

A STUDY ON DEPRESSION AND/OR ANXIETY
AMONG ADULT TYPE 2 DIABETES MELLITUS
PATIENTS ATTENDING DIABETIC CENTER,
HOSPITAL UNIVERSITI SAINS MALAYSIA

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Dissertation Submitted In Partial Fulfillment of The
Requirements For The Degree Of Master
of Medicine (Family Medicine)



UNIVERSITI SAINS MALAYSIA
2008

Not to forget, I dedicated my greatest gratitude to all patients attending KRK and KPP especially those who participated as respondents, for giving me motivation and support to proceed and complete this dissertation.

My beloved husband, En. Mohd Zaharuddin, lovely son Mohd Zarif Shafiq, my parents and all my friends for their endless prayers, support and patience, giving me the strength to complete this dissertation.

The Research and Ethical Committee of School of Medical Sciences, Universiti Sains Malaysia for allowing me to proceed with this dissertation.

TABLE OF CONTENTS

TABLES OF CONTENTS

Table of Contents	Page
List of Appendices	vii
List of Tables	viii
List of Figures	x
List of Abbreviations	xi

Abstract

Bahasa Malaysia	xii
English version	xiv

CHAPTER ONE : INTRODUCTION

1.0 Introduction	1
1.1 Depression and Anxiety	2

CHAPTER 2 : LITERATURE REVIEW

2.0 Overview of Diabetes Mellitus	6
2.1 Overview of Depression and anxiety	7
2.1.1 Depression	8
2.1.2 Anxiety	9
2.2 Diabetes Mellitus, Depression and Anxiety	10
2.3 Screening for Depression and Anxiety	12

2.3.1	Self Administered Tool	13
2.3.2	Interviewer-Administered Tool	15
2.4	Risk Factor for Depression in Diabetes Mellitus	16
2.4.1	Socio-demographic Factors	
2.4.1.1	Age	16
2.4.1.2	Sex	16
2.4.1.3	Marital Status	17
2.4.1.4	Level of Educations	17
2.4.1.5	Income Satisfaction	17
2.4.2	Family Dynamic Factors	
2.4.2.1	Satisfaction with Spouse	18
2.4.3	Diabetic Factor	
2.4.3.1	Duration of Diabetes Mellitus	18
2.4.3.2	Concomitant Disease	18
2.4.3.3	HbA1c	18
2.4.3.4	Obesity, Number of diabetic complications, Treatment	19
2.5	Justification And Rational Of The Study	21

CHAPTER THREE: OBJECTIVES

3.0	General Objectives	23
3.1	Specific Objectives	23
3.2	Research Hypothesis	24

CHAPTER FOUR : METHODOLOGY

4.0	Study Area/Background	25
4.1	Study Design	25
4.2	Reference Population	25
4.3	Source of Population	26
4.4	Inclusion Criteria	26
4.5	Exclusion criteria	26
4.6	Sampling Frame	26
4.7	Sampling method	27
4.8	Sample size calculation	27
4.9	Research tool	29
	4.9.1 Hospital Anxiety and Depression Scales	29
	4.9.2 General Questionnaires	30
4.10	Data collection	35
4.11	Operational Definitions	35
4.12	Statistical analyses	36
4.12	Ethical approval	38

CHAPTER FIVE : RESULT

5.1	Socio-demographic And Characteristics ff Respondents	40
5.2	Family Dynamic Characteristics of Respondents	41
5.3	Medical Factors of The Respondents	43
5.4	Socio-Demographic Characteristics of Depression and Non Depression	45
5.5	Family Dynamic Factors For Depression And Non Depression	47
5.6	Medical Factors of For Depression And Non Depression	48
5.7	Socio-Demographic Characteristic Of The Anxiety And Non Anxiety	50
5.8	Family Dynamic Factors For Anxiety And Non Anxiety	52
5.9	Medical Factors For Anxiety And Non Anxiety	53
5.10	Prevalence of Depression and/or Anxiety	54
5.11	Factors Associated With Depression	
5.11.1	Sosio-Demographic Factors Associated With Depression In HUSM Analysed By Univariate Analyses	55
5.11.2	Family Dynamic Factors Associated with Depression Analysed by Simple Logistic Regression	57
5.11.3	Medical Factors associated with Depression Analysed by Simple Logistic Regression	59
5.12	Factors Associated with Anxiety	
5.12.1	Socio-Demographic Factors Associated with Anxiety Analysed By Univariate Analyses	61
5.12.2	Family Dynamic Factors Associated With Anxiety Analysed By Univariate Analyses	63

5.12.3 Medical factors Associated With Anxiety Analysed by univariate analysis	65
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CHAPTER 6 : DISCUSSION

6.1. Introduction	67
6.2. Prevalence Of Depression Among Patient With T2DM	68
6.3. Prevalence Of Anxiety Among Patient With T2DM	71
6.4 Factors Associated With Depression Among Patient With Diabetes Mellitus	72
6.4.1 Risk Factors For Depression	75
6.4.2 The Protective Factors For Depression	78
6.5 Factors Associated With Anxiety Among Patient With T2DM	79
6.5.1 The Risk Factors For Anxiety Among T2DM	80
6.5.2 The Protective Factors For Anxiety Among T2DM	81

CHAPTER 7 : CONCLUSIONS	83
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CHAPTER 8 : LIMITATIONS	84
--------------------------------	-----------

CHAPTER 9 : RECOMMENDATIONS	86
------------------------------------	-----------

CHAPTER10 : REFERENCES	89
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CHAPTER 11 : APPENDICES

Appendix 1	Ethical Approval Letter from Research and Development, HUSM	98
Appendix 2	Borang Maklumat dan Keizinan Pesakit	99
Appendix 3	Borang Keizinan Pesakit (Halaman Tandatangan)	102
Appendix 4	General Questionnaire (Bahasa Malaysia)	104
Appendix 5	Hospital Anxiety and Depression Scale (HADS)	108

LIST OF TABLES

LIST OF TABLES

Table		Page
Table 2.1	The Summary List Of Assessment Tools Used For Screening In Primary Care.	15
Table 5.1	Socio-Demographic Characteristic Of Respondents.	40
Table 5.2	Family Dynamic Factors Of The Respondents	42
Table 5.3	Medical Factors Of The Respondents	44
Table 5.4	Socio-Demographic Characteristic Of The Depression And Non Depression Group	45
Table 5.5	Family Dynamic Factors For Depression And Non Depression	47
Table 5.6	The Medical Characteristics Of The Depression And Non Depression Group.	48
Table 5.7	Socio-Demographic Of Anxiety And Non Anxiety	50
Table 5.8	Family Dynamic Factors For Anxiety And Non Anxiety	52
Table 5.9	The Medical Characteristics Of The Anxiety And Non Anxiety Group	53
Table 5.10	Socio-Demographic Factors Associated With Depression Among Patient With Diabetes Mellitus Analysed By Univariate Analysis	56
Table 5.11	Family Dynamic Factors Associated With Depression Among Patient With Diabetes Mellitus In Husm Analysed By Simple Logistic Regression	58
Table 5.12	Univariate Analysis Of Medical Factor Variables Associated With Depression In Adult T2dm	60
Table 5.13	Simple Logistic Regression Analysis Of Socio-Demographic	62

Variables Associated With Anxiety

Table 5.14	Simple Logistic Regression Analysis Of Family Dynamic Variables Associated With Anxiety	64
Table 5.15	Simple Logistic Regression Analysis Of Medical Factors Associated With Anxiety Among	66
Table 6.1	Comparisons Of The Prevalence Of Depression Among Patient With Diabetes Mellitus Between This Study And Other Study.	70

LIST OF FIGURES

LIST OF FIGURES

Figure 2.1	Conceptual framework of associated factors between T2DM and depression	20
Figure 4.1	Flow chart of the study	39
Figure 5.1	Prevalence of depression among T2DM	54
Figure 5.2	Prevalence of anxiety among T2DM	55

ABBREVIATIONS

BMI	Body Mass Index
DR	Diabetic Retinopathy
HRPZ II	Hospital Raja Perempuan Zainab II
HUSM	Hospital Universiti Sains Malaysia
MDD	Major Depression Disorder
RM	Ringgit Malaysia
SPSS	Statistical Package for Social Science
T2DM	Type 2 Diabetes Mellitus
WHO	World Health Organisation

ABSTRAK

ABSTRAK

KAJIAN PENYAKIT KEMURUNGAN DAN KEBIMBANGAN DI KALANGAN PESAKIT DIABETES DI HUSM

Objektif Kajian ini bertujuan untuk mengenalpasti kadar kemurungan dan/atau kebimbangan dikalangan pesakit diabetes mellitus di HUSM. Kajian Ini juga dilakukan untuk mengenalpasti kaitan diantara faktor-faktor peribadi, keluarga dan sejarah perubatan dengan kemurungan dan/atau kebimbangan.

Kaedah Ini adalah kajian hirisan lintang melibatkan 260 pesakit dewasa diabetes mellitus jenis 2 di Pusat diabetes, Hospital Universiti Sains Malaysia dari bulan November hingga Mac tahun 2008. Pesakit disoal selidik berkaitan faktor peribadi, keluarga dan sejarah perubatan. Kajian untuk menentukan faktor-faktor kemurungan dan kebimbangan dilakukan menggunakan borang khas "Hospital Anxiety and Depression Score (HADS)". Skor 9 dan ke atas adalah positif untuk saringan dan mereka dirujuk kepada pakar psikiatrik untuk pengesahan menggunakan DSM-IV.

Keputusan Prevalen kemurungan adalah 20.8% dan prevalen kebimbangan adalah 10.8%. Tahap pendidikan pada peringkat menengah dan universiti atau kolej ($p < 0.05$), berpuas hati dengan pendapatan ($p < 0.05$), sudah berpencen dan berkerja swasta ($p < 0.05$), punca pendapatan daripada ahli keluarga lain ($p < 0.05$), dijaga oleh anak ketika sakit ($p < 0.05$), mempunyai komplikasi akibat daripada diabetes mellitus pada kaki ($p < 0.05$), mata

($p < 0.05$) dan menepati temu janji ($p < 0.05$) adalah berkait rapat dengan kemurungan. Faktor yang berkait rapat dengan kebimbangan adalah lelaki ($p < 0.05$), membuat keputusan dalam keluarga ($p < 0.05$), dijaga oleh anak ketika sakit ($p < 0.05$) dan mempunyai kesan sampingan akibat diabetes mellitus pada kaki ($p < 0.05$)

Kesimpulan Prevalen kemurungan dikalangan diabetes mellitus jenis 2 adalah sama dengan kebanyakan kajian tetapi prevalen kebimbangan adalah rendah. Berkerja di sektor swasta, menerima jumlah pendapatan daripada bukan golongan ahli keluarga, dijaga oleh anak ketika mengalami penyakit, mempunyai kesan sampingan akibat daripada penyakit diabetes mellitus jenis 2 pada mata dan kaki dan menepati temujanji adalah berisiko tinggi kepada faktor kemurungan. Golongan yang mendapat pendidikan pada tahap sekolah menengah dan kolej atau universiti, berpuas hati dengan jumlah pendapatan dan sudah berpencen adalah kurang terdedah kepada risiko kemurungan. Golongan yang dijaga oleh anak ketika mengalami penyakit dan mempunyai kesan sampingan diabetes mellitus pada kaki (diabetic foot) adalah terdedah kepada faktor kebimbangan dan golongan yang kadang-kadang membuat keputusan didalam keluarga dan golongan lelaki kurang terdedah kepada kebimbangan.

ABSTRACT

ABSTRACT

THE PREVALENCE OF DEPRESSION AND/OR ANXIETY AMONG PATIENT WITH DIABETES MELLITUS IN HUSM

Objective To determine the prevalence of depression and/or anxiety and the factors associated with depression and/or anxiety among patient with Diabetes Mellitus in USM.

Methodology This is a cross sectional study involving 260 adult Type 2 Diabetes Mellitus patients, attending Diabetic Center, HUSM from November 2007 till March 2008. The patients were interviewed using a set of questionnaires on sociodemographic, family dynamic and medical history. Screening for depression and anxiety was done by using self administered Hospital Anxiety and Depression Score. Those who had score of 9 and above for both part are positive for anxiety and depression. They were referred to psychiatrist for further assessment to confirm the diagnosis by means of DSM-IV criteria.

Result The prevalence of depression was 20.8% and anxiety was 10.8%. Level of occupation ($p<0.05$), satisfaction with income ($p<0.05$), retired and also working in private sector ($p<0.05$), source of income from other family members ($p<0.05$), has been taken care by their children during an acute illness ($p<0.05$), diabetic foot and retinopathy ($p<0.05$) and compliant to the diabetic follow up ($p<0.05$) were associated with depression. Factors that associated with anxiety were male ($p<0.05$), decision making in the family ($p<0.05$),

has been taken care by their children during illness ($p<0.05$) and presence of diabetic foot ($p<0.05$).

Conclusion Prevalence of depression among T2DM was similar with most studies but however the prevalence of anxiety was lower in this group of patients. Working in private sector, received source of income from other than family members, taken care by their children during acute illness, presence of diabetic retinopathy and diabetic foot were associated with increased risk for depression among T2DM. Those who received secondary and tertiary level of education, satisfied with their income and retired were associated with reduced risk for depression. Those who had diabetic foot was associated with increased risk for anxiety, however male and those who occasionally dominance in making decision in making the decision in the family were associated with reduced risk for anxiety.

CHAPTER ONE

INTRODUCTION

CHAPTER 1

INTRODUCTION

1.0 INTRODUCTION

Diabetes Mellitus is a group of metabolic diseases characterized by hyperglycemia due to absolute or relative deficiency of insulin, resulting from defects in insulin secretion, insulin action or both. The chronic hyperglycemia of diabetes is associated with long-term damage, dysfunction and failure of various organs, especially the eyes, kidneys, nerves, heart and blood vessels (Narayan and Amen, 2007).

The diagnosis of diabetes is a significant stressor for patients, their families and their environment because some adjustments are needed in some of their customary routines. The family's response to the diagnosis of diabetes on the patient may have a negative effect on glycemic control (Szydlo *et al.*, 2003). But the positive effect of the family to the diagnosis of the disease is that, they can have an early screening and can practice healthy lifestyles to prevent it.

Individuals with Diabetes Mellitus must self-manage their diabetes treatment regimen constantly. For example, individuals with Diabetes mellitus must be more vigilant than non-diabetic persons with regards to normal daily activities such as eating, sleeping and exercise in order to achieve the good diabetic control. In addition, individuals with Diabetes mellitus must monitor their blood glucose levels and medication continuously. The goal of the individual with Diabetes mellitus is to strike a balance in their blood glucose range in order to avoid the medical complications that associated with hyperglycemia and the acute complications of hypoglycemia. Being too far at the polar opposites of the

hypo/hyperglycemia state has severe consequences. The constant stress of maintaining tight glycemic control can result in two types of psychological distress such as sub clinical emotional distress, and diagnosable psychological disorders (Rubin and Peyrot, 2001).

Affective and anxiety disorders are the most common diagnoses and occur significantly more often in patients with diabetes than in the general United States population (Cohen and Rodriguez, 1995). Major depression affects approximately one of every five patients with diabetes and severely impairs quality of life and all aspects of functioning. These disorders can lead to poor glycemic control through alterations in neurohormonal and neurotransmitter functioning and through disruption in diabetes self-care (Gavard *et al.*, 1993). It has added importance in diabetes because of its association with treatment non adherence, poor glycemic control, and increased risk for micro and macrovascular disease complications (Lustman *et al.*, 1997). Depression remains unrecognized and untreated in the majority of cases despite its specific relevance to diabetes (Lustman *et al.*, 1987).

1.1 Depression and anxiety

Depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration (WHO, 2008).

According to the DSM-IV, the standard approach is first to determine whether the patient is experiencing a major depressive episode. When a major depressive episode is present, one considers the diagnosis of Major depressive disorder (MDD). When a major depressive