

Abstract

Original Article

The Impacts of Diabetes Education on Self Care Agency, Self-Care Activities and HbA1c Levels of Patients with Type 2 Diabetes: A Randomized Controlled Study

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Abstract

Background: Uncontrolled levels of blood glucose is the basic problem in patients with diabetes. So, aim of the diabetes management is to control the glycemia and to prevent the complications. The question of how to help the individuals with diabetes for self-care activities in order to improve the glycemetic control is important, with in the perspective in nursing.

Aim: The study aims to investigate the effects of diabetes education based on the self-care deficit nursing theory (SCDNT) on the self-care agency, self-care activities, and HbA1c levels of patients with type 2 diabetes.

Methodology: The study is a double-blind, randomized, controlled intervention study. With the block-randomized method, 70 patients were assigned to the intervention group and 69 patients to the control group. Following the pre-test, in April 2012 the intervention group received self-management education based on SCDNT. To compare the intervention and control groups t test was used in independent groups and also it was used to evaluate the intra-groupal differences in dependent groups. Intention to treat analysis was also performed because of missing data.

Results: After the SCDNT-based diabetes self-management education, a statistically significant difference was observed in the self-care agency between the two groups ($p < .05$) but there was no significant difference in HbA1c and self-care activities between the two groups. When the pretest and posttest scores were analyzed, the intervention group scores after interventions for self-care agency and self-care activity were significantly higher, and HbA1c was significantly lower than the scores at pre-intervention ($p < 0.05$). Control group scores showed no difference at the initial and 6th month of the study ($p > 0.05$).

Conclusions: Following the self-management education based on SCDNT, self care agency and self-care activity and the glycaemic control of the individuals with diabetes in intervention group were improved. SCDNT was a good guide in planning the study and for the self-management education.

Keywords: Type 2 Diabetes, Self Care Deficit Nursing Theory, Self-Management Education, HbA1c, self care activities, self-care agency.