Effect of a Hospital-based Clinic Intervention on Glycemic Control Self-efficacy and Glycemic Control in Chinese Patients with Type 2 Diabetes Mellitus

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ABSTRACT

A randomized controlled trial (RCT) design examined the effect of a hospital-based clinic intervention on glycemic control self-efficacy and glycemic control in Chinese patients with type 2 diabetes mellitus. The 160 enrolled participants in this study, which was conducted at the hospital-based clinic in the teaching hospital of Xi'an Jiaotong University, were randomized into the experimental and control groups with 80 participants in each group. Three participants in the experimental group dropped out after the first class session due to a business trip or their familial reasons. The participants assigned to the experimental group received an one-month hospital-based clinic intervention, based on self-efficacy theory, using health educational strategies. The one-month intervention program met two hours per week in a class session for four weeks. Individual counseling by telephone was also provided for four months after the clinic intervention. Data were collected using the Diabetes Management Self-efficacy Scale and blood was drawn to determine HbA1c level at pre-, post- and four-month follow-up period. Data were analyzed using descriptive statistics and repeated measures ANOVA.

The findings revealed that the experimental group showed statistically significant improvement in glycemic control self-efficacy immediately after intervention and at the 4-month after intervention ($F = 26.888$, $p < .05$), and the HbA1c was significantly decreased at 4-month after intervention ($F = 4.317$, $p < .05$). The study suggested that the hospital-based clinic intervention should be used to promote glycemic control self-efficacy and control blood glucose for patients with type 2 diabetes mellitus.

Key words: Diabetes mellitus (DM), Hospital-based clinic intervention, Glycemic control self-efficacy, Glycemic control