# UNIVERSITI TEKNOLOGI MARA

# ASSESSMENT OF KNOWLEDGE AND ATTITUDE OF NON-DIABETICS POPULATION TOWARDS DIABETES: A SURVEY IN URBAN AND RURAL AREAS OF SELANGOR

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### **ABSTRACT**

The prevalence of DM in Malaysia is increasing at an alarming level day by day. Due to this problem, the public's knowledge and attitude towards the disease should be assessed. To date, there is limited data on knowledge and attitude on DM in Malaysia particularly in Selangor. The study aims to assess the knowledge and attitude towards DM among the non-diabetics in the urban and rural areas of Selangor. A cross sectional survey was conducted to evaluate the non-diabetics' knowledge of diabetes and their attitude towards the disease. The respondents were required to answer 28 questions from a pre-tested questionnaire divided into five main sections which are general knowledge, risk factors, symptoms, complications, preventive measures, treatment and management of DM sections. Four queries were asked to assess the level of attitude towards DM. A point was awarded for each correct answer and zero for wrong or unsure responses. The maximum total score was 28. A total of 500 respondents comprising of 250 urban and 250 rural respondents participated in the study. The mean score for knowledge on DM for urban and rural respondents were 17.87 ± 5.30 and 17.98 ± 4.96, respectively. Approximately 80% of respondents from both groups scored 50% out of the 28 questions asked. They have sufficient knowledge on risk factors, symptoms complication, preventive measures, treatment and management of DM sections of the questionnaire. They performed best in preventive measures section and worst in general knowledge. Gender, education level, and monthly income did not influence the level of knowledge for both urban and rural respondents. Urban respondents aged between 61 to 65 years old, married respondents and pensioner group have higher level of knowledge Meanwhile, rural respondents between 51 to 60 years old and divorced respondents are more knowledgeable on DM. For both urban and rural groups, Indian respondents have higher level of knowledge on DM compared to other races. In conclusion, both urban and rural respondents' had high knowledge on diabetes but there were some areas of deficiency. Urban respondents had more positive attitude towards DM than the rural respondents. There was a correlation between knowledge and attitude but the increase in level of knowledge does not influence the increase in the level of attitude of respondents towards DM.

## CHAPTER 1

# INTRODUCTION

Diabetes mellitus (DM) has been a global public health problem and it is the most commonly encountered disease by the healthcare professionals. The prevalence continuously increased especially in developed countries (Rugayah, 2007). In 2008, World Health Organization (WHO) estimated the prevalence of DM exceeded 8% of the adult population in 13 countries with some countries in the group having the highest levels of prevalence in the world. McCarty and Zimmet (1994) found that the prevalence rate among adults was 4% in 1995 and expect it to increase by 1.4% in 2005. WHO further estimates that currently, more than 180 million people worldwide have diabetes and this will likely to increase more than 360 million by year 2030. Asia alone contributed to more than 138 million out of 180 million diabetes cases. There will be a 3-fold rise of the disease in Asia especially in China (40 million) and India (55 million) due to the massive population of these countries. Rapid developing Asian nations like Singapore, Malaysia, Thailand and those making up Indochina will also experience the rapid increase in the prevalence of DM. The number of people who died from diabetes is also on the rise. Worldwide, 1.1 million people died from diabetes in 2005. Death from diabetes is estimated to increase by half million in 2015 (WHO, 2008).