

The Effect of Diabetic Foot Exercise Therapy and Health Education on Blood Glucose Level Control Among Families with a Member Suffering from Type II Diabetes Mellitus in the Mulyorejo Community Health Center Area

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ABSTRACT

Type 2 diabetes mellitus prevalence continues to increase. Uncontrolled blood glucose levels are caused by lack of physical activity, poor knowledge, and suboptimal family support. The combination of mild aerobic exercise and health education is believed to provide a synergistic effect. A descriptive case study of Mr. I (78 years) and Mrs. S (72 years) with type 2 DM. The combined intervention of mild aerobic exercise and health education was provided over 4 home visits. Evaluation used random blood glucose measurement and observation of clinical symptoms. There was a decrease in RBG in Mr. I from 210 mg/dL to 188 mg/dL and in Mrs. S from 217 mg/dL to 180 mg/dL. Complaints of dizziness, weakness, polydipsia, polyphagia, and polyuria decreased. Family knowledge improved. The combined intervention effectively lowers blood glucose levels through increased insulin sensitivity and improved knowledge and family support. The combination therapy is effective for blood glucose control in families with type 2 DM members.

Keywords: *Type 2 Diabetes Mellitus, Mild Diabetic Foot Exercises, Health Education, Blood Glucose Levels*