



## A Comparison of the Effectiveness of Acceptance and Commitment Therapy (ACT) and Cognitive Behavioral Therapy (CBT) in Improving Health Locus of Control, Irrational Health Beliefs, and Medication Adherence in Men and Women with Type II Diabetes

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### Abstract

**Aim:** The present study aimed to compare the effectiveness of acceptance and commitment therapy (ACT) and cognitive behavioral therapy (CBT) in improving health locus of control, irrational health beliefs, and medication adherence in individuals with type II diabetes. **Methods:** The present semi-experimental research had a pretest-posttest design with follow-up and control groups. The statistical population of the research consisted of men and women with type II diabetes who visited Imam Hossein Clinic in Sari city. During a public announcement (Imam Hossein Clinic located in Sari), 45 men and women with the inclusion criteria to participate in the research were selected and randomly assigned to three groups, namely cognitive behavioral therapy (n=15), acceptance and commitment therapy (n=15), and control group (n=15). The cognitive behavioral therapy group received Frey's therapy protocol (2005) in twelve sessions, and the acceptance and commitment therapy group received the Hayes protocol (2004) in eight sessions. All three groups were evaluated in three stages, pre-test, post-test, and follow-up by the Irrational Health Belief Scale (IHBS) by Christensen et al. (1999), the Multidimensional Health Locus of Control scale (MHLCS) by Wallston and Wallston (1982), and the Medication Adherence Questionnaire by Madanlou (2013). The collected data were analyzed using the repeated-measures analysis of variance. **Results:** The cognitive behavioral therapy and group acceptance and commitment therapy were effective in improving irrational health beliefs ( $P=0.043$  and  $F=3.497$ ), external control ( $P=0.022$  and  $F=4.342$ ), internal control ( $P=0.023$  and  $F=5.236$ ), and medication adherence ( $P=0.001$  and  $F=12.606$ ) in the post-test and the effect was stable in the follow-up phase. **Conclusion:** Both treatment methods could improve irrational health beliefs, internal and external control, and medication adherence but acceptance and commitment therapy had a greater effect on the research variables.

**Keywords:** Health locus of control (HLOC), Irrational beliefs, Medication adherence, Acceptance and commitment therapy (ACT), Cognitive behavioral therapy (CBT)

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