**Depression Among Diabetes Patients** 

## **ACKNOWLEDGEMENT**

# Bismillahirrahmanirrahim

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#### **ABSTRACT**

*Objective:* This study was aimed to verify the correlation and relationship that exist between depression and diabetes, through analyzing demographic and disease-related variables that may predict of depressive symptoms among diabetes patients.

Methods: A hundred and fifty-three diabetes patients aged above twenty years old participated and were required to answer structured questionnaires about sociodemographic traits and the awareness of depression. DASS-21 questionnaires which consist of twenty-one questions examined on three scales; depression, anxiety and stress were used to evaluate depressive symptoms among the subjects. Pearson's correlation and multiple regression analysis were performed to assess the association of depressive symptoms with socio demographic factors of age, gender, race, marital status, level of education and employment status. Habits and behaviours assessment containing six questions were also tested using the same method of analysis.

Results: Socio-demographic traits showed significant correlation with the depression level among diabetes patients. Distribution of the patients according to gender showed not much difference in term of percentage, whereby females are (51%) and males (49%). Out of a hundred and twenty-five, only ten (6.53%) agreed to discuss their problem regarding depression with physicians.

Conclusion: Findings from the study proved that there was significant relationship between diabetes and depression. The underlying causes of depression may vary, thus, further studies should examine other factors that could contribute to depression.

#### CHAPTER 1

# **INTRODUCTION**

## 1.1 Diabetes Mellitus

Studies worldwide have proven that over the years showed an increase in the prevalence and incidence of diabetes (Zahid *et al* 2007). Diabetes, or medically known as Diabetes Mellitus is a chronic metabolic disorder characterized by elevated levels of blood glucose, or sugar. It happens when the body depletes production of insulin or producing no insulin at all. Diabetes also appears when the body cells do not respond appropriately to the insulin that is produced by the  $\beta$  cell of the pancreas leading in uncontrolled level of glucose in the blood (Zimmet *et. al*, 2001).

Diabetes can be classified into two types, Type 1 or also known as insulindependent type diabetes (IDDM) and Type 2, which is also referred as non-insulindependent type diabetes (NIDDM). Type 1 diabetes is due to insufficient insulin produced by  $\beta$  cell of the pancreas, whereby, it commonly affect adolescents and young