Eating Disorders and Disordered Eating: Basics for Healthcare Providers

Laura M. Bridge, MD, FACP
Associate Professor of Clinical Medicine
Division of General Internal Medicine
The Ohio State University Wexner Medical Center

MedNet21
Center for Continuing Medical Education

Disclosure Information

- I have no financial relationships to disclose.
- I will not be discussing the off-label or investigational use of any medications or therapies.

Learning Objectives

- Understand the spectrum of disordered eating and eating disorders (EDs)
- Understand the importance of weight-neutrality in healthcare
- Become comfortable initiating a weight-neutral conversation about eating behaviors
- Learn about available screening tools for EDs
- Learn the initial steps in the medical evaluation of an ED

What is an eating disorder (ED)?

- Brain-based biological and psychiatric disorder
- Characterized by disturbance in eating behaviors with associated ***functional impairment*** and emotional distress
- Occur in individuals of all ages, genders, sexual orientations, races, ethnicities, socioeconomic backgrounds, weights
  - Cannot be diagnosed by appearance

What is an eating disorder (ED)?

- Narrowly defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM), 5th Ed.
  - Published by the American Psychiatric Association (2014)
  - Established formal diagnostic criteria
  - Excludes many individuals at risk for serious medical and psychiatric complications

DSM 5 Diagnostic Categories

- Anorexia nervosa (AN)
  - Binge-purge subtype (AN-BP)
  - Restricting subtype (AN-R)
- Bulimia nervosa (BN)
- Binge eating disorder (BED)
- Avoidant/restrictive food intake disorder (ARFID)
- Other specified feeding and eating disorder (OSFED)
- Unspecified feeding or eating disorder (UFED)

Anorexia Nervosa

- Restriction of caloric intake due to intense fear of weight gain, leading to significant weight loss
- In pediatrics, may present as failure to appropriately gain weight or dropping off growth curve
- Ambivalence toward seriousness of situation is common
- Characterized by body shame, distorted body image, over-valuation of the thin ideal

Bulimia Nervosa

- Binge eating with compensatory purging
  - e.g., vomiting, laxatives, diuretics, over-exercise, diet pills
- At least once a week
- At least three months
- Characterized by body shame and over-valuation of the thin ideal

Binge Eating Disorder

- Eating a large quantity of food in a short time span, until extremely full, without compensatory purging
- Unrelated to physical hunger
- Associated with loss of control, shame, or guilt
- At least once a week
- At least three months
- Individuals may be “normal” weight

Avoidant/Restrictive Food Intake Disorder

- Extreme limitations in food intake
- May be due to sensory aversion (e.g, texture, smell)
- Or may be due to anxiety (e.g., fear of choking or being ill)
- Leads to weight loss or failure to grow, nutritional deficiencies
- Markedly interferes with psychosocial functioning
- Fear of gaining weight is absent

OSFED

- Not meeting full formal criteria for another DSM diagnosis
- Examples:
  - “Atypical” anorexia nervosa
  - Night eating syndrome
  - BED or BN of lower frequency or duration
  - Purging disorder

Atypical AN

- More common than “typical” AN
- Meets all DSM criteria for AN with exception of weight loss / underweight
- Same medical complications of starvation and malnutrition
- An example of bias and stereotyping at work in medicine

UFED

- Typically used when there is insufficient information to classify the ED
  - Placeholder during ongoing diagnostic evaluation
  - In an emergency department setting

What an ED is *NOT*

- An extreme diet or effective dieting technique
- A phase
- A choice or lifestyle
- Harmless
- A problem of young, affluent, white women
- Lack of willpower or effort (binging)
- Moral weakness or personal failing (binging)

What is disordered eating?

- "Non-normative" pattern of eating ***without functional impairment***
- May or may not cause psychological distress
  - e.g., restrictive dieting may lead to irritability, anxiety, or sense of deprivation
- Includes "aberrant" eating behaviors that result in mismatch between energy intake vs. expenditure (net deficit or excess)
- May impact metabolism and body weight
- May cause medical complications

What is disordered eating?

- Ubiquitous and often normalized in Western culture (including medicine)
- Examples:
  - Fad diets (e.g., keto, palaeo, Atkins, South Beach, intermittent fasting, Whole 30)
  - Cleanses
  - Diet supplements / metabolism "boosters"
  - Laxative or enema use for weight loss
  - Supplement misuse

What is disordered eating?

- Examples:
  - Over-focus on appearance / over-valuation of the thin ideal
  - Emotional eating or restriction
  - Eating in secret / hiding food
  - Loss of control eating
  - Elimination of a food or food group without a medical reason (e.g., confirmed allergy, confirmed diagnosis of lactose intolerance, confirmed diagnosis of celiac disease, etc.)

Language of disordered eating

- "I'm not dieting, I'm just eating ***clean***."
- "I'm not dieting, I'm just eating ***whole*** foods."
- "I ***feel fat*** in these pants."
- "Today is my ***cheat day***."
- "I've been really ***bad***, because of what I've been eating."
- "I've been really ***good***, because I'm making healthy choices."

Language of disordered eating

- "I'm ***cutting out*** carbs."
- "Hang on, I just have ***log*** my calories in my ***tracking app***."
- "I went for a longer run to ***make up for*** a piece of cake."
- "I'm going out later, so I'm going to ***skip*** breakfast."

Why do we eat?

- "Food is fuel"
  - Nutrition (i.e., survival needs)
- Social, communal, ritual
  - e.g., family meals, dinner with friends, holidays or special events, religious or cultural celebrations
- Soothing / comfort
  - e.g., your favorite childhood recipe after a rough day
- Food can be fun!

Food gets complicated when…

- It is labeled as inherently “good” or “bad”
- How we eat and what we weigh are interpreted as reflecting a person’s moral worth
- It becomes a surrogate for control in an uncertain, unpredictable world
- It is used to avoid or numb unpleasant or unwanted emotions or experiences (maladaptive coping)

What we eat or do not eat, and what we weigh, will never make any of us a better human being, heal a broken sense of self-worth, or fulfill our need for belonging and connection.

Behavioral Warning Signs

- Caloric restriction, fasting, or skipping meals
- Elimination of food groups
- Elimination of specific foods without a medical, ethical, or religious reason
- Rigidity around food (strict meal plan or diet, “food rules”)
- Over-concern with calorie-counting, ingredients

Behavioral Warning Signs

- Preoccupation with weight and body shape (often with high levels of shame)
- Exercising through illness or injury
- Avoidance of social events due to food, or bringing own food to events
- Compulsive eating or loss of control around food
- Eating in secret, hiding food wrappers

Signs and Symptoms

Signs and symptoms vary by eating behavior, but include…

- Weight fluctuations
- Irritability, anxiety, mood symptoms
- Impaired concentration
- Fatigue or generalized weakness
- Impaired sleep
- Social isolation / impairment

Signs and Symptoms

- Electrolyte abnormalities and fluid shifts
- Nutritional deficiencies
- Skin, hair, nail changes
- Cardiac
  - Palpitations
  - Bradycardia
  - Orthostatic hypotension or tachycardia
  - Symptomatic dizziness

Signs and Symptoms

- Gastrointestinal
  - Gastroesophageal reflux
  - Constipation
  - Diarrhea
  - Bloating
  - Gastroparesis
- Endocrine
  - Hypogonadism
  - Bone density loss

Eating Disorders in the Clinic

- Data from 2018-2019 estimates (published 2020)
  - Lifetime prevalence 9% (28.8 million Americans in U.S.)
  - One-year prevalence 5.48 million (1.66% of U.S. population)
- Rates are increasing
  - Projected one-year prevalence of 5.75 million cases by 2029-30 (+/- 5.5-22K)
  - Emergency department visits for girls with eating disorders aged 12-17 doubled from 2019 to 2020-21 (CDC data)

Eating Disorders in the Clinic

- Lifetime prevalence among males 4.07% (6.6 million)
  - Males are under-reported
- <6% of individuals with an ED are underweight
  - Higher-weight individuals have 2.45x odds of disordered eating, are diagnosed half as often and low/normal-weight
- OSFED is most common
- BED is second most common
  - Lifetime prevalence in U.S. adults 2.8%

Case Example

- 48-year-old female with new onset diabetes mellitus type 2
- Married mother of 2 teenage girls
- Employed full-time
- Last seen in clinic 2 years ago
- Experienced vision changes, prompting eye exam
- Diagnosed with diabetic and hypertensive retinopathy with hemorrhages and macular edema
- Initial hemoglobin A1c (HbA1c) is 9.9%

Case Example

- After ophthalmology diagnosis, patient started a commercial weight-loss program marketed to people with diabetes
  - Eliminated all carbohydrates
  - Extreme calorie restriction
  - 25 lb weight loss
- Exam today is unremarkable, with exception of weight loss
  - Blood pressure 121/78
  - Point-of-care A1c is 6.1%
  - Non-fasting blood glucose is 87 mg/dL

Case Example

- Patient would like to start a glucagon-like peptide-1 receptor agonist (GLP-1 RA)
  - Patient would like to continue losing weight

Case Example

- Past medical history: Non-contributory
- Medications: Metformin XR 1000 mg daily
  - Started 8 weeks ago
  - Tolerating well
- Labs:
  - LDL is 89 mg/dL, HDL 47 mg/dL, triglycerides 101 mg/dL
  - Unremarkable chemistry panel
  - No albuminuria

Case Example

- Family medical history
  - Sister with “overweight” BMI
  - Teenage daughter in treatment for anorexia nervosa

What do you ask next?

- Can you tell me more about why you want to start a GLP-1 RA, specifically?
  - “My sister just started semaglutide and is losing a LOT of weight on it!”

What do you ask next?

- Do you mind if we talk a little about your past experiences with dieting and with your weight? For some people this can be a very sensitive topic, so I would like you to share as much as you are comfortable.
  - Lifelong history of “overweight,” like many women in her family
  - Sick and tired of always being “too heavy”
  - Dieting since teenage years – nothing has worked (until now)
  - Really excited to continue losing! Friends and family are “super supportive!” and “so excited for me!”

What do you ask next?

- Why do you think it's important to ***continue*** losing weight?
  - "I mean, just look at me! This is not healthy! I ***need*** to lose weight!"
- Can you tell me what being healthy means to you?
  - …

Starting the Conversation

1. Normalize
   - "Many people have mixed emotions about their bodies."
   - "I've found that many people come to see me with past experiences around weight and their bodies that are not always that great, and sometimes they've had some very negative experiences with health professionals."

Starting the Conversation

2. Ask permission
   - “Do you mind telling me more about…?”
   - “Is it okay with you if we talk about…?”
   - “Please share as much as you are comfortable. You may stop at any time.”

Starting the Conversation

- Expect resistance
- Have tissues ready
- Allow time
- Build trust

Questions to Consider

- “How do you feel about your weight/size/shape?”
- “Do you have any concerns about your eating habits?”
- “Have you ever lost or gained a significant amount of weight quickly?”
- “Have you ever gone on a very restrictive diet in an attempt to lose weight?”

Weight Stigma

- Also called ***weight bias***
- A form of discrimination or stereotyping based on an individual’s BMI, body size (e.g., shape, appearance, impression of overweight / obesity)
- May be implicit or explicit (often both)
- Includes the assumption that individuals are responsible for their body size / weight / shape
- Often becomes internalized (i.e., self-blame)
  - Can lead to decreased self-efficacy

Weight Stigma

- Other assumptions may include
  - Larger individuals are lazy, morally inferior, lack willpower, and/or deserve the negative consequences associated with their body weight/shape/size
  - That larger individuals are “unhealthy”
  - That shaming larger individuals is helping to promote healthier behaviors that will lead to weight loss (i.e., “concern trolling”)
- Family members and ***physicians*** are the two most common perpetrators

Reconsidering Weight

- “Overweight” is ***not*** synonymous with unhealthy
- Losing weight does ***not*** necessarily make a person healthier
  - Weight loss can be markedly unhealthy
  - Weight fluctuations may increase cardiac and metabolic risk
- Gaining weight does ***not*** necessarily make a person less healthy

Weight-Inclusive Care

- Be self-aware
- Be compassionate
- Consider skipping the weigh-in
  - Not an option for individuals with restriction
- Leave weight and BMI off after visit summary
- Avoid comments about physical appearance
- Avoid language such as obese / obesity, morbidly obese
  - Alternatives: higher weight, larger body, fat (ask the patient!)

Weight-Inclusive Care

- Pay attention to the environment
  - Furniture (e.g., sturdy chairs without armrests)
  - Location of scale
- Equipment (e.g., BP cuff, gowns, drapes, tables)
  - Is it easily accessible? Or stored separately/out of the way?
- Include all staff

Weight-Inclusive Care

- De-emphasize weight
- Re-emphasize health with shared decision-making
  - Movement (not “exercise”)
  - Sleep
  - Alcohol, substance use, tobacco
  - Social connection
  - Cancer screening and other preventative health
  - Chronic disease management
  - Eating habits (e.g., balanced, “all foods fit,” intuitive)

When and How to Screen

- USPSTF found insufficient evidence for routine screening in general healthy adolescent and adult population
- Many validated screening tools exist
  - All lack high positive predictive value
  - Not designed to detect newer DSM V diagnoses
- Screening tools are not necessarily better than clinical judgment

When and How to Screen

- Consider screening in at-risk population
  - History of trauma or adverse childhood experiences
  - Young adults
  - Females
  - Transgender individuals
  - Athletes
  - Rigid or perfectionistic tendencies

When and How to Screen

- Consider screening individuals with signs/symptoms or another primary mental health condition
  - Anxiety
  - Depression
  - Post-traumatic stress disorder
  - ADD/ADHD
  - Substance use disorder

Screening Tools: SCOFF

- SCOFF
  - Cut-off of 2 or more
  - Sensitivity of 84% and specificity of 80% for any ED
  - Sensitivity is lower in adolescents
  - May miss binge eating and OSFED diagnoses

Screening Tools: SCOFF

Do you ever make yourself **Sick** because you feel uncomfortably full?

Do you worry you have lost **Control** over how much you eat?

Have you recently lost more than **One** stone (14 lb) in a 3 month period?

Do you believe yourself to be **Fat** when others say that you are too thin?

Screening Tools: EDS-PC (or ESP)

- Eating Disorder Screen for Primary Care
  - Cut-off of 2 or more
  - Sensitivity range 97-100%
  - Specificity range 40-71%

Screening Tools: EDS-PC (or ESP)

- Are you satisfied with your eating patterns? (No = 1)
- Do you ever eat in secret? (Yes = 1)
- Does your weight affect the way you feel about yourself? (Yes= 1)
- Have any members of your family suffered with an eating disorder? (Yes = 1)
- Do you currently suffer with or have you ever suffered in the past with an eating disorder? (Yes = 1)

Screening Tools: SDE

- Screen for Disordered Eating
  - Cut-off of 2 or more
  - Sensitivity 91%
    - Sensitivity for BN and AN is 100%
    - Sensitivity for BED is 87%
  - Specificity is 58%
  - Positive predictive value is 28%

Screening Tools: SDE

- Do you often feel the desire to eat when you are emotionally upset or distressed?
- Do you often feel you cannot control what or how much you eat?
- Do you sometimes make yourself throw up (vomit) to control your weight?
- Are you often preoccupied with the desire to be thinner?
- Do you believe yourself to be fat when others say you are thin?

Screening Tools: EAT

- Eating Attitudes Test
  - EAT-26 (short form) and EAT-40 (long form)
  - EAT-26 validated cross-culturally
  - Available to download in many languages
  - Internationally, the most commonly used self-report screener
  - Influenced by self-report bias (minimization)
  - Sensitivity 80-85%
  - Specificity 85-90%

I think this patient has an ED… now what?

- Most medical complications resolve completely with both…
  - Cessation of behaviors (e.g., restriction, binging, purging, etc.)
  - Nutritional rehabilitation
- Some complications are permanent
- Early diagnosis and treatment of the ED is essential

Now what?

- Physical examination
  - Blind weight
  - Orthostatic blood pressures
  - Temperature
  - Electrocardiogram
- Limited laboratory studies
  - Comprehensive metabolic panel (including phosphorus)
  - Complete blood count
  - Thyroid function studies

Signs of Medical Instability

- Severe malnourishment
  - ≤ 75% (or 70%) median BMI for age, sex, and height
  - BMI Z-score ≤ -3.0 (children and adolescents)
  - Adult female with BMI < 15.2 or male < 16.0
  - Significant or rapid weight loss, even if not underweight
    - > 20% pre-morbid weight in 12 mos. *or* > 10% in 6 mos.
  - Deceleration in BMI across three Z-scores or CDC growth curve lines
  - Consuming ≤ 25% of estimated nutritional needs

Signs of Medical Instability

- Hypoglycemia
- Abnormal electrolytes (potassium, phosphorus, acid-base)
- Hemodynamic instability
  - Bradycardia
  - Orthostatic hypotension
  - Hypothermia

Indications for Hospitalization

- Acute medical complications of malnutrition
  - e.g., syncope, seizure, heart failure, pancreatitis, etc.
- ECG abnormalities
  - e.g., QTc > than 450 ms, heart rate < 40 bpm, arrhythmia
- Abnormal electrolytes (potassium, phosphorus, acid-base)
- Complete food refusal
- Psychiatric instability
  - e.g., suicidal thoughts / behaviors, aggressive or unsafe

Baseline Evaluation

- Avoid fasting labs, unless absolutely necessary
- Amylase is neither sensitive nor specific for vomiting
- Albumin and pre-albumin are ***not*** reliable markers of nutritional status
- Echocardiography is not routinely indicated
- Don't treat euthyroid sick syndrome with thyroid replacement

Now what?

- An ED is ***not*** a diagnosis of exclusion
- Unnecessary testing…
  - …delays diagnosis and intervention
  - …may cause iatrogenic harm
- Refer, refer, refer!!!
  - Standard of care is ***multidisciplinary*** with ***experienced*** eating disorder treatment professionals

Multidisciplinary Team

- **Registered dietician: Nutritional rehabilitation**
- **Counselor: Psychotherapy**
  - Eating disorder cognitions
    - Food and eating
    - Weight
    - High levels of anxiety and shame
  - Co-morbid mental health conditions
    - PTSD, OCD, ADHD, GAD, MDD, etc.

Multidisciplinary Team

- Primary care (and medical specialists, if needed):
  - Medical stabilization and monitoring
  - Treatment of physical symptoms
- Primary care or psychiatrist:
  - Psychiatric medication management

Revisiting the Case

- Patient was medically stable
- Referred to a dietician specialized in eating disorders
  - Reintroduced carbohydrates
  - Started to learn principles of intuitive eating
- Metformin continued
- Repeat HbA1c was 5.7%
- Semaglutide was ***not*** started
- Referred to a counselor specializing in eating disorders

Revisiting the Case

- Continues to follow with ED dietician on intuitive eating, eating for nutrition and pleasure, food rules and rigidity
- Continuing to work on disordered body image and internalized weight stigma in counseling
  - Working to redefine health independent of body size
- Following with primary care to monitor for malnourishment and to monitor for excessive weight loss

Take Away

- Disordered eating and eating disorders exist on a spectrum
- DSM diagnostic criteria may not capture all individuals at high psychiatric and medical risk
- EDs are common
  - Both incidence and prevalence are increasing
  - You are already treating these patients!
- Screening questionnaires can be a helpful clinical tool, but they don't supersede clinical judgment

Take Away

- Know the signs and symptoms
- Don't be afraid to initiate the conversation
- At all times, how we talk about weight matters
  - If it isn't relevant, don't talk about it!
  - Weight ≠ health
- Early referral to experienced treatment professionals is essential to ED recovery

Resources

Eating disorders: A comprehensive guide to medical care and complications, 4th ed. Ed. Mehler PS and Anderson AE. Baltimore: The Johns Hopkins University Press, 2022.

Gaudiani JL. ***Sick enough: A guide to the medical complications of eating disorders and undernutrition, 2nd ed.*** New York: Routledge, 2026.

Resources

Eating disorders: A guide to medical care. Academy for Eating Disorders Report 2021. 4th ed. Available at https://irp.cdn-website.com/6a4a8a38/files/uploaded/2120_AED_Medical_Care_4th_Ed_FINAL.pdf. Accessed 4 Oct 2026.

Resources

Academy for Eating Disorders

- Professional references and information on the diagnosis and treatment of eating disorders
- www.aedweb.org

National Eating Disorders Association

- Information, advocacy, and patient support
- https://www.nationaleatingdisorders.org

Resources

National Alliance for Eating Disorders

- Information, advocacy, patient support (including support groups), and assistance locating treatment
- https://www.allianceforeatingdisorders.com/

Project HEAL

- Assistance locating and financing treatment
- https://www.theprojectheal.org/