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Toward an Understanding of Girls with Eating Disorders

Many girls and women develop harmful eating patterns during adolescence and early adulthood, with most cases of anorexia nervosa developing between ages 15 and 19 and most cases of bulimia nervosa developing between ages 20 and 24.[1] Younger girls are also at risk for developing patterns of disordered eating. A recent population-based study of U.S. adolescents found that 0.3% of teens suffer from anorexia nervosa, 0.9% suffer from bulimia nervosa, and 1.6% suffer from binge eating disorder.[2] More teens suffer from harmful, or disordered, eating patterns that may not meet the diagnostic criteria for an eating disorder but have negative effects on health and well-being. For example, a 2010 study found that 13.4 percent of girls ages 9 to 14 displayed disordered eating behavior.[3] Although males can also develop eating disorders, females account for between 90 and 95 percent of people with eating disorders.[4]

In the state of Ohio in 2007, 30.1 percent of high school students and 35.7 percent of high school girls thought they were slightly or very overweight, compared to 33.8 percent and 46.2 percent in 1993.5 The same study found that 62.5 percent of Ohio female high school students were trying to lose weight. Results showed that 69.6 percent of girls reported exercising to lose weight or to keep from gaining weight, 57.7 percent reported dieting, 14.2 percent fasted, 6 percent vomited or used laxatives, and 8.1 percent used diet pills.[7] On the positive side, all of these numbers have decreased since 1999.[7]

Toward an Understanding of Girls with Eating Disorders

DEFINITIONS

Eating Disorders

Disordered eating

The term "disordered eating," while not an official diagnostic category, is often used in studies about adolescent eating patterns to determine rates of unhealthy eating behaviors. Disordered eating behaviors include, but are not limited to, fasting to lose weight, using diet products, vomiting to lose weight, laxative abuse, food restriction and binge eating.[8,1]

Anorexia nervosa

"Anorexia nervosa is an eating disorder that involves an inability to stay at the minimum body weight considered healthy for the person's age, height and gender. Persons with this disorder may have an intense fear of weight gain, even when they are underweight. They may use extreme dieting, excessive exercise, or other methods to lose weight."[1]

Bulimia nervosa

"Bulimia is an illness in which a person binges on food or has regular episodes of significant overeating and feels a loss of control. The affected person then uses various methods – such as vomiting or laxative abuse – to prevent weight gain."[1]

Binge-eating disorder

Binge-eating disorder occurs when a person recurrently consumes large quantities of food, accompanied by feelings of loss of control, guilt and shame. Binge-eating is rarely accompanied by excessive exercise, fasting, or purging and as a result, people who suffer from binge-eating disorder are often overweight or obese.[1]

Causes and Consequences of Eating Disorders

Eating disorders have been linked to a variety of other health and mental health consequences, including death. Anorexia nervosa has the highest mortality rate of any psychiatric disorder with up to 20 percent of patients dying from anorexia or related complications, although treatment can greatly reduce this number.[6] All eating disorders have been associated with higher rates of suicidality.[2] Electrolyte imbalances caused by vomiting, depressed heart function caused by caloric restriction, and cardiac complications associated with refeeding are major causes of eating disorder-related morbidity and mortality.[6] Eating disorders also can cause gastrointestinal problems, endocrine disorders, osteoporosis, and pulmonary system damage.[6] Eating disorders often occur with other psychiatric conditions such as depression, obsessive-compulsive disorder, and personality disorders.[7] Disordered eating also has been found to be associated with teen cigarette use, binge drinking, and marijuana and inhalant use.[8] Unfortunately, research suggests that only a small minority of the people who meet the criteria for an eating disorder receive any form of mental health treatment.[9]

The exact causes of eating disorders are unknown, but research has demonstrated that a variety of biological, sociocultural and environmental factors can influence the development of eating disorders. Premature birth and other perinatal complications increase the risk of eating disorders.[3] Other studies suggest that genes that regulate serotonin may play a role in eating disorders.[9] Additionally, the changes during puberty, such as hormonal fluctuations, brain changes, and changes in social affiliation, can trigger disordered eating behavior.[3]

Peer pressure and conflicting gender roles can also influence risk for eating disorders.[10] The influence of Western media and shifting social norms following the introduction of Western media has made disordered eating a concern in non-Western contexts.[11] However, some protective factors such as acceptance of a wide variety of body types as beautiful and a high value placed on caring for oneself may limit the development of eating disorders among girls in these contexts and provide directions for preventative programs elsewhere.[12]

Best Practices and Treatment of Eating Disorders

Despite the discouragingly high levels of eating disorders and the severity of the consequences, several effective treatment options for eating disorders do exist. The family-based treatment (FBT) model (also known as the Maudsley method) has shown promising success in treatment of children and adolescents with anorexia nervosa.[3] FBT allows children and teens to remain at home and have their treatment supervised by their parents using traditional behavior modification strategies and with the support of health care professionals.[13] Although nearly a third of patients with anorexia nervosa will relapse sometime after their first treatment, longitudinal research that followed patients for a number of years found that more than three-quarters of patients had made a full recovery after 10 years.[14] The length of time needed to achieve recovery varied, depending on the definition of recovery, but took an average of about 4-6.5 years.

Cognitive behavioral therapy is widely recognized as the most effective treatment for bulimia nervosa, although most of this research has been conducted on adults and

older adolescents. Antidepressants are sometimes used by adults with bulimia, especially when psychological therapy is unavailable, but they may not be recommended for adolescents because of increased suicide risk.[3] Dialectical behavior therapy (DBT), an approach originally designed for use with adults with borderline personality disorder, has been successfully applied to the treatment of eating disorders in adults.[15] This treatment approach focuses on issues which may be particularly important for patients with eating disorders, such as acceptance, relationship deficits and emotion-regulation. In addition, DBT has been shown to be effective for patients with multiple problems, which is especially useful given the high rates of co-morbidity often seen in patients with eating disorders.

Access to treatment is also a significant issue. Treatments are only effective if patients and their families are able to afford them. Although the 2009 Mental Health Parity and Addiction Equity Act requires group health plans that offer mental health and substance abuse treatment to provide that coverage with no greater cost or treatment limitations than medical and surgical care, it does not require all group health plans to offer mental health and substance abuse coverage.[16] The severe medical complications and the chronic nature of eating disorders show the importance of providing comprehensive treatment coverage early in the disorder. In addition to access, family support is another major consideration, particularly as most treatments rely on significant parent involvement to effectively treat the child.

Selected Additional Resources Regarding Eating Disorders

The following is a list of suggested further reading on eating disorders. These articles provide epidemiological, sociocultural and clinical perspectives on disordered eating, with an emphasis on children and adolescents.

Anderson-Fye, E. and Becker, A. 2003. "Sociocultural Aspects of Eating Disorders." *The Handbook of Eating Disorders and Obesity,* Chapter 27, pp. 565-589. Wiley Press.

This chapter provides an overview of various sociocultural factors regarding eating pathologies and changing patterns of eating pathologies linked to processes of modernization and Westernization. The authors note different patterns of eating disorders in non-Western contexts, such as non-fat phobic anorexia nervosa in East Asia, showing that diagnostic tools developed in the West may not be effective in other contexts. Within Western nations, contrary to the image of disordered eating as occurring primarily among Caucasian females, ethnic minority groups usually have similar rates of eating pathologies, although recent immigrants show higher rates of eating disorders compared to populations in their home countries. The article also notes that a cultural valuation of thinness, and the movement of this valuation to new areas through media and modernization, is often linked to disordered eating patterns, although indigenous sociocultural preference for larger bodies may be protective against eating disorders. As Western media enters new contexts, the opportunities portrayed for young women may be linked to a thin body, increasing desire for thinness. Finally, the article explores feminist theories of disordered eating, including that it may be a result of increasingly restrictive standards of female beauty as women have access to more forms of success outside the home.

Bacalhau, S. & Moleiro P. (2010) Eating disorders in adolescents–what to look for? *Acta Médica Portuguesa*, 23(5), 777-784.

A study from Leiria, Portugal of 22 adolescents on early detection of eating disorders found that doctors should give importance to symptoms such as weight loss, inappropriate eating attitude, dissatisfaction with body image, and psychosomatic complaints, even when they do not meet the criteria for anorexia nervosa or bulimia nervosa.

Becker, A.E., Fay, K.E., Agnew-Blais, J., Kahn, A.N., Striegel-Moore, R.H., & Gilman, S.E. (2011). Social Network Media Exposure and Adolescent Eating Pathology in Fiji. *The British Journal of Psychiatry,* 198: 43-70.

Researchers from Harvard Medical School's Department of Global Health and Social Medicine found that indirect media exposure, such as having friends who watch a lot of TV, had more influence on eating disorder symptoms than direct media exposure. The study followed adolescent girls from Fiji where broadcast television only became available in the mid-1990s. The findings suggest that interventions aimed at limiting media exposure should be focused at the community or peer-based level, rather than individuals. Also, parents simply limiting their own children's screen time is not enough to protect children from the risk of media exposure.

Research suggests that only a small minority of the people who meet the criteria for an eating disorder receive any form of mental health treatment.

Findlay, S., Pinzon, J., Taddeo, D., & Katzman D. (2010). Family-based treatment of children and adolescents with anorexia nervosa: Guidelines for the community physician. *Journal of Pediatrics and Child Health,* 15(1), 31-35.

This article gives an overview of the family-based treatment (FBT) model, which evidence suggests is the most effective treatment for anorexia nervosa in children and teenagers. FBT allows young people suffering from eating disorders to remain at home and gives parents the responsibility for ensuring adequate nutrition and weight normalization, through direct supervision of all meals and snacks, exercise restriction and the use of traditional behavioral modification strategies. The article emphasizes the value of implementing the FBT approach through primary care physicians, either alone or while waiting for more specialized services, if needed.

Merikangas, K.R., He, J.P., Burstein, M., Swendsen, J., Avenevoli, S., Case, B., et al. (2011). Service utilization for lifetime mental disorders in U.S. adolescents: results of the National Comorbidity Survey-Adolescent Supplement (NCS-A). *Journal of American Academy of Child and Adolescent Psychiatry,* 50(1), 32-45.

The National Comorbidity Survey–Adolescent Supplement was analyzed to study patterns and correlates of lifetime mental health service use by severity, type and number of disorders as defined by *DSM-IV.* The study found that only 12.8% of adolescents and 17% of girls meeting the diagnostic criteria for an eating disorder had ever received disorder-specific treatment. The study also found that sex, race/ethnicity and urban/rural residence were related to likelihood of treatment for a variety of disorders.

National Institute of Mental Health. (2010). Eating Disorders. Retrieved January 25, 2011, from http://www.nimh.nih.gov/health/publications/eating-disorders/complete-index.shtml

The National Institute of Mental Health's website provides an overview of the definition of eating disorders, as well as several different types of eating disorders, including anorexia nervosa, bulimia nervosa and eating disorders not otherwise specified (EDNOS). The website also includes a variety of treatment options and areas of current research regarding eating disorders.

Rome, E.S., Ammerman S., Rosen D.S., Keller R.J., Lock J., Mammel K.A. et al. (2003). Children and adolescents with eating disorders: the state of the art. *Pediatrics,* 111(1), 98-108.

This article provides a review of current literature on eating disorders in order to determine the current state of the art, including pathogenesis and etiology, prevention and screening, risk factors, nutritional issues, and various issues regarding treatment and care. Of particular note are the role of primary care physicians in recognizing early symptoms of eating disorders, a set of clinical guidelines for treatment based upon the severity of eating disorder, and the importance of insurance companies for proper eating disorder care.

Rosen D.S. & the Committee on Adolescence. (2010). Identification and Management of Eating Disorders in Children and Adolescents. *Pediatrics,* 126, 1240-1253.

This article provides a review of eating disorders for pediatricians, with an emphasis on the importance of evaluating patients and managing treatment or referring patients diagnosed with an eating disorder, given rising incidence and prevalence of anorexia nervosa and bulimia nervosa. The article provides the full *DSM-IV* criteria for anorexia nervosa, bulimia nervosa, and eating disorders not otherwise specified, as well as lists of tests that should be performed when an eating disorder is suspected and possible complications of eating disorders. The article suggests most cases of eating disorders can be managed in outpatient care and provides recommendations for nutritional rehabilitation and weight gain, in addition to descriptions of family-based therapy, day-treatment programs, hospital-based therapy and pharmacotherapy. The article also notes the high rate of long-term recovery in adolescents, although treatment may be protracted, and the low mortality rate among adolescents with anorexia nervosa compared to adults with anorexia nervosa.

Wisniewski, L. & Kelly, E. (2003). The Application of Dialectical Behavior Therapy to Eating Disorders. *Cognitive and Behavioral Practice,* 10(2), 131-138.

Dialectical Behavior Therapy (DBT) is an approach that was originally developed to treat borderline personality disorder. In this article, the authors build on studies that suggest that DBT may be useful for the treatment of eating disorders by proposing ways in which DBT may be applied to eating disorders treatment. They outline aspects of DBT which make it suitable for patients with eating disorders and make recommendations for ways in which DBT can be modified to more specifically target some of the key components of an eating disorder diagnosis.

Current Research on Eating Disorders at Case Western Reserve University

Case Western Reserve University has a number of current faculty members, including many Schubert Center Faculty Associates, studying both eating disorders and promoting healthy eating behavior.

Dr. Eileen Anderson-Fye of the Department of Anthropology studies body image and mental health among high school girls in Belize and socio-cultural factors contributing to eating disorders. Her research suggests that upward mobility and introduction of Western influences results in changing body image and eating ideals,[17,10] but that cultural notions of multiple forms of beauty and the importance of caring for oneself may prevent girls from developing disordered eating patterns.[12]

Dr. Elaine Borawski of the Department of Epidemiology and Biostatistics and the Center for Health Promotion Research has studied how observed physical attractiveness influences weight preoccupation. Her recent study of healthy weight girls in grades 8 to 12 found that Caucasian girls who were rated by researchers as very attractive were more likely to be trying to lose weight or to keep from gaining weight than those considered least attractive.[18] However, researcher observed attractiveness was not related to preoccupation with weight reduction or weight control for African-American or Hispanic girls, perhaps due to less narrowly defined body ideals and cultural importance of self-acceptance and nurturance among these communities.[23]

The Prevention Health Research Center for Healthy Neighborhoods at CWRU has several programs aimed at improving access to healthy foods, teaching youth about nutrition and promoting physical activity to reduce childhood obesity. Their FreshLink project aims to increase access to healthy foods in urban areas and educate residents about nutrition and the benefits of healthy foods. The Prevention Health Research Center recently received a $12.5 million grant to begin a seven-year project following 450 overweight and obese Cleveland Metropolitan School District students and examining the effectiveness of three different approaches to reduce childhood obesity and high blood pressure. Dr. Elaine Borawski, Dr. Leona Cuttler, and Dr. Shirley Moore, are the principal investigators.

Dr. Marilyn Lotas of the Department of Nursing studies obesity and hypertension among children in Cleveland Metropolitan School District. Her study of 2000 CMSD students in 4th and 7th grade found that 16 percent of students were overweight, 26.8 percent were obese and 15.7 percent were hypertensive.[19] Her findings suggest that local initiatives should focus on making healthy food cheaper and more accessible to busy parents, improving school lunches, and providing safe areas for physical activity. A policy brief on Dr. Lotas's work in Cleveland schools can be found on the Schubert Center website.

Dr. Lucene Wisniewski, Adjunct Assistant Professor with the Department of Psychology and Co-Director of the Cleveland Center for Eating Disorders, has been one of the leaders in applying Dialectical Behavior Therapy (DBT) to eating disorders. Her current research evaluates the effectiveness of DBT for eating disorder treatment in a range of contexts. She recently conducted research on DBT telephone skills coaching for patients with eating disorders, a service which provides after-hours support and assistance to patients. Findings demonstrated that the majority of participants called for assistance with eating disorder related urges, nutritional information, and self-imposed accountability.[20] Dr. Wisniewski has also recently conducted an evaluation of a day treatment program for patients with eating disorders in Cleveland.[21]

FOR MORE INFORMATION

The Cleveland Center for Eating Disorders provides treatment for eating disorders, support groups and other resources.
http://www.eatingdisorderscleveland.org

A nonprofit advocacy organization, The National Eating Disorders Association seeks to support individuals and families with eating disorders through advocacy, programming and resources including a toll-free helpline.
http://www.nationaleatingdisorders.org

Families Empowered and Supporting Treatment of Eating Disorders (F.E.A.S.T.) is an international organization of and for families and other caregivers supporting people living with eating disorders.
http://www.feast-ed.org

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