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Comparing the Effectiveness of Resilience Training and Religious-based Cognitive-Behavioral Therapy in Adherence to Treatment in Type 2 Diabetes Patients

Leila Hassannia, Mohamad Kazem Fakhri*, Seyedeh Olia Emadian

Department of Psychology, Sari Branch, Islamic Azad University, Sari, Iran.
***Correspondence** should be addressed to Dr. Mohamad Kazem Fakhri; **Email:** Fakhri@iausari.ac.ir

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Abstract

Background and Objective: Diabetes is one of the chronic diseases in which adherence to treatment plays a significant role in adherence to treatment and preventing its complications. The aim of this study was to compare the effectiveness of religion-based cognitive-behavioral therapy (RCBT) and resilience education in adherence to the treatment of patients with type 2 diabetes.

Methods: This is a quasi-experimental study with pre-test post-test control group design. Among type 2 diabetic patients referring to health service centers 45 were selected by targeted sampling method as the final sample, who were then randomly assigned to three groups of 15 including two experimental groups and one control group. One experimental group received 10 sessions of 60 minutes of RCBT and the other group received 9 sessions of 60 minutes of resilience training. Data were analyzed using univariate analysis of covariance and Tukey test. In this study, all ethical considerations were observed and no conflict of interest was reported by the authors.

Results: The results showed a difference between the experimental and control groups in the post-test of adherence to treatment with pre-test control (P=0.001, F=22.5) at 95% confidence level (P<0.05). Also, there was no statistically significant difference between RCBT and resilience training groups (F=8.46, P=0.2) at 95% level (P<0.05) in this regard.

Conclusion: The results showed that RCBT and resilience training are both effective in increasing adherence to the treatment of diabetic patients, so both methods can be used as an adjunct in the treatment of diabetic patients to increase adherence to treatment.

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Summary

Background and Objective

Type 2 diabetes is considered an important disease in terms of causing mortality and disability, which is associated with fragility conditions (1) and is one of the most common chronic diseases. The use of medication in the management of this disease is vital. However, the effectiveness of treatment largely depends on the degree of adherence to the prescribed medication. Drug compliance in patients with type 2 diabetes in primary care clinics is poor (2). Health policymakers and staff should consider interventions to increase the resilience of diabetics so that they can achieve better blood sugar control and manage their diet, medication, activity, and stress properly (3). Resilience is the ability to adapt the level of control to environmental conditions (4).

Although resilience is partly a function of personality traits, it is also a function of individuals' environmental experiences. Therefore, human beings are not absolute victims of the environment and heredity, and people's

reactions to stress, unpleasant events and difficulties can be changed so that they can overcome the problems and the negative impact of the environment (5).

Considering the importance and necessity of paying attention to the economic and social burden of diabetes and the role of adherence to the treatment of patients with diabetes in the prevention of complications, the present study investigated and compared the effectiveness of religion-based cognitive-behavioral therapy and resilience training on adherence to treatment in patients with type 2 diabetes.

Methods

Compliance with ethical guidelines: Observing the right of choice and authority of the subject to participate in the project, confidentiality of personal information, providing the necessary information on how to implement the research project, obtaining informed consent, leaving the project in case of dissatisfaction of participants and providing medical interventions to the control group after the study. Were the most important ethical issues observed in the present study.

This study was quasi-experimental and involved the use of two experimental groups and a control group. It was carried out using a pre-test post-test design. The statistical population included all the patients with diabetes under the auspices of family physicians of Ghaemshahr comprehensive health services centers, out of whom 45 were selected as the final sample by purposive sampling method. Then, they were randomly assigned to three groups of 15, including two experimental groups and a control group.

First, demographic and adherence to treatment (6) questionnaires were administered in both experimental and control groups. The patients in the two experimental groups received 10 sessions of 60 minutes, once a week, in addition to receiving routine medical care; one group underwent cognitive-behavioral therapy (7, 8) and the other group received resilience training (9, 10). The patients in the control group received only routine medical care during this period. Post-test was applied to both groups one week after the end of the interventions.

Data were univariate analysis of covariance (ANCOVA) and Tukey test.

Results

The results showed a difference between the religious-oriented cognitive behavioral education group and the control group in the variable of adherence to treatment (28.46, P=0.001) and this educational program could increase adherence to treatment in the patients with type 2 diabetes in the cognitive therapy group (173.46) compared to the control group (145). The results also showed that there is a difference between the resilience training group and the control group in the variable of adherence to treatment (P=0.0001) and this training program was able to increase adherence to treatment in the patients with type 2 diabetes in the resilience training group (46/173) compared to the control group (145). Comparing the two methods by Tukey test also showed no significant difference between religion-oriented cognitive behavioral education group and resilience education group (8.46, P=0.2). This finding shows that despite the increase in the mean related to adherence to treatment in the group that received religion-based cognitive behavioral therapy (173.46) compared to the group of resilience education (165), this difference was not statistically significant.

Conclusion

Studies on the patients with diabetes show that they have a low level of adherence to treatment (6). Non-adherence to treatment is one of the reasons for treatment failure, increased complications and other problems, including increased treatment costs (11).

The results showed that there was a significant difference between the group of RCBT, resilience education and the control group in terms of adherence to treatment. But there is no significant difference between the two groups of cognitive-behavioral therapy and resilience training. This means that both treatments were effective in increasing adherence to treatment.

Research shows that resilient individuals follow better treatment than other patients (12-14); this finding is consistent with the findings of the present study. Resilience is a new approach that increases adherence coping strategies and reduces the likelihood of non-adherence to treatment (14). On the other hand, religious beliefs can also lead to inner peace and ultimately increase adherence to treatment by creating hope and encouraging positive attitudes (15-17). A sense of belonging to a high source helps people to hope for God's help and to be optimistic about the future in difficult situations in the face of stressful life events (18, 19). It is also suggested that due to the cross-sectional nature of this study, researchers conduct longitudinal studies to evaluate the sustainability of the effectiveness of

religion-based cognitive-behavioral therapy and resilience training.

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Conflict of interest
The authors did not report any conflict of interest in this study.

Authors' contribution
Writing the article and doing the statistical analyses: first author; the supervisor: second author; and the consultant professor: third author.

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