Practical strategies for the diagnosis and management of binge eating disorder

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Intended audience

Nurse practitioners (NPs) and other advanced practice healthcare providers (HCPs) who care for women.

Continuing education (CE) approval period

Now through February 29, 2016

Estimated time to complete this activity

1 hour

Program description/identification of need

Gap 1: In 2013, binge eating disorder (BED) was designated as a formal diagnosis in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*. BED is underdiagnosed and undertreated. NPs in women's health are the primary HCP and contact for many women, and are positioned to identify patients with BED and provide treatment and/or referral.
Gap 2: Many HCPs, including NPs, who care for women are insufficiently educated about the etiology of BED and its association with genetic and environmental factors, as well as its prevalence in women with obesity.
Gap 3: Various pharmacologic agents have been studied with regard to their efficacy in patients with BED, many of whom have co-morbidities. HCPs need information about the usefulness of currently available and investigational agents to treat both BED and common co-morbidities.

Gaps in practice

Gap 1: NPs in women's health, as well as other HCPs who specialize in the care of women, are well positioned to screen for and diagnose BED. This activity will better enable them to do so.
Gap 2: A multifaceted approach to treatment for BED is required. HCPs need information about appropriate treatment options, and need to know which members of the health-management team are best positioned to offer these options.
Gap 3: Many patients with BED have co-morbidities associated with obesity. Identification of pharmacologic agents that will improve symptoms of both BED and co-morbid conditions can help optimize patient outcomes.

Educational objectives

At the conclusion of this activity, participants should be better able to:

- Discuss current diagnostic criteria for BED.
- Apply effective patient–HCP communication strategies regarding BED and its effects, including those related to fertility and future pregnancy.
- Evaluate nonpharmacologic and pharmacologic approaches to BED treatment.
- Monitor patient progress, adjust treatment plans, and make referrals as appropriate.

Credit designation statement

This Activity (No. J-15-02) has been evaluated and approved by the Continuing Education Approval Program of the National Association of Nurse Practitioners in Women's Health (NPWH) for 1.0 contact hour of CE credit, including 0.5 contact hours of pharmacology content. Each participant should claim only those contact hours that he/she actually spent in the educational activity.

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Successful completion of this activity
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The authors discuss the etiology of binge eating disorder (BED), as well as techniques for screening and diagnosis and recommended treatments. They also describe common mental and physical co-morbidities in patients with BED and the disorder's potential effects on reproductive health and pregnancy. Three relevant case studies—of a teenage girl, a woman in the middle of her reproductive years, and a woman nearing menopause—illustrate how healthcare providers can evaluate and manage patients with BED.

KEY WORDS: **binge eating disorder, disordered eating, co-morbidities, cognitive behavioral therapy, pharmacotherapy**

Binge eating disorder (BED), now included in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (*DSM-5*),[1] is defined as follows:

- Recurrent and persistent episodes of binge eating
- Binge eating episodes that are associated with three (or more) of the following:
  - Eating much more rapidly than normal
  - Eating until feeling uncomfortably full
  - Eating large amounts of food when not feeling physically hungry
  - Eating alone because of being embarrassed by how much one is eating
  - Feeling disgusted with oneself, depressed, or very guilty after overeating
- Marked distress regarding binge eating
- Absence of regular compensatory behaviors (such as purging)

Particularly **common among females** (*See Cases 1, 2, and 3*) and **associated with obesity**, BED poses physical, psychological, and social challenges that decrease health-related quality of life (HRQOL) and increase disease burden.

Etiology

The **etiology of BED** is multifactorial and complex. Although associated with **hedonic hunger**, BED is linked less to pleasure and more to an attempt to suppress negative feelings through bingeing without purging.[2] Motivation to binge likely also arises from homeostatic hunger.

Risk factors

Risk factors for BED include **genetics**, female gender, Caucasian ethnicity, weight concern, negative body image, childhood problems, low self-esteem and self-efficacy, low family cohesion, psychiatric morbidity, and **stressful events**.[3,4] In addition, a community-based case–control study demonstrated that patients with BED, versus controls, were significantly more likely to report **sexual abuse and repeated severe physical abuse**. The typical overweight person with BED is **overly concerned with body shape and weight**. BED is most likely to occur in

young women of high socioeconomic status in industrialized countries, but it is not limited to this population (*See Cases 1, 2, and 3*).

Binge-eating disorder in children and adolescents

In children and adolescents, early identification and treatment of BED is vital (*See Case 1*). Loss of control over eating is associated with modifiable lifestyle factors. Often considered temporary, BED is actually a long-term chronic condition often associated with co-morbid obesity. Childhood factors that increase risk for BED include obesity, self-criticism, poor self-esteem, body dissatisfaction, and emotional abuse.[5] In female adolescents and young adult women, BED is associated with pre-existing depressive symptoms and an increased risk for developing mood disorders.[6]

Specific goals of treatment for children and adolescents include treatment of underlying depression or anxiety, improvement of self-esteem, normalization of eating patterns, promotion of physical activity, and implementation of family therapy to address family dysfunction and engage family members in supporting the patient's recovery. BED treatment outcomes can be optimized through early detection and referral to eating disorder specialists; incorporating a multidisciplinary treatment team to address the physical, psychological, nutritional, and spiritual aspects of BED; and combining cognitive behavioral therapy (CBT), a self-help program, and, when appropriate, pharmacotherapy.

Co-morbid psychiatric disorders

Co-morbid anxiety, mood, and disruptive behavior disorders are common in patients with BED, as are obsessive-compulsive disorder, post-traumatic stress disorder, and substance abuse. Co-morbid obesity increases psychopathology, emotional eating, concerns about weight and body shape,[7] and perhaps a desire for bariatric surgery.[8] Obesity and BED are common in patients with bipolar disorder. In patients with personality disorders, alexithymia (a personality construct characterized by the subclinical inability to identify and describe emotions in the self) correlates more highly with BED than with other eating disorders.[9]

A case–control study showed that patients with BED, compared with controls, reported a significantly greater number of adverse life events during the year prior to symptom onset, suggesting that the accumulation of stressful events can trigger the disorder.[10] Even after weight loss and CBT, patients with BED experienced higher morning basal cortisol levels than did a control group without BED.

Effects of disordered eating patterns on reproductive health

Disordered adolescent eating patterns affect one's development, with implications for reproductive function. Behaviors associated with risk-taking and self-harm frequently co-exist with eating disorders and increase risks for unplanned pregnancy and sexually transmitted infections. Obesity is strongly associated with conditions that adversely affect reproductive function.

In anovulatory overweight or obese women, sustained gradual weight loss will regulate menstrual cycles and increase the chance of spontaneous ovulation and conception.[11] Lifestyle modification has been shown to improve reproductive function.

Effects of binge eating disorder on pregnancy

Pre-pregnancy and pregnancy dietary patterns of women with BED may influence pregnancy outcomes. Many obstetricians do not query patients about weight control or disordered eating during pregnancy, and many patients do not seek treatment. Studies evaluating maternal and fetal outcomes in women with eating disorders are limited.

Women with BED during pregnancy are considered high risk. BED treatment during pregnancy is important for long-term management and reduction of harmful behaviors such as smoking; in fact, treatment during pregnancy is particularly likely to produce long-lasting results.

Pregnant patients with BED need frequent prenatal visits to discuss problems related to both nutrition and BED. Healthcare providers (HCPs) should do the following:

- Empower women to discuss weight and body-image concerns during pregnancy;
- Educate patients that uneven weight gain patterns may occur in pregnancy;
- Inform patients that controlling BED during pregnancy reduces the risk for a large-for-gestational-age newborn;
- Provide or refer for dietary sup-

Case study 1. Ann, age 15

Height: 5'5"
Weight: 204 lb
BP: 138/90
Presentation: Gynecologic visit to evaluate amenorrhea
History: 35-lb weight gain within past year; menses lightened 6 months ago and ceased 4 months ago
Family history: 10-year-old brother is underweight; he has unrestricted access to food. Maternal grandmother had type 1 DM. Parents are mildly overweight. Father receives medication for hypercholesterolemia. Mother is a chronic dieter.

Ann has daily afternoon headaches. Her academic performance has declined over the past year. According to Ann's mother, Ann rarely does homework and does not clean her room or help with household chores. Her only physical activity is a weekly dance class. Over the past 4-6 months, Ann has become irritable and cannot get along with anyone. Her only friend is a dance classmate. Large amounts of food have gone "missing," and candy and cookie wrappers are strewn around the house.

Assessing for an eating disorder

When asked the eating disorder screening question (see section on Screening and diagnosis), Ann states that she loves sweets, and that her mother limits the amounts she may have. As her NP, you ask her to list what she has eaten in the past 24 hours and she replies as follows:

- Breakfast: 2 donuts and a mug of hot chocolate
- Lunch: 2 slices of cheese pizza, 4 chocolate sandwich cookies, a small bag of Skittles candy, and a can of Coke
- Snack after school (home alone): a medium-sized bag of potato chips (4-serving size), a pint of chocolate fudge ice cream, 6 chocolate sandwich cookies, and a can of Coke
- Dinner: Plate of pasta with chicken Alfredo sauce (2 helpings), 1 cup of corn, and 8 oz of 2% milk
- Bedtime snack: 2 graham cracker sheets with Nutella and Fluff and 8 oz of 2% milk

Ann binged the previous day; as is typical, she binged after school when left alone. She says that the only time she can eat as much as she wants is after school, when her mom is at work and she is alone; this scenario represents typical adolescent binging behavior. Ann says that she has difficulty paying attention in school and focusing on her homework because she daydreams. When asked about her lack of friends, she responds, *I don't like any of the kids at school.*

Treatment plan

For Ann's treatment plan, you:

- Obtain CBC, CMP, lipid panel, TSH, and T4. Noteworthy results: FBG, 124; total cholesterol, 220, with elevated LDL-C and normal HDL-C; triglycerides, 432; elevated TSH and normal T4; random BG reading via in-office glucometry shows elevated results.
- Order HbA1c.
- Explain the meaning of the above abnormal lab values to Ann. Tell her that her eating patterns are consistent with BED, which contributes to her weight gain and abnormal lab values.
- Ask Ann to keep a daily food intake and feelings journal and bring it to a follow-up visit in 1 month.
- Instruct Ann on use of the glucometer to self-test her blood sugar levels.
- Refer Ann to an endocrinologist for a thyroid evaluation and consultation regarding her elevated BG. Ask Ann to bring the results of her self-testing to that appointment.
- Refer Ann to an eating disorder treatment center for CBT, individual and family therapy, an eating disorder recovery group for education and social support, and specialized medical care for BED and for help managing the underlying psychological problems triggering the BED.
- Refer Ann to a registered dietitian for nutritional counseling regarding her elevated lipids.
- Initiate a trial of lisdexamfetamine 30 mg/day in the morning to improve Ann's academic performance and help improve her focus at mealtimes in order to develop a more healthful eating pattern.

Follow-up

At a 1-month follow-up, Ann's endocrinologist has diagnosed hypothyroidism and prescribed levothyroxine sodium. Ann's academic performance has improved; she is better able to focus on homework. She has lost 1 lb already. She says that she still thinks about food all the time, which distracts her while in class.

Ann has begun a CBT program (under the guidance of an eating disorder specialist) and individual psychotherapy. She attempts to follow a meal plan prescribed by the dietitian. Two weeks ago, the NP at the eating disorder treatment center started her on sertraline 50 mg/day for depressive symptoms and topiramate 25 mg/day to help decrease her preoccupation with food and eating. She will be seen weekly by the eating disorder treatment team, and her medications will be titrated up to therapeutic dosages.

At a 3-month follow-up, Ann has lost 12 lb. She is maintained on sertraline 100 mg/day, topiramate 100 mg/day, and lisdexamfetamine 50 mg/day. No bingeing episodes have occurred in the past 6 weeks. Her headaches have subsided. Repeat lab results reveal an FBG of 92 and a total cholesterol of 194; her lipid profile is moderately improved.

Ann's mood is much improved. She is doing better in school and has begun a part-time job at an animal shelter, where she has made new friends. Vaginal spotting indicates gradual resumption of normal menses. She continues to receive specialized eating disorder treatment at bi-weekly visits and participates in an eating disorder recovery group. At a 5-month follow-up, her menstrual cycle has become regular.

Prognosis

Early detection by Ann's women's health NP and referral for specialized intervention were keys to her successful outcome. Her prognosis is good, given that she adheres to her medication regimen (nonadherence can be a problem for many adolescents).

port and meal planning;
- Assess and/or refer for management of psychiatric co-morbidities;
- Provide a routine postpartum visit at 1-2 weeks to monitor for relapse or exacerbation of BED; and
- Provide nutritional and dietary counseling for breastfeeding mothers and for the first 6-12 months postpartum.[12]

Co-morbid physical disorders

Binge eating disorder is associated with multiple physical **co-morbidities**, with decreased HRQOL and physical and psychosocial functioning.[13] A large majority of individuals with BED receive **medical treatment** for co-morbidities, particularly **obesity-related conditions** such as **type 2 diabetes mellitus** (DM). **Weight loss in patients with type 2 DM and BED** who control their eating habits is similar to that in persons who have never experienced BED. BED may precede **bariatric surgery** and/or re-emerge post-surgery.

Screening and diagnosis

Assessment for eating disorders, including BED, should be part of a routine health evaluation. HCPs can use an **assessment tool** or pose a simple screening question in a matter-of-fact, nonjudgmental, empathetic manner to facilitate open conversation: *Do you have thoughts, feelings, or behaviors regarding eating, weight, or body image that occupy most of your time or that make you feel out of control? (See Cases 1, 2, and 3.)* The **SCOFF Questionnaire** can be useful. Practical strategies for screening and diagnosis implemented by the authors include the following:

- Use an eating disorder screening question at routine visits as patients age from childhood through the older adult years;
- Engage patients in a conversation about possible BED;
- Maintain accurate chronological weight records;
- Be familiar with *DSM-5* diagnostic criteria;
- Obtain a 24-hour written food intake and feelings journal for 7 consecutive days (including weekends) and review the journals with patients;
- Assess for underlying depression or anxiety; initiate medication if indicated;
- Use physical, nutritional, and psychological findings to incentivize patients to engage in treatment;
- Avoid references to calories, weight, and dieting that may exacerbate feelings of shame or excessive focus on food;
- Advocate an approach for treatment of BED and obesity that does not center on the need for dieting but, instead, emphasizes the importance of specialized psychological, medical, and nutritional care;
- Be familiar with eating disorder specialists in your geographic area and be able to implement the referral process; and
- Confirm that patients follow through with BED treatment.

Binge-eating disorder subtypes may manifest in difficult-to-treat **food addictions**, which are common in patients with co-existing histories of addictive personality or substance abuse disorder. A marker of substance dependence includes consumption of high-fat/high-sugar foods.[14] A food addiction symptom count (using criteria similar to those for substance abuse disorder in the *DSM-5*) should be obtained for these patients.[15]

Emotions associated with binge eating may be experienced differently by **individuals from specific ethnic, racial, and cultural groups**.

Treatment

The American Psychiatric Association has established **levels of care guidelines** for patients with eating disorders, who can be difficult to treat. Many patients with BED experience shame, embarrassment, self-disgust, depression, and guilt as a result of their eating disorder. They tend to eat secretly or alone and may hide binge foods. Patients may deny that they have an eating disorder and may be reluctant to discuss BED with their HCP. Many patients who use binge eating to deal with difficult life situations are reluctant to eliminate this behavior and do not fully commit to a treatment program. Others welcome interventions that may improve HRQOL.

Nonpharmacologic approaches

Cognitive behavioral therapy, considered a first-line therapy for BED, and interpersonal psychotherapy are effective in patients with BED (*See Cases 1, 2, and 3*). Other nondrug approaches usually entail a combination of a lifetime nutritional plan, assertiveness training, improved stress management, and moderate exercise to increase lean muscle mass.

Pharmacotherapy

No agent is FDA-approved for the

Case study 2. Jackie, age 29

Height: 5'3"
Weight: 182 lb
BP: 128/86
Presentation: Routine gynecologic visit for Pap smear and contraceptive consultation
History: Fatigue, depression, abnormal weight gain
Family history: Father and older brother are obese. Mother has struggled with overweight all her life and is a lifetime member of a commercial weight-loss program in her community. Mother had bulimia when in college and has recently been diagnosed with type 2 DM.

Assessing for an eating disorder

Jackie is a registered nurse who works the night shift on the medical–surgical unit of a local hospital. When you pose the eating disorder screening question, she reports that, at work, she frequently becomes bored and tired. To stay awake, she drinks diet colas and grazes continually on candy, cookies, and other high-carb foods.

Jackie has gained 17 lb since her last visit 1 year ago. She does a 40-minute aerobic workout at a local gym 3 times a week. She is embarrassed to be seen by fit and/or thin gym members.

Over the past year, Jackie's relationship with her live-in boyfriend of 6 years has become unstable. The two of them work different shifts and spend little quality time together. Jackie spends most of her free time alone at home and binges nonstop from 3 to 5 PM. She is embarrassed to share this information with you.

Further discussion reveals low energy, diminished libido, and little desire to leave her home. She says that she has nothing to look forward to over the next few months. Her menstrual cycles are normal, but she expresses some concern because she has a friend who became overweight and had difficulty conceiving.

As the discussion about her eating disorder and weight gain continues, Jackie begins to cry, stating, *I feel so ashamed…I am a healthcare professional…I should be able to stop this, but I can't.* Although she is intelligent and well educated, Jackie is unhappy with her life circumstances and feels powerless to change them. To numb her feelings, she has turned to food. Binge eating gives her a temporary escape. After bingeing, she feels guilt and remorse. Her recent weight gain has contributed to her fatigue, low energy, poor body-image, and low self-esteem. You administer the Beck Depression Inventory. She scores high. You diagnose her with BED and major depressive disorder.

Treatment plan

For Jackie's treatment plan, you:

- Obtain a CBC, chemistry panel, TSH, and T4 to rule out nutritional anemia, DM, and hyperlipidemia. Results are normal.
- Prescribe bupropion HCl XL 150 mg/day, which may help improve her sexual dysfunction.
- Instruct Jackie to take a 20-minute brisk walk on non-gym days.
- Refer Jackie to an eating disorder treatment center for CBT, individual therapy, eating disorder recovery group enrollment for education and social support, and specialized medical management of BED.
- Recommend couples counseling for Jackie and her boyfriend.
- Follow-up in 2 weeks to evaluate the effects of bupropion HCl and confirm adherence to the treatment plan.

Follow-up

At a 2-week follow-up, Jackie states that she feels much better. She reports that her binge episodes are shorter, with one binge-free day. Her weight is 178.5 lb. She was seen by an eating disorder specialist and started on topiramate 25 mg/day 1 week ago. She has had one individual therapy session and has made an appointment for couples therapy. She plans to start attending a CBT group for eating disorders the following week. She has begun walking but managed to walk only 3 times in the past 2 weeks. She will continue her eating disorder recovery program weekly at the treatment center.

Prognosis

The prognosis for Jackie is excellent. Because this episode of major depression is her first, and because she is receiving multidisciplinary treatment for her BED, she stands a good chance for a full recovery.

treatment of BED. An application for an indication for **lisdexamfetamine dimesylate** as a treatment for BED likely will be filed soon with the FDA. Multiple **pharmacologic agents** have demonstrated benefits at varying dosages in trials conducted between 2005 and 2010.

Antidepressants

Antidepressants address common mood-related co-morbidities. Of note, many patients with BED consume tryptophan-containing carbohydrates that synthesize serotonin. When these patients' serotonin levels are low, cravings commence. Antidepressants that inhibit reuptake of serotonin can help decrease compulsive/binge eating. In many patients with co-morbid depression (or if CBT is unavailable), selective serotonin reuptake inhibitors (SSRIs) can decrease bingeing (and purging) by 50%, although some patients may not respond to treatment or may relapse with SSRI discontinuation.[16] **Bupropion** has beneficial effects on weight and does not have **SSRI side effects**. Bupropion dosages of 300-450 mg/day have been shown to be effective.[17]

Psychostimulants

Agents used to treat attention deficit hyperactivity disorder (ADHD) affect dopamine/norepinephrine systems associated with both the etiology of BED and eating behavior/reward behavior. An epidemiologic relationship between BED and ADHD has been noted in adolescents[18] and adults.[19] An association has also been reported be-

Case study 3. Rose, age 49

Height: 5'1"
Weight: 212 lb
BP: 150/96
Presentation: Gynecologic visit for irregular menstrual cycles and hot flashes; also complains of fatigue, depression, and abnormal weight gain.
History: Insomnia (delayed sleep), mood swings, abnormal weight gain, exertional dyspnea, and decreased exercise tolerance
Family history: Mother had myocardial infarction at age 55. Paternal health history is unknown to the patient.

A first-grade teacher, Rose is a single parent whose third child has recently left home to attend college, leaving her alone in her home. Her husband died of cancer 4 years earlier.

Assessing for an eating disorder

In response to the eating disorder screening question, Rose reports that she rarely prepares meals for herself. Instead, she consumes take-out meals from chain restaurants or pizza outlets. She feels anxious and occasionally has suicidal thoughts in the evening. She contents herself by eating continuously while watching TV. She often consumes an entire bag of corn chips or buttered popcorn, a half-liter of soda, and a pint of ice cream over 2-3 hours. She has always struggled with her weight and has gained 75 lb since her husband's death. She reports some functional difficulties when she tries to participate in activities with her students. She realizes that her diet is unhealthful. She fears that, like her mother, she may have a heart attack at an early age.

You administer the Beck Depression Inventory; her score is very high. Her 24-hour written food recall suggests consumption of 3,800 kcal/day.

Rose is grieving the loss of her family. She fears being alone and worries about what the future may hold. She has major depressive disorder with a strong anxiety component. She has been unknowingly self-medicating with food and has BED. As her NP, you explain the connection between her psychological problems and her disordered eating, and stress the importance of receiving specialized eating disorder treatment.

Treatment plan

For her treatment plan, you:

- Obtain CBC, CMP, lipid panel, TSH, and T4. Noteworthy results; total cholesterol, 225, with elevated LDL-C and low HDL-C; triglycerides, 380; FBG, 156; Hb, 10.4; and Hct, 20.
- Order FSH, LH, and prolactin levels to rule out menopause.
- Order HbA1c; if HbA1c is elevated, refer to endocrinologist for comprehensive DM evaluation and treatment recommendations.
- Administer resting ECG; results are normal.
- Refer to dietitian for nutritional counseling and education to lower lipids and BG, in order to reduce cardiovascular risk and control early-onset DM.
- Start citalopram 10 mg/day to improve depression and anxiety, and have Rose contract for safety in writing. If she refuses, she should be taken to a local ED for emergency psychiatric evaluation.
- Suggest OTC melatonin as sleep aid. Rose's insomnia is likely a symptom of anxiety, although perimenopausal status may contribute and will be assessed by tests.
- Refer to eating disorder treatment center for CBT program, individual therapy, an eating disorder recovery group for additional education and social support, and specialized medical treatment for BED.
- Schedule a follow-up visit in 2 weeks to evaluate the effects of citalopram and melatonin, and to ensure that Rose is following through with endocrinology and eating disorder referrals.

Follow-up

At a 2-week follow-up, Rose reports some improvement in sleep, mood, and anxiety, although little or no change in her eating behaviors. She is waiting for her first appointment at the eating disorder treatment center, scheduled for 1 week from today. She saw the endocrinologist this past week and was started on metformin 500 mg BID. She will see a diabetes educator in that office later this week. She has not purchased the melatonin because her sleep has been improving with the citalopram.

Prognosis

Rose's eating disorder recovery may be challenging because of the severity of her depression and her lack of social supports. Efforts are made to keep her engaged in mental health and eating disorder treatment, particularly group therapies.

tween bulimia nervosa (BN) and ADHD; a small study of patients with co-morbid BN and ADHD showed the efficacy of **psychostimulant medication**. An ongoing study is comparing methylphenidate with CBT in the treatment of BED.[20]

Pharmacotherapy during pregnancy

Few studies have evaluated the use of psychotropic agents during pregnancy other than a large cohort evaluation of **SSRIs**. Additional data may guide decision making regarding the use of agents such as **bupropion**, **methylphenidate**, **memantine**, **naltrexone**, **sodium oxybate**, **topiramate**, and **zonisamide** in pregnant women.

Conclusion

Binge-eating disorder is a complex, multifactorial condition that requires a comprehensive and integrated course of treatment. Nurse practitioners and other advanced practice HCPs caring for women are positioned to play important roles in patient assessment and management.

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Resources for patients

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National eating disorder organizations

- Binge Eating Disorder Association (BEDA), www.bedaonline.com, 855-855-2332
- National Association of Anorexia Nervosa and Associated Disorders (ANAD), www.ANAD.org, 630-577-1333/Helpline: 630-577-1330
- National Eating Disorders Association (NEDA), www.nationaleatingdisorders.org, 800-931-2237

Resources for healthcare providers

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