UNIVERSITI TEKNOLOGI MARA

Towards Improving The Health Of A New Generation: Identifying Risk Factors For Diabetes In Uitm Pharmacy Students

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ABSTRACT

In Malaysia, diabetes has become one of ten major diseases that lead to a significant burden on the healthcare system. Holding 6th place among men and 5th place among women. Malaysia is expected to face an increasing prevalence of diabetes from 11.6% in 2010 to an estimated 13.8% in 2030. The purpose of this study is to determine the risk factor of diabetes among third-year pharmacy students at UITM together with their level of knowledge regarding diabetes. Questionnaires were distributed among 113 among the students and their blood pressure, weight and height were measured. The results show that risk factors present among students include a family history of diabetes, high BMI, obesity, hypertension, sedentary lifestyle and an unhealthy diet. 35.40% of the students have a family history of diabetes, 20.35% of them have a high BMI as 12.39% are overweight and 7.96% are obese. 21.25% of the students also having higher blood pressure out of normal range where 20.35% have pre-hypertension and 0.90% with hypertension, 61.90% categorised as having unhealthy lifestyle where females tended to exhibit a more sedentary lifestyle compared to male and most of the students also practice unhealthy dietary intake. There is an average attitude on diet and lifestyle among the students and there is a relationship between attitude and BMI categories with most of the overweight and obese participants displaying an average and below average attitude respectively. The students generally have good knowledge of diabetes and understand the role of pharmacist in diabetes management.

Chapter 1: Introduction

Diabetes has become one of the most prevalent chronic diseases in the world and now holds a fourth or fifth place as a disease that causes the most deaths in developed countries (Whiting, Guariguata, Weil, & Shaw, 2011). The prevalence and rise in diabetes is mainly due to urbanization, increase in population, sedentary lifestyle, aging and increased levels of obesity (Letchuman et al., 2010). There are higher numbers of adults with diabetes in developing nations compared to developed countries. With the former, the expected increase in the number of adults with diabetes between 2010 and 2030 is 36% while in developed countries only a 20% rise is expected (Shaw, Sicree, & Zimmet, 2010). According to studies by Shaw et al in 2010 Malaysia is 10th among countries with the highest prevalence of diabetes in 2010. In addition, Malaysia is expected to face an increase in prevalence from 11.6% in 2010 to an estimated 13.8% in 2030. In Malaysia, diabetes has become one of the 10 major diseases that causes a significant burden to society, holding 6th place among men and 5th place among women (Letchuman et al., 2010).

There are a number of studies which indicates that sugar is addictive if consumed in an excessive amount (Avena, Rada, & Hoebel, 2008). Sweet foods are often consumed in order to boost mood when faced with stress and also as a reward. Studies have revealed that sugar can cause reward and addictive effect comparable to cocaine (Ahmed, Guillem, and Vandaele (2013). Food can change brain activity firstly by stimulating the sweet taste cells in the mouth and so inducing the

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