

**SELF-CARE KNOWLEDGE AMONG TYPE 2 DIABETES MELLITUS PATIENTS  
IN UITM CLINICAL TRAINING CENTRE (CTC), SUNGAI BULOH:  
A CROSS-SECTIONAL SURVEY**



**DIPLOMA IN PHARMACY  
FACULTY OF PHARMACY,  
UNIVERSITI TEKNOLOGI MARA  
PULAU PINANG**

**PREPARED BY  
AMILA ATHIRAH BT MD ADHA  
NURUL NADIA BT FEIZAL  
SYAMIMI BT JAMIL**

**MARCH 2018**

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Supervisors : Dr Lean Qi Ying (Faculty of Pharmacy UiTM Pulau Pinang)  
Madam Wong Yuet Yen (Faculty of Pharmacy UiTM Pulau Pinang)  
Field Supervisor : Mr. Norazmi Bin Badarulzaman (Pharmacy Department, UiTM CTC  
Sungai Buloh)

Submitted in part fulfilment for the degree of diploma of pharmacy in the  
Faculty of Pharmacy,  
Universiti Teknologi MARA  
Pulau Pinang

March 2018

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Universiti Teknologi MARA  
Pulau Pinang.

## ABSTRACT

**Background:** Type 2 diabetes mellitus (T2DM) is a complex disease requires continuous medical interventions coupled with patient-driven self-care activities performed outside of clinic setting. Despite the availability of different medicines, less than a quarter of patients in Malaysia achieved good glycaemic control. Therefore, self-care practices among Malaysians with diabetes mellitus urgently need to be explored.

**Objectives:** This study aimed to (1) assess self-care knowledge among individuals with T2DM; (2) explore factors affecting diabetes self-care knowledge; (3) determine relationship between self-care knowledge and glycaemic control; (4) solicit patients' opinions on difficulties and helpful aspects in managing diabetes.

**Methods:** A cross-sectional survey was conducted for 4 months and a half at UiTM Clinical Training Centre, Sungai Buloh, Malaysia. Using a pre-validated questionnaire, investigators conveniently surveyed patients diagnosed with T2DM who were waiting at the endocrinology clinic and out-patient pharmacy. Total knowledge scores were calculated based on correct responses provided. Data were analysed using IBM SPSS, version 20 with a priori of less than 0.05 considered to be significant.

**Results:** 79 questionnaires were distributed but only 76 respondents completed the survey, with a response rate of 96.2%. The age range of the respondents was 57-61 years old. Most respondents were males (51.3%), Malays (84.2%) and had completed tertiary education (92.4%). The mean duration of respondents diagnosed with T2DM was  $11.74 \pm 8.04$  years. The mean of HbA<sub>1c</sub> from 45 respondents was  $7.7 \pm 1.67\%$  while the mean of fasting blood glucose from 58 respondents was  $8.5 \pm 3.03$  mmol/L. Majority of the respondents (69.7%) had high diabetes self-care knowledge, significantly associated with the household monthly income ( $p = 0.018$ ). A significant but weak positive correlation was noticed between

knowledge scores and fasting blood glucose ( $r = 0.278$ ,  $p = 0.034$ ). Patients expressed that controlling diet was among the toughest yet most helpful aspect in managing diabetes.

**Conclusions:** Several diabetes self-care knowledge gaps were identified from this study despite a large proportion of respondents achieved high knowledge scores. These knowledge weaknesses warrant reinforcement in order to optimize diabetes care among patients with T2DM.

## **ACKNOWLEDGEMENT**

We took so many efforts to complete this final year project for our diploma requirements. Nevertheless, this project would not be done with the kind support and help from many individuals and organisations. We would like to extend our thanks to all of them.

First of all, we would like to express our deepest appreciation to our supervisors, Madam Wong Yuet Yen and Dr Lean Qi Ying for their endless supervisions and support as well as equipping us with the full guidance and necessary knowledge to complete this project.

Next, we are very grateful to our parents and our team members for their support and kind cooperation in this project. Moreover, we would like to thank our head of pharmacy department in UiTM Clinical Training Centre, Encik Nur Azmi Bin Badarulzaman for approving our project proposal, giving us the opportunity to experience an internship in the hospital and for the meaningful advices regarding work ethics.

In addition, we would like to express our appreciation to the respondents for their kind cooperation, support and involvement in this project. Last but not least, thanks to everyone who willingly helped us out with their abilities and who gave us the chances to conduct and complete this research as our final year project for diploma pharmacy course at UiTM Pulau Pinang, Kepala Batas Campus.