

# Eating Disorders in Women: An Underestimated Problem

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**Abstract**—Eating disorders, though taken very lightly, are serious mental illnesses; they are not merely a lifestyle choice or a diet gone 'too far'. These disorders occur in people irrespective of their gender, socio-economic status or cultural background. Four major eating disorders are recognized by the Diagnostic and Statistical Manual of Mental Disorders (DSM), which are predominantly present in females, namely, Anorexia Nervosa, Binge Eating Disorder, Bulimia Nervosa and Other Specified Feeding and Eating Disorders (OSFED). Though adolescence marks the beginning of this disorder, but it occurs in women of all ages. In addition to mental impairment and distress, people with eating disorders suffer from various major medical complications and have the highest mortality rate of all the mental disorders. Such disorders have a multifactorial etiology, personality and genetic vulnerabilities interact with environmental and social factors. Nutritional rehabilitation and psychotherapy remains the mainstay of treatment. Family and friends play a critical role in the recovery of people with eating disorders..

## 1. INTRODUCTION

Eating disorders are psychiatric disorders which involve abnormal eating habits. These are not simply under eating or over eating of food. It is a gradual process rather than a simple, sudden change in diet. Eating disorders are disorders of eating behaviors, associated thoughts, attitudes and emotions, and their resulting physiological impairments [1]. The conscious mind tells the body the harmful effects of eating disorders however a person's subconscious state will react otherwise. Eating disorders are dictated by the mind's decision to control eating habits. Attitudes toward body shape and food play a role in the development and maintenance of dysfunctional eating behaviors [2]. These disorders occur in people of all caste and creed, no background is omitted and no person can be considered immune.

Although recent research has shown that the prevalence in males was previously underestimated, these disorders do have a clear female preponderance [1]. One major reason for the predominance of these disorders in women is the overvaluation of slimness in females. These disorders involve number of medical complications in females if not treated. Due to cultural transformations, these disorders are now increasingly spreading in non Western countries including India.

Though eating disorders are considered mental illnesses, they are underestimated in comparison to other mental disorders. Eating disorders accompany anxiety, depression and other unpleasant emotions which have a negative impact on personal and professional life of the victim.

The aim of this study is to bring attention of people towards eating disorders, comparing its prevalence among women and exploring the possible and available treatment of eating disorders across the world.

## 2. EATING DISORDERS AS MENTAL AILMENT

It would be unwise if eating disorders are considered solely as improper eating habits. They are a psychological disorder. A mental disorder is defined as a psychological syndrome or pattern, which occurs in an individual, and causes distress via painful symptom or disability, or increases the risk of death, pain, or disability. Eating disorders are listed as mental illnesses in The Diagnostic and Statistical Manual of Mental Disorders (DSM) published by American Psychiatric Association's and The International Statistical Classification of Diseases and Related Health Problems (ICD) published by the World Health Organization. . Eating disorders are associated with one of the highest rates of mortality among psychiatric disorders [1]. A person suffering from an eating disorder has different feeling, thinking and perception regarding food. Neuropsychological assessments and clinical observations have led researchers to hypothesize that there is an underlying brain based abnormality causing this characteristic cognitive profile. Eating disorders seem to increase the risk of depressive disorders, suicide attempts, anxiety disorders, and substance abuse. As this illness progresses, the neuropsychological complexities are increased [3].

## 3. TYPES OF EATING DISORDERS

Eating disorder may include excessive or inadequate food intake which ultimately hampers an individual's well being. Anorexia Nervosa, Bulimia Nervosa and Binge Eating Disorder are the most common forms of eating disorders which affect both males and females.

### 3.1 Anorexia Nervosa

It is characterized by low weight, fear of gaining weight and food restriction to the point of starvation. People suffering from this disorder see themselves as overweight. Many people will exercise excessively, starve continuously or start using laxatives. Some even start taking anorectics, drugs that reduces appetite resulting in lower consumption of food and hence leading to weight loss. Most health workers recognize that anorexia nervosa (AN) is a serious disorder that results in significant disability and impaired quality of life. Unfortunately for some, this disorder becomes a chronic or life-shortening illness [4]. Anorexia nervosa is associated with numerous general medical complications. The complications affect almost all major organ systems and often also include physiologic disturbances such as hypotension, bradycardia and hypothermia [5]. Patients with anorexia nervosa have a number of abnormalities in endocrine function which may result in amenorrhea in women and loss of sexual potency in men [1]. Anorexia nervosa has the highest mortality rate of any psychiatric disorder, likely due to these medical complications [5].

### 3.2 Bulimia Nervosa

This disorder is characterized by repeated binge eating followed by behaviors that compensate for the overeating. Self-induced vomiting is the most frequently used purging method which patients with eating disorders revert to in order to compensate for bingeing behavior and in order to lose weight [6]. People with Bulimia Nervosa are reported to have a persistent craving of eating. There is a self perception of being too fat with an extensive phobia from being fat. A number of medical consequences are associated with the self induced vomiting behavior of people suffering from Bulimia Nervosa. Patients who induce vomiting commonly complain of symptoms consistent with Gastroesophageal reflux (GERD), Dysphagia, and Odynophagia. Several abnormalities in the oral cavity such as dental erosion, reduced salivary flow rate, tooth hypersensitivity, dental caries, periodontal disease, and Xerostomia (dry mouth) are reported in patients suffering from this disorder [6].

### 3.3 Binge Eating Disorder (BED)

It is characterized by recurrent episodes of binge eating without involving compensatory behavior which are associated with Bulimia Nervosa. Related features include eating until uncomfortably full, eating when not physically hungry, eating alone and feelings of depression or guilt. Although it is not limited to obese individuals, it is most common in this group and those who seek help do so for treatment of overweight rather than for binge eating. The prevalence of BED is reported to be 2–5% in community samples, and 30% in individuals who seek weight control treatment [1].

The above disorders are present both in males and females. Epidemiological studies however suggest the higher cases of eating disorders in females than in males. Table 1 shows the percentages of women and men that will experience a disorder in their lifetime.

**Table 1: Percentage of affected males and females with eating disorders**

Disorder	Percentage of females affected	Percentage of males affected
Anorexia Nervosa	0.9	0.3
Bulimia Nervosa	1.5	1.5
Binge Eating Disorder	3.5	0.2

Prevalence of Eating Disorder Symptoms in Women and Men is shown in Table 2 [7].

**Table 2: Eating disorder symptoms in men and women**

Symptom	Women (%)	Men (%)
Overeating	18.0	26.0
Loss of control over eating	29.6	20.0
Binge eating at least once/week	10.0	8.0
Binge eating at least twice/week	7.8	5.8
Vomiting	3.7	1.5
Fasting	6.3	4.0
Laxatives	3.1	3.0
Exercise	6.0	5.6
Body checking	22.5	8.9
Body avoidance	11.3	4.4

Findings suggest that these compensatory behaviors are present in both males and females however higher levels of such behaviors occur in women.

Eating disorders in females mostly commence in later teenage years however researches have investigated these disorders in middle aged women [8].

## 4. CAUSES AND CONSEQUENCES OF EATING DISORDERS IN WOMEN

The causes and consequences of eating disorders are interwound. For example, depression can be both the cause and consequence of these disorders. Depression in one's personal life can lead to irregular and unhealthy eating habits resulting in an eating disorder. Similarly, distorted self image in eating disorders leads to depression.

### 4.1 Causes:

Like most psychiatric disorders, eating disorders have multifactorial etiology comprising biological, psychological and environmental factors.

**Biological factors-** Genetics and biology play a role in the development of eating disorders. While past researches have focused primarily on the psychological, environmental, and socio-cultural causes, new studies have uncovered evidence that there is a prevalent genetic aspect in eating disorders. Genetic contributions to the development of eating disorders have been suggested by twin studies, with heritability estimates ranging from 0.39 to 0.74, depending on the disorder. Abnormalities in the regulation of certain neurochemicals, such as 5-Hydroxytryptamine (HT) and the serotonin-transporter-linked polymorphic region (5-HTTLPR), have been closely linked with eating disorders. Further, recent research has identified mutations on two specific genes that have been associated with increased risk of developing eating disorders in families: estrogen-related receptor  $\alpha$  (ESRRA) and histone deacetylase 4 (HDAC4). In addition, early puberty has also been associated with disordered eating behaviors, potentially due to increases or irregularities in circulating sex hormones, especially estrogen [9].

**Psychological factors-** Presence of certain traits such as perfectionism, rigidity, and being rule-bound each increase the risk of subsequently developing anorexia nervosa by a factor of nearly seven. Trauma during childhood or adolescence contributes to the likelihood of later psychiatric disorders, in general, not specifically an eating disorder [1]. Researchers have recognized perfectionism as a specific risk factor in the development of eating disorders. Perfectionism can also be a maintenance factor for disordered eating since it promotes dieting, bingeing, and purging, and enhances eating disorder symptoms, particularly when combined with low self-esteem. Similarly, research has shown high levels of stress, guilt, hostility, anger, anxiety, and depressed mood, is associated with increases in eating disorder symptoms [9].

**Environmental factors-** The major factor responsible for the development of eating disorders is the cultural emphasis on thinness. There is an unrealistic portrayal of beauty and ideal body type by the media, entertainment and fashion industry. Further, when women of all races base their self evaluation upon what is considered the culturally ideal body, the incidence of eating disorders increases [1], [9].

**Child abuse** which involves physical, mental and sexual abuse, as well as neglect is an important factor in development of wide variety of psychiatric disorders, including eating disorders.

Social isolation can also lead to the development of an eating disorder. Social isolation is stressful and depressing. In order to ameliorate these anxiety provoking feelings, an individual may get involved in emotional eating in which food serves as a source of comfort.

Parental influence is an intrinsic component in the development of eating behaviors of children. This influence is manifested by a variety of diverse factors such as the parents' own body shape and eating patterns, the degree of

involvement and expectations of their children's eating behavior as well as the relationship of parent and child.

#### **4.2 Consequences:**

**4.2.1** The ability to identify and describe emotions is decreased among women suffering from eating disorders. There is an overall emotional dysfunction involving emotional sensitivity and invalidating responses. Women with eating disorders are more likely to use dysfunctional regulation strategies such as rumination and suppression in response to negative affect. Inability to cope with intense emotional states may serve as a maladaptive way of emotional regulation [10].

**4.2.2** Eating disorder patients have a more negative self image compared to healthy and sub clinically depressed people [10].

**4.2.3** Decision making is reported to be impaired in anorexia nervosa and bulimia nervosa patients [11].

**4.2.4** Anxiety disorders are much higher in Anorexia Nervosa and Bulimia Nervosa people.

**4.2.5** Eating disorders are associated with increased risk of multiple substance use disorders, with the risk being more for bulimia nervosa and binge eating disorder [1].

**4.2.6** People with eating disorders are preoccupied with thoughts about themselves.

**4.2.7** Functional Hypothalamic Amenorrhea (FHA) occurs in women suffering from anorexia nervosa. Weight loss can cause elevations in the hormone ghrelin. Elevated concentrations of ghrelin alter the amplitude of GnRH pulses, which leads to the reduction of luteinizing hormone and follicle stimulating hormone by pituitary. A lack of eating causes amenorrhea and bone loss leading to osteopenia and sometimes progressing to osteoporosis.

**4.2.8** Many medical complexities such as low blood pressure, acid reflux, gastrointestinal problems, and multi organ failure are associated with prolonged unhealthy eating habits.

**4.2.9** Among psychiatric diagnoses, EDs are associated with increased mortality rates, even when specialized treatment is available. Of the mortalities that are reported in individuals with EDs, suicide is among the most commonly reported causes of death [12].

## **5. TREATMENT AND CHALLENGES**

Eating disorders are both physically and mentally destructive. The victims need to undergo treatment to heal their body, mind and spirit. No simple cure exists for eating disorders but treatment is available and recovery is possible. There are different treatments and therapies available for eating disorders. While considering a particular approach, it is very important to realize that everyone has a unique story, their own experiences with the disorder and their own distinctive strengths and challenges. Hence people suffering from the same disorder can respond positively to different treatment.

Some evidence based treatments include:

**Psychotherapy-** One of the most effective treatment for an eating disorder is psychotherapy or psychological counseling. Psychotherapy lays emphasis on emotions, behaviors, patterns of thinking, perception and attitude. Various models are used such as Cognitive Analytic Therapy (CAT), Cognitive Behavioral Therapy (CBT) and Dialectical Behavioral Therapy (DBT). Practice guidelines identify cognitive behavior therapy (CBT), as the best evidence based treatments for bulimia nervosa (BN). CBT is also recommended for adult anorexia nervosa (AN). One study found 74.5% of ED therapists employed CBT for AN, and 83.8% for BN [13]. CBT works to change unhelpful thinking and behavior. The principle behind this therapy is that there may be behaviors that cannot be controlled through rational thought, but rather emerge based on prior conditioning from the environment and other external and/or internal stimuli. CBT is "problem focused" and "action oriented" or directive in its therapeutic approach.

**Family based treatment-** Family-based treatment (FBT) is probably the most efficacious treatment currently available for children and adolescents. FBT is an outpatient intervention for adolescents with eating disorders that involve parent involvement in addressing eating disorder symptoms, while also promoting parental responsibility for facilitating treatment adherence. Parents are encouraged to work together as a team against the eating disorder of their child [14].

**Nutritional Management-** Nutritional management is provided by a dietician or nutritionist during treatment. This approach is designed to ensure that the person with the eating disorder is receiving the right level of vitamins and minerals throughout the treatment process. Nutrition Management helps in providing right amount of nutrients, which not only helps the patient in acquiring a healthy physique but also help it their speedy recovery.

**Music Therapy-** Literature supports the relationship between music therapy practice in mental health recovery and emphasis on empowerment and patient led processes. Case studies derived from patient experiences have described feelings of renewed self confidence and empowerment through participation in music therapy. Findings indicate that participation in music therapy significantly decreases post meal related anxiety and distress [15].

The most challenging and difficult part in the treatment of eating disorder is to begin. Accepting and confronting this disorder is the first and the biggest step towards recovery. Sufferers usually feel shame in disclosing their experiences. Seeking out someone who can understand and help can be difficult for most of the people.

Lack of awareness is another challenge in overcoming this disorder. General public do not consider unhealthy eating practices as a disorder. They do not understand the fact that

these disorders are related with the mind. Going to a psychologist is looked down upon by the society.

## 6. CONCLUSION

Unlike other mental health concerns, eating food is necessary for living. But when it gets wrapped up in emotional issues, self-image and cognitive distortions, it can be hard to separate out what is healthy and what isn't. Eating disorders have been prevalent in our society since long. But they are overlooked as improper eating habits. The need of the hour is to raise awareness about the impact of eating disorders in our society. Knowledge regarding these disorders should be enhanced in general community and in those working in the health, fitness, education and media sectors. Research has shown that having the correct information and acquiring the right education about eating disorders can help prevent an eating disorder from developing. Being informed can also ease the suffering of a person in the early stages of the illness and can reduce the stigma and misconceptions that often surround those who suffer from eating disorders.

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