The Effect of Gestational Diabetes Mellitus Training upon Metabolic Control, Maternal and Neonatal Outcomes

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Abstract

Background: Gestational Diabetes Mellitus is observed nearly 3-7% of all the pregnancies.

Objective: This article is a report of the effect of Social-Cognitive Theory and Health Promotion Model (HPM)-based patient education on metabolic control, maternal and neonatal outcomes of pregnancies who have gestational diabetes.

Methodology: The study adapted a quasi-experimental design, with a comparison between an intervention group and usual care group. The study was conducted in Obstetrics and Gynecology Clinic of Ege University Hospital in Turkey. Sixty pregnant women with gestational diabetes participated in this study. The data were collected between 01 February 2010-15 October 2010. The data collection tool comprised an Patient Identification Form, Metabolic Control Follows-up Form, Postpartum Evaluation Form and Gestational Diabetes and Management Achievement Test. The intervention group received Social-Cognitice Theory and HPM-based oral education, while the usual care group received a routine follow-up. Data were analysed with Chi-square analysis, independent samples t test and Mann-Whithney-U test.

Results: There was no significant difference found in the pre and post-test mean value baseline of the Achievement Test score in the usual care group, however there was significant difference found in the pretest and post-test mean value baseline of the Achievement Test score in the intervention group. Also, there was no significant difference between the groups for postpartum maternal and neonatal outcomes, first and fifth minute appgar scores and lenght staying at hospital of the baby and mother (p>.05).

Conclusions: The results of the study have shown that Social-Cognitive Theory and HPM-based education increase knowledge level of the women with GDM.

Keywords: Gestational diabetes, Health Promotion Model, maternal and neonatal outcomes, nursing, education