

UNIVERSITI TEKNOLOGI MARA

**THE PRE AND POST ASSESSMENT OF GLYCEMIC CONTROL AND
PATIENTS' MEDICATION ADHERENCE OF TYPE 2 DIABETES
MELLITUS (T2DM) IN PHARMACIST-MANAGED DMTAC PROGRAM
AT PUTRAJAYA HEALTH CLINIC.**

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Master in Pharmacy Practice

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I certify that a Panel of Examiners has met on 21st January 2016 to conduct the final examination of Hajar Binti Mat Noji on her Master of Pharmacy Practice dissertation entitled “The Pre and Post Assessment of Glycemic Control And Patients’ Medication Adherence of Type 2 Diabetes Mellitus (T2DM) in Pharmacist-Managed DMTAC Program at Putrajaya Health Clinic” in accordance with Universiti Teknologi MARA Act 1976 (Akta 173). The Panel of Examiners recommends that the student be awarded the relevant degree. The panel of Examiners was as follows:

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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 dissertation 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 Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

According to WHO 2014 data, 9% of adults 18 years and older had diabetes. In 2012 diabetes was the direct cause of 1.5 million deaths. Until this date, diabetes mellitus has become a major healthcare burden in almost all countries in the world. According to the Third National Health and Morbidity Survey (2006) done by the Ministry of Health Malaysia, the prevalence of diabetes among Malaysian adults of over 30 years has almost increased by two folds. WHO states that non-adherence to medications is a major problem whereby poor adherence can lead to negative health outcomes such as worsened disease or even mortality. The aim of this study was to evaluate the effectiveness of pharmacist-managed DMTAC program in improving patients' glycemic control, lipid profile, and medication adherence pre and at least 3 months post DMTAC program. This retrospective cross sectional study was carried out within 3 months at the out-patient pharmacy of Putrajaya Health Clinic Presint 9. Primary outcome measure was the glycemic control changes pre and post DMTAC service. Other relevant clinical parameters changes were the secondary outcome measures. There was a significant difference of mean HbA1c by -0.82%, which decreased from 10.46% (S = 1.68) to 9.64% (SD = 2.34) ($p < 0.001$). Meanwhile, the reduction of 2.9 mmol/L ($p < 0.001$) in mean FBG was also significant. This statistical significant difference of HbA1c indicates a positive impact of DMTAC program.

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