

The effectiveness of hope group therapy on Depression of women's with type 2 diabetes of Shiraz Diabetes Association

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Abstract

The purpose of this study was to investigate the effectiveness of group hope therapy on depression in women's with type 2 diabetes of Diabetes Association in Shiraz. The sample included 30 women who were selected randomly among 70 women with depression disorder. The women were divided randomly into two groups (experimental and control). The subjects also completed Beck's Depression Questionnaire .sessions of group therapy carried out. Result of MANCOVA were statistically significant at $p < 0.05$. It is suggested that group hope therapy improve depression) $F = 8.82$, $P < 0.05$) in the experimental group compared with the control group.

Keywords:

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1. Introduction

Diabetes is a metabolism disorder. Normally, food changes into glucose or blood sugar in the stomach. Sugar in the stomach enters the blood flow. The pancreas secretes insulin and this hormone causes the sugar from the blood flow into body cells. As a result, the blood level remains normal and balanced. But in Diabetes, either there is not enough insulin in the body or the insulin is not able to properly perform its duties. Therefore, glucose cannot effectively enter body cells due to the resistance against it and its level rises. Insulin is a hormone secreted by beta cells in the pancreas and its main duty is to reduce blood sugar. Pancreas is also one of the digestive glands located behind the stomach (Hegelson, Snyder, Escobar, Seminary & Becker, 2007). In the early stages, type 2 Diabetes can be treated through changing the lifestyle including healthy eating, physical activities, and stress control. However, in more advanced stages the disease can often be controlled with oral medication (Hegelson et al., 2007).

Researches have shown that psychological issues are very effective in controlling Diabetes. Psychological trainings together with medical treatments are much more efficient and stable to treat diabetes than medical treatments alone. It should be noted that psychological trainings have to be in accordance with the type of Diabetes and the patients' abilities. As Diabetic patients have a high risk of depression and anxiety disorders as well as eating disorders, they have to undergo psychological trainings. Moreover, their families must be trained so that they learn how to behave these patients properly. Psychological and group trainings including self-care, problem-solving ability, anger control and appropriate food diets have been really effective in sustainable recovery of diabetic patients (Canadian Diabetes Association, 2008). One of the effective psychological ways to treat diabetes is the cognitive-behavioral therapy. The cognitive-behavioral approach focuses on cognitive distortions and efforts to change behavior. The essence of cognitive-behavioral approach is the emotions and behaviors shaped by our thoughts and cognition. Therapists help the patients identify their cognitive distortions regarding the topics related to diabetic conditions and replace them with more positive and realistic ways of thinking (Wildermuth, 2008). One of the variables that play an important role in improving depression is hope. It can be said that by having a high degree of hope, people can protect themselves against depression and recover from short periods of depression and it is less likely to have that experience again (Snyder, 2000). Group Hope Therapy is a new therapeutic approach that provides the focus on solving the problems of a short-term, semi-structured and new treatment system by combining the principles of biography-based therapeutic interventions.

Research has shown that diabetic people have a high risk of depression and anxiety. Prevalence of depression in diabetic patients is 24% (Goldney, Philips, Fisher & Wilson, 2004). The goal of psychological therapy in type 2 diabetic patients is to live healthier and better with Diabetes. The purpose of this project is to use cognitive-behavioral therapy to provide a comprehensive training that focuses on a better life with diabetes. In this method, the patients' quality of life as well as emotions and social status are investigated. It aims at reducing the negative potential in diabetic adults. Their ability to control themselves not to consume low-value and inefficient food and to have proper daily care and pharmaceutical diet makes the intervention of psychological treatment necessary (Wildermuth, 2008). Research has shown that in a group activity, diabetic people learn what methods to apply in order to achieve more positive and sustainable changes, and the group cognitive-behavioral hope therapy approach might be effective in the increase of their metabolic control, self-esteem and life quality (Gladni et al, 2004). According to the previous studies, the prevalence of depression among diabetic patients is 11% to 12%. In a study done on 4800 adults suffering from type 2 diabetes, it was found that 12% of them had major depression and 8.5% had minor depression (Sadouk & Sadouk, 2008). Previous studies have shown that diabetic patients who suffer from depression disorders control blood glucose poorly and there are many changes in their HbA1c test (Sadouk & Sadouk, 2008).

In a research conducted by Yourbansky, Faberi and Taylor (2009), the effect of cognitive-behavioral therapy on eating disorders in diabetic people was evaluated. Findings of that research indicated that cognitive-behavioral therapy not only increased self-control in eating,

but it also increased self-esteem and compliance with the disease and reduced the average blood glucose level in the patients. The aim of the present study is to determine the efficacy of group hope therapy through a cognitive-behavioral approach on depression in female patients with type 2 Diabetes who had depression symptoms and referred to the Diabetes Association in Shiraz.

Type 2 Diabetes symptoms include recurrent infections especially urinary tract and skin infections, blurred vision, slow healing of wounds, tingling and numbness in the toes, polydipsia and thirst, over-urination, irritability, and unjustified exhaustion and excitability. All people over 40 are at risk for type 2 diabetes and their blood sugar should be tested every 3 years. Furthermore, studies have shown that obese people, people with high cholesterol and high blood pressure are at increased risk for type 2 diabetes (Hitman, 1999, quoted in Wilmot, 2008).

Hope is not just a passive thrill that emerges in the dark moments of life; rather, it is a cognitive process through which people actively pursue their goals. Elliott believes that it is a process through which people (1) set their goals, (2) create strategies to achieve those goals, and (3) create the necessary incentive to implement these strategies and maintain it along the way. These three hope pattern components are known as goals, pathway thinking and agency thinking (Snyder, 1994; 1995). Bastlar, Power, Cagepress, Jaws and Snoke (2008) used cognitive-behavioral therapy for adults who had type 2 diabetes with depression disorder. Patients who had been selected randomly were divided into experimental and control groups and were put under a group cognitive-behavioral therapy (8 therapy sessions). At the end of the therapy, depression was significantly reduced in the experimental group compared to the control group. Within the 6-month follow-up, the cognitive-behavioral therapy showed significant improvement in the patients' mood. In a study by Tsamparil and Syvsyvra (2009), the effectiveness of cognitive-behavioral therapy on depression and life quality of patients with type 1 diabetes was examined. They randomly selected 31 diabetic people who had depression disorder, and divided them into experimental and control groups. The patients' average blood glucose levels were measured before and after the treatment sessions. Then, they underwent group cognitive-behavioral therapy (10 sessions). Results of the study indicated that they had improved in mood control, coping with the disease, and self-care. Besides, their mean blood glucose test showed that they had better controlled their blood glucose during that time. In a study done by Petrarch, Hotzinger, plaque, Crunfeld and Rocks (2010) the effect of cognitive-behavioral treatment on mild and moderate depression in type 2 diabetic patients were investigated. In that study, considering the fact that the percentage of patients with diabetes will increase from 4.6% in 2010 to 7.7% in 2030 while 9% of them will suffer from depression, the necessity of psychological treatment was mentioned. To conduct the research, diabetic patients who had 3 to 6 depression symptoms were randomly selected. The patients were divided into control and experimental groups. The experimental group participated in 12 sessions of cognitive therapy while psychotherapy sessions were not held for the control group. The obtained results showed that the rates of depression in the experimental group had reduced and they had controlled their blood sugar better than the control group. These sustainable effects were reported in the follow-up that was performed 1 year later. In their studies on hope therapy of the women with cancer, Ironbech, Snyder and Crosone (1998) indicated that more hopeful people showed lower rates of depression and they had greater life expectancy and were able to better cope with their disease.

In their studies based on the effect of hope on the process of spinal cord injury improvement, Elliott et al. (1991) concluded that there was a relationship between high rates of hope and less consistency and depression and higher life expectancy. Klasner et al. (1998) studied group hope therapy for depressed adults in order to increase the pathway and incentive agent, and found that the participants' anxiety and depression were significantly reduced while their levels of happiness were significantly increased.

2. Method

The statistical population for this study included the women with type 2 diabetes attending the Diabetes Association in Shiraz. The sample was selected through convenience sampling method so that we attended Shiraz Diabetes Association and invited all women with type 2 diabetes who had high school and higher educations. They were then asked to complete the 13-point Beck Depression Inventory. Next, the individuals whose scores were higher than 5 were selected and the clinical semi-structured interviews were applied on them. After the interview, 35 of the 70 patients had diagnostic criteria for depression. Of those, 1 was excluded due to travelling, 3 were excluded due to lack of coordination of the meetings with their working hours and 1 was excluded due to a lack of desire to continue working in the study. In the end, 30 patients with depressive disorder remained. They were randomly divided into experimental and control groups. In this study, in order to collect the required data 2 questionnaires were used:

Beck Depression Inventory: the 13-point form of this questionnaire is a summarized version of the 21-point form (Beck, 1961), which was developed in 1972 (Beck, Ward, Mendelson, Mock & Erboch, 1961; Beck & Beck, 1972; Beck, Steer and Garbin, 1988). Reynolds and Gould (1981) reported 83/0 reliability and internal consistency for the 13-point Beck Depression Inventory. The reliability of the questionnaire according to the interval between the 2 tests and the type of population studied was reported from 48/0 to 86/0 (Beck & Weichaar, 1981).

Applying the questionnaire to a sample of students in the Shiraz, Fathi (2006) used Cronbach's alpha and bisection methods and reported the reliability coefficients 89/0 and 87/0, respectively. In the present study, to determine the reliability of the questionnaire using Cronbach's alpha, the coefficient of reliability was obtained to be 70/0. This study was an experimental field one and a pretest-posttest type with control groups which included 10 group hope therapy sessions. To evaluate the research data, the T-test was used.

3. Findings

In the present study, a multivariate covariance analysis (MANCOVA) was used to determine whether the differences between the scores of the experimental and control groups in terms of depression were significant.

Table1. Comparison of Depression scores for the pre-test

	Sig	Mean Square	Df	Sum of Squares	F	value	confidence level	Sig
Depression	Pre-test	30/54	1	6/46	0/20	0/20	0/68	0/018
	group	289/11	1	61/21	0/71	0/73	1	0/001
	error	118/08	25	6/46				

Table2. Comparison of Depression scores for the post-test

		Mean Square	Df	Sum of Squares	F	value	confidence level	Sig
Depression	Post-test	30/48	1	30/48	6/70	0/20	0/70	0/016
	group	328/24	1	328/24	72/17	0/73	1	0/001
	error	118/24	26	4/54				

Result of table shoes there is significant deference among pre-test and post-test of Experimental group and control croup and table show 73 percent of difference is related to hope group therapy.

4. Conclusion

According to table 1&2 it can be seen in the column related to the significance level that the difference between the experimental and control groups in terms of depression variable is significant at $p=0.001$. In this regard, it might be stated that hypothesis Group cognitive-behavioural hope therapy reduces depression in women with type 2 diabetes is confirmed. In addition, the effect size indicates that 73% of the differences between the two groups are due to the Trial Intervention. The test statistical power showed that, according to Tables 1 and 2 there was a significant difference between the experimental and control groups at the post-test stage in terms of depression. The findings show that the experimental and control groups differ from each other in terms of depression in cognitive-behavioural treatment. Thus, group cognitive-behavioural psychotherapy has resulted in reduced depression symptoms and improved quality of life at the post test stage in the subjects of the experimental group compared to those in the control group. Results of this study are consistent with those of Bastlar et al. (2008), Tsamparil & Siousioura, (2009), Wildermuth (2008), Kigreng (1991) and Petrak, Haut zinger, Plack, Kronfled and Ruckes (2010). In order to explain the results of this research it can be said that the cognitive-behavioural therapy with teaching anger management, dare predatory behaviour, problem solving skills, self-control skills, impulse control and relaxation may reduce the patients' depression and improve their quality of lives. In a research conducted by Wildermuth (2008), the effectiveness of cognitive-behavioural therapy on depression with type one diabetes was confirmed. Continuous glucose control is associated with psychological stress and since there is no support for this additional stress on patients, their internal stress increases and this decreases their life quality.

References

- Bastelar, V., Pouwer, F., Cuijpers, P., Jos, W., & Snoek, F. (2008). Web - Based Cognitive behavior therapy (w-CBT) for diabetes Patients with Co - morbid depression. *Boston medical center Psychiatry* 23, 422 - 456.
- Beck, A. T., & Beck, R. W. (1972). Screening depressed patients in family practice: A rapid technique. *Postgraduate Medicine*, 52, 81-85.
- Beck, A. T., & Weichard, M. (1981). Cognitive therapy in current Psycho therapies. New York: Guilford Press.
- Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8, 77-100.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for Measuring depression. *Archives of General Psychiatry*, 4, 561 - 574.
- Canadian Diabetes Association. (2008). The prevalence and costs of diabetes. *Consulted on November, 14, 2011*.
- Goldney, R. D., Phillips, P. J., Fisher, L. J., & Wilson, D. h. (2004). Diabetes, depression and quality of life. *Diabetes care*, 27, 1066- 1070.
- Hegelson, V. S., Snyder, P. R., Escobar, O., Siminero, L., & Becker, D. (2007). Comparison of adolescents with and without diabetes on indices of Psychosocial functioning for three years. *Journal of Pediatric Psychology*, 32, 194 - 806.
- Petrak, J., Haut zinger, M., Plack, K., Kronfled, K., & Ruckes, C. (2010). Behavioral medicine interventions in diabetes. *Current Opinion in Psychiatry*, 23, 131 - 138.
- Reynolds, W. M., & Gould, J. W. (1981). A Psychometric investigation of the Stand are and short form of the Beck Depression inventory. *Journal of consulting and clinical Psychology*, 49, 306 - 603.
- Sadock, B., & Sadock, V. (2009). Comprehensive Text book of Psychology. England Publishment.
- Snyder, C. R. (1994). *The psychology of hope: You can get there from here*. Simon and Schuster.
- Snyder, C. R. (1995). Conceptualizing, measuring, and nurturing hope. *Journal of Counseling & Development*, 73(3), 355-360.
- Snyder, J. L. (2000). *From voting to violence: Democratization and nationalist conflict* (p. 37). New York: Norton.

Norouzi, N., & Nejad, H., K. (2015). The effectiveness of hope group therapy on Depression of women's with type 2 diabetes of Shiraz Diabetes Association. *Global Journal of Psychology Research*. 5(2), 43-48.

Tsamparil, A., & siousioura, D. (2009). Primary application of conjunction group therapy in adult type 1 diabetes mellitus Patients. *Original Research Article*, 43, 143 - 169.

Urban ski, P., Fabri, G., & Taylor, D. (2009). The diabetes educator's role in managing eating disorder and diabetes. *Diabetes Spectrum*, 3, 150 - 162.

Wildermuth, A.S. (2008). Cognitive behavior group therapy for adolescent 5 with type 1 diabetes. Dissertation for P.H.D in Psychology, Regent University.