

The Life of Adolescents With Eating Disorders and the Coexistence of Depression A Systematic Review

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Abstract

The present review aims to investigate and understand food intake disorders during adolescence in conjunction with the comorbidity of depression. The method chosen to conduct this study was the systematic review. According to the findings it is found, eating disorders do indeed affect adolescents aged 12–17 years, especially girls. Eating disorders negatively affect both physical and mental health. The comorbidity of depression and eating disorders is significant. In addition to symptoms of depression, adolescents appear to have evidence of anxiety disorder and suicidal behaviour. It is also not uncommon for eating disorders to appear in childhood and continue through adolescence and into adulthood.

Keywords: Eating disorders, depression, adolescents, anxiety, bulimia, anorexia, overeating.

Introduction

In modern and developed society, teenagers' preoccupation with external appearance has been strongly observed. This is reinforced by many factors, such as family and friends, the media, society, and public opinion in general (Konstantopoulou et al., 2022), resulting in adolescents being driven to painful diets and they only concern being their external appearance and being liked by others. Thus, it is logical that individuals are affected by food intake disorders, such as psychogenic bulimia, psychogenic anorexia, and hyperphagia disorder.

The prevalence of these disorders is increasing because more and more people are getting trapped in fashion and beauty standards and cannot cope with them, since the family itself does not help to protect its children from negative influences (Konstantopoulou et al., 2022).

Along with eating disorders, depression or other disorders coexist, which can have unpleasant effects on the physical and mental health of an adolescent. Depression is usually associated with anorexia or bulimia. With eating episodes come depressive episodes, which result in a decrease in interest in social life and any activity.

The person closes in on themselves because they constantly feel and think derogatory thoughts about their outward appearance (Kring et al., 2010). Eating disorders have existed and plagued societies for many decades. Thus, technological and scientific developments have a major role in their continuous increase.

Finally, neurobiological factors do not explain bulimia and anorexia, but people's fear of getting fat and not maintaining their body as they would like. However, the awareness of eating disorders in adolescents increased strongly in the last decades (since 1980), first with the DSM in the United States, which is one of the countries where obesity and psychogenic anorexia are most common, as WHITE women are 8 times more likely to have eating problems than women of colour (Perez et al., 2002). Eating disorders have existed since ancient times in different forms and frequencies.

Eating disorders are mostly mental disorders, characterised by disordered eating habits, such as restrictive or excessive eating, affecting the physical and mental health of the individual. Food intake disorders include the following categories: psychogenic bulimia, psychogenic anorexia, hyperphagia disorder, and avoidance or restrictive food intake (Fountoulakis, 2019). Psychogenic bulimia does not recognise episodes of hyperphagia and purging when they occur in the context of psychogenic anorexia and extreme weight loss, according to the DSM-V (Doll & Fairburn, 1998; McCabe et al., 2001).

In addition, people with the diet-depression type are more likely to have comorbidities including mood, anxiety, and personality disorders, as well as more frequent episodes of overeating and not responding to cognitive-behavioural therapy and therefore less activity related to their social domain (Stice & Fairburn, 2003).

It has become clear that there is no exact cause of bulimia, because according to specific research related to eating disorders, bulimia results from a combination of specific personality characteristics, feelings and thoughts, biological and environmental factors, as well as the person's dissatisfaction with their body that always exists (which especially happens to women regarding how to maintain their external image). Thus, a strong anxiety is created, and many of women as is normal, have low self-esteem and a constant fear of becoming overweight and objects of ridicule, especially teenagers still going to school, for whom external appearance is everything (Strumia, 2013).

The factors are genetic-it is very common for bulimia to appear in first-degree relatives, and first-degree women are 4 times more likely to have bulimia nervosa. Alternatively, the relatives of individuals with eating disorders may have symptoms but may not fully meet the criteria (Klump et al., 2010).

There are neurobiological factors: the hypothalamus is the main centre of the brain for the regulation of hunger and food intake, and it manages certain hormones, such as cortisol, which is associated with anorexia nervosa, but not with bulimia. However, opioids are also associated with bulimia and anorexia, and when there is intense physical exercise, then the episodes of overeating also increase because they create an uncontrollable tendency to eat and consume without stopping (Waller et al., 1986; Volkow et al., 2002; Waller et al., 1986).

Also important in eating disorders and bulimia are sociocultural factors, as individuals are influenced by society itself, its beauty standards, and often the family itself, with the greatest burden falling on women and young girls as they go through puberty, since the stimuli are many and they often act according to the taste of men, who are looking for the perfect female body. It is usual that in the 20th century and beyond, the correct body model is increasingly slimmer, and many times people become overweight because of the negative feelings they have about themselves. Psychodynamic theories state that eating disorders are linked to personality traits and the poor relationship a parent may have with their child. This is how the child develops low self-esteem or perfectionism, since they want the attention of their parent and to feel that they can cope with what is asked of them (Goodsiitt, 1997).

Eating disorders are quite dangerous for a teenager, but the right prevention and treatment can help the person manage them. However, especially when there is co-morbidity with depression and other disorders, things can turn out to be fatal for the patient. Psychotherapy and the correct use of medication may also help the person to control themselves. Collaboration with a mental health professional is required, and with the right methods, there will be positive future outcomes (Kring et al.,

2010). Eating disorders that accompany depression are quite common and can exacerbate and affect the severity of both disorders. The imposition of starvation on oneself presupposes the existence of negative emotions. Thus, people with anorexia nervosa try to regulate their emotions and eliminate or alleviate guilt. Patients with acute anorexia nervosa present with difficulty in self-regulation of emotions, with male adolescents being more prone to the coexistence of depression and eating disorders. The lower the body mass index, the better teenagers regulate their emotions—the same applies to both adolescent boys and girls (Brockmeyer et al., 2011).

Regarding overeating and depression, it is observed that with the increase in food and the variety of food, teenagers do not overeat to cover natural hunger, but to reduce negative emotions, stress, and depression. The comorbidity of depression and binge eating during adolescence is quite common, since young people consume large amounts of food beyond the normal limit, likely to cover up the aforementioned factors.

Adolescents, due to their fast pace of life and obligations, relieve themselves through excessive food consumption, locking their lives in a negative pattern and a wrong way of dealing with everyday life and the symptoms of depression (Peifasyn, 2019). Of course, food addiction and repeated bulimic crises are often external factors with which teenagers take care of and ensure their peace of mind, which a depressed person is unable to achieve (Kosmas, 2021).

This work aims to study whether eating disorders are associated with the symptomatology and clinical picture of depression during adolescence. It is worth noting that the investigations do not only concern the diagnosis of the two disorders (eating disorders and mood disorders), but also the intensity and duration of their respective symptoms, as well as the therapeutic treatment.

Methods

The present study is a new type of systematic literature review based on PRISMA 2020 in the PubMed database. The selection criteria for writing this systematic review were that the titles of the articles contained the words “adolescents”, “eating disorders”, “depression”, and “syndromic disorders”. The abstracts of the systematic studies were then screened, from which those with a sample size of under than 800 were selected for analysis, because this number covers a wide range of population groups and provides a valid, reliable, and representative sample. The time of publication was from 2010 to 2020. This time was chosen to feature more recent research on the comorbidity of eating disorders and depression in the adolescent population. Finally, those studies that reported on eating disorders, mood disorders, suicide, and anxiety disorders were recorded (Table 1).

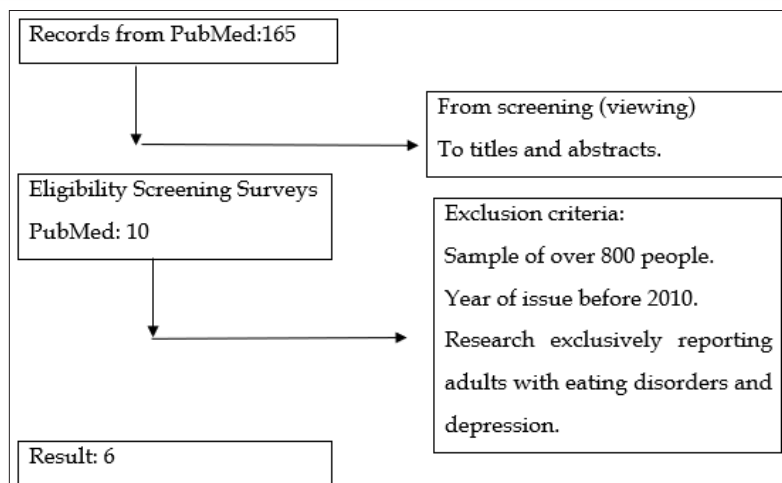


Table 1: Flowchart based on the PRISMA Statement 2020

Results

The results emerged from a total of six studies which concerned the comorbidity of eating disorders and depression in adolescence and their association with other factors such as suicidal behaviour and anxiety disorders. The surveys concerned the population group of adolescents aged 12–17 years, with little reference to children.

Fennig and Hadas (2010) studied the likelihood of suicidal ideation and depression in adolescent females experiencing anorexia nervosa or bulimia nervosa in a sample of 46 Israel girls.

Another study was conducted by the HOPE association in the context of a childhood depression inventory (Watson et al., 2014). Both studies showed the inextricable link between depression and eating disorders. Specifically, in the first survey from the sample collected, it was found that 24% of the girls had attempted suicide at least once, while 65% had experienced suicidal ideation at least once. It is noteworthy that in addition to the diagnosis of psychogenic anorexia or bulimia, 58% of the sample also had severe depression. The same appeared to be true in the second survey, where a sample of 1000 people was collected, 256 of whom were aged 12–17 years. This population group had been diagnosed with an eating disorder and depressive complexes, and suicidal ideation seemed to increase with age. In addition, suicidal thoughts, successful or unsuccessful attempts, and depression occurred with greater intensity and frequency in individuals diagnosed with an eating disorder than in the healthy population.

The next two investigations concerned the comorbidity of eating disorders with depression and anxiety (Hughes et al., 2013), with the second investigation emphasizing the differences between boys and girls (Sidor et al., 2015). In the first survey, data were collected from children and adolescents in a special clinic, while in the second survey, data were collected via an online platform. In both studies, the correlation of anxiety and depression with eating disorders was evident. Initially, 217 people participated in the first survey, of whom 32 had comorbidities of anxiety and eating disorders, 86 had comorbidities of depression, and 36 had comorbidities

of both anxiety and depression. Those diagnosed with anxiety also suffered from binge eating disorder and had intense concerns about their body and weight. In the second study, a sample of 235 adolescent boys and 471 adolescent girls was collected to study the association of anxiety and depression with eating disorders. Essentially, it appears that the symptoms of depression and anxiety were the same in both boys and girls, and the community must take preventive actions towards adolescent boys and girls.

The next research studied the relationship between polyunsaturated fatty acids (PUFA) and depression in adolescents with eating disorders (Swenne et al., 2011). The sample was 217 teenagers, of whom 209 were girls and eight were boys. Diagnosis was made by clinical interviews and self-report instruments. Adolescents with eating disorders and depression did not differ from those with only eating disorders in terms of weight loss. Depressed adolescents had lower proportions of eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). However, desaturase activities did not differ between depressed and non-depressed adolescents. Finally, further research needs to be done on whether omega-3 PUFA is improved solely by refeeding, or whether PUFA supplementation is warranted.

The last research (Drieberg et al., 2019) concerned perfectionism and its association with eating disorders, anxiety, and depression, as it is a predictive factor. More specifically, it studied the relationship of anxiety and depression with perfectionism and symptoms of eating disorders in the population group of adolescents and children facing eating disorders. The sample collected included 231 people aged 14–15, who were mostly adults. Specifically, the research was investigated based on three models. The first model concerned the association of anxiety and depression with perfectionism and eating symptoms, the second model concerned the effect of eating disorder symptoms on the probability of anxiety/depression and perfectionism, while the third model concerned the effect of perfectionism on the probability of anxiety/depression and eating disorders. The results highlighted the correlation between the first and second models, while the third model appeared to be dysfunctional. According to the existing

research findings, children, and adolescents with anxiety and/or depression are affected by perfectionism and its association with eating disorders, while at the same time, there is a reciprocal connection where eating disorders contribute to the appearance of perfectionism, anxiety, and depression (Drieberg et al., 2019). From most of the studies studied and discussed, there is a direct link with depression in adolescents diagnosed with eating disorders aged around 12–17 years (Table 2).

Authors	Publication year	Conducting framework	Participant characteristics	Sample size	Results
Fennig & Hadas	2010	Israel	Teenage girls	46	24% → suicide attempt. 65% → suicidal thoughts. 58% → moderate to severe depression.
Watson et al.,	2014	Register Hope	Girls 12–17 years old	256	The prevalence of suicidal ideation was quite high.
Drieberg et al.,	2019	Register Hope	Girls 14–15 years old	231	Stress and depression affect ED and perfectionism.
Hughes et al.,	2013	Special clinic	Kids and teenagers	371	217 → without comorbidity. 32 → comorbid stress. 86 → comorbid depression. 36 → depression and anxiety.
Sidor et al.,	2015	USA	Adolescent boys and girls	471 girls 235 boys	Similar symptoms in both sexes.
Swenne et al.,	2011	Sweden	Adolescent boys and girls	209 girls 8 boys	Low levels of omega-3 are associated with depression and ED

Table 2: Table of children and adolescents with comorbid depression and eating disorders

Conclusion

Adolescence is one of the most difficult ages in a person's life. The person is faced with physical and personal changes and forms a new personality and views on various issues after being informed and influenced by various aspects of their life. It is certainly difficult at this sensitive and transitional age to be faced with disorders such as eating disorders and depression, especially when there is co-morbidity. These disorders prevent the person from being functional and able to live this special and wonderful age. Their feelings and thoughts have changed rapidly and are not used in their established flow.

From the conclusions and results of the work, it becomes very clear that teenagers usually experience a large percentage of eating disorders and usually co-morbidity with depression and anxiety, while children of a younger age are only slightly affected. This is likely because it is during the teenage years that the intense preoccupation with one's appearance, body, and weight begins. All this happens because of family, beauty standards, genetic factors, and environmental factors. This results in ever-increasing episodes of depression and anxiety.

The research highlights this relationship between adolescence and the comorbidity of the disorders mentioned and analyses the samples that took part, the method, the results, and the findings. Children were barely mentioned in one article, while the emphasis was on teenagers aged 12–17. The work agrees that girls exceed boys in these disorders, and this is reinforced by the samples used in the research. The separation of the two genders is because young girls tend to be more sensitive and overthink their appearance without giving importance to other equally important issues. Even in suicide episodes and attempts, usually girls commit these acts due to emotional

shock. Nevertheless, boys and girls are at the same level of risk of comorbidity with eating disorders, and the community must act in the right way for prevention and proper treatment. Finally, another article related to biological issues and polyunsaturated omega-3 agrees that the two genders have equal chances of comorbidity, as the factors are genetic, and the differences between boys and girls, are not so maximally important.

The differences between the two genders lie in the fact that girls are more emotional than boys and care more about their peers' opinions. Also, boys tend to hide it and feel disadvantaged if they happen to experience such disorders. Both genders need help from experts and from their own family, which is a factor that drastically affects them. They also need to help themselves, with the first step being to accept what they have and then accept help.

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