

Anorexia Nervosa:

Description, Etiology, Prevalence, Treatment and Representation in Media

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### Abstract

This paper includes peer-reviewed articles, website articles, and a film that portrays anorexia nervosa. The paper will start with an introduction of anorexia nervosa, and it will focus on its diagnostic criteria, its symptoms, and its complications. After that, the paper will point out effective treatments for treating anorexia nervosa such as family-based treatment for transition age youth (FBT-TAY) and Mandometer therapy. Lastly, the paper will analyze a popular film that portrays anorexia nervosa. The movie used will be *To the Bone*, a drama, targeted to the general population.

*Keywords:* Anorexia nervosa, treatment, dangers, symptoms, diagnostic criteria, eating disorder

### **Introduction to Anorexia Nervosa**

People all over the world have psychological disorders. One highly life-threatening psychological disorder is anorexia nervosa (Sachs, Mlis, Mehler & Krantz, 2015). According to the National Eating Disorder Collaboration (2017), anorexia nervosa is “characterized by persistent energy intake restriction, intense fear of gaining weight and disturbance in self-perceived weight or shape” (para. 1). Also, there are different subtypes of anorexia nervosa: restricting type and binge/purging type. Essentially, anorexia nervosa is a complex disorder and highly distressful; hence, to understand its complexity the description, etiology, prevalence, and the dangers of anorexia nervosa will be described.

To start, to be diagnosed with anorexia nervosa, an individual must meet the diagnostic criteria for anorexia nervosa from either the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*) or the *International Classification of Diseases (ICD)*. As stated in the *DSM-5* (2013) an individual with anorexia nervosa must have a limited caloric intake, have a very low BMI, have a fear of gaining weight/being fat, have restricting behaviors, and have a distorted body image. As mentioned in the *DSM-5*, people with anorexia drastically limit their food intake. Frequently people who experience this disorder cut out many or most of their dietary needs to decrease their body weight. Further, these individuals customarily have specific “safe foods” that they eat to suppress and satisfy their hunger. Many individuals resort to eating low-calorie foods and drink diet or zero calorie drinks. They may also overuse enemas and diuretics. Based on the restriction of calories, these individuals result in having low body weight. In consonance with low weight and other symptoms, the BMI is used to measure the severity of anorexia nervosa. For instance, individuals who have extreme anorexia nervosa have a BMI that is less than 15 kg/m<sup>2</sup>, those who have severe anorexia nervosa have a BMI between 15 and

15.99 kg/m<sup>2</sup>, those with moderate anorexia nervosa have a BMI between 16 and 16.99 kg/m<sup>2</sup>, and those with mild anorexia nervosa have a BMI that is equal to or greater than 17kg/m<sup>2</sup> (American Psychiatric Association, 2013). Moreover, the DSM-5 states that to propose a more accurate severity, “the clinician should consider available numerical guidelines, as well as the individual's body build, weight history, and any physiological disturbances” (p. 340). Therefore, an individual’s weight should be considered low if it also dramatically deviates from what the individual used to weigh.

Anorexia nervosa can be further characterized by its subtypes. In one subtype called restricting type, individuals restrict the amount of food they consume. Additionally, they cut out many food groups out of their diet, like carbohydrates and other calorie and fat dense foods. They may also keep track of the number of calories they consume, while even skipping meals. Further, they may exercise to burn off the calories they eat. The DSM-5 (2013) categorizes an individual in this subtype if “during the last three months, the individual has not engaged in recurrent episodes of binge eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas)” (p. 339). On the other hand, some individuals are diagnosed with the binge eating and purging subtype. In this subtype of anorexia nervosa, individuals limit their food intake by purging the food they do eat, sometimes after having had an episode of binge eating. The National Eating Disorders Collaboration (2017) mentions that many of these individuals also use laxatives to control their weight. Overall, the type of anorexia nervosa someone may develop varies from person to person.

Some common symptoms of anorexia nervosa include physical, psychological, and behavioral complexities. One of the many physical symptoms of girls and women with anorexia nervosa is that they lose their menstrual cycle. As with this, they tend to lose their interest in

sexual activities. Also, because they have poor blood circulation, they tend to feel colder easily. From feeling cold, their bodies may grow hair on their face and other body parts. Moving on, some of the psychological symptoms associated with anorexia nervosa are anxiety around food, low self-esteem, rigid thinking, easily irritated, distractibility, negative body image, and fear of gaining weight. Regarding behavioral symptoms, individuals might eat foods in private, lie about having had eaten, retreat from social situations, and have specific ways of preparing their food. However, just like subtypes, symptoms also vary across people.

Correspondingly, the journey of individuals with anorexia nervosa varies. Thus, different people get sunk into this devastating disorder under different circumstances. For example, some individuals may have biological predispositions. In support of this, Wade, Bulik, Neale, and Kendler (2000) state that “anorexia nervosa was estimated to have a heritability of 58%” (p. 469). Their statement implies that people whose family has or had anorexia nervosa have a higher predisposition of acquiring anorexia nervosa. Similarly, Lacoste (2017) states that “we could find three times more anorexia nervosa subjects in the families whose parents have a history of this disorder” (p. 77). Thus, predisposition to anorexia nervosa increases as the comparability of genetic makeup increases among family members.

Furthermore, some individuals may develop anorexia nervosa as a result of environmental and behavioral predispositions. Through modeling and operant conditioning, they may acquire eating disorder behaviors that their friends and family members may have. In addition, Bergh et al. (2013) cited Bergh and Södersten (1996) as finding that anorexia nervosa may develop “because it is initially “rewarding” to eat less food and that it is maintained by conditioning to the situations that originally provided the reward” (p. 886). Equally important, the way that parents raise their children may also affect their predisposition to acquiring anorexia

nervosa. With this in mind, Lacoste (2017) states that “overprotecting parents or high concern parenting in infancy could be associated with the later development of anorexia nervosa” (p. 77). Also, traumatic events may increase the predisposition to develop anorexia nervosa. According to Lacoste’s study, 67% of the participants had been sexually abused preceding the development of their eating disorder. Hence, models, conditions, and stressful circumstances may assist in the development of anorexia nervosa.

Nevertheless, cognitive and emotional predispositions may also leave individuals vulnerable to anorexia nervosa. Speaking of this, Gadsby (2017) states that “not only do AN patients have a body image disturbance, they also appear to have a body schema disturbance: both representations are oversized” (p.19). In other words, people might have misinterpretations and misperceptions of their body that predispose them to acquire an eating disorder. In addition, adverse body image thoughts and perceptions can cause them to have negative emotions towards how they feel about their bodies. For example, Lacoste (2017) mentions that some adolescents might acquire anorexia nervosa to feel better about their bodies during or after puberty. Finally, he also states that some children and adolescents use anorexia nervosa to stay a child/adolescent or to communicate something that is troubling them without actually speaking about it.

As a result of anorexia nervosa, numerous sufferers experience various adverse outcomes. Adolescents who develop anorexia nervosa during puberty are significantly affected (Steinhausen, 2002). Especially, since their body is growing and changing, they are more susceptible to adverse after effects compared to well-developed adults. Also, Nagl et al. (2016) assert that “most retrospective age-of-onset data suggest that EDs typically start early in adolescence” (p. 903). This assertion means that many adolescents are left vulnerable to the disorder and its consequences. Other major risks may involve a damaged immune system, a

higher probability of osteoporosis, loss of menstrual cycle, anemia, as well as kidney failure (National Eating Disorder Collaboration, 2017). Further, individuals might have heart problems, and worst of all they could die (Sachs, Mlis, Mehler & Krantz, 2016). As evidence, the DSM-5 (2013) states that “the crude mortality rate (CMR) for anorexia nervosa is approximately 5% per decade. Death most commonly results from medical complications associated with the disorder itself or from suicide” (p. 342). Moreover, women are most vulnerable to the dangers of anorexia nervosa, considering that 90% of people who have this disorder are female (Hoek & Van Hoeken, 2003, as cited Bergh et al., 2013). Along with that, the DSM-5 mentions that women are ten times more likely than men to suffer from anorexia nervosa. Lastly, “the 12-month prevalence of anorexia nervosa among young females is approximately 0.4%” (American Psychiatric Association, 2013).

Overall, anorexia nervosa is an eating disorder that drastically changes the lives of people suffering from it. People with anorexia nervosa may suffer from either the restrictive subtype or the bingeing and purging subtype. Both the restrictive and binge/purging subtype have one primary aspect in common, the people suffering from them are underweight. Further, some individuals might develop the disorder as a consequence of one or a combination of reasons; each person has their unique, intricate narrative. In the same way, people are affected by anorexia nervosa in complex ways, as so are their complications and aftereffects. In all, anorexia nervosa is a threatening multifaceted disorder that affects copious individuals, specifically women.

### **Research Informed Treatment**

Anorexia nervosa comes with many complications that make it difficult to treat. Von Holle et al., (2008) states that "the rate of recovery for anorexia and bulimia is remarkably low at 10 to 11%" (as cited in Bergh et al., 2013, p. 879). However, two treatment approaches that have been successful in research are the family-based treatment for transition age youth (FBT-TAY) and Mandometer therapy. Hence, to learn about successful treatment approaches, FBT-TAY, Mandometer therapy, and other strategies used to treat anorexia nervosa will be discussed.

To start, FBT-TAY's primary goal is to help clients restore and maintain a healthy weight. Further, "the FBT-TAY model empowers families to continue support across the artificial divide of pediatric to adult treatment systems" (Dimitropoulos et al., 2018, p. 59). FBT-TAY is composed of three phases. During each session, the therapist and the patient meet individually to discuss. After the individual meeting, the family has family therapy. In the first session of the first phase, the patient and the therapist discuss "weight, non-negotiables of treatment, and thoughts about family involvement" (Dimitropoulos et al., 2018, p. 54). Overall, the first phase centers on discussing previous treatment history, and how anorexia nervosa has affected the family as a whole. During this phase, family members will be responsible for supporting the patient and for holding them accountable for their progress (Dimitropoulos et al., 2018). Overall, phase one normally lasts for ten sessions. Through phase two, the patient and the family work to "gradually return control age-appropriate meals to the young adult" (Dimitropoulos et al., 2018, p. 54). Phase two lasts about ten sessions. Lastly, phase three lasts for three to five sessions. During the last sessions, the patient works with the therapist to create an achievable eating plan, and a relapse prevention program. In the final session, the therapist presents the family with their overall progress. FBT-TAY is offered in an inpatient or outpatient



program. Notably, one study using this FBT-TAY showed that patients significantly made progress and that they maintained their progress three months after. However, as much as this treatment approach is effective with children, adolescents, and young adults it is not useful when started with older adults.

Another successful treatment approach is called Mandometer therapy. Mandometer therapy focuses on helping clients eat properly. Moreover, “Mandometer therapy for eating disorders is not a statistical anomaly, does not depend exclusively on the quality of an individual therapist, or on the quality of an individual clinic, nor does it depend on the treatment of a unique patient population” (Bergh et al., 2013, p. 883). During this treatment approach, therapists provide patients with feedback based on how successfully they eat their meals. Patients use a scale called Mandometer to measure how much they have eaten. For example, “by consulting a small monitor next to their plate, patients are able to compare their rate of eating in real time to that of a typical person eating that meal” (Bergh et al., 2013, p. 880). In addition, patients are provided with heat, in forms of thermal blankets, jackets, or by being inside warm rooms. This treatment uses warmth to prevent patients from burning calories during thermoregulation. Further, patients are restricted from any form of exercise. Mandometer therapy classifies remission when patients no longer meet the anorexia nervosa diagnostic criteria. This treatment approach is performed in an inpatient or outpatient treatment center. Lastly, in one study, Mandometer therapy had a “63 to 75% success rate” (Bergh et al., 2013, p. 884).

Furthermore, there are specific approaches included in treatment for anorexia nervosa. For example, in extreme cases, individuals may be fed through a feeding tube. This treatment is done to stabilize a patient's health sooner; with a feeding tube, patients consume calories faster. Along with that, patients may be restricted from walking if they are not complying with their

treatment; this occurs during inpatient treatment. In order to prevent them from walking, patients are assigned a wheelchair. In other cases, patients may be placed on bed rest.

In all, treatment for anorexia nervosa can be challenging for patients. A patient's motivation to recover is a necessity to achieve recovery. Moreover, some treatment approaches that might help patients have a more successful recovery are FBT-TAY and Mandometer therapy. In addition, some specific steps might be taken to enhance improvement in patients, such as using tube feeding. Therefore, although recovery from anorexia nervosa is extremely challenging, it is not impossible, and successful treatment approaches help pave the way towards recovery.

### **Anorexia Nervosa in Popular Media**

Anorexia nervosa has long been seen as a taboo. Along with this, people fail to see anorexia's true complications; instead, they see it as a vanity problem or as a glamorized disorder. One film whose objective is to depict anorexia nervosa is *To the Bone*. This film's depiction is vital because viewers can use it to learn about the disorder. Hence, *To the Bone's* accuracy and portrayal will be analyzed to depict whether the film accurately represented anorexia nervosa.

*To the Bone* is about a girl named Ellen who suffers from anorexia nervosa. Ellen has gone in and out of treatment various times. At the beginning of the film, she is reluctant to get treatment. Because of her unwillingness, Ellen rebels against her family and the people in charge of her treatment. Later in the film, we find out that her mother suffers from bipolar disorder, and that she was in and out of inpatient treatment while Ellen was a child. Hence, Ellen had to watch her mother struggle all throughout her childhood. Moreover, her mother later divorced her father and got married to a woman. Later on, her father stopped being in the picture and Ellen was left

without the care of her parents. Because of this, we find out that Ellen lacked nurturance during her childhood, adolescence, and young adulthood; all which could have had impacted the onset of her disorder. However, it was never stated what caused her anorexia nervosa. At the end of the film, her mother provides her with the nurturance she needed, and Ellen realizes how much love her stepmother and her stepsister have for her. From this, she decided to put effort in her recovery.

To start, *To the Bone*'s objective is to represent anorexia nervosa accurately. At the beginning of the film, it states that people who suffered from an eating disorder contributed to the film. Based on the fact that people who have gone through the disorder created it, created a more realistic depiction of eating disorders, specifically anorexia nervosa. A realistic depiction represented in the film was shown through its diversity. Ellen and other patients in treatment were diverse in age, gender, and ethnicity. For instance, there was a male, a Salvadorian, and a pregnant patient in treatment who suffered from anorexia nervosa. Also, as known, anyone can fall develop anorexia nervosa. Other accurate depictions were demonstrated through the physical symptoms that Ellen experienced due to anorexia nervosa. For example, Ellen had amenorrhea, lanugo in her body, she bruised easily, and was underweight. As with behavioral symptoms, Ellen played with her food, avoided and excluded out certain foods from her diet, and she talked to distract people from noticing she was not eating her food. Lastly, the film also demonstrated accurate cognitive symptoms that some patients with anorexia nervosa have. Ellen had cyclical thoughts about weight and calories, and she feared gaining weight and becoming obese.

*To the Bone* accurately demonstrated the experiences of patients in treatment. For example, through Ellen, the film demonstrated that recovery is difficult for patients with anorexia nervosa. Because of this, many go out and in of treatment. Further, the film

demonstrated different methods used to help patients recover cognitively and physically. For instance, some patients were fed through a feeding tube, and some had either group therapy and/or individual therapy. Furthermore, *To the Bone* accurately demonstrated how patients sometimes learn maladaptive behaviors from other patients and how sometimes they keep each other's maladaptive behaviors a secret. The film also accurately depicted how some patients are competitive against each other. For example, when one patient asked Ellen “how many inpatients have you had?”, Ellen said five and the one who asked smirked and said, “well I have had six”. Besides, the film accurately demonstrated how eating disorders impact both the patient and their family. For instance, Ellen’s sister mentioned to Ellen that she was missing out on a sister and that she was scared that she might soon not have one.

Overall, *To the Bone* presents an accurate depiction of anorexia nervosa. It accurately depicts the experiences, the behaviors, the thoughts, and the harmful effects of anorexia nervosa. Unlike other films, *To the Bone* does not glamorize nor does it judge people suffering from anorexia nervosa. Instead, this film depicts what it is to have an eating disorder, specifically anorexia nervosa. Further, the film depicts how anyone can fall victim to this destructive disorder. Hence, *To the Bone* accomplishes its objective of being realistic. Because of its accuracy, *To the Bone* leads viewers to learn about the true nature of anorexia nervosa, instead of misleading viewers with false information.

### **Conclusion**

All things considered, anorexia nervosa is a complicated disorder. Anorexia's complexity makes it difficult to treat. Moreover, anorexia nervosa should not be taken for granted, and instead, it should be depicted by its cognitive, physical, and behavioral complications. Like *To the Bone*, other films should treat anorexia nervosa with severity, so other children, adolescents,

and adults can learn about its vulnerabilities. Nevertheless, anorexia prevention programs should be created to help prevent it. Anorexia prevention programs would help un-glamorized this disorder, as well as providing support to those in need. In all, anorexia nervosa is a dangerous and a complicated disorder that can leave an individual with many negative aftermaths or even with death.

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