

Eating disorders in diabetic patients and their influence on glycemic control

Thesis

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By

Naira Hany Abd El-Aziz Khalil

M.B, B.CH

Supervised by

Prof. Dr. Mohamed Reda Halawa

Professor of Internal Medicine & Endocrinology

Faculty of Medicine Ain-Shams University

Dr. Maram Mohamed Maher Mahdy

Assistant professor of internal medicine & endocrinology

Faculty of medicine Ain-Shams University

Dr. Nesreen Mohamed Mohsen Ibrahim

Assistant professor of psychiatry

Faculty of medicine Ain-Shams University

Faculty of Medicine,

Ain-Shams University

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ABSTRACT

A close relationship exists between the physical and mental health of individuals with diabetes, the clinical features of an eating disorder can interfere directly with an individual's ability to attend to the daily tasks of diabetes management. This can compromise the individual's efforts to achieve optimal metabolic control and can lead to an increased risk of both immediate and long-term diabetes-related medical complications.

The aim of our study is to evaluate eating disorders in a group of Egyptian diabetic patients and their influence on glycemic control.

Diabetes may be diagnosed based on the plasma glucose criteria, either the fasting plasma glucose (FPG) or the 2-h plasma glucose (2-h PG) value after a 75-g oral glucose tolerance test (OGTT) or the A1C criteria.

Quality of life may be thought of as a multidimensional construct incorporating an individual's subjective perception of physical, emotional, and social well-being, including both a cognitive component (satisfaction) and an emotional component (happiness).

Eating disorders are characterized by a persistent disturbance of eating or eating-related behavior that results in the altered consumption or absorption of food and that significantly impairs physical health or psychosocial functioning.

Insulin restriction (i.e., administering reduced insulin doses or omitting necessary doses altogether) is an eating disorder symptom unique to type1 diabetes, because intentionally induced glycosuria causes weight loss as calories spill into the urine. While not a formal medical diagnosis, coverage of this issue in the popular press uses the term, “*Diabulimia*”.

Egypt is one of the 19 countries and territories of the IDF MENA region. 415 million people have diabetes in the world and more than 35.4 million people in the MENA Region; by 2040 this will rise to 72.1 million. There were over 7.8 million cases of diabetes in Egypt in 2015.

There is a significant increase in *eating abnormality behaviour* (44%), most of them were females (75.8%) and in type 2 diabetics (44.6%). From the abnormal behavioural doing subjects,

- Type 1 diabetes mellitus: 1.5% binge/ 31.8% NOS
- Type 2 diabetes mellitus: 12% binge/ 32.6% NOS
- Control: 0.8% anorexia/6.9% binge/ 14.4% NOS

Key words: Diabetes- Eating disorder- Quality of life-
Diabulimia- Glycemic control.

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List of Abbreviations

AN	Anorexia nervosa
BED	Binge eating disorder
BN	Bulimia nervosa
CBT	cognitive behavioral therapy
DAWN	The Diabetes Attitudes, Wishes and Needs program
DSM-IV	The Diagnostic and Statistical Manual of Mental disorders
ED	Eating disorder
EDI	Eating disorders Inventory
EDNOS	ED-Not Otherwise Specified
ED-T1DM	Eating disorder type 1 diabetes mellitus
IADPSG	the International Association of the Diabetes and Pregnancy Study Groups
IDDM	Insulin dependent diabetes mellitus
IDF	International Diabetes Federation
MENA	Middle-East and North Africa
NOS	Not otherwise specific
OSFED	Other Specified Feeding and Eating Disorders

PA	Physical activity
QOL	Quality of life
SCID-1	Structured clinical interview for DSM-IV
WESDR	The Wisconsin Epidemiologic Study of Diabetic Retinopathy

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INTRODUCTION

A close relationship exists between the physical and mental health of individuals with diabetes, likely related to the complex and constant requirements of diabetes management and to the influence of the experience of living with a chronic medical condition on psychosocial functioning. The clinical features of an eating disorder can interfere directly with an individual's ability to attend to the daily tasks of diabetes management. This can compromise the individual's efforts to achieve optimal metabolic control and can lead to an increased risk of both immediate and long-term diabetes-related medical complications (*Patricia et al., 2009*).

Eating disorders are a group of conditions characterized by Disturbed eating behaviour and a range of psychological traits and symptoms. The term “disturbed eating behaviour” encompasses milder and more extreme dieting behaviour, binge eating episodes, and compensatory behaviour for weight control (*American Psychiatric Association, 2000*).