

# **Eating Disorders in Adolescents**

*An Essay*

Submitted for Partial Fulfillment of Master Degree  
*in Neuropsychiatry*

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**2014**



# (وَقُلْ رَبِّ زِدْنِي عِلْمًا)

صدق الله العظيم

سورة طه الآية (١١٤)



## Acknowledgement

First of all, I am very grateful to **ALLAH**, the most gracious and merciful for blessing me with all the people who helped me to accomplish this piece of work.

I would like to express my profound gratitude to my respectful Professor **Doctor/ Tarek Asaad Abdo**, Professor of Neuropsychiatry, Ain Shams University, for his continuous support, inspiring guidance, and most valuable suggestions.

Also, I would like deeply and sincerely to thank **Doctor/ Mohamed Fekrey Abdel Aziz**, Professor of Neuropsychiatry, Ain Shams University, for his generous patience, meticulous supervision, and permanent support. His great cooperation and guidance were essential for this work.

I wish to express my gratefulness and appreciation to **Doctor/ Marwa Abdel Rahman Soltan**, Assistant Professor of Neuropsychiatry, Ain Shams University, for her valuable ideas, helpful suggestions, and comments.

My thanks also go to all my Professors of Neuropsychiatry Department, Faculty of Medicine, Ain Shams University & for all who helped me in this work.

No words can express my genuine gratitude and deep appreciation to my family for their encouragement and support.

I can never forget what my loving husband have done to me and I will always owe to him a lot as long as I live.

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## ***List of Abbreviations***

<b>AN</b> .....	Anorexia nervosa
<b>BED</b> .....	Binge eating disorder
<b>BMI</b> .....	Body mass index
<b>BN</b> .....	Bulimia nervosa
<b>CBT</b> .....	Cognitive behavioural therapy
<b>DSM-V</b> .....	Diagnostic and statistical manual of mental disorders, 5 <sup>th</sup> edition
<b>EDs</b> .....	Eating disorders
<b>IBW</b> .....	Ideal body weight
<b>ICD-10</b> .....	International statistical classification of diseases 10 <sup>th</sup> edition
<b>IPT</b> .....	Inter-personal psychotherapy
<b>OCD</b> .....	Obsessive compulsive disorders
<b>SSRIs</b> .....	Selective serotonin reuptake inhibitors
<b>TCAs</b> .....	Tricyclic antidepressants

## ***Introduction***

Eating disorders include problems with eating too little and problems with eating too much. Although eating disorders often involve weight problems (weighing too little as a result of not eating or weighing too much because of overeating), many people who suffer from eating disorders do not look particularly underweight or overweight. In addition, not all people who are underweight or overweight have an eating disorder. Almost everyone overeats at one time or another and most girls have gone on a diet, eating far less than would be considered normal or healthy. Overeating and dieting are not, in themselves, eating disorders. However, they may be related to the risk for developing an eating disorder (*Keel, 2006*).

Adolescence is a time of major growth and development, and nutrition plays a key role. The adolescent growth spurt accounts for approximately 25% of adult height and 50% of adult weight. In addition, adolescents are developing reproductive capacity at this time. Nutritional intake has to support this growth by providing not only enough energy, but also the proper balance of protein, carbohydrates, fats, vitamins, and minerals (*Kaplan, 2004*).

The prevalence of eating disorders has increased in adolescents over the last 30 years. In fact, eating disorders, which include anorexia nervosa (AN), bulimia nervosa (BN),

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and eating disorder not otherwise specified (ED-NOS), are the third most common chronic illnesses in adolescent females (*Waasdorp, 2007*).

The etiology of eating disorders is thought to include a combination of biological, psychological, and societal factors. Known risk factors for eating disorders include the pressure to optimize physical performance, body fat, and weight to participate in sports and activities that emphasize leanness with high achievement expectations (*Waasdorp, 2007*).

Combinations of factors influence the development of anorexia nervosa and bulimia. Anderson (1983) identified perfectionism, a society that emphasizes thinness, a family that manifests depression and biological predisposition as primary predisposing factors. Clinical studies indicate that prolonged restrictive dieting, loss or separation; difficulties in handling particular emotions, impulsivity, fear of heterosexual relations, and depression usually precede the onset of an eating disorder (*Johnson et al., 1983*).

There is also an increase in the prevalence of anorexia nervosa in western cultures in comparison to eastern cultures, which would suggest that socio cultural factors play a significant role in the development of this eating disorder (*Buhrich, 1981*).

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In addition, the media provides exposure to different types of foods and also tends to present thinner body types as “ideal.” In this regard, television and magazines have been shown to have considerable influence on female adolescents, eating habits (*Kaplan, 2004*).

Increases in incidence and prevalence of eating disorders can be attributed to both a rise in the number of cases and improved methods of diagnosis. Even with improved eating disorder identification, two factors hinder accurate reporting within a symptomatic population. First, anorexics do not view themselves as abnormal and therefore do not seek treatment. Second, bulimics are usually aware that a problem exists, but in many cases are too embarrassed to seek help (*Theander, 1970*).

Family environment also appears to play a significant role in the prognosis of eating-disordered patients. Several studies have identified conditions associated with a poorer outcome. These conditions include an older age of onset, longer duration of illness, and lower body weight at presentation, poorer adjustment in childhood, disturbed family relationships, and a history of previous psychiatric treatment (*Hsu et al., 1979*). An examination of conditions associated with both the risk of developing an eating disorder and the prognosis reveals the importance of family environment when developing prevention strategies. Sexual abuse was strongly associated with disordered eating among both girls and boys. Physical

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abuse was also strongly associated with disordered eating, in particular among the girls. Prevalence rates of disordered eating were particularly high among youth who had experienced both physical and sexual abuse (*Neumark-Sztainer et al., 1999*).

Before one can prevent the occurrence of eating disorders, the correlates between at-risk adolescents and eating disorders must be identified. Once correlates have been determined, interventions addressing the awareness and the influencing of these correlates can be developed and targeted toward at-risk adolescents. Interventions may lead to a decrease in prevalence and improvement in the recovery time of individuals who have developed an eating disorder (*Felker et al., 1994*).

Many adolescents with eating disorders are resistant to treatment and changing their eating disorder behaviors. However, less severe eating disorder symptom was related to greater motivation for change. Therefore, supporting adolescents in reducing their eating disorder symptoms could enhance their motivation to make further changes. Involving adolescent's parents in treatment might be necessary, particularly for adolescents who describe the greatest resistance to treatment. Thus, focusing on enhancing the parent-adolescent relationship may be one way to engage this population in treatment (*Zaitsoff et al., 2009*).

## ***Aim of the Work***

- 1- To provide an update on cultural analysis of eating disorders.
- 2- To highlight the beliefs of eating disorders in adolescent patients concerning causes and risk factors for eating disordered behavior.
- 3- To emphasize how eating disorder prevention should involve denouncing the thin ideal, minimizing appearance as an indicator of value and emphasizing traits other than appearance as determinants of worth.
- 4- To highlight the different psychological interventions that might be used in management of eating disorders in adolescence

## ***Etiology***

Adolescence is a time of profound biological and psychosocial change. During the period of life from 10 to 21 years, adolescents experience rapid growth, with half of eventual adult weight and most of peak bone mass accumulated during this time. This dramatic physical growth increases an adolescent's energy, protein, vitamin, and mineral needs. Given the struggle for independence that often occurs as part of adolescent cognitive and social development, this put them at increased risk for eating disorders. Adolescence is a critical period in the life course for both nutrition education and intervention to establish healthy eating patterns and reduce disease risk (*Evans and Lo, 2013*).

Eating disorders (EDs) are psychiatric disturbances involving abnormal eating behaviors, maladaptive efforts to control shape or weight, and disturbances in perceived body shape or size as shown in figure (1). EDs are chronic conditions that are associated with high relapse rates, emotional distress, medical complications, and functional impairment, and often co-occur with other psychiatric conditions. EDs also increase the risk for onset of obesity, depression, suicidal attempts, anxiety disorders, substance abuse, and medical problems (*Stice and Shaw, 2011*).



**Figure (1):** In eating disorder there are disturbances in perceived body shape and size

**Historical Background of Eating Disorders:**

**The First Millennium and the Middle Ages**

Deviant eating attitudes and behaviors have been associated with completely different concepts over the centuries: from a concept of holiness and sacrifice in the past, to the myth of beauty and thinness in the present age. Bulimic behaviors were practiced in the ancient Roman Empire. The Greek physician Galen (AD 130-200) spent a considerable

portion of his life in Rome and defined boulimus (great hunger) as a digestive dysfunction (*James, 1743*).

There are well documented cases of irreversible self-starvation in the fasting female saints in the middle Ages. Of Italian fasting saints, the most complete biographical account exists for Catherine of Siena (*Bell, 1985*). Another example is Princess Margaret of Hungary who lived from 1242 to 1271 (*SMC, 1945*). Princess Margaret was the daughter of a king, raised in a Dominican convent where she excelled in all her studies and in all of the undesirable chores of the monastery. To an utterly heroic degree, she practiced the rituals of fasting, deprivation of sleep, exhausting unskilled work and other self-punishment acts. She would often slip out to pray while her sisters ate and was described as being never at rest. Margaret intensified her dieting when King Baylor confronted her and died at the age of 28 years with a clear mind and a poor wasted body (*Halmi, 2003*).

The similarities between the behavior of Saint Margaret and that of the 20<sup>th</sup> century anorexia nervosa women is obvious. Whether dieting for sainthood or dieting for thinness produces the same determination not to gain weight is still matter of controversy. Psychiatric diagnostic categories are constrained by history and culture. Dieting seems to be the common risk factor across the centuries. It is most likely that the psychobiological vulnerability factors that induced the