Bulimia Nervosa in Adolescents: Factors, Challenges, and Targeted Interventions

Chufei Yang

Beijing 21st Century School, Beijing, China
13717965873@163.com

Abstract. Bulimia nervosa is a severe eating disorder marked by repeated episodes of binge eating, after which individuals turn to compensatory behaviors-such as making themselves vomit, exercising excessively, or misusing laxatives-to avoid weight gain. For adolescents, this disorder carries serious risks: without proper treatment, it can cause lasting physical and psychological harm. This study looks into how common bulimic symptoms are among teenagers and explores the factors that contribute to them. These factors include internal ones like trouble regulating emotions, impulsiveness, and dissatisfaction with the body of a person, as well as external ones such as family dynamics, pressure from peers, and the influence of social media. It also examines the unique challenges in diagnosing and treating the disorder in this age group, like teens hiding their behaviors out of shame and struggling to stick to treatment plans. Adolescence is a vulnerable time, with physical changes, the process of figuring out the identity of a person, and exposure to the beauty standards of a society all playing a role. To address these issues, the research suggests targeted strategies: school programs that promote positive body image, getting families involved in prevention and treatment, teaching teens digital literacy to help them think critically about online content, and early intervention using cognitive-behavioral therapies adapted for young people. By dealing with the complex way individual vulnerabilities and environmental triggers interact, these approaches aim to lower risks, enable early detection, and reduce long-term harm-ultimately supporting overall health and well-being of adolescents.

Keywords: Bulimia Nervosa, Adolescents, Prevention Strategies

1. Introduction

1.1. A subsection sample

Bulimia nervosa is a life-threatening eating disorder. It involves repeated episodes of binge eating, where a person eats an unusually large amount of food in a short time (usually around two hours) and feels unable to control their eating. After these epi-sodes, they use compensatory behaviors to prevent weight gain-things like making themselves vomit, misusing laxatives, diuretics, or enemas, exercising too much, skipping meals, or combining these actions. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) states that the disorder also includes an

excessive focus on body shape and weight, and these binge-eating and compensatory episodes must happen at least once a week for three months or more [1].

It is important to tell bulimia nervosa apart from other eating disorders. Eating dis-orders are a group of conditions involving abnormal eating habits and worries about body weight or shape. Unlike anorexia nervosa-where people severely limit their food intake, leading to extremely low body weight-bulimia nervosa is not defined by being underweight. People with bulimia can have a normal, above-normal, or even below-normal body mass index (BMI). Also, while binge-eating disorder (BED) also involves repeated binge eating, it does not include the compensatory behaviors that are key to bulimia nervosa [2]. So, the cycle of bingeing and purging is what makes bulimia nervosa different from other eating disorders.

Binge-eating behaviors in teenagers-especially those that point to bulimia nervosa-need serious attention in academic, clinical, and public health discussions. Binge eating in adolescence is not just a passing phase; it often reflects underlying psychological, emotional, and physical distress that can continue into adulthood if not addressed. Recent research shows that even mild binge-eating behaviors in teens make it more likely they will develop full-blown eating disorders, as well as other problems like depression, anxiety, substance abuse, and poor school performance [3]. What is more, teens often hide these behaviors because they feel ashamed, which can delay them getting help. This delay can make physical complications worse, like electrolyte imbalances, tooth decay, and digestive system issues [4]. Given the potential for long-term health consequences, studying binge-eating in this age group is not just important for research-it is essential for creating early prevention and treatment strategies.

This study has three main goals: first, to look at how common bulimia nervosa symptoms are in teens and identify the factors linked to them, including background characteristics, psychological triggers, and social influences; second, to find the unique challenges in detecting and treating bulimia nervosa in this age group, like why teens do not talk about their behaviors and why they might not stick to treatment; and third, to suggest prevention and treatment strategies that fit the developmental needs of adolescents. This research matters in several ways. For healthcare providers and therapists, it can help them better understand how bulimia nervosa shows up in teens, making it easier to detect early and create personalized treatment plans. From a public health perspective, it can inform the design of school, family, and community programs that reduce risk factors-like promoting positive body image and helping teens deal with social pressure. Finally, by highlighting the specific risks teens face, this research contributes to efforts to reduce the long-term impact of eating disorders, improving people's lives and easing the burden on individuals, families, and healthcare systems.

2. Literature review

Adolescence is a time when people are more likely to develop eating disorders like bulimia nervosa, and this is because of a mix of biological, psychological, and social factors. Biologically, this stage involves rapid physical changes: weight gain, hormo-nal shifts, and brain development-especially in the parts of the brain that control impulses and how people perceive their bodies [5]. Psychologically, adolescents are focused on figuring out who they are, being accepted socially, and how they feel about their bodies. They often compare themselves to their peers and the "ideal" images they see in the media, which can lead to being unhappy with their bodies [6]. Socially, they face a lot of pressure to fit narrow beauty standards, and this pressure is made worse by social media, advertising, and interactions with peers. Also, as teens get more freedom to choose what they eat, they are more likely to adopt restrictive or unhealthy eating habits to deal with stress, low self-

esteem, or strong emotions [7]. All these factors together make the teen years a critical time for the start of eating-related problems, which can have long-term effects on both physical and mental health.

2.1. Psychological factors

Research keeps finding that several psychological factors are key predictors of bulimia nervosa, helping explain the internal processes that cause and keep the disorder going.

Emotion Regulation Deficits. People with bulimia nervosa often struggle to regulate their emotions in healthy ways. Recent studies show that binge-eating and purging behaviors often act as unhealthy coping mechanisms for dealing with strong negative emotions like anxiety, sadness, or anger [8]. Instead of processing their emotions in a healthy way, those with the disorder turn to food or compensatory behaviors to numb or distract themselves from emotional pain. This creates a cycle: the temporary relief from these behaviors makes them more likely to repeat them.

Impulsivity, Inhibitory Control, and Executive Functioning. Impulsivity is a well-known trait in people with bulimia nervosa, especially during binge-eating episodes-these episodes are often marked by a loss of control [9]. Neuropsychological research shows that having trouble with inhibitory control-the ability to hold back inappropriate or impulsive responses-is a core part of the disorder. This makes it hard for those affected to resist the urge to overeat. Also, problems with executive functioning-like planning, making decisions, and being able to adapt cognitively-make it even harder for them to break the cycle of bingeing and purging [10].

Body Image Dissatisfaction and Low Self-Esteem. Having a distorted view of one's body and being overly focused on weight and shape are defining features of bulimia nervosa. Studies show that people with the disorder often see their bodies inaccurately-they overestimate their size and feel very unhappy with how they look [11]. This unhappiness is closely tied to low self-esteem: their sense of self-worth becomes too dependent on their body weight and shape. The desire to achieve an idealized body type-often influenced by society's standards-leads them to restrict their eating. But when their self-control slips, this restriction paradoxically triggers binge-eating episodes [12].

2.2. Environmental factors

Environmental factors play a big role in the risk of developing bulimia nervosa. They interact with psychological vulnerabilities to make the disorder worse. These environmental factors include the family environment, peer influence and social pressure, and social media and online culture.

The family environment is crucial. Parenting styles that are too critical, controlling, or emotionally neglectful increase the risk. They can make teens feel inadequate or create a strong need for control, which might show up as disordered eating [13]. Also, family eating habits-like being too focused on dieting, checking weight often, or having irregular mealtimes-can make restrictive or chaotic eating behaviors seem normal. A family environment with a lot of tension and conflict can also contribute. In such cases, teens might turn to bingeing or purging to cope with unresolved stress or family problems [14].

Peer influence during adolescence and early adulthood is also significant. The pressure to fit in with peers' ideas about body image, dieting, or being thin can make teens more unhappy with their bodies and lead to disordered eating [15]. Comparing themselves to peers-both in person and online-often makes them feel inferior, pushing them to use extreme methods to control their weight. What is more, being teased or bullied about weight is a known risk factor; it makes it more likely teens will use bingeing or purging to defend themselves or regulate their emotions [16].

The growth of social media has brought new environmental stressors. These platforms often promote idealized and unrealistic body images, which is linked to increased body dissatisfaction and negative feelings about eating [17]. Constantly seeing curated content-like “fitspiration” posts, diet trends, and edited photos-creates a culture where people are always comparing themselves to others and chasing impossible standards. Also, online communities that make extreme dieting or purging seem normal, or even encourage them, can keep these harmful behaviors going and make recovery harder [18].

2.3. The interaction between psychological and environmental factors

Bulimia nervosa rarely comes from just psychological or just environmental factors; it is usually the result of these two types of factors interacting in complex ways. For example, a teen who struggles to regulate their emotions (a psychological factor) might be more affected by family conflicts (an environmental factor) and turn to binge-eating to cope. Similarly, being unhappy with the body of a person (psychological) can get worse if a teen uses social media a lot (environmental), making purging behaviors more likely.

Studies suggest that environmental factors often act as “triggers” that set off underlying psychological vulnerabilities. Take a teenager with low self-esteem (psychological) who gets teased by peers about their weight (environmental). This might make them start restricting their eating, and when that restriction combines with impulsivity (psychological), it can lead to a binge-eating episode. This creates a vicious cycle: environmental stressors make psychological problems worse, and the worse psychological state makes the teen more sensitive to other environmental triggers, keeping the disorder going [19,20].

What is more, the influence of these factors can change as adolescence progresses. In early adolescence, for example, peer influence might have a bigger effect on how teens feel about their bodies. In late adolescence, social media and individual psychological factors like issues with forming an identity might become more important [21]. Cultural differences also play a role. In some cultures, family values and traditional beauty ideals might either ease or make worse the effects of psychological and environmental factors on the development of bulimia nervosa [22]. Understanding these details is key to creating effective prevention and intervention strategies that target the specific vulnerabilities of different groups of adolescents.

2.4. Prevention recommendations and early intervention strategies

Dealing with bulimia nervosa requires targeted prevention and early intervention approaches that address both psychological and environmental factors. These include school-based prevention programs, family-focused interventions, digital literacy edu-cation and social media regulation, and early clinical support.

Schools are a great place to reach at-risk adolescents. Programs that promote positive body image, media literacy, and healthy ways to cope with emotions can reduce body dissatisfaction and problems with emotion regulation [23]. Teaching students about the dangers of extreme diets and how unrealistic beauty standards affect them helps push back against social and media pressure.

Family-focused interventions-where family members are involved in treatment and prevention-can reduce harmful environmental influences. Family therapy that addresses parenting styles, improves communication, and encourages healthy eating habits creates a supportive home environment [24]. Teaching parents to spot early signs of disordered eating-like secretive eating or excessive exercise-lets them step in early.

Reducing the harmful effects of negative online content is also important. Digital literacy programs that teach teens to think critically about social media images and avoid comparing themselves to others can protect them from body image issues [25]. Also, pushing for stricter rules on misleading diet content and more representation of diverse body types on social media platforms can reduce environmental triggers.

Early detection by healthcare providers, teachers, or counselors is essential. Brief psychological interventions-like cognitive-behavioral therapy (CBT) adapted for young people-can correct distorted body images and help teens manage their emotions better before symptoms get worse [26]. For at-risk individuals, using screening tools to check for binge-eating and purging behaviors can help get them referred to the right care quickly.

By combining strategies that target both psychological vulnerabilities and envi-ronmental stressors, these approaches aim to lower the number of cases of bulimia nervosa and improve outcomes for those affected. This work is not just about "curing" bulimia; it is about giving adolescents the tools to overcome the disorder. By under-standing how their vulnerabilities and environment interact, a safety net can be created to keep them from falling into the disorder. More research is needed to find out why some teens are more at risk, which interventions work best, and how to make sure these interventions reach all adolescents-no matter what resources they have. It is also essential to challenge a culture that ties a child's worth to their appearance.

3. Conclusion

In the end, bulimia nervosa is far from being just a "phase" or a temporary issue with food. It is a serious, potentially life-threatening eating disorder that deeply affects the daily life of a person. At its core are repeated episodes of eating too much food in a short time, with a complete loss of control. Afterward, people use extreme methods to avoid weight gain-like making themselves vomit, misusing laxatives or diuretics, exercising until they are exhausted, skipping meals for a long time, or doing a combination of these things. Throughout all this, their thoughts are fixated on their body, constantly worrying about how they look and their weight.

Bulimia nervosa is different from other eating disorders. Anorexia nervosa, for example, is marked by extreme restriction-people starve themselves to get to a dangerously low body weight, which is what defines it. Binge-eating disorder involves similar uncontrolled eating episodes but does not have the "compensatory" behaviors that are part of bulimia nervosa. So, bulimia nervosa has a unique, destructive cycle: eating to the point of discomfort, then purging to get rid of the calories. This cycle is especially hard to break.

Adolescence is a vulnerable time for developing bulimia nervosa, and that is no accident. Biologically, teens are going through constant changes: their bodies are growing, their hormones are fluctuating, and their brains are still developing-especially the parts that control impulses and how they perceive their bodies. Psycho-logically, this is when they start to question who they are, and they often tie their identity to how they look. They are always comparing themselves to friends, celebrities, and the idealized images on their screens, and they often feel like they are not good enough. Socially, the pressure to fit a narrow definition of "beauty" is everywhere-friends talk about diets, parents make comments about weight, and social media is full of body images that are impossible to live up to.

These factors do not exist alone; they work together. A teen who already struggles to regulate their emotions might eat a whole box of cookies after arguing with their parents, then panic and make themselves vomit. A child with low self-esteem might scroll through Instagram, see a "perfect" body, and start skipping lunch to lose weight-only to binge when they get too hungry. Each

time this happens, the cycle gets tighter: external stress makes internal struggles worse, and those internal struggles make the teen more sensitive to future stress.

If bulimia nervosa in teens is not addressed, the consequences last a long time. Physically, their bodies suffer: stomach acid erodes their teeth, electrolyte imbalances strain their hearts, and repeated purging damages their digestive systems. Mentally, the impact is even bigger-depression, anxiety, and a constant feeling of not being good enough follow them into adulthood, but that does not have to happen.

Dealing with this issue means meeting teens where they are. Schools can run programs that do not just talk about "healthy eating" but also teach students to accept their bodies and think critically about what they see online. Families can stop talking so much about diets and have meaningful conversations at dinner instead; parents can learn to spot signs like missing food or a child spending too much time in the bathroom after meals and step in before things get worse. Social media platforms need to stop promoting unrealistic body images and start showing diverse, real people. Therapists can use approaches like cognitive-behavioral therapy (CBT) but adapt them for teens-using language they understand and helping them find ways to manage stress that do not involve food.

Teens are resilient, and that strength is often overlooked. With the right support, they can break free from the cycle of bulimia nervosa and grow up to be adults who see themselves as more than a number on a scale. The goal is not just to im-prove their physical health-it is to help them be mentally well, too.

References

[1] American Psychiatric Association: Diagnostic and statistical manual of mental disorders. 5th edn. American Psychiatric Publishing (2013)

[2] APA PsycNet, https: //psycnet.apa.org/record/2001-05466-000, last accessed 2025/08/19

[3] Yamamiya, Y., Stice, E.: Risk factors that predict future onset of anorexia nervosa, bulimia nervosa, binge eating disorder, and purging disorder in adolescent girls. Behavior Therapy 55(4) (2023)

[4] Health Centre NZ Breaking the Silence: Why Teens Hide Their Mental Health Struggles and How to Help. https: //healthcentre.nz/breaking-the-silence-why-teens-hide-their-mental-health-struggles-and-how-to-help/, last accessed 2025/08/19

[5] Casey, K., Oja, K. J., Makic, M. B. F.: The lived experiences of graduate nurses transitioning to professional practice during a pandemic. Nursing Outlook 69(6) (2021)

[6] Crawford, M.: Ecological Systems Theory: Exploring the Development of the Theoretical Framework as Conceived by... ResearchGate, https://www.researchgate.net/publication/354193756_Ecological_Systems_Theory_Exploring_the_Development_of_the_Theoretical_Framework_as_Conceived_by_Bronfenbrenner_Article_Details, last accessed 2025/08/19

[7] S, G., Lm, W., Js, H.: The Role of the Media in Body Image Concerns Among Women: A Meta-Analysis of Experimental and Correlational Studies. Psychological Bulletin (2008)

[8] Diana Otero Svaldi, Higgins, I. A., Holdridge, K. C., Yaari, R., Case, M., Luc Bracoud, Scott, D., Sergey Shcherbinin, Sims, J. R.: Magnetic resonance imaging measures of brain volumes across the EXPEDITION trials in mild and moderate Alzheimer's disease dementia. Alzheimer's & Dementia: Translational Research & Clinical Interventions 8(1) (2022)

[9] Fischer, T. B.: Impact assessment publishing – observations and reflections after 7 years of being editor of Impact Assessment and Project Appraisal. Impact Assessment and Project Appraisal 41(3), 175–180 (2023)

[10] Wiss, D. A., Brewerton, T. D.: Adverse Childhood Experiences and Adult Obesity: A Systematic Review of Plausible Mechanisms and Meta-Analysis of Cross-Sectional Studies. Physiology & Behavior 223, 112964 (2020)

[11] Wisting, L. Stice, E., Ghaderi, A., Dahlgren, C.L.: Effectiveness of virtually delivered Body Project groups to prevent eating disorders in young women at risk: a protocol for a randomized controlled trial. Journal of Eating Disorders 11(1) (2023)

[12] Razmus, M., Razmus, W., Tylka, T. L., Jović, M., Jović, M., Namatame, H.: Cross-cultural measurement invariance of the Body Appreciation Scale-2 across five countries. Body Image 34, 270–276 (2020)

[13] APA PsycNet, https: //psycnet.apa.org/record/2020-74076-001, last accessed 2025/08/19
[14] Le Grange, D., Eckhardt, S., Dalle Grave, R., Crosby, R. D., Peterson, C. B., Keery, H., Lesser, J., Martell, C.: Enhanced cognitive-behavior therapy and family-based treatment for adolescents with an eating disorder: a non-randomized effectiveness trial. Psychological Medicine 52(13), 1–11 (2020)
[15] Lipson, S. K., Zhou, S., Abelson, S., Heinze, J., Jirsa, M., Morigney, J., Patterson, A., Singh, M., Eisenberg, D.: Trends in college student mental health and help-seeking by race/ethnicity: Findings from the National Healthy Minds Study, 2013–2021. Journal of Affective Disorders 306(1), 138–147 (2022)
[16] Pearson, N., Naylor, P.-J., Ashe, M. C., Fernandez, M., Yoong, S. L., Wolfenden, L.: Guidance for conducting feasibility and pilot studies for implementation trials. Pilot and Feasibility Studies 6(1), 1–12 (2020)
[17] Perloff, R. M.: The Dynamics of Persuasion. Routledge (2020)
[18] Fairburn, C. G., & Brownell, K. D. (Eds.): Eating disorders and obesity: A comprehensive handbook. 2nd edn. Guilford Press (n.d.)
[19] Steffen, A., Thom, J., Jacobi, F., Holstiege, J., Bätzing, J.: Trends in prevalence of depression in Germany between 2009 and 2017 based on nationwide ambulatory claims data. Journal of Affective Disorders 271, 239–247 (2020)
[20] Li, W., Separovic, F., O'Brien-Simpson, N. M., Wade, J. D.: Chemically modified and conjugated antimicrobial peptides against superbugs. Chemical Society Reviews 50(8), 4932–4973 (2021)
[21] van den Berg, J. H., Heemskerk, B., van Rooij, N., Gomez-Eerland, R., Michels, S., van Zon, M., de Boer, R., Bakker, N. A. M., Jorritsma-Smit, A., van Buuren, M. M., Kvistborg, P., Spits, H., Schotte, R., Mallo, H., Karger, M., van der Hage, J. A., Wouters, M. W. J. M., Pronk, L. M., Geukes Foppen, M. H., Blank, C. U.: Tumor infiltrating lymphocytes (TIL) therapy in metastatic melanoma: boosting of neoantigen-specific T cell reactivity and long-term follow-up. Journal for ImmunoTherapy of Cancer 8(2), e000848 (2020)
[22] Maher, P. J., MacCarron, P., Quayle, M.: Mapping public health responses with attitude networks: the emergence of opinion-based groups in the UK's early COVID-19 response phase. British Journal of Social Psychology 59(3), 641–652 (2020)
[23] APA PsycNet, https: //psycnet.apa.org/record/2020-13185-001, last accessed 2025/08/19
[24] Schlegl, S., Voderholzer, U., Maier, J., Naab, S., Lock, J.: Efficacy, moderators and mediators of manualized family-based treatments in adolescents with eating disorders: a systematic review. Psychotherapie, Psychosomatik, Medizinische Psychologie 70(3–4), 112–121 (2020)
[25] Holingue, C., Kalb, L. G., Riehm, K. E., Bennett, D., Kapteyn, A., Veldhuis, C. B., Johnson, R. M., Fallin, M. D., Kreuter, F., Stuart, E. A., Thrul, J.: Mental distress in the United States at the beginning of the COVID-19 pandemic. American Journal of Public Health 110(11), 1628–1634 (2020)
[26] Loades, M. E., Chatburn, E., Higson-Sweeney, N., Reynolds, S., Shafran, R., Brigden, A., Linney, C., McManus, M. N., Borwick, C., Crawley, E.: Rapid systematic review: the impact of social isolation and loneliness on the mental health of children and adolescents in the context of COVID-19. Journal of the American Academy of Child & Adolescent Psychiatry 59(11), 1218–1239 (2020)