

Eating Behaviors among an Egyptian Sample of First Year Female Medical Students

Thesis

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in Neuropsychiatry*

By

Afnan Reda Ahmad Ahmad
M.B. B.Ch.

Under the Supervision of

Prof. Dr. Afaf Mohammed Abdel Samei

*Professor of Neuropsychiatry
Faculty of Medicine - Ain shams University*

Prof. Dr. Mona Ibrahim Awaad

*Professor of Neuropsychiatry
Faculty of Medicine - Ain shams University*

Dr. Dalia Abdel Moneim Mahmoud

*Assistant Professor of Neuropsychiatry
Faculty of Medicine - Ain shams University*

**Faculty of Medicine
Ain Shams University
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List of Abbreviations

Abb.	Full term
5-HIAA	5-hydroxyindoleacetic acid
5-HT	5-hydroxytryptamine
AN	Anorexia
APA	American Psychiatric Association
ARFID	Avoidant/ Restrictive Food Intake Disorder
BDNF	Brain-derived neurotrophic factor
BED	Binge eating disorder
BID	Body image disturbance
BMI	Body mass index
BN	Bulimia nervosa
CBT	Cognitive behavioral therapy
CSF	Cerebrospinal fluid
DA	Dopamine
DEAs	Disordered eating attitudes
DLCO	Diffusion capacity of the lung for carbon monoxide
DSM-III	Diagnostic and statistical manual of psychiatric disorders third edition
DSM-III R	Diagnostic and statistical manual of psychiatric disorders third edition revised
DSM-IV	Diagnostic and statistical manual of psychiatric disorders fourth edition

Abb.	Full term
DSM-IV TR	Diagnostic and statistical manual of psychiatric disorders fourth edition text review
DSM-V	Diagnostic and statistical manual of psychiatric disorders fifth edition
EAT- 40	Eating attitude test 40 questios version
ED NOS	Eating disorder not otherwise specified
EDs	Eating disorders
FBT	Family based treatment
FSH	Follicle stimulating hormone
FT-AN	Family therapy in the treatement of an
GERD	Gastroesophageal Reflux Disease
GnRH	Gonadotropin releasing hormone
HVA	Homovanillic acid
IGF-1	Insulin like growth factor 1
INR	International normalized ratio
IPT	Individual psychotherapy
Kcal	Kilo calorie
LH	Luteinizing hormone
MAOI-A	Monoamine oxidase-A inhibitors
MRI	Magnetic resonance imaging
NCS- R	National Comorbidity Study Replication
NES	Night eating syndrome
NICE	National Institute for Health and Care Excellence

Abb.	Full term
OA	Overeaters Anonymus
OCD	Obsessive-compulsive disorder
OSFED	Other specified feeding or eating disorder
PD	Purging disorder
PDs	Personality disorders
QTc	Correct QT interval
SGAs	Second-generation antipsychotics
SNRIs	Sertonin Norepinephrine Reuptake Inhibitors
SSRIs	Serotonin reuptake inhibitors
T3	Triiodothyronine
T4	Thyroxine
TCAs	Tricyclic antidepressants
TSH	Thyroid stimulating hormone
UAE	United Arab Emirates
UFED	Unspecified feeding and eating disorders

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Introduction

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 (**American Psychiatric Association, 2014**).

Eating disorders, including anorexia nervosa, bulimia nervosa, and binge eating disorders, are severe psychiatric and somatic conditions occurring mainly in adolescents and young adults, especially in young females (**Preti et al., 2009**).

Regarding the epidemiology of eating disorders, a study found that the peak age of risk for eating disorders appears at 10–24 years (**Currin et al., 2005**).

Milder variables related to disordered eating attitudes (DEAs), such as obsessive thinking about food and dieting, body image dissatisfaction (BID), overweight preoccupation, and fear of fatness, are of paramount importance (**Costarelli et al., 2009**).

Although most of disordered eating attitudes and weight loss practices are benign, their presence is strongly

associated with an increased risk of developing clinical eating disorders (**Goldschmidt et al., 2008**).

Diagnosis of eating disorders has become more prevalent in men, women, and children, and has therefore become a greater concern within today's society. Anorexia nervosa affects 490 women and 15.7 men out of 100,000. Similarly, bulimia nervosa affects 300-438 women out of 100,000, therefore, it is crucial to better understand eating disorders, as they have the highest mortality rate of any mental illness (**Trent et al., 2013**).

Regarding the occurrence of eating disorders among adolescents and young adults, it is estimated that 13.5% of college aged women and 3.6% of college aged men suffer from disordered eating (**Paulson & Rutledge, 2013**).

A study has indicated that Body Image Dissatisfaction (BID) has been observed in approximately 60% of adolescent girls and 30% of boys in the United States (**Presnell et al., 2004**).

While a study in the United Arab Emirates (UAE), 66% of adolescent girls (aged 13–18 years) have desired to be thin (**Eapen et al., 2006**).

Moreover, the prevalence of BID among adolescent girls in Palestine was 13% (**Latzer et al., 2007**), and it was 21.2% in Jordan (**Mousa et al., 2009**).

Body image dissatisfaction is of growing importance owing to its implication as a risk factor in the subsequent onset of eating disorders (**Littleton & Ollendick, 2003**), depression (**McCreary & Sasse, 2000**), emotional distress (**Johnson & Wardle, 2005**) and low self-esteem (**Stice & Bearman, 2001**).

And due to the presence of the negative consequences of body image dissatisfaction, it is imperative that factors associated with and contributing to negative body image are explored, eating disorder symptoms were also found to be associated with suicidal ideation and attempts in a statistically significant proportion of cases (**Zaitsoff & Grilo, 2010**).

A recent study confirms the existence of a relationship between self-esteem and body image among adult men and women, whereby higher self-esteem was related to lower body dissatisfaction (**Mellor et al., 2009**).

Eating disorders, obesity, and unhealthy weight loss practices have a number of shared personal, socio-environmental, and behavioral facets that could be

addressed in an “integrated” prevention program that is grounded in social cognitive theory. Social cognitive theory offers an appropriate framework for an integrated approach to prevention, since it assumes that behavioral change requires changes on both socio-environmental and personal levels (**Bandura, 1977**).

Therefore, further, preventive interventions grounded in social cognitive theory have been successful at promoting healthy eating habits (**Perry, 1999**) and reducing unhealthy eating behaviors (**Neumark-Sztainer et al., 1995**).

Rationale of the Work

Psycho-education and counseling services need to be implemented for students especially the females who are pressured to seek the ideal body image due to stress of transition from high school to the university life, to take them into consideration in treatment and awareness programs.

Hypothesis

Drive for thinness is expected to be widely prevalent among students, not surprisingly being female medical students can be the persistent cause of seeking perfectionism, competing in exams grades, and proving oneself among teen peers leading to coping with these stressors by distorted body perception and eating pattern. Also our study hypothesizes that eating patterns are directly affected by peer pressure, media figures, low self esteem and family problems, which associated mainly with depression and anxiety disorders.

Aim of the Work

- 1- To study the occurrence of different eating patterns among a sample of first year female medical students in the Faculty of medicine.
- 2- To identify the co-morbidities in other Axis I disorders with such eating patterns.
- 3- To highlight the correlation between psychosocial variables, body image dissatisfaction and self esteem with the presence of disturbed eating attitude.

Chapter One

Panoramic View on Abnormal Eating Behaviors

Eating behavior is a broad term that encompasses food choice and motives, feeding practices, dieting, and eating-related problems such as obesity, eating disorders, and feeding disorders (**LaCaille, 2013**).

Eating behaviors are affected by a variety of personal, social, cultural, environmental, and economic factors. What people eat and how much they eat has a considerable influence on their health. Individual factors, physical environment, social environment, macro level environment affect also eating behaviors (**Wansink, 2010**).

Intra-individual factors influencing eating behavior and food choice include physiological processes (e.g., hunger, satiety, innate preference for sweet foods, brain mechanisms) and psychological processes (e.g., learned food preferences, knowledge, motivations, attitudes, values, personality traits, cognitive processes, self-regulation). The social environment has also been shown to have a substantial effect on eating behavior. Eating behavior is shaped indirectly through observing others and