

**UNIVERSITI TEKNOLOGI MARA**

**KNOWLEDGE OF DIABETES MELLITUS USING  
DKN SCALES AMONG THE PUBLIC IN KLANG  
VALLEY**

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## ABSTRACT

Research on knowledge of diabetes mellitus among the public is lacking. This study was set out to investigate current knowledge of diabetes mellitus among the public in Klang Valley, Selangor, Malaysia. Cross-sectional descriptive design and convenience survey methods were used. The sample consisted of 150 respondents from the public who completed the questionnaires. Knowledge of diabetes mellitus was assessed with a modification of Diabetes Knowledge (DKN) Scales questionnaires. Fifteen diabetes knowledge items were analyzed and classified into six factors: basic physiology of diabetes, food group, sick day management, hypoglycemia, general diabetes care and food substitutions. All six factors of both genders are not significantly different. However, ketones, sick day management and food substitutions factors need to be taken action in diabetes education. It can be concluded that public's knowledge of diabetes mellitus can be improved. Although the study sample has geographic limitations, future national studies with similar populations of public in Malaysia will help government and non-government agencies to understand additional educational effort to increase knowledge of diabetes mellitus among public.

Key words: public; diabetes knowledge; diabetes education; survey method

# CHAPTER 1

## INTRODUCTION

### 1.1. Introduction

Diabetes Mellitus is a major and growing health problem in most countries (Shafie et al., 2004). Globally there is a rising trend in the prevalence of diabetes due to many factors such as population growth, aging, urbanization and increasing prevalence of obesity and physical inactivity (Zanariah et al., 2006).

Worldwide, it was estimated that the prevalence rate of diabetes in year 2000 was 171 million and this is expected to increase to 366 million in year 2030, which is more than double (WHO, 2008). The International Diabetes Federation (2009), predicts that by the year 2025, the South East Asia Region would have the highest prevalence of diabetes. The World Health Organisation (2009), has estimated that in the year 2030, Malaysia would have a total of 2.48 million people with diabetes. In 2002, Diabetes Mellitus was the sixth most common cause of death, accounting for 4% of annual total mortality in Malaysia (WHO, 2006).