# UNIVERSITI TEKNOLOGI MARA

# THE RELATIONSHIP BETWEEN MEDICATION ADHERENCE AND SATISFACTION AMONG PATIENTS WITH TYPE 2 DIABETES MELLITUS IN PRIMARY HEALTHCARE

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Dissertation submitted in partial fulfillment of the requirement for degree of

**Master in Pharmacy Practice**

**Faculty of Pharmacy**

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# AUTHOR'S DECLARATION

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

In the event that my dissertation be found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my degree and agree be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

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# ABSTRACT

*Introduction:* The prevalence of diabetes mellitus in Malaysia is high with a figure 15.2% reported in 2011. Antidiabetic drugs are known to effectively control type 2 diabetes mellitus. However previous studies showed that glycaemic control is still far from satisfactory in Malaysia. It has been widely established that adherence to antidiabetic agents is positively associated with a decrease in HbA1c levels. Patient's adherence towards treatment and their health-related decision-making might be influenced by their satisfaction towards treatment.

*Objectives:* This study aimed to assess medication adherence and its relationship with treatment satisfaction among diabetic patients.

*Method:* This is a cross sectional descriptive study conducted in Klinik Kesihatan Presint 9, Putrajaya, Malaysia and involved 200 patients with Type 2 diabetes mellitus. The Morisky-8 and Diab-Med-Sat were used to assess adherence and satisfaction respectively. SPSS Ver.21 was used for analysis. Main outcomes were levels of medication adherence and satisfaction. The relationship between the two outcomes was determined.

*Results:* According to Morisky-8, 74 patients (37.0%) had high adherence, 81 (40.5%) had medium adherence and 45 (22.5%) had low adherence. The mean score for adherence was 6.7 ± 1.5 which is medium adherence. The mean score for satisfaction was 89.4% ± 8.2. Adherence score was positively and significantly correlated with satisfaction (r=0.34, p<0.05). Similar significant positive correlation was found between adherence scores and age (r=0.307, p<0.05) as well as adherence scores and duration of illness (r=0.140, p<0.05). Positive association was also found between adherence level and gender ($\chi^2$=4.341, p=0.037), employment status ($\chi^2$=11.864, p=0.001) and fasting blood glucose level ($\chi^2$=4.331, p=0.037). Adherence was not significantly associated with the variables such as education level, number of prescribed antidiabetic medications and type of antidiabetic therapy.

*Conclusions:* Practices and services which can improve patients' adherence such as campaigns, medications counselling and medication therapy adherence clinic can improve both patient satisfaction to treatment services and patients' adherence to their medication. This can subsequently improve patients' health and quality of life and further reduce health care costs.

# APPROVAL SHEET

I hereby recommend that the dissertation titled 'The Relationship between Medication Adherence and Medication Satisfaction among Type 2 Diabetes Mellitus in Primary Healthcare prepared under my supervision by Nik Iryani binti Nik Ahmad Damian be accepted in partial fulfillment of the requirements for the Master in Pharmacy Practice, Faculty of Pharmacy, Universiti Teknologi MARA (UiTM).

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