



Eating Disorders

Eating disorders are complex, chronic illnesses largely misunderstood and misdiagnosed. The most common eating disorders - anorexia nervosa, bulimia nervosa, and binge eating disorder - are on the rise in the United States and worldwide. No one knows exactly what causes eating disorders. However, all socioeconomic, ethnic and cultural groups are at risk.

More than ninety percent of those with eating disorders are women. Further, the number of American women affected by these illnesses has doubled to at least five million in the past three decades.

Eating disorders are one of the key health issues facing young women. Studies in the last decade show that eating disorders and disordered eating behaviors are related to other health risk behaviors, including tobacco use, alcohol use, marijuana use, delinquency, unprotected sexual activity, and suicide attempts. Currently, 1-4% of all young women in the United States are affected by eating disorders.¹ Anorexia nervosa, for example, ranks as the third most common chronic illness among adolescent females in the United States.²

Eating disorders have numerous physical, psychological and social ramifications, from significant weight preoccupation, inappropriate eating behavior, and body image distortion. Many people with eating disorders experience depression, anxiety, substance abuse, and childhood sexual abuse, and may be at risk for osteoporosis and heart problems. Moreover, death rates are among the highest for any mental illness.

Types Of Eating Disorders

Anorexia Nervosa

Anorexia nervosa is a dangerous condition in which people can literally starve themselves to death. People with this disorder eat very little even though they are already thin. They have an intense and overpowering fear of body fat and weight gain, repeated dieting attempts, and excessive weight loss. This particular eating disorder affects from 0.5% to 1% of the female adolescent population with an average age of onset between 14 and 18 years.³ Anorexia is identified in part by refusal to eat, an intense desire to be thin, repeated dieting attempts, and excessive weight loss. To maintain an abnormally low weight, people with anorexia may diet, fast, or over exercise. They often engage in behaviors such as self-induced vomiting or the misuse of laxatives, diuretics, or enemas. People with anorexia believe that they are overweight even when they are extremely thin. Often, the beginning of illness will occur after a stressful life event such as initiation of puberty or moving out of the parents' home.

Those with anorexia are often characterized as perfectionists and overachievers who appear to be in control. In reality, they suffer from low self-esteem and confidence and overly criticize themselves. They are also very concerned about pleasing others.



Complications - The most severe and noticeable consequences of anorexia nervosa resemble those of starvation. The body reacts to the lack of food by becoming extremely thin, developing brittle hair and nails, dry skin, lowered pulse rate, cold intolerance, and constipation as well as occasional diarrhea. In addition, mild anemia, reduced muscle mass, loss of menstrual cycle and swelling of joints often accompany anorexia.

Beyond experiencing the immediate effects of anorexia nervosa, individuals suffer long-term consequences throughout the life cycle, regardless of treatment. In addition to the risks of recurrence, malnutrition may cause irregular heart rhythms and heart failure. Lack of calcium places anorexics at increased risk for osteoporosis both during their illness and in later life. A majority of anorexics also have clinical depression while others suffer from anxiety, personality disorders or substance abuse, and many are at risk for suicide. Approximately 1 in 10 women afflicted with anorexia will die of starvation, cardiac arrest, or other medical complication, making its death rate among the highest for a psychiatric disease.⁴

Bulimia Nervosa

Individuals suffering from Bulimia Nervosa follow a routine of secretive, uncontrolled or binge eating (ingesting an abnormally large amount of food within a set period of time) followed by behaviors to rid the body of food consumed. This includes self - induced vomiting and/or the misuse of laxatives, diet pills, diuretics (water pills), excessive exercise or fasting. Bulimia afflicts approximately 1% - 3% of adolescents in the US with the illness usually beginning in late adolescence or early adult life.³ As with anorexia nervosa, those with bulimia are overly concerned with food, body weight, and shape. Because many individuals with bulimia 'binge and purge' in secret and maintain normal or above normal body weight, they can often hide the disorder from others for years. Binges can range from once or twice a week to several times a day and can be triggered by a variety of emotions such as depression, boredom, or anger. The illness may be constant or occasional, with periods of remission alternating with recurrences of binge eating.

Individuals with bulimia are often characterized as having a hard time dealing with and controlling impulses, stress, and anxieties. Bulimia nervosa can and often does occur independently of anorexia nervosa, although half of all anorexics develop bulimia.

Complications - Most medical complications attributed to bulimia nervosa result from electrolyte imbalance and repeated purging behaviors. Loss of potassium due to vomiting, for example, damages heart muscle, increasing the risk for cardiac arrest. Repeated vomiting also causes inflammation of the esophagus and possible erosion of tooth enamel as well as damage to the salivary glands. Some individuals with bulimia struggle with addictions such as drugs and alcohol, and compulsive stealing. Like those with anorexia, many people with bulimia suffer from clinical depression, anxiety, obsessive-compulsive disorder and other psychiatric illnesses.

Binge Eating Disorder (BED)

Binge eating disorder (BED) is the newest clinically recognized eating disorder. BED is primarily identified by repeated episodes of uncontrolled eating. The overeating or bingeing does not typically stop until the person is uncomfortably full. Unlike anorexia nervosa and bulimia nervosa, however, BED is not associated with inappropriate behaviors such as vomiting or excessive exercise to rid the body of extra food. The illness usually begins in late adolescence or in the early 20s, often coming soon after significant weight loss from dieting. Some researchers believe that BED is the most common eating disorder, affecting 15% - 50% of participants in weight control programs. In these programs, women are more likely to have BED than males. Current findings suggest that BED affects 0.7% - 4% of the general population.³

To the lay person, BED can be difficult to distinguish from other causes of obesity. However, the overeating in individuals with BED is often accompanied by feeling out of control and followed by feelings of depression, guilt, or disgust.

Complications - People with BED are often overweight because they maintain a high calorie diet without expending a similar amount of energy. Medical problems for this disorder are similar to those found with obesity such as increased cholesterol levels, high blood pressure, and diabetes, as well as increased risk for gallbladder disease, heart disease, and some types of cancer. Researchers have shown that individuals with BED also have high rates of depression.

Eating Disorder not Otherwise Specified (ENDOS)

The Eating Disorder Not Otherwise Specified (EDNOS) category is for disorders of eating that do not meet the criteria for any specific eating disorder. In EDNOS, individuals engage in some form of abnormal eating but do not exhibit all the specific symptoms required to diagnose an eating disorder. For instance, an individual with EDNOS may meet all the criteria of anorexia nervosa but manage to maintain normal weight while someone else may engage in purging behavior with less frequency or intensity than a diagnosed bulimic.

Disordered Eating

Far more common and widespread than defined eating disorders are atypical eating disorders, or disordered eating. Disordered eating refers to troublesome eating behaviors, such as restrictive dieting, bingeing, or purging, which occur less frequently or are less severe than those required to meet the full criteria for the diagnosis of an eating disorder. Disordered eating can be changes in eating patterns that occur in relation to a stressful event, an illness, personal appearance, or in preparation for athletic competition. The 1997 Youth Risk Behavior Surveillance Study found that over 4% of students nationwide had taken laxatives, diet pills or had vomited either to lose weight or to keep from gaining weight.⁵

While disordered eating can lead to weight loss or weight gain and to certain nutritional problems, it rarely requires in depth professional attention. On the other hand, disordered eating may develop into an eating disorder. If disordered eating becomes sustained, distressing, or begins to interfere with everyday activities, then it may require professional evaluation.

Diagnosis

Because of the secretive habits of many individuals with eating disorders, their conditions often go undiagnosed for long periods of time. In the cases of anorexia nervosa, signs such as extreme weight loss are more visible. Bulimics who maintain normal body weight, on the other hand, may be able to hide their condition to the casual observer. Family members and friends might notice some of the following warning signs of an eating disorder:

A Person with Anorexia may...

- Eat only 'safe' foods, usually those low in calories and fat
- Have odd rituals, such as cutting food into small pieces
- Spend more time playing with food than eating it
- Cook meals for others without eating
- Engage in compulsive exercising
- Dress in layers to hide weight loss
- Spend less time with family and friends, become more isolated, withdrawn, and secretive

A person with Bulimia may...

- Become very secretive about food, spend a lot of time thinking about and planning the next binge
- Take repeated trips to the bathroom, particularly after eating
- Steal food or hoard it in strange places
- Engage in compulsive exercising

If an individual is displaying any of these characteristics, they should be taken to a physician, nutritionist, or other professional with expertise in diagnosing eating disorders.

Treatment and Recovery

Eating disorders are most successfully treated when diagnosed early. The longer abnormal eating behaviors persist, the more difficult it is to overcome the disorder and its effects on the body. In some cases, long term treatment and hospitalization is required. Families and friends offering support and encouragement can play an important role in the success of the treatment program.

Treatment

Presently, there is no universally accepted standard treatment for anorexia nervosa, bulimia nervosa, or binge eating disorder. Ideally, an integrated approach to treatment would include the skills of nutritionists, mental health professionals, endocrinologists and other physicians. Various types of psychotherapy may be employed, including cognitive-behavioral therapy, interpersonal therapy, and family and group therapy. Self-esteem enhancement and assertiveness training may also be helpful. Antidepressants and other drugs have been part of some therapeutic regimes.

The status of eating disorders as curable diseases has been controversial, since relapse rates for disturbed eating patterns can be very high.

Etiology

No exact cause of eating disorders has yet been found. However, some characteristics have been shown to have influence in the development of the illnesses.

Personality Factors

Most people with eating disorders share certain personality traits: low self-esteem, feelings of helplessness, and a fear of becoming fat. In anorexia, bulimia, and binge eating disorder, eating behaviors seem to develop as a way of handling stress.

Genetic and Environmental Factors Eating disorders appear to run in families, with female relatives most often affected. However, there is growing evidence that a girl's immediate social environment, including her family and friends, can emphasize the importance of thinness and weight control. For example, regular discussion of weight and dieting may normalize societal pressure to be thin. Weight related teasing by peers and family is related to low body esteem and eating disturbances in young girls. The National Institute of Mental Health (NIMH) reports that girls who live in families that tend to be strict and place strong emphasis on physical attractiveness and weight control are at an increased risk for inappropriate eating behaviors.⁴

Additionally, people pursuing professions or activities that emphasize thinness - like modeling, dancing, gymnastics, wrestling, and long distance running - are more susceptible to the problem.

Body Image

The idealization of thinness has resulted in distorted body image and unrealistic measures of beauty and success. Cultural and media influences such as TV, magazines, and movies reinforce the belief that women should be more concerned with their appearance than with their own ideas or achievements. Body dissatisfaction, feelings of fatness, and drive for thinness has led many women to become overly concerned about their appearance. Research has shown that many normal weight and even underweight girls are dissatisfied with their body and are choosing inappropriate behaviors to control their appetite and food intake. The American Association of University Women found that adolescent girls believe physical appearance is a major part of their self-esteem and that their body image is a major part of their sense of self.⁶

Biochemistry

Recent studies have revealed a connection between biological factors associated with clinical depression and the development of anorexia nervosa and bulimia nervosa. Stress hormones such as cortisol are elevated in those with eating disorders, while neurotransmitters such as serotonin may not function correctly. Research continues to better understand this relationship.

Population Differences

Gender Differences

Eating disorders are much more prevalent in females than in males. However, recent studies have shown that incidence and prevalence rates are increasing among males. Currently, there is approximately one male case to ten female cases. Further, up to one in four children referred to an eating disorders professional for anorexia is a boy. Many boys with eating disorders share the same characteristics as their female counterparts, including low self-esteem, the need to be accepted, an inability to cope with emotional pressures, and family and relationship. Males with eating disorders are most commonly seen in specific subgroups. For instance, males who wrestle show a disproportionate increase in eating disorders, rates seven to ten times the normal. Additionally, homosexual males have an increased rate of eating disorders.⁷

Cultural Variation

Eating disorders are often perceived to be an affliction of Caucasian girls and young women in middle and upper socio-economic classes. Nevertheless, increasing numbers of cases are being seen in men and women of all different ethnic and cultural groups.³

Girls and women from all ethnic and racial groups may suffer from eating disorders and disordered eating. The specific nature of the most common eating problems, as well as risk and protective factors, may vary from group to group, but no population is exempt. Research findings regarding prevalence rates and specific types of problems among particular groups are limited, but it is evident that disturbed eating behaviors and attitudes occur across all cultures.

Age

While eating disorders tends to peak between adolescence and early adulthood, the incidence and prevalence has shown an increase in all age groups. For instance, eating disorders are increasing rapidly among pre-pubertal girls. Disordered eating habits and weight concerns are beginning at earlier ages and concerns of body weight and image emerge in girls as young as 9 years of age. A recent study found that 70% of sixth grade girls surveyed report that they first became concerned about their weight between the ages of 9 and 11.⁸

Eating disorders are also becoming more common among elderly women. This is in part due to patients maintaining their illness into old age. Also, elderly women have been shown to initiate weight control practices, such as bingeing and purging.⁹

Prevention

Increasing interest and concern about eating disorders has been demonstrated in both the public and private sectors but research into prevention has been limited. Although many risk factors for developing eating disorders have been identified, efforts at prevention have so far been disappointing. A few studies have attempted to intervene in high-risk groups with mixed results.

Attitudes that lay the groundwork for developing eating disorders occur as early as fourth or fifth grade or younger, making prevention a major challenge. Better success has been accomplished in early detection and treatment of individuals with eating disorders.

Actions by the Department of Health and Human Services

Consistent with its mission to protect and advance the Nation's health, the Department of Health and Human Services (DHHS) undertakes various activities to advance the understanding and education of eating disorders.

Office on Women's Health

The Office on Women's Health is sponsoring "BodyWise", an educational campaign on eating disorders. The goal of the program is to increase knowledge of eating disorders, including their signs and symptoms, steps to take when concerned about students, and ways to promote healthy eating and reduce preoccupation with body weight and size. An information packet has been developed that includes materials emphasizing the links among healthy eating, positive body image, and favorable learning outcomes.

OWH also sponsors the National Women's Health Information Center, a one-stop gateway to Federal and private sector information resources on a variety of women's health topics including eating disorders, nutrition, and body image. OWH also supports the Girl Power! campaign which provides positive messages, accurate health information, and support for girls ages 9 to 14 years.

BodyWise information packets can be accessed on the National Women's Health Information Center (www.4woman.gov) as well as the Girl Power! website (<http://www.health.org/gpower/>).

National Institutes of Mental Health

The National Institute of Mental Health (NIMH) conducts and supports research on mental illness and mental health, seeking to improve basic, clinical and service delivery knowledge concerning any aspect of behavioral and mental disorders. The NIMH is also concerned with the speedy dissemination and implementation of this knowledge in practice and service delivery systems. As part of this effort, scientists funded by NIMH are actively studying ways to better treat and understand eating disorders.

Food and Drug Administration

The Food and Drug Administration (FDA) provides information for women and adolescents on diet and nutrition. Information can be downloaded from: <http://www.fda.gov/womens/informat.html>

FDA Consumer magazine also periodically runs articles with important health information for teenagers, ranging from eating disorders and nutrition to sun safety and attention deficit disorder. These "Teen Scene" articles are available electronically at <http://www.fda.gov/opacom/7teens.html> and some are available as reprints. To order single copies, call toll-free 1-888-INFO-FDA (1-888-463-6332).

www.4woman.gov -- 800-994-9662 -- 888-220-5446 (TDD)

National Institute of Diabetes and Diseases of the Kidney Weight Control Information Network

The National Institute of Diabetes and Diseases of the Kidney (NIDDK) provides consumers and health professionals with information on nutrition and obesity. Fact sheets can be found at:

<http://www.niddk.nih.gov/health/health.htm>

NIDDK also sponsors the Weight-control Information Network (WIN). WIN was established in 1994 to provide health professionals and consumers with science-based information on obesity, weight control, and nutrition. WIN has also developed the Sisters Together: Move More, Eat Less program that encourages black women to achieve a healthy weight by making changes in their lifestyle.

Endnotes

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8. Shisslak CM, Crago M, McKnight KM, Estes LS, Gray N, Parnaby OG. Potential risk factors associated with weight control behaviors in elementary and middle school girls. *J Psychosomatic Research* 1998;44:301-313.
9. Hsu LK, Zimmer B. Eating disorders in old age. *Intl J of Eating Disorders* 1988;7:1:133-138.

Resources

Federal Government

Office on Women's Health 200 Independence Ave SW, Room 730B Washington, DC 20201 Ph: (202) 690-7650 <http://www.4woman.gov>.

Food and Drug Administration 200 C St., SW Washington, DC 20204 Ph: 1-888-INFO-FDA
<http://www.fda.gov>.

National Institute of Mental Health Public Inquiries Section 5600 Fishers Lane, Room 7C-02 Rockville, MD 20857 Ph: (301) 443-4513 <http://www.nimh.nih.gov>.

Weight-control Information Network (WIN) (Sponsored by the National Institute of Diabetes and Diseases of the Kidney) 1 WIN WAY Bethesda, MD 20892-3665 Ph: (800) WIN-8098
<http://www.niddk.nih.gov/health/nutrit/win.htm>.

Other Groups

National Eating Disorders Association. Phone: (800) 931-2237 Internet Address:
<http://www.nationaleatingdisorders.org>

Harvard Eating Disorders Center Massachusetts General Hospital ACC-725 15 Parkman Street Boston, MA 02114 <http://www.hedc.org>.

National Association of Anorexia Nervosa and Associated Disorders Box 7 Highland Park, IL 60035 Ph: (847) 831-3438 <http://www.anad.org>.

Pennsylvania Educational Network on Eating Disorders 3277 Cedar Run Road Allison Park, PA 15101 Ph: (412) 366-9966

February 2000