Transcultural Prevalence of Depression in Type 2 Diabetics Attending Endocrine Clinics in Both Egypt and Yemen

Submitted by

Ahmed Salem Saeed Basabbea
M.B., B.Ch
For Partial Fulfillment of Master Degree in Endocrinology

Under Supervision of

Prof. Dr. Mohammed R. Halawa

Professor of Internal Medicine and Endocrinology
Faculty of Medicine - Ain Shams University

Dr. Ghada EL-Khouly

Consultant of Neuropsychiatry
Faculty of Medicine - Ain Shams University

Dr. Abdullah Saleh Bin-Nabhan

Assistant Professor of Internal Medicine
Faculty of Medicine_Hadhramout University (Yemen)

Faculty of Medicine
Ain Shams University
2012

Acknowledgement

Contents

Subjects	Page

List of Abbreviations

A1c	Glycosylated hemoglobin
ACEI	Angiotensin converting enzyme inhibitors
ADA	American diabetes association
ARB	Angiotensin receptor blockers
CHD	Coronary heart disease
CRH	Corticotropin releasing hormone
CVD	Cardiovascular disease
DKA	Diabetic ketoacidosis
DM	Diabetes mellitus
DSM-IV	Diagnostic and statistical manual of mental disorder-fourth edition
FPG	fasting plasma glucose
HHS	Hyperosmolar Hyperglycemic syndrome
HPA	Hypothalamic-pituitary adrenal axis
ICD-10	International classification of disease-10
IGT	Impaired glucose tolerance
OGTT	oral glucose tolerance test
SSRIs	selective serotonin reuptake inhibitors
T2DM	Type 2 diabetes mellitus
UKPDS	United kingdom prospective diabetes study

List of Tables

📖 *List of Tables* ✍

✍ List of Tables ✍

List of Figures

Scottish Intercollegiate Guidelines Network (2010),
Management of diabetes: A national clinical guideline,
available at www.sign.ac.uk

Introduction

Diabetes mellitus is a serious health problem worldwide. According to the international diabetes federation, 189million individuals have diabetes worldwide. The prevalence of diabetes is rapidly rising; worldwide the number of individuals with diabetes is expected to have doubled in 2025 **(Scharm *et al*, 2009)**.

According to international diabetes federation, the prevalence of diabetes mellitus among age group between 20-79 years in Egypt is 11% in 2007 with a total number of 4.4 million persons affected **(I.D.F, 2006)** .

Depression is a serious medical condition that affects thoughts, feelings, and the ability to function in everyday life. Depression can occur at any age. National institute of mental health (NIMH)-sponsored studies estimate that 6 percent of 9- to 17-year-olds in the U.S. and almost 10 percent of American adults, or about 19 million people age 18 and older, experience some form of depression every year **(Braiana *et al*, 2008)**.

Depression may adversely impact outcomes of chronic illnesses, such as diabetes, in several ways. Depression has been shown in patients with diabetes to be associated with poor adherence to glucose monitoring diet exercise regimens and taking medication as prescribed **(Dunning and Ward, 2008).**

The high prevalence of depressive symptoms among patients with diabetes (between 18% and 35%) has been well documented in several studies. Patients with diabetes and co morbid depression display higher functional impairment and work loss and poorer self-management behavior, and they have more co morbidities **(Miranda *et al*, 2009)**

In an Egyptian study , 44.7% of diabetic children and adolescents were found to have psychiatric disorder, the most common being depression as 22.4% are showing depressive symptoms and17.6% have major depression **(Shaker, 2003)** .

In a study of primary care diabetic patient in Al-Ain, Uuited Arab emirates, the author found that 33.8% of diabetic patients had psychiatric co morbidity. All psychiatric cases were identified as mild or moderate in severity. Depression was the most common disorder (16.9% of diabetic patients) **(Sulaiman et al, 2010).**

Because of lack of published studies on the prevalence of the depression in type 2 diabetic patients in Egypt and Yemen, we will carry on this study to evaluate the prevalence of depression among type 2 diabetics Egyptian and Yemeni adults, and correlate it to cultural differences.

Aim of the Study

To study the prevalence of depression in a sample of type 2 diabetic patients taken from diabetic and endocrine outpatient clinics in both Egypt and Yemen and to correlate it to cultural differences.

Chapter (1)

Depression

Depression

The word depression comes in Latin deprime, meaning "to press down". The term was first applied to mood at the seventeenth century**.** Depression was first named as a condition about 2,400 years ago by the famous ancient Greek doctor "Hippocrates", who called it melancholia **(Gilbert, 2001).**

Depression refers to a wide range of mental health problems characterized by the absence of a positive affect (a loss of interest and enjoyment in ordinary things and experiences), low mood and a range of associated emotional, cognitive, physical and behavioral symptoms **(Lewinsohn *et al.*, 2000).**

Behavioral and physical symptoms typically include tearfulness, irritability, social withdrawal, an exacerbation of pre-existing pains, pains secondary to increased muscle tension **(Gerber *et al.*, 1992),** a lack of libido, fatigue and diminished activity, although agitation is common and marked anxiety frequent. Typically there is reduced sleep and lowered appetite (sometimes leading to significant weight loss), but for some people it is recognized that sleep and appetite are increased. A loss of interest and enjoyment in everyday

life, and feelings of guilt, worthlessness and that one deserves punishment, are common, as are lowered self-esteem, loss of confidence, feelings of helplessness, suicidal ideation and attempts at self-harm or suicide.

Cognitive changes include poor concentration and reduced attention, pessimistic and recurrently negative thoughts about oneself, one's past and the future, mental slowing and rumination **(Cassano and Fava, 2002).**

Major depression is generally diagnosed when a persistent low mood and an absence of positive affect are accompanied by a range of symptoms, the number and combination needed to make a diagnosis being operationally defined **(APA, 1994).**

People with severe depression may also develop psychotic symptoms (hallucinations and/or delusions), most commonly thematically consistent with the negative, self-blaming cognitions and low mood typically encountered in major depression, although others may develop psychotic symptoms unrelated to mood **(Anderson, 2010**).

The average age of the first episode of major depression occurs in the mid-20s and, although the first episode may occur at any time from early childhood through to old age, a substantial proportion of people have their first depression in childhood or adolescence **(Fava and Kendler, 2000).**