



Research paper

## Evaluation of the Effectiveness of Reality Therapy Intervention on Increasing Self-Care in Women with Type 2 Diabetes

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### Abstract

The aim of this study was to investigate the effectiveness of reality therapy on increasing self-care in women with type 2 diabetes. The research was quasi-experimental design with pre-test, post-test with control group. The statistical population included 618 patients, enrolled in the Diabetes Charity Clinic in 2019, of whom 36 were selected by convenience sampling and randomly assigned to experimental and control groups. Participants completed the self-care questionnaire of diabetic patients before and after the intervention period. The intervention was performed on the experimental group for two months, 90-minute sessions of weekly. Multivariate analysis of covariance showed that in the post-test, reality therapy intervention significantly increased self-care scores and its subscales (exercise, treatment and foot-care) except diet, in women with diabetes. Glasser Reality Therapy Intervention can be used as an effective intervention to increase self-care in women with diabetes.

**Keywords:** Diabetes, health behavior, reality therapy, self-care

### Introduction

According to WHO, diabetes is a multifactor and metabolic disease, resulted from deficits in either insulin release or its functions or both (ElSayed, et al., 2023). Self-care is an important factor that may reduce the psychological and physical effects of diabetes (Patra, et al., 2023). Reality therapy is an effective psychological intervention introduced by William Glasser in 1960s and emphasizes on responsibility in all aspects of life including how a person encounters with the effects of his problems and manages his disease, and was claimed to be helpful for those with psychosomatic conditions such as diabetes (Glasser, 1999). According to this approach, although people do not choose to be a patient, they can choose their behavior and accept the responsibility of their actions in order to overcome and control their disorders or diseases. So, research found that reality therapy can be an effective treatment in promoting self-care behaviors in people with type II diabetes, compliance with medical instructions and may decrease psychological problems like anxiety and depression (Behzadi, et al., 1400; Hamidi, et al., 1401). Some of concepts that were taught in reality therapy sessions included: how and why each person behaves and the goals of behaviors; five basic needs each person has, total behavior and its components (action, thinking, feeling and physiology); internal and external control and four types of the latter; seven constructing and seven destructing behaviors; quality world and its elements; WDEP (wants, doing, self-evaluation, planning). Because of the increasing number of people with diabetes and their difficulties in engaging in self-care

behavior it seems that they lack the knowledge and capability of managing these problems, and do not aware of the role of behavior-choosing and responsibility-taking in reducing the physical and psychological consequences of diabetes. Since most studies using reality therapy pay attention to decreasing the psychological signs and symptoms of diabetes, and not increasing self-care, this study tends to promote the patient knowledge and responsibility-taking and hypothesizes that reality therapy intervention is effective on increasing self-care in women with type II diabetes.

## Method

The research design was quasi-experimental with pre-test, post-test with control group. The statistical population included 618 patients enrolled in the Najaf-Abad Janan Diabetes Charity Clinic in 1398, of whom 36 were selected by convenience sampling. 18 patients were randomly assigned to each group (experimental and control). Since the self-care problems in patients with diabetes and because reality therapy invites all the people, including patients with psychosomatic conditions, to be responsible for their lives and behaviors, reality therapy approach was chosen to be conducted in group sessions. Both groups filled the consent form prior to intervention. The experimental group participated in 90-minute weekly sessions for 8 weeks, receiving information from choice theory and reality therapy constructs. Participants in both groups completed the self-care questionnaire of diabetic patients before and after the intervention period. Covariance analysis (ANCOVA) and multivariate covariance analysis (MANCOVA) were conducted by SPSS-26 software.

## Tools

**Summary of Diabetes Self-Care Activities (SDSCA)** developed by Toobert and Glasgow (1994) in 14 items to assess the self-care behavior in diabetes patients including Diet, Exercise, Regimen Adherence, and Foot Care, reported internal reliability was 0.75, and its validity was confirmed by experts. The reliability was 0.79 in this research.

**Intervention Procedure:** Reality therapy group intervention consists of eight 90-minute weekly sessions, in which basic concepts of choice theory and reality therapy and their relevance to self-care behavior are taught.

## Results

Table 1 shows significant differences in post-test scores on exercise, regimen adherence and foot care between two groups, meaning that reality therapy enhances self-care behaviors in those domains. There were no significant differences in diet sub-scale between two groups.

**Table 1. MANCOVA results for differences between post-test scores of experimental and control groups**

Variable	Source	Square Means	df	F	Sig.
Diet	Pre-test	4.38	1	0.28	0.61
	Group	49.47	1	3.11	0.09

<b>Exercise</b>	<b>Pre-test</b>	67.81	1	16.47	0.01
	<b>Group</b>	116.66	1	28.33	0.01
<b>Regimen Adherence</b>	<b>Pre-test</b>	75.01	1	13.28	0.01
	<b>Group</b>	285.94	1	50.62	0.01
<b>Foot Care</b>	<b>Pre-test</b>	317.37	1	9.00	0.01
	<b>Group</b>	234.27	1	7.38	0.01

According to table 2 there is significant difference between post-test self-care total scores of experimental and control groups. The results indicates that reality therapy causes significant increase in total self-care in experimental group.

**Table 2. MANCOVA results for differences between post-test scores of experimental and control groups**

<b>Variable</b>	<b>Source</b>	<b>Square Means</b>	<b>df</b>	<b>F</b>	<b>Sig.</b>
<b>Self-Care</b>	<b>Pre-test</b>	248.48	1	4.12	0.06
	<b>Group</b>	1683.41	1	27.90	0.01

## Discussion and Conclusion

The results suggest that reality therapy intervention is an effective approach in enhancing total self-care behavior and its subscales except diet in patients with diabetes, which is a difficult concept due to lack of accompaniment from family members; and for some, it is hard to have a dietary or different type of food from other members. So, it is important to teach patients to have better relationships with their families. According to Glasser introducing choice theory and reality therapy components (such as total behavior, internal control, and most importantly responsibility) to patients can help them to manage better their disease and choose effective behaviors in order to reduce the effects of their condition. So, one of the crucial elements taught in reality therapy intervention is how to choose effective and responsible behaviors to avoid negative consequences of their disease. Another important concept is internal control. If the patients feel control over their lives and behaviors, they can choose their behaviors more consciously and appropriately. Since in reality therapy intervention the emphasis is on teaching these items, clearly this treatment approach can help the participants to better adjust with their disease and have more control over their choices and actions. According to the limitations of this study, it is suggested that future investigations include both genders and target other demographic factors with follow-up sessions and assessment.

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