## Glycemic Control on Self-Efficacy and Self-Care Behaviors among Omani Adults with Type 2 Diabetes

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Abstract : Background: Type 2 diabetes has a significant impact on individuals' health and well-being. Glycemic control may influence self-efficacy and self-care behaviors, and reduce the risk of complications among adults with type 2 diabetes. Type 2 diabetes has substantial morbidity and mortality and 60% of adults' poor self-care. Glycemic control is associated with reported self-efficacy and self-care behavior. Adults with type 2 diabetes with less information were less likely to take diabetes self-care. Aim: To examine the relationship between glycemic control, demographic factors, clinical factors on self-efficacy, self-care behaviors among Omani adults with type 2 diabetes. Methods: A correlational, descriptive study was used. Omani adults with type 2 diabetes (n=140) were recruited from a public hospital in Oman. The data were collected during January-March 2015. Ethical approval was given by the college research and ethics committee, College of Nursing, and the Hospital, Sultan Qaboos University Data was collected on self-efficacy, self-care behaviors and glycemic control. The study was approved by the Institution Ethics and Research Committee. Bivariate and multivariate analyses were conducted. Results: Most adults had a fasting blood glucose >7.2mmol/L (90.7%), with the majority demonstrating 'uncontrolled or poor HbA1c of > 8%' (65%). Variance of self-care behavior (20.6%) and 31.3% of the variance of the self-efficacy was explained by the age, duration of diabetes, medication, HbA1c and prevention of activities of living. Adults with type 2 diabetes with poor glycemic control were more likely to have poor self-efficacy and poor self-care behaviors. Conclusion: This study confirms that self-efficacy model on outcome predicts self-efficacy and self-care behavior. Higher understanding of diabetes, prevention of normal daily activities, higher ability to fit diabetes life in a positive manner and high patient-physician communication were significant with selfefficacy and self-care behaviors. Hence, glycemic control has a high effect on improving self-care behaviors like diet, exercise, medication, foot care and self-efficacy among type 2 diabetes. Implications: Using these findings to improve self-efficacy, individualized self-care management is recommended for better self-efficacy and self-care behaviors among adults with type 2 diabetes.

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