

# Effect of Existential Group Therapy on the promotion of Mood in women after Myocardial Infarction

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## Abstract

Present study was performed with the main goal of investigating the effect of existential group therapy on the promotion of mood in women after myocardial infarction (MI). Studies in two decades have presented relationship between depression, cardiovascular disease and mortality. The subjects were selected by using convenient sampling method from the list of women after MI. 24 subjects selected (12 persons in each group). Then the Beck Depression Inventory (BDI) with a reliability ratio of 0.86 was performed as pre-test and post-test. The experimental group was subjected to the intervention of existential group therapy. After a 12-session treatment (3 months, each session being two hours) in experimental group in order to measure the dependant variable (depression), Beck Depression Inventory was performed as post-test. The results of statistical analysis of T-test supported the main hypothesis (verified with a significant value of  $p= 14\%$  and reliability of 95%) and secondary hypothesis (verified with a significant value of  $p= 01\%$  and reliability of 95%). As a result, existential group therapy in comparison with control group would significantly reduce the amount of depression in women after MI.

**Keywords:** existential, group therapy, depression, myocardial infarction

The idea that emotion, feelings and social contexts may contribute to the cause to the cause of heart disease is not a new one. For centuries, there has been popular, if not scientific, association between the heart and emotions. Of all the parts of the body, the heart holds a place of special distinction in common thinking as the seat of emotion, effort and even of life itself. Our every day language makes this clear. We speak of heartbreak and heavy-heartedness, of love coming straight from the heart, as well as psychologically, the heart is crucial to ones identity and social function (15).

Cardiovascular disease frequently coexists with psychiatric disorders. The co morbidity of psychiatric and cardiovascular disease is attributable not only to the co-occurrence of cardiac disease as a complication of emotional or psychiatric problems and conversely, the development of psychiatric disorders as complications of cardiovascular disease (15). Depression following myocardial infarction is associated

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with a higher mortality rate and depression has been repeatedly shown to adversely affect cardiac morbidity and mortality (7, 20). Depression is related to poor prognosis in patients with established coronary artery disease, particularly in those recovering from MI (4, 9, 12, 21, and 24). Frausre-smith & et al. (2000) reported that depression is associated with a 3 – to 4 – fold increase in cardiac motility over the first 18 months after an MI (5, 8). Among each 100 patients who admitted to hospitals, 6 patients show major depression, 36 patients show moderate depression, 33 patients show mild depression and only 25 patients don't show any kind of depression. (14)

Approximately 65 percent of patients with acute myocardial infarction report experiencing symptoms of depression (13). Cardiovascular diseases are widespread approximately 1500000 MIs occur per annum in the united state (2, 4). The annual motility rate among survivors of an initial MI is about 10% (3, 4, and 10).

In Iran, these diseases cause 25 percent of whole of mortalities. On the other hand, cardiovascular diseases cause decrease of efficacy of human resource and specialist out of ordering (17). A patient's level of depression, in particular, plays an essential role in his or her ability to recover. Cossette, Frasure-smith and Lesperance (2001) found that interventions that resulted in a reduction in psychological distress led to a decreased likelihood of subsequent cardiac problems and improved psychological well-being. Heart attack patients assessed to have a positive out look on life had better physical and mental health out comes (1, 22). So appropriate psychotherapy could be utilized to treatment of depression and recovery their heart disease. Considering these patients are facing up a fatal disease that resulted death anxiety, therefore existential psychotherapy could be useful and efficient to improving mood.

Existential psychology is a term utilized to identify a treatment approach that is centered upon helping individuals, families, couples, and groups deal with the ultimate issues and concerns of human life, such as freedom, meaning, intimacy, and death (22). The existentialism psychotherapy is based upon the philosophy. On the one hand, it is based on the initial works of Karl jaspers, which has been influenced by hedger's ideas. On other hand, it is on the basis of the works of Ludwig bins anger and Medard Boss. These two psychiatrists had been inspired by the work Heidegger in order to create an alternative method of dealing with emotional and mental distress. Recently, practicing the existentialism in psychotherapy followed with the other varied works of frankl, May, Laing, Szasz, Yalom and van deurzen.(6)

### **The research procedure**

This research is practical one and is included in the pseudo experimental research group (pretest-posttest randomized group design).in this research, the experimental group is subjected to the independent variable (the existential therapy method), but the

control evident group does not receive any psychotherapy .also, in the dependent variable is a mood which is by the Beck Depression Inventory (BDI). The desired society in this research is all patients suffering from mayo cardio in fraction along with depression. These patients have called on the mashed resave hospital. In this research, the sampling has been done using the accessible sampling.

This research is consisted of an experimental group and a control group, which the researcher visits the hospitals (cave) and the internal heart department providing a back depression questionnaire to the myocardial infarction patients as a pretest and asking them to participate in the group therapy sessions to improve their natural conditions. agony the volunteered individuals, 24 of them have been chosen and divided into two control and experimental groups in a randomized way, which they scored 12 and more in the BDI. In the mean while, the patients were asked and allowed to use any other psychological therapy individually or in a team works (or collectively), in other to control the intervening variables during this period .12 group therapy sessions were held through the existential procedure weekly to treat the experimental group. Each session took 90 minutes and the control group did not receive any therapy. After completing the therapy period which took 3 months the BDI was administered as a posttest of the patients condition in two groups after passing one month and a half .as a result the obtained results a administered on the BDI indicates that implies that its internal correlation coefficient comes between o.73 to 0.92 with the average 0.86.(26)

### Conclusions

After entering the data, the data were analyzed by the spss soft ware and the T-test. Mean, variance, standard deviation, standard error of the mean, the highest score in the group and the range variability of the testers in the BDI for the experimental group were shown in the table and for the control group in the table 2.

Table 1: the descriptive group data study of the excremental group

The range of variability	Lowest score	Highest score	Standard deviation	Variance	mean	frequency	component the stage of performance
10	14	24	2.87492	8.265	17.4	12	pretest
18	5	23	4.97265	24.727	14	12	posttest

Table.2 the descriptive group data study of control group

The range of variability	Lowest score	Highest score	Standard deviation	variance	mean	frequency	Component The stage of performance
12	12	24	3.45096	11.909	18.5	12	pretest
14	11	25	4.29499	18.446	19.08	12	posttest

The test was used for the independent group in the major research hypothesis test. The existential approach group therapy has reduced the depression as compared with the individuals (control group) received the present treatment. The differential coverage mean of the pretest-posttest scores (d) of the control and experimental groups are compared with each other in the BDI. The results are shown as in the table 3.

Table 3: t-test to determine the significance of the depression rate in the posttest of two groups

significance	t	df	Standard error difference	Mean difference	Standard deviation	Mean	frequency	Component Groups
0.014	2.68	22	1.89680	5.0833	4.29499	14	12	experimental
					4.97265	19.08	12	Control

Considering the results of the table 3, the value of the Significance  $p=0.014$  is obtained, which this value of the significance has become smaller than 0.05 as result, the null hypothesis rejects with the %95 reliability .it means that the existential group therapy causes the depression to be reduced significantly as compared with the individuals having received the (present) therapy or treatment simply in the control group. For the

test of the minor hypothesis-the existential group therapy causes the depression reduction in the myocardium in fraction patient's significantly.-the attest has been used for the dependent groups. There for, the mean of the differential scores of the pretest posttest of the experimental groups testers are compared in the BDI with each other. The results are shown as in the table 4.

**Table4.** T-test to determine the significance of the depression rate in the experimental group

significance	t	df	Standard error difference	Mean difference	Standard deviation	Mean	frequency	Component Performance stage
0.001	4.729	11	0.722	3.4167	2.874197	17.42	12	Pretest
					4.97265	14	12	posttest

Considering the results of the table 4.,the value the significance  $p=0.001$  is obtained, which this value of the significance has become smaller than 0.05 as result, the null prosthesis with the %95 reliability it means that the existential group therapy allows for the depression reduction significantly in the myocardial infraction patients.

### Discussion

The depression disorders in the individuals suffering from the physical disease are more widespread than the healthy ones. More than one-third of the medical patients admitted to hospitals show the mild or slight symptoms of depression (25). The Striks studies (2001) showed that the essential rate of depression in the patients suffering from the heart failure of the 15-30 percentages is on the first 18 months period, witch another 20 percentage has reported the slight or partial depression .in general; it seems that the depression can be a normal reaction of the myocardial infarction. Also, the different examinations have shown that the depression could be as an important factor in the survival rate of the patients after the myocardial infraction. The out break or onset of the depression after the heart attack could also be the hindrances of the disease recovery as well as the mortality growth. For the importance of psychotherapy, this group of the patients, Johnson (2000) the patients that they have been consulted after MI in the hospital with that group who had received the only present treatment. He reports that, as long as the patients visit and attend the hospital, the rate of the depression and anxiety will be at a high level only after getting them released from hospitals, the rate of the

depression and anxiety can be increased in comparison with the group of the patients who have received the present intensive cares. And the patient have been received the consultation as well as the present treatment ,the rate of anxiety and depression is indicative of the decrease among them just as before .the patients suffering from depression and physical disease are weaker in the performance levels than the similar patient who have not had any depression. the weaker patients have had the higher rate of mortality than the similar ones that have not had any depression too. The special psychological therapies, such as the problem solution, cognitive-behavior therapy(CBT) or interpersonal therapy may be used as a secondary treatment in relation to the treatment by antidepressant drugs for the mild, weak depressive disorders among that group of the depressed individuals that have had the physical disease as well. By the way, CBT has been useful very much in practicality at the present, it is used by the health psychologists for programs of heart recovery and chronic pain .however, for the other methods of psychotherapy, few studies has been made. (25)

The couples were given the Zung Depression Scale, Maholik and Krombokh life expectancy (PIT) and Marriage Relation Perceptions Inventory (MRPI) at the first month, in the end and the six months after the interference. The age of the individual suffering from heart attack was between 39-64 with the average of fifty years old and 83 percent (n=20) were from the masculine patients. by examining the average, the couples have been cured within 21hours (11-41hours) .at first, the scores of the Zung Depression Scale in men were significantly higher than their wives, but after the therapy and the stage of performance, it was not observed the significant difference in the depression scores of couples .there was not considerable distinction in the MRPI and PIT scores of men and women. In the end of treatment period and the stage of performance, the PIT scores men and women were significantly increased, the Zung depression scores were decreased and the MRPI scores increased as well. As a result, this research indicates that the treatment method is effective (23).Lantz and Gregoire also applied the existential trauma therapy (ETT) after the heart attack individually. The studies showed that this method is useful for the men when this method administered especially after the myocardial infarction with the personal, family and pair treatments. In a research titled “social support, depression and mortality during the first year after the myocardium infarction” freasur-smith (2000), administered BDI and the perceived social support scale (PSSS) on 887 patients, approximately 7 days after the heart attack. The BDT scores were fewer than 10 in 32 per cent of the patients, indicative of the weak to medium depression. For all patients, the release opportunity or chance from disease had been determined for the next years. These patients were included in two separate projects. one of these projects was a controlled and occasional evaluator of psychosocial interference for the patients after MI. Also, it was the next project of studying the prognosis and emotions after the myocardial infarction. The analysis of the

results showed that establishing a more social support in cardiac patient having the depression causes the reduction the depressant signals.(11)

In this way, the researcher observations and findings in the present research have also revealed the influence of the existential group therapy on the reduction of the depression rate from which the individuals suffered due to MI. The changes in the experimental group were the positive ones, indicative of the reduction of the depression rate in the patients. Of course, it was observed some changes in the pretest and posttest scores of the control group too, but the changes were negative, indicating the increase in the depression rate of this group of the patients. The increase likely indicated that the individual will suffer more depression after passing the acute period of the disease as well as the reaction to it. Probably, change in the life career, the care responsibility, roles changing and even change in the social models and sexual relationship will have the considerable influence on the mental response to the patients. The researcher recognizes the influence of the group interferences in enabling the people to be honest with the selves, to expand their points of view about the world, even to clarify what gives their lives meaning. In addition, one can find out the fact that the visitors who do not have the perfect origin in their lives and how they should make their potential abilities actual and they can determine their life targets, their aims in living conditions, following through the life stages, they should know their standard and values, will resulting achieving a new natural talent for their life. Also results this process makes humankind attain where to find know ledge by making decisions in a responsible way. Knowing the fact that the persons should be responsible to their making decisions and accept the stress in their path to changes as well as having the ability to face with the inevitable or unchangeable affair will help this group of the patients very much in their lifetimes. In other words, the existentialism point of view in group gives them significant. In the content of group processing, the group will allow the individual to find out he/she does not have to remain sacrificed in the living conditions in a passive way, hoping that he/she can determine his/her life. Tumuli also clearly expresses that it is not important to what extent the conditions or circumstances can make a person sacrificed, it is the person that he/has have the potentiality to know whether he/she has been sacrificed there fore he/has can relate it to his/her fate and destiny which will leave a good impression on them (19). On the basis of this point, the present research results also indicated that this model are a useful and effective procedure to the patient of heart failure facing the death stress, so as to help them understand their feeling and perceptions of death and encountering it in a useful way inevitably.

### **Suggestions**

As far as every patient of heart failure, have had a single experience in respect with disease and treatment, as one ought, it is meritorious the present research be performed

in the form of single case designs. Since the sampling in this research has been an accessible sampling and the patients has been chosen from once hospital only, it is better to finish this study, some researches should be made in the from of larger groups and the higher bulk or volume of sample . Also, this type of studies along with the follow-up study should be made to demonstrate the stability of the treatment effects of it.

Additionally, bearing in mind that all testers in this study selected from the women population suffered from the cordial disease, it is suggested that this kind of intervention should be administered for the men too. As far as we can not deny effectiveness of psychological interventions in the psychosomatic diseases, it will be worthy the specialists and the doctors dealing with this group of patients to improve them as fast and as perfect as possible, should make much use of psychologists in order to make the psychotherapy interventions.

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