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## Eating disorder among adolescents: A cause of concern

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### Abstract

Eating Disorders are a serious group of psychiatric disorders with a high level of impairment. They involve a poor body image, abnormal eating behaviours, overemphasis of the importance of weight and shape, and the use of extreme weight control behaviours. This paper presents a review of research done on adolescent eating disorders and the probable factors underlying it.

**Keywords:** Eating Disorder, Body Image, Adolescents, Body Mass Index (BMI)

### 1. Introduction

Eating disorders are psychiatric diseases with abnormal eating habits. Their complications are nutritional, psychiatric, and physical health disturbances (Klein, & Walsh, 2008, Schebendach, 2008) [19, 32]. People with Eating Disorders can become seriously unwell and many will require access to hospital treatment. Common reasons for hospitalization include medical complications (e.g., cardiac abnormalities, electrolyte disturbance, and hypotension), suicidal behaviour, and lack of response to outpatient treatment in a very underweight patient. Krause *et al.* (2000) [20] point out that “a sense of depression, loss and helplessness is often associated with eating disorders. Eating disorders play important role in adolescent development during puberty nutritional behavior can however change. Adolescent girls who engage in unhealthy weight-control behaviors are at increased risk for dietary inadequacy (Story, *et al.* 2002) [36] A number of factors like media effect (Field, *et al.* 1999) [3], Cash and Pruzinsky 2004) [2, 37]. Concern over body image (Demarest and Allen, 2000, Becker, *et al.* 2002) [16, 1] socio economic status (Neumark, *et al.* 2008, Costa, *et al.* 2008, Abraham and Birmingham. 2008) [8, 6, 27] gender (Costa, *et al.* 2008) [6] and age (Neumark and Hannan, 2000) [7] make them feel dissatisfied with their body shape and weight.

### 2. Types of Eating Disorder

The Diagnostic and Statistical Manual of Mental Disorders fourth edition (DSM-IV) 27 recognizes three clinically diagnosable Eating Disorders. These are Anorexia Nervosa (AN), Bulimia Nervosa (BN), and Eating Disorder Not Otherwise Specified (EDNOS).

#### 2.1 Anorexia Nervosa

Anorexia Nervosa (AN) involves having a body weight that is 15 percent lower than normal, a relentless AN involves having a body weight that is 15 percent lower than normal, a relentless pursuit of thinness, a disturbed view of one's actual shape and weight, a lack of menstruation among girls and women, and an intense fear of gaining weight or becoming fat. Females with AN typically overvalue thinness and a low body weight, while males with anorexia are more likely to value and strive toward a lean body shape that is muscular and low in fat.

#### 2.2 Bulimia Nervosa

BN is characterised by recurrent episodes of binge-eating, described as consuming a very large amount of food within a short period of time with an accompanying sense of loss of control, and regular use of inappropriate behaviours designed to compensate for binge eating. These behaviours include fasting, vomiting, laxative and diuretic misuse, enemas, diet pills, and compulsive exercising.

### 2.3 Eating Disorder Not Otherwise Specified

Eating Disorder Not Otherwise Specified (EDNOS) is a diagnostic category for individuals who present with other extreme disturbances in eating behaviours and body image, that are sufficiently distressing and disabling as to warrant classification as a psychiatric condition. This category “captures” individuals who do not meet full criteria for AN or BN, but nonetheless evidence disordered eating behaviours to a clinically significant degree.

### 3. Eating Disorder and Media

Media presentation of thin image is a major contributor to current high incidence of body dissatisfaction and eating disorder in adolescents. Television advertising and soap opera generally represent the hero and heroine as slim, young and beautiful. Adolescents are very much influenced by watching these advertisements on television and mostly they try to keep their body slim. Groesz *et al.* (2002) [14] found that the greatest decline in body satisfaction occurred in girls under the age of 19 following exposure to overtly thin media images. Recent studies indicate that current diet, exercise, and beauty trends displayed in reality television shows and social media outlets can contribute to unhealthy adolescent body perceptions. Tiggemann and Slater (2013) [38] found that among 13–15-year old girls, body image concerns increased with time spent on the Internet and Facebook usage. Meier and Gray (2014) [25] further identified that the time spent on Facebook was less important than the degree of exposure to appearance-specific media such as photo sharing, which was positively associated with body image concerns. These findings suggest that in addition to print media, current television and Internet trends are sources of promoting unrealistic and so-called ideal images to adolescents.

### 4. Factor of age and gender on Eating Disorder

A substantial amount of research has shown that females are more prone to eating disordered behaviour than males (Borchert and Heinberg 1996). Mishra and mukhopadhyay (2010) [31] reported that girl often opted for skipping of meals to control their body weight. Some of them reported the habit of snacking between main meals. The same study revealed that girls who remained dissatisfaction with their body weight were more inclined to diet. Adolescents after transition from high school to college environment face many new environmental factors which influence them in a different ways. Many of these factors contribute to the development and exacerbation of disorder eating behaviors (Vohs, *et al.* 2001) [39]. Eating disorders are more common at the age of 25 or below and mainly occur among females (Deering S, 2001) [10]. However, studies showed that eating disorders are increasing in young males (Sepulveda, *et al.* 2008, Lavender, *et al.* 2010) [33, 23]. Gardner (1999) [28] found that Females show greater discrepancy between their perceived body size and their ideal body size compared to males. Moreover, concern over body image is more common among adolescent females than the other age groups (Bruch, 1981) [15].

### 5. Eating Disorder and Socio-economic status

Eating disorder is found among adolescent girls of higher socioeconomic status (Neumark, *et al.* 2008) [9] on the other hand, Jones *et al.* (2001) [17] observed that socioeconomic status (SES) was not significantly associated with disturbed eating behaviours in a school-based study in Ontario. Similar result has been found by Rogers *et al.* (1997) [21].

Dev *et al.*, (2009) [11] found that overweight was more frequently found among urban female as compared to rural female adolescents because the economic status of the urban adolescents was higher than their rural counterparts. Furthermore, they also found that urban female adolescents have the perception of being overweight from the actual BMI value and these youths were beginning to be thin or too thin body image. Moreover, many normal healthy adolescents compared their image with thin women portrayed in the media. According to Monir *et al.* (2010) [26] eating disorder is more prevalent among overweight-obese adolescents of high social class and they conclude that social background, obesity, negative body image, depression and teasing are the main risk factors for developing eating disorder.

### 6. Eating Disorder, BMI and Body Image

According to the World Health Organization (WHO), obesity is defined as abnormal or excessive weight that may cause serious health problems (<http://www.who.int/>, 2015). There are more than 1.4 billion of overweight adults and more than 40 million overweight children under the age of 5 worldwide. Babio *et al.* (2009) [4] in a study among adolescents aged 12 - 18 years showed that the increasing risk of eating disorders was positively associated with body mass index (BMI) and fat mass (FM) percentage and negatively associated with waist-to-hip ratio. Body image is a multidimensional construct that involves the perception of body size, feelings, beliefs and behaviors toward physical appearance (Laus MF, *et al.* 2011, Lepage ML & Crowther JH, 2010) [22, 24]. According to White & Halliwell (2010) [40], body image consists of two dimensions: perceptive and attitudinal, and the latter includes body dissatisfaction. The latter, in turn, relates to discontentment with weight and physical appearance. Body dissatisfaction directly influences inappropriate eating behaviors, such as food restriction and the use of pharmaceutical drugs that promote weight loss (Keery H, 2004) [18]. Negative body image has been a central diagnostic feature for all clinical eating disorders (ie, anorexia nervosa, bulimia nervosa, binge eating disorder) as outlined by the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)

### 7. Eating Disorder and Dieting

A number of studies involving clinical samples have found that the majority of individuals with eating disorders report that they started to diet before they initiated their disordered eating behaviors (Bulik CM, *et al.* 1997, Fairburn CG and Cooper PJ, 1984) [5, 12]. Further evidence of the association is provided by prospective studies within community samples of adolescents. Among adolescents, self-reported dieting has been shown to predict increased risk of disordered eating behavior (Stice E, and Agras WS. 1998, Field, AE., 1999, Stice E. A. 2001) [34, 3, 35]. Chugh and Puri (2001) [29] reported that weight concern and dissatisfaction over body weight were prevalent among underweight as well as overweight adolescent girls. Eating behaviours like skipping meals, eating out and snacking were common among these adolescent girls. Augustine and Poojara (2003) [30] reported that more than half of the adolescent girls wanted to lose body weight. Results showed that weight loss plans among the study groups included exercise (21%), followed by meal skipping (20%), starvation (16%), binge eating (6%), and consumption of diet pills (2%) and the most commonly skipped meal was breakfast.

## 8. Conclusion

Adolescence is a critical period for developing Eating Disorders them because of the various social, physical, and psychological changes occurring between the 13 to 18 years of age. The relationship between eating disorder and body image is complex, such that additional variables must be considered when explaining this association, including Body Image, Media effect, socio economic status, age, gender, weight-related pressures and concerns etc.

## 9. References

1. Becker E, Burwell RA, Gilman SE, Herzog DB, Hamburg P. Eating behaviours and attitudes following prolonged exposure to television among ethnic Fijian adolescent girls, *British Journal of Psychiatry*. 2002; 180:509-514.
2. Field E, Camargo Jr CA, Taylor CB, Berkey CS, Colditz GA. Relation of peer and media influences to the development of purging behaviors among preadolescent and adolescent girls, *Archives of Pediatrics and Adolescent Medicine* 1999; 153(11):1184-1189.
3. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. Fifth ed. Washington, DC: American Psychiatric Association, 2013
4. Babio N, Canals J, Pietrobelli A, Perez S, Arija V. A two-phase population study: relationships between overweight, body composition and risk of eating disorders. *Nutr Hosp* 2009; 24(4):485-91.
5. Bulik CM, Sullivan PF, Carter FA. Manifestations Initial of disordered eating behavior: dieting versus bingeing. *Int J Eat Disord*. 1997; 22:195-201.
6. Costa Ramos E, Severo M, Barros H, Lopes C. Determinants of eating disorders symptomatology in Portuguese adolescents, *Archives of Pediatrics and Adolescent Medicine* 2008; 162(12):1126-1132.
7. Neumark-Sztainer PJ Hannan. Weight-related behaviors among adolescent girls and boys: results from a national survey, *Archives of Pediatrics and Adolescent Medicine* 2000; 154(6):569-577.
8. Neumark-Sztainer, Eisenberg ME, Fulkerson JA, Story M, Larson NI. Family meals and disordered eating in adolescents: longitudinal findings from Project EAT, *Archives of Pediatrics and Adolescent Medicine* 2008; 162(1):17-22.
9. Neumark-Sztainer, Eisenberg ME, Fulkerson JA, Story M, Larson NI. Family meals and disordered eating in adolescents: longitudinal findings from Project EAT, *Archives of Pediatrics and Adolescent Medicine* 2008; 162(1):17-22.
10. Deering S. Eating disorders: recognition, evaluation, and implications for obstetrician/gynecologists (1). *Prim Care Update Ob Gyns* 2001; 8(1):31-5
11. Dev RDV, Permai V, Omar Fauzee MS. Rural urban differences in body image perception, Body Mass Index and dieting behavior among Malay adolescence Malaysian schoolgirl. *European Journal of Scientific Research*. 2009; 34:69-82.
12. Fairburn CG, Cooper PJ. The clinical features of bulimia nervosa. *Br J Psychiatry*. 1984; 144:238-46.
13. Field AE, Camargo CA Jr, Taylor CB. Relation of peer and media influences to the development of purging behaviors among preadolescent and adolescent girls. *Arch Pediatr Adolesc Med* 1999; 153:1184-9.
14. Groesz LM, Levine MP, Murnen SK. The effect of experimental presentation of thin media images on body satisfaction: a meta-analytic review. *Int J Eat Disord*. 2002; 31(1):1-16.
15. Bruch H. Developmental considerations on anorexia nervosa and obesity, *Canadian Journal of Psychiatry*. 1981; 26(4):212-217.
16. Demarest J, Allen R. Body image: gender, ethnic, and age differences, *Journal of Social Psychology*. 2000; 140(4):465-472.
17. Jones JM, Bennett S, Olmsted MP, Lawson ML, Rodin G. Disordered eating attitudes and behaviours in teenage girls: a school-based study, *CMAJ*. 2001; 165(5):547-552.
18. Keery H, Van Den Berg P, Thompson JK. An evaluation of the tripartite influence model of body dissatisfaction and eating disturbance with adolescent girls. *Body Image* 2004; 1(2):236-51.
19. Klein DA, Walsh BT. Eating disorders: clinical features and pathophysiology. *Physiol Behav* 2008; 81(2):359-74.
20. Krause E, Robins C, Lynch T. A mediational model relating sociotrophy, ambivalence over emotional expression, and disordered eating. *Psychology of Women Quarterly* 2000; 24:328-335.
21. Rogers L, Resnick MD, Mitchell JE. The relationship between socioeconomic status and eating-disordered behaviors in a community sample of adolescent girls, *International Journal of Eating Disorders*. 1997; 22:15-23.
22. Laus MF, Costa TMB, Almeida SS. Body image dissatisfaction and its relationship with physical activity and body mass index in Brazilian adolescents. *J Bras Psiquiatr*. 2011; 60(4):315-20.
23. Lavender JM, De Young KP, Anderson DA. Eating Disorder Examination Questionnaire (EDE-Q): norms for undergraduate men. *Eat Behav* 2010; 11(2):119-21.
24. Lepage ML, Crowther JH. The effects of exercise on body satisfaction and affect. *Body Image* 2010; 7(1):124-30.
25. Meier EP, Gray J. Facebook photo activity associated with body image disturbance in adolescent girls. *Cyberpsychol Behav Soc Netw* 2014; 17(4):199-206.
26. Monir ZM, Khalifa AG, Hassaballa F, Tawfeek S, Abdelmonem M, Shady MA *et al*. Eating Behavior and Problems in Egyptian Adolescents; Relation to Dietary Intake. *Journal of American Science*. 2010; 6(12):1145-1159.
27. Abraham NK, Birmingham CL. Is there evidence that religion is a risk factor for eating disorders? *Eating and Weight Disorders* 2008; 13(4):e75-e78.
28. Gardner RM, Friedman BN, Jackson NA. Body size estimations, body dissatisfaction, and ideal size preferences in children six through thirteen, *Journal of Youth and Adolescence*. 1999; 28(5):603-618.
29. Chugh R, Puri S. Affluent adolescent girls of Delhi: eating and weight concerns, *British Journal of Nutrition*. 2001; 86(4):853-542.
30. Augustine LF, Poojara RH. Prevalence of obesity, weight perceptions and weight control practices among urban college going girls, *Indian Journal of community Medicine*. 2003; 28(4):187-190.
31. Mishra SK, Mukhopadhyay S. Eating and weight concerns among sikkimese adolescent girls and their biocultural correlates: An exploratory study, *Public Health Nutrition* 2010; 14(5):853-859.

32. Schebendach JE. Nutrition in eating disorders. In: Mahan L, Escott-Stump S, editors. *Krause's food & the nutrition therapy*. 12 ed Philadelphia: WB Saunders, 2008, 563-86.
33. Sepulveda AR, Carrobbles JA, Gandarillas AM. Gender, school and academic year differences among Spanish university students at high-risk for developing an eating disorder: an epidemiologic study. *BMC Public Health*. 2008; 8:102. doi: 10.1186/1471-2458-8-102.
34. Stice E, Agras WS. Predicting onset and cessation of bulimic behaviors during adolescence: a longitudinal grouping analyses. *Behav Ther* 1998; 29:257-76.
35. Stice EA. Prospective test of the dual-pathway model of bulimic pathology: mediating effects of dieting and negative affect. *J Abnorm Psychol*. 2001; 110:124-35.
36. Story M, Neumark S, French S. Individual and environmental influences on adolescent eating behaviors. *Journal of the American Dietetic Association* 2002; 02:40-51.
37. Cash TF, Pruzinsky T. *Body Image: A Handbook of Theory, Research and Clinical Practice*, The Guildford Press, London, UK, 1st edition, 2004.
38. Tiggemann M, Slater Netgirls A. the internet, facebook, and body image concern in adolescent girls. *Int J Eat Disord*. 2013; 46(6):630-63.
39. Vohs KD, Heatherton TF, Herrin M. disordered eating and the transition to college: a prospective study. *Int J Eat Disord*. 2001; 29(3):280-8.
40. White J, Halliwell E. Examination of a sociocultural model of excessive exercise among male and female adolescents. *Body Image* 2010; 7(1):227-33.