UNIVERSITI TEKNOLOGI MARA

RELATIONSHIP OF SELF-EFFICACY WITH SELF-CARE BEHAVIOUR, MEDICATION ADHERENCE AND GLYCAEMIC CONTROL AMONG TYPE 2 DIABETES MELLITUS PATIENTS IN TAMAN EHSAN AND SUNGAI BULOH PRIMARY HEALTH CARE CLINICS

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Dissertation submitted in partial fulfillment of the requirements for the degree of
Master of Medicine (Family Medicine)

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and regulations for Post Graduates, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

Evidence has shown that glycaemic control could be improved with better self-efficacy, self-care behavior and medication adherence among patients with T2DM. However, there was no published research of these relationships among T2DM patients in the Malaysian primary care setting. Such evidence is needed to guide better management of T2DM in primary care. The objectives of this study were to i) determine the levels of self-efficacy, self-care behaviour, medication adherence and glycaemic control among T2DM patients in the Malaysian primary care setting ii) determine the relationship of self-efficacy with self-care behaviour, medication adherence and glycaemic control iii) determine the factors associated with good glycaemic control. This was a cross-sectional study involving 340 T2DM patients from two public primary care clinics in Malaysia. Self-efficacy, self-care behaviour and medication adherence levels were measured using previously translated and validated self-filled questionnaires. Glycaemic control was measured using HbA_{1c}. The total mean (±SD) of self-efficacy, self-care behaviour and medication adherence scores were 7.33 (±2.25), 3.76 (±1.87) and 6.31 (±1.50), respectively. A positive relationship was demonstrated between self-efficacy with self-care behavior ($P<0.001$, R^2 0.538) and medication adherence ($P<0.001$, R^2 0.261). Higher self-efficacy score was shown to be correlated with lower HbA_{1c} ($P<0.001$, R^2 -0.41). Linear regression analysis demonstrated that higher self-efficacy score (adjusted OR: -0.015; 95% CI: -0.020, -0.011; $P<0.001$), better medication adherence score (adjusted OR: -0.514; 95% CI: -0.706, -0.322; $P<0.001$), shorter duration of diabetes (adjusted OR: 0.005; 95% CI: 0.003, 0.008; $P<0.001$) and smaller waist circumference (adjusted OR: 0.017; 95% CI: 0.003, 0.031; $P=0.016$), were significantly associated with good glycaemic control. This study demonstrated that higher self-efficacy was correlated with improved self-care behaviour, higher medication adherence level and better glycemic control. Higher self-efficacy and medication adherence scores were also significant predictors of good glycaemic control. Findings of this study highlight the importance to incorporate the concept of self-efficacy into T2DM interventional programmes in our primary care setting aiming to improve glycaemic control.

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