Why do People Suffer from Eating Disorders? A Critical Evaluation of the Contemporary Etiological Models of Eating Disorders

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Abstract

Eating disorders is one of the most prominent health issues among adolescents not only in the West but also in non-Eastern countries like India. Its higher prevalence during adolescence is often seen as a form of defense against the demands for greater autonomy and responsibility during this period of transition and often linked with stress as the key variable. However, empirical studies attribute this to the changing patters of family dynamics during adolescence. Whereas, in contrast to this, the psychiatric morbidity model suggests that, eating disorders are seen as manifestation of psychological disturbances such as major depression and obsessive-compulsive disorders, at some point of time, as these disorders are almost three times more common among patients, particularly, with anorexia nervosa. Whereas, addictive models of eating disorders suggest that, eating disorders are driven by compulsion to eat or avoid eating in spite of either satiation or deprivation, respectively in obesity and anorexia nervosa, whereas sociocultural models emphasize social and familial expectations as well as social desirability as the driving force. Psychoanalytic models on the other hand focus on the underlying unconscious motives at the core of eating disorders, and cognitive models, on the underlying thoughts and belief systems, whereas, the biological models have attributed eating disorders to genetics and biochemistry. The article attempts to critically evaluate these prevalent contemporary models of eating disorders.

Keywords: eating disorders, anorexia, family dynamics, addictive model, psychoanalytic model

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Eating disorders have been found to be a major mental health issue in the West, and traditionally considered to be less prevalent in non-Western countries like India. However, this picture has been changing very fast. Their prevalence is elevated in non-Western and non-industrialized countries as well. This could be due to rapid globalization. This has made people more aware about their weight, and shape. Media has also influenced peoples eating and feeding behaviours. In India, also we are witnessing elevated prevalence of eating disorders. Even in well-informed adults in even developed countries tend to involve in poor eating behaviours such as low fruit and vegetable intake, high consumption of energy-dense snack foods, even avoid or fail to consume regular meals throughout the day, which cause health problem, which could also be seen as eating disorders. Such unspecified and abnormal eating behaviours could lead to various health problems including central adiposity, poor insulin resistance and cardio metabolic problems as well as anorexia nervosa and bulimia. A study conducted in South India revealed that 26.06 per cent students in the age group of 15-25 years demonstrated eating discrepancies on the psychometric instruments such as Eating Attitude Test-26 and Binge Eating Severity. For anorexia nervosa and binge eating disorders and the female to male ratio is between 10:1 and 15:1, respectively (Nivedita, Sreenivasa, & Malini, 2018). The etiology of eating disorders have not yet been understood adequately, perhaps because of the very fact that eating disorders are multi-factorial, and therefore, cannot be attributed to a single cause. Bruch (1975) for instance, considered eating disorder like anorexia nervosa, as, “a complex condition determined by many simultaneously interacting factors” (p. 157). Also, practically it is difficult to distinguish their specific contributions, mounting prevalence of eating disorders around the world warrants a probe to explore some of its etiological factors as well as their dynamics. This section deals with

some of the most prominent factors, which contribute to the disorders.

Models

Family Dynamics During Adolescence

Several investigators have attributed causes of eating disorders to adolescence, as the prevalence is highest during this period of transition. Adolescence is characterized by biological maturation of the reproductive system, assuming greater responsibilities, need for greater autonomy and freedom. There are considerable social changes as well, such as developing hetero-social relationships, demanding intimacy and sexuality. Therefore, it is a challenging situation to cope with. Adolescents also confront with questions concerning their own identity. As a consequence, some adolescents become susceptible to eating disorders, which provide at least a temporary solution to their problems. Maladaptive eating behavior is used a form of defense against the demands for greater autonomy and responsibility. For some adolescents this period of transition turns to be stressful. This is manifested in symptoms of eating disorders. However, it will be wrong to assume that adolescence per se is the sole cause of eating disorders. Rather the manner the adolescents are cared in their families play significant role. In a recent study on triadic interaction (parents and anorexic daughters) Balottin, Mannarini, Mensi, Chiappedi and Gatta (2017) revealed a different interaction pattern between parents and their adolescent daughters.

Majority of these families exhibited collusive alliances. They had greater difficulties in respecting during the play maintaining a structuring role providing help, support and guidance to their daughters and these girls had difficulty in showing independent ideas and develop personal projects. It was not only the mother-daughter relationship but also father-daughter and even

parental couple contribute to eating disorders.

Psychiatric Morbidity Model

People who suffer from other psychiatric disorders do have higher chances of having eating disorders than those who have no diagnosable mental disorders. There are several psychological disorders such as post-traumatic stress disorder (e.g. Blinder, Cumella, & Sanathar, 2006; Dansky, Brewerton, & Kilpatrick, , 2000; Tagaya, Schlegl, & Snef, 2010), obsessive-compulsive disorder, anxiety disorders, depression, alcohol abuse, which are prevalent in the population suffering from eating disorders. They have more tendencies of dieting and eating problems. On the other hand, people with bulimia nervosa show more distinctive patterns of exposure to those factors, which elevate chances of dieting and negative self-evaluation. Many obese (bulimic) persons admit that they over eat when they are emotionally upset. They are more likely to manifest neurotic traits than those who have no neurotic traits. At least 80 per cent of patients suffering from eating disorders exhibit psychological disturbances at some point of time and major depression is one of the most frequently occurring symptoms and obsessive-compulsive disorders are almost three times more common among patients with anorexia nervosa.

Addiction Model

A connection is seen between eating disorders and addiction, as both involve compulsive actions. Thus, they share certain core behavioural patterns with addiction. Even the condition like anorexia nervosa may be viewed as an addictive behavior characterized by self-starvation along with excessive exercise, as observed in anorexia nervosa could be a kind of addictive behavior, which release endogenous opioids. The addiction model of eating disorders suggests

(see Volkow, Wang, Tomasi & Baler, 2013, for an overview) that an addictive process occurs in the operation in causation as well as maintenance of eating disorders, particularly bulimia nervosa. Conditioned physiological responses perhaps play a critical role in symptom formation by producing anticipatory secretion of insulin, which causes craving for food and consequently trigger over eating. High scores on addiction Scale of the Eysenck Personality Questionnaire and high correlation between scores on anorexia nervosa and bulimia, confirms the hypothesis. However, the addiction model has been criticized on the basis there is as such no empirical model of addictive personality, explaining this behavior. Secondly, it does not address to the issue of core clinical characteristics of eating disorders, nor concomitant psychopathology (e.g. poor self-esteem or feeling of being ineffective).

Sociocultural Model

Eating disorders, particularly anorexia nervosa is so much influenced by the culture that some authors have described this as a possible culture-bound syndrome. Most sociocultural models explain that eating disorders are triggered by idealization of thinness as a function of social attention given to such people and media does play a significant role in eating disorders. For several decades, for the Western societies an unrealistic thin body shape had been the cultural ideal for women (e.g. Polivy & Herman, 1987; Stice, 2001). This has led to experiencing discomfort about individual's own body. The susceptible individuals engage in excessive exercises or other forms of dieting. In search of a thinner future self, the young women start exhibit good amount of body dissatisfaction. Even due to this cultural obsession with slim figures, women prefer those sports, which stress on slimness such as gymnastics or ballet. They are at more risk of anorexia nervosa. Whereas, in contrast to this, in many non-Western societies,

people consider plumpness or obesity as attractive, fertility and economic security, thus, involves no stress at all. Consequently, in such cultures the prevalence of eating disorder is very few. In a cross-cultural analysis, Castillo (1997) reported that one of the fundamental characteristics of anorexia nervosa in India and Hong Kong is that, this is not accompanied by "fear of fatness", nor they have shown the desire to be thin. Rather, they had exhibited the desire to fast for religious reasons. Eating disorders are much more common now in most cultures due to adoption of the Western values about physical aesthetics. Movement of people into various cultures as well as affluence and freedom of choice are some of the reasons for women may play very significant role. However, the research on relationship between socio-economic status and eating disorder has remained inconclusive.

Sociocultural theories are heavily dependent on self-report, which may not be fully accurate. Further, there is a large focus on the media as the source for shaping body image. However, those, who are engaged in frequent body surveillance are not always driven by media applications like face book etc. In fact there are several sociocultural theories of eating disorders, which needs to be integrated. Still there is a need to assess to what extent the people with eating disorder really focus on SNS (therefore get influenced) social networking sites. Some studies (e. Saunders & Eatong, 2018) revealed that daily time spent on SNS do not differ much based on primary platforms.

Psychoanalytic Model

Psychoanalytic approach explains eating disorders as pathological manifestation of the underlying conflicts that the individual is unable to handle adaptively. Food and eating have been assigned psychological significance by psychoanalysts because of as during early years of life

feeding used to be closely associated with transaction of emotional feelings by the caregiver. Thus eating has been assigned considerable psychological significance. It is used for transaction of emotional feelings (Bemporad, Bersin, Ratey, Driscoll, Linderm, and Herzog (1992) provided a developmental profile of 67 index cases of eating disorders. Deviant eating behaviours suggest expression of painful disturbed emotions. From this perspective, although there is a general tendency of maintaining slimness, mastery and achievement, these are not root cause of anorexia nervosa. These are only manifestations of the illness. The roots lie in the disturbances in early human relationship that is, relationship with parents, which leads to insecurity and difficulty in developing trusting relationship with others. Apart from that, they have problems with their own identity, fear of abandonment, and problems in peer relationship and have underlying personality disorder. Referring to the inner struggle of the anorectic said, "*in hunger, I am a king*". In their relentless pursuit of thinness, they make desperate search for autonomy as well as well as a self-respecting identity. They have serious emotional disturbances. People suffering from bulimia nervosa have food obsession followed by eating, vomiting, People suffering from bulimia nervosa have food obsession followed by repeated over eating, vomiting, purging, use of laxatives is quite typical. These symptoms provide relief to emotional pain experienced by the client.

In psychoanalytic literature, eating disorder is seen as a possible consequence of affect dysregulation, which could be due to failure of the caregivers to respond to the emotional needs of the developing child. This can lead to dysfunctional relationship with food and subsequently, earing disorders. The child internalized this as a primary sadistic object. Its inaccessibility generates deep feelings of shame and worthlessness. Body becomes a sort of safe heaven for the individual with eating disorder. He/she imagines protecting self from sadistic object's intrusive

attacks. However, what works behind this is a self-destructive impulse of a frightened and helpless self. The analyst is the one who can reach the client genuinely be supportive in bringing out the client from this pathological treatment of the body (Granieri, & Schimmenti, 2014). Although, psychoanalytic theory has contributed significantly to our current understanding of eating disorders, using illustrative case studies, there seems to be many weaknesses. For instance, it does not explain anorexia nervosa very well.

Psychoanalytic approach is based on data that are too much ambiguous, such as free association, dream analysis, even case studies without much empirical evidence. Secondly, Freud's exclusive emphasis on childhood psychosexual trauma or distress and repression as a core factor in psychopathology like this is questioned as cognitive psychologists find repression as a rare phenomenon and that intense tress actually causes better remembrance of an event (Myers, 2010). Freud's clients were almost exclusively from the upper class Austrian women who lived in a sexually repressed society of later 19th century clients. Perhaps this is the reason the focus was more on sexuality. Secondly the long sessions to work through the conflict using free association and its cost prevents the clients to avail psychoanalytically oriented psychotherapies, particularly classical psychoanalysis as a method of treatment.

Cognitive Model

A large group of researchers believe that cognitive processes play a central role in intense deviations in eating behaviours. Distorted beliefs about eating, body-weight, and body-image are believed to be at the nucleus of eating disorders. People with eating disorders seem to have cognitive biases. This is observed in their cognitive processing of food-, weight-, body-image and self-related information. They tend to have organized schemas related to feeding and self-esteem and these schemas are combined so closely that they fail to distinguish the two. This is

how eating and self-concept become inseparable from each other. Their extreme need to restrain eating in anorexics may be connected with feeling of control, as it enhances their self-esteem. Precisely, dietary restrictions become an inner punitive retreat, as it enhances a sense feeling of control. Maladaptive expectations drive the anorexics to engage in pursuits for thinness. These core beliefs regarding weight and shape seem to be unconditional, dichotomous and highly resistant to change. This kind of belief systems affect the manner in which food related data are processed by them. Patients frequently regard their symptoms serving a valued function and therefore it is maintained over a long time. Eating disorders could be seen as misperception of body image, which induces anxiety and triggers weight control behaviours. There are specific biases in eating disorders. Each of them have affective and behavioural consequences and these biases are originated from the patient's attentional biases. What is meant by attentional bias is, the tendency to neglect the relevant data while establishing a correlation between the events, for instance 'eating' and 'body image'. Instead of examining other possibilities they focus on a narrow range of factors, about which maladaptive schema has already been formulated. Such biases drastically skew the reliability of the evidences obtained from actual observation. Understanding of these biases would help the clinician to uncover their denials, resistances, to treatment as well as misinterpretation of therapeutic interventions.

Biological Model

While mapping the prevalence of eating disorders we find that eating disorders are generally found to be predominantly in females and that most of these disorders occur during adolescence. This picture remains constant across the globe, irrespective of cultures. Therefore, it is presumed that perhaps genetics plays a significant role in etiology of eating disorders. Several

genetic theories generally suggest that different types of eating disorders are associated with different genes (e.g. Klump, & Gobrogge, 2005; Polivy et al, 2003). Accordingly, anorexia nervosa may be linked to a different gene than bulimia nervosa. This has been validated by recent twin studies, family studies as well as molecular-genetic findings. Faulty composition of transmitters due to genetic reasons is also considered to have etiologic significance. One of the most frequently studied neurotransmitter is serotonin. This compound is present in blood platelets and serum, which constricts blood vessels and serves as neurotransmitters. Neurochemists believe that serotonin in the brain regulate anxiety, and happiness. Low levels of serotonin is associated with depression, inhibition of feeding (anorexia nervosa), stimulus reactivity and sexual activity. Low level of serotonin is also associated with other characteristics of anorexia nervosa such as higher drive for thinness or body dissatisfaction rating. Some authors suggest, eating disorders are connected with releasing of endogenous opioids, whereas, increased levels of serotonin in the brain triggers binge eating. Even environmental changes fail to correct the behavior in binge eating, if the patient's serotonin disturbance is genetic. Studies have also revealed that genetics seem to account for roughly half (50 per cent) of the variance in eating disorders in the age between 14 to 18 years female twins compared with only 6 per cent in those at the age of 11 years or so. Hormonal developments add more fat as well as curvy shape to the body of the adolescent girls. This changing body shape pushes them for heterosexual interactions, which they find more stressful to handle, compared to that of the boys. This is manifested in eating disorders, particularly anorexia nervosa, as restrictions on eating impacts body shape, this is used as a means of conflict resolution. In addition to this, other factors such as childhood trauma, early puberty, premature birth and having high premorbid Body Mass Index (BMI), increases the risk factors for an eating disorder anorexia nervosa.

Conclusion

Above analyses reveal that eating disorders may have multiple etiologies. Individual personality traits, biological changes, cognitive styles, genetic predisposition, family environment and even external influences like that of media can play important role in shaping up maladaptive eating behaviour. For a detailed discussion, the readers may refer to McFarlane et al. (2016). Foreyt and McGavin (1989) wrote, "....we are doubtful that the occurrence of these complex disorders will be explained without an understanding of many relevant dimensions, including the physiological, societal familial, psychiatric and psychological" (p. 533). Above all there are cultural variations in its manifestation. Although, in DSM-5 classification of mental disorders, which are supposed to be empirically supported and reflect consensus, there are substantial controversies regarding this, as many symptoms are not universal, the criteria still remain obscure.

Not only that the etiology of eating disorders is complex, but also the manifestations show a large variety of behavioural deviance such as avoidance of food, following rigid dietary rules, constantly measuring the caloric intake, binging and vomiting, regurgitation, fasting, having distorted beliefs about body image, weight gain, and even self-esteem. Therefore, considerable scientific effort has been made to identify the causative factors and treat eating disorders. This has been well substantiated by emergence of new research groups, scientific associations and publication of a large number of research journal exclusively dedicated to study of eating disorders. An idiopathic approach is often considered to be more meaningful in understanding the psychopathology and for conducting effective intervention programmes for people with eating disorders. This is more so because eating disorders are not uniform. The

pattern varies from individual to individual and there seems to be multiple causes (Grilo, 2006), which has been suggested by Bruch (975), who is one of the modern theorists on eating disorders. From this perspective, a detailed functional analysis of the case may be more useful information to understand the individual psychopathology.

References

Balottin, L., Mannarini, S., Mensi, M. M., Chiappedi, M, & Gatta, M. (2017). Triadic interaction in families of adolescents with anorexia nervosa, and families of adolescents with internalizing disorders, *Frontiers of Psychology, 7*. https://doi.org/10.3389/fpsyg.2016.02046

Bemporad, J. R., Beresin, E., Ratey, J. J., O'Driscoll, G., Linderm, K., & Herzog, D. B. (1992). A psychoanalytic study of eating disorders: I. A developmental profile of 67 index. *Journal of American Academy of Psychoanalysis, 20*, 4 509-532. https://doi.org/10.1521/jaap.1.1992.20.4.509

Blinder, B. J., Cumella, E. J., & Sanathar, V. A. (2006). Psychiatric comorbidities of female inpatients with eating disorders, *Psychosomatic Medicine, 68*(3), 454-462.

Bruch, H. (1975). Obesity and anorexia nervosa: Psychosocial aspects Australia and New Zealand. *Journal of Psychiatry, 9*(3), 159- 161. https://doi.org/10.3109/00048677509159842

Castillo, R. J. (1997). Eating disorders. In R. J. Castillo (Eds.) *Culture and mental illness: A client–centred approach*. Cole Publishing Co.

Dansky, B. S., Brewerton, T. D., & Kilpatrick, D. G., (2000). Comorbidity with bulimia nervosa and alcohol use disorder: Results from national women's study. *International Journal of Eating Disorders, 27*(2), 180-190. https://doi.org/10.1002/(sici)1098-108x(200003)27:2<180::aid-eat6>3.0.co;2-z

Foreyt, J. P., & McGavin, (1989). Anorexia nervosa and bulimia nervosa. In E. J. Mash and R. A. Berkley (Eds.) *Treatment of childhood disorders* (pp. 529-558), Guilford Press.

Granieri, A., & Schimmenti, A. (2014). Mind-body splitting and eating disorders: A psychoanalytic perspective, *Psychoanalytic Psychotherapy,* 28(1), 52-70. https://doi.org/10.1080/02668734.2013.872172

Grilo, C. M. (2006). *Eating and weight disorders*, Psychology Press.

Klump, K. L., & Gobrogge, K. L. (2005). A review and primer of molecular genetic studies of anorexia nervosa. *International Journal of Eating Disorders, 37*(S1), S43-S48. https://doi.org/10.1002/eat.20116

McFarlane, T., MacDonald, D., Trottier, K., Polivy, J., Herman, C. P. & Arsenault, J. (2016). Eating disorders. In J. E. Maddux and B. A. Winstead (Eds.) *Psychopathology: Foundations for a contemporary understanding*, (431-458). Routledge.

Myers, D. (2010). *Psychology in modules: Personality*, Worth Publishers.

Nivedita, N., Sreenivasa, G., & Malini, S. (2018). Eating disorders: Prevalence in student population of Mysore, South India. *Indian Journal of Psychiatry, 60*(4), 433-437. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_97_16

Polivy, J., & Herman, C. P. (1987). Diagnosis and treatment of normal eating. *Journal of Consulting and Clinical Psychology, 55*(5), 635-644. https://doi.org/10.1037/0022-006X.55.5.635

Polivy, J. Herman, C. P., Mills, J., & Wheeler, H. B. (2003). Eating disorders. In adolescence. In G. Adams & M. Berzonnsky (Eds.), *The Blackwell handbook of adolescence* (pp. 523-49). Blackwell Publishing.

Saunders, J. F., & Eatong, A. A. (2018). Snaps, selfies, and Shares: How three popular social media platforms contribute to the sociocultural model of disordered eating among young women. *Cyberpsychology. Behaviour, and Social Networking, 21*(6), 343-354. https://doi.org/10.1089/cyber.2017.0713

Stice, E. (2001). A prospective test of the dual pathway model of bulimic pathology: Mediating effects of dieting and negative affect. *Journal of Abnormal Psychology*, 110, 1-12.

Tagaya, S., Schlegl, S., & Snef, W. (2010). Traumatic events, posttraumatic stress symptomatology and somatoform symptoms in eating disorder patients. *European Eating Disorders Review, 18*, 124-132.

Volkow, N., Wang, G., Tomasi, G & Baler, R. (2013). Obesity and addiction: Neurological overlaps. *Obesity Reviews, 14*, 2-18.