico L, Vado A, Leto L. (2013). Relationship between Cognitive Function, Depression/Anxiety and Functional Parameters in Patients Admitted for Congestive Heart Failure. *Open Cardiovasc Med J*; 7: 54-60.
- Hoogwegt MT1, Kupper N, Theuns DA, Zijlstra WP, Jordaens L, Pedersen SS. (2012). under treatment of anxiety and depression in patients with an implantable cardioverter-defibrillator: impact on health status. *Health Psychol.*; 31(6):745-53.
- Irvine J1, Firestone J, Ong L, Cribbie R, Dorian P, Harris L, Ritvo P, Katz J, Newman D, Cameron D, Johnson S, Bilanovic A, Hill A, O'Donnell S, Sears S Jr. (2011). A randomized controlled trial of cognitive behavior therapy tailored to psychological adaptation to an implantable cardioverter defibrillator. *Psychosom Med.*; 73(3):226-33.
- Molloy GJ, Johnston DW, Witham MD. (2005). Family caregiving and congestive heart failure. Review and analysis. *Euro J Heart Fail* 2005; 7: 592-603.57(538): 364-70.
- Seligman, M.E.P., Steen, T., Park, N. and Peterson, Ch., (2005). "Positive psychology Taylor SE. (2003). *Health Psychology*. London, Mc Grow-Hill; PP: 89-92
- World Health Organization (WHO). Global Strategy on Diet, Physical Activity and Health. *Cardiovascular Disease: Prevention and Control*. [Online] [Cited 2009 May 12]; Available from:RL:<http://www.who.int/dietphysicalactivity/publications/facts/cv>.