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Faces of Anorexia in Adolescents: Diagnosis, Risk, and Support

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Abstract

Introduction: Anorexia nervosa (AN) is an eating disorder most commonly occurring during adolescence, characterized by the highest mortality rate among mental health conditions. It is a serious disorder affecting the physical and psychological development of children and adolescents. The increase in AN cases following the COVID-19 pandemic and difficulties in its early diagnosis present significant challenges in treatment.

Objective: The aim of this paper is to review current research on anorexia nervosa, its symptoms, risk factors, the impact of the COVID-19 pandemic, and the role of social media in the development of this disorder. Therapeutic approaches, with a particular focus on family therapy and psychotherapy, are also discussed.

Methods: This study provides a literature review on anorexia nervosa, focusing on its etiology, the impact of the pandemic, and contemporary treatment methods. Available research on co-occurring mental disorders, the effects of social media, and the role of family in the therapeutic process was analyzed.

Conclusion: Anorexia nervosa is a serious disorder that requires intensified preventive and diagnostic efforts, especially in young individuals. The COVID-19 pandemic and increased social media activity have significantly exacerbated AN symptoms. Effective treatment necessitates a multifaceted approach, including early diagnosis, family therapy, and psychotherapy. A supportive family environment can significantly enhance treatment outcomes.

Keywords: anorexia nervosa, eating disorders, COVID-19 pandemic, social media, psychotherapy, risk factors

Introduction

Anorexia is an eating disorder most commonly occurring during adolescence, distinguished by the highest mortality rate among mental health disorders [1]. The peak incidence occurs between the ages of 13 and 18, with a lifetime prevalence ranging from 0.5% to 2% [2]. It often coexists with other health issues, both physical and psychological [1]. Particularly after the COVID-19 pandemic, there has been a significant increase in the number of minors suffering from anorexia nervosa [3]. Complications of this condition often stem from starvation, malnutrition, and their physiological consequences, affecting various bodily systems and, in children, normal development [4]. Detecting eating disorders in children is challenging as many do not exhibit typical symptoms, particularly in anorexia, and early diagnosis is often delayed due to a lack of awareness among patients, parents, and healthcare providers, even though early treatment referral can significantly improve outcomes [5].

Symptoms of Anorexia

Anorexia is characterized by a significant restriction of caloric intake, leading to a body weight that is not appropriate for the individual's age, sex, growth rate, or physical health status [6].

Individuals with this condition often follow risky diets that negatively impact nutrient intake, thereby hindering proper growth and development in children and adolescents [3].

Typical symptoms of anorexia include:

- intense fear of gaining weight,
- obsessive preoccupation with one's weight,
- minimal or complete disregard for health risks associated with excessive weight loss [7]

The DSM-5 identifies two subtypes of anorexia: the restrictive type and the binge-eating/purging type, lasting at least three months. In the restrictive type, weight loss is achieved mainly through restrictive diets, fasting, and/or excessive physical activity. In contrast, the binge-eating/purging type involves episodes of overeating countered by behaviors aimed at limiting food absorption, such as vomiting or systematic use of laxatives or diuretics [8].

Risk Factors

The risk of anorexia is influenced by genetic predisposition, while psychosocial and relational factors may contribute to its development [9]. Factors such as striving for the ideal of thinness, lack of self-acceptance, negative emotional states, dietary restrictions, and difficulties in interpersonal relationships significantly contribute to the onset of anorexia [10]. Adolescents with personality traits like low self-esteem, perfectionism, and impulsivity, combined with dissatisfaction with their appearance, are more susceptible to eating disorders. Behaviors such as using weight control methods, obsession with body mass index, and social isolation are often associated with anorexia [11].

Positive reactions from others to initial weight loss, the need to control situations, stress, or coping mechanisms for stress, as well as cognitive functioning issues, may contribute to worsening eating disorders. These factors can reinforce unhealthy eating patterns and hinder effective emotional and stress management [7]. Individuals with anorexia often have co-occurring mental disorders, such as personality disorders (40-45%). Abnormal approaches to food may serve as a mood regulation method, leading to anxiety, shame, depression, and social difficulties [12]. Co-occurring mental disorders and suicidal thoughts significantly impact long-term outcomes [13]. Therefore, recognizing early warning signs, promoting a healthy attitude toward food and body image in children and adolescents is crucial.

Anorexia and the COVID-19 Pandemic

The COVID-19 pandemic negatively affected the mental and behavioral health of young individuals with anorexia. Many reported worsening sleep problems and difficulties managing emotions. Increased depression, loneliness, and obsessive behaviors related to concern for relatives' health were also observed [14]. Restricted activities, lack of routine, reduced social interactions, and increased use of social media during the COVID-19 pandemic were identified as causes of the rise in anorexia cases [15].

Over 1,000 participants from the USA and the Netherlands took part in an online study on the impact of COVID-19. It was found that 62% overall, including 69% of those with anorexia, were concerned about their eating habits, while individuals with bulimia or binge eating disorder reported more frequent binge episodes compared to the pre-pandemic period [16].

The pandemic led to a significant increase in hospitalizations, worsening symptoms of eating disorders, anxiety, depression, and changes in BMI. Limited access to medical care and treatment also contributed to the exacerbation of anorexia symptoms [17].

Anorexia and Social Media

Social media exposure can play a significant role in the development or exacerbation of anorexia symptoms [18]. In recent years, the prevalence of anorexia has increased, particularly among girls aged 10–14. This significant rise can be explained not only by biological factors, such as earlier puberty, but also by this group's heightened sensitivity to contemporary social and cultural changes, including the growing popularity of social media [19].

Applications for photo editing and graphic filters can promote unrealistic beauty standards, often leading to increased body dissatisfaction, especially among impressionable adolescents [18]. One study conducted among teenagers in the USA showed that spending more than three hours a day on social media is associated with a higher risk of mental health issues, which can also intensify and increase the risk of eating disorders [19]. Conscious limitation of social media use may therefore support recovery [20].

On the other hand, some studies suggest that social media, when used appropriately, can serve as a platform for seeking help and encouraging individuals with eating disorders to take steps toward recovery and seek professional assistance [21].

Complications of Anorexia

Excessive caloric restriction in adolescent girls can stunt growth and cause amenorrhea. Combined with significant physical strain, such restrictions lead to malnutrition, resulting in protein deficiencies and disruptions in the functioning of various bodily systems, such as cardiovascular, renal, digestive, hormonal, dermatological, hematopoietic, and reproductive systems [8].

Malnutrition can cause disorders such as sinus bradycardia, QT interval prolongation (QTc), as well as depression, delayed gastric emptying, reduced bone mineral density, and stunted growth [11]. Individuals with anorexia often exhibit symptoms such as dry skin, hair loss, brittle nails, and bluish skin discoloration due to hypothermia and circulatory disorders. Loss of skeletal muscle mass, muscle weakness, pericardial effusion, and mitral valve prolapse may also occur in some cases [22]. Eating disorders are thus associated with numerous medical complications requiring thorough assessment and prompt treatment to improve long-term prognosis and prevent further complications that can even lead to death [4].

Treatment

The main component of anorexia treatment is providing the patient with adequate caloric intake and addressing existing malnutrition [23]. During refeeding, patients rapidly gain weight to stabilize their somatic condition and improve their mental state as preparation for psychotherapy [24]. In some cases, treatment may also require electrolyte supplementation, hydration correction, and normalization of body temperature [25]. Early intervention has been shown to significantly increase the chances of effective treatment and improved outcomes, as eating disorders often occur during adolescence and early adulthood [26].

A higher age at the onset of anorexia is associated with better treatment outcomes, emphasizing the need for professionals working with children and adolescents to identify cases with very early onset [27]. Intergenerational eating patterns and parental dietary practices play a crucial role and are strongly linked to eating problems in children. Parental comments about eating habits, body weight, or a child's physique, such as encouraging dieting or criticizing appearance, can have negative effects, including contributing to the development of eating disorders [22]. Effective treatment for anorexia, particularly in adolescents, includes psychotherapy, such as cognitive-behavioral therapy and family therapy [28]. Significant progress in treatment demonstrates the effectiveness of therapeutic interventions involving families [9]. In healthy, balanced family environments characterized by appreciative communication and problem-solving skills, the family acts as a protective factor, supporting the patient in adhering to therapy, which leads to a low risk of relapse [29]. Family involvement in early-stage interventions can result in long-term positive effects, although patients with severe or chronic forms of the disorder may require inpatient care and/or outpatient psychotherapy [30]. While some anorexia patients recover after a single episode, many experience relapses or a chronic course. Early initiation of treatment and appropriate adjustment of its form, from outpatient to inpatient care, is key to improving outcomes and reducing resistance to treatment [31].

Conclusion

Anorexia nervosa (AN) is a serious eating disorder most commonly occurring during adolescence, with early detection challenging due to symptom minimization by patients and a lack of awareness among parents and healthcare providers. The condition has severe health consequences, both physical and psychological, including complications related to malnutrition, hormonal disorders, emotional disturbances, depression, and suicidal thoughts. The COVID-19 pandemic exacerbated anorexia-related issues, leading to an increase in cases, particularly among younger individuals, as well as worsening symptoms and mental health problems.

Risk factors for anorexia include genetic predisposition, personality traits such as perfectionism and low self-esteem, and the influence of social media, which can promote unrealistic beauty standards and increase body dissatisfaction. Early detection of the disease, family support as a protective factor, and appropriate psychotherapy, particularly cognitive-behavioral and family therapy, are crucial in treating anorexia. Early interventions and family involvement significantly improve treatment outcomes, reduce the risk of relapse, and enhance patient prognosis. However, severe cases may require hospitalization and intensive specialized care.

Author's contribution

Conceptualization,; JNS methodology, JNS, EJJ; software, KR, MN, MR; check, MN; formal analysis, JNS, MR; investigation, KR, MN; resources, EJJ, MR; data curation, KR,; writing–rough preparation; JN, KR, EJJ; writing-review and editing, EJJ; visualization, MN; supervision, KR; project administration, MR

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