Eating Disorders 101
Understanding Eating Disorders
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Learning Objectives

1. List the diagnostic criteria and review the typical clinical symptoms for common eating disorders.

2. Become familiar with the biopsychosocial model for understanding the causes of eating disorders.

3. Understand treatment options and goals for eating disorder recovery
Declaration of Conflict of Interest

I have no relevant financial relationships with the manufacturer(s) of any commercial product(s) and/or provider (s) of commercial services discussed in this CE/CME activity.
What is an eating disorder?

Eating disorders are serious, life-threatening, multi-determined illnesses that require expert care.
Eating Disorders May Be Invisible

- Eating disorders occur in males and females
- People in average and large size bodies can experience starvation and malnourishment
- Even experienced clinicians may not recognize the medical consequences of EDs
Importance of Screening and Early Detection

- Delay in appropriate treatment results in
  - Associated with numerous med/psych/social complications
  - These may not be completely reversible
  - Long-lasting implications on development

- Longer the ED persists, the harder it is to treat
  - Crude mortality rate is 4 - 5%, higher than any other psychiatric disorder (Crow et al 2009).
  - Costs for AN treatment and quality of life indicators, if progresses into adulthood, rivals Schizophrenia (Streigel-Moore et al, 2000).
AN-Diagnostic Criteria

• Restriction of energy intake relative to requirements resulting in low weight
• Intense fear of gaining weight or interference in gain
• Disturbance in weight or shape experience, excessive influence on self-evaluation, or lack of recognition of seriousness of low weight
• Severity levels
  – Mild (>17), Moderate (16-16.9), Severe (15-15.9) Extreme (<15)

(APA, 2014)
AN-Diagnostic Criteria

**Restricting Type:** during the current episode of Anorexia Nervosa, the person has not regularly engaged in binge-eating or purging behavior

**Binge-Eating/Purging Type:** during the current episode of Anorexia Nervosa, the person has regularly engaged in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas)

*Amenorrhea NO longer included in criteria*
Anorexia Nervosa

Warning signs

• Eat only “safe foods”, those low in calories or fat
• Have odd rituals, such as cutting food into small pieces
• Spend more time playing with food than eating it
• Cook meals for others without eating
• Engage in compulsive exercise
• Dress in layers to hide weight loss
• Spend less time with family and friends, become more isolated, withdrawn, and secretive

Symptoms

• Menstrual periods may cease
• Osteopenia or osteoporosis through loss of calcium and estrogen
• Hair/nails become brittle
• Skin dries and can take on a yellowish cast
• Mild anemia and muscles, including the heart muscle, waste away
• Severe constipation
• Drop in blood pressure, slowed breathing and pulse rates
• Internal body temperature falls, causing person to feel cold all the time
• Depression and lethargy
Avoidant/Restrictive Food Intake Disorder (ARFID)

An eating or feeding disturbance (lack of interest in eating or food; avoidance of certain food groups, textures/smells). Failure to meet the appropriate nutritional/energy needs. There is significant weight loss, nutritional deficit, relies on supplements, interference with day-to-day functioning.

- Seek treatment at average age of 12 (Fisher, 2014)
- 14% of patients incoming to treatment centers have ARFID 30% are male (Fisher, 2014)
- Examples:
  - Traumatic experience with a certain food, i.e. choking once on a green bean. Now afraid to eat all green food.
  - Picky or fussy eating as a child which progresses to ARFID.
Definition of a “Binge”

(1) Eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances.

(2) A sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).
Bulimia Nervosa

- Recurrent episodes of binge eating
- Recurrent inappropriate compensatory behaviors to prevent weight gain
  - Misuse of laxatives, self-induced vomiting, diuretics, enemas, fasting, exercise
- Binge and purge episodes occur on average once per week for three months
- Self-evaluation is unduly influenced by shape/weight
- The disturbance does not occur exclusively during episodes of Anorexia Nervosa
- Categorized severity based on number of episodes of compensatory mechanisms per week i.e. mild average of 1-3, severe avg. of 14+

(APA, 2014)
Purging Methods

• Self-induced vomiting
• Laxative abuse
• Diuretic misuse
• Enemas
• Exercise
Bulimia Nervosa

**Symptoms from chronic vomiting**

- Chronically inflamed and sore throat
- Swollen parotid glands (“chipmunk cheeks”)
- Tooth enamel wears off; decay due to exposure to stomach acids
- GERD
- Severe dehydration
- Muscle loss and muscle pain, electrocardiographic changes, congestive heart failure, arrhythmia, and sudden death

**Symptoms from laxatives/diuretics abuse**

- Intestinal problems
- Kidney problems
- Muscle weakness, fatigue, cardiac arrhythmias, dehydration
- Electrolyte imbalance such as low potassium, high blood pH, mild elevations of serum amylase, low magnesium and low phosphorous
Binge Eating Disorder

- Recurrent episodes of binge eating
- Binge eating episodes are associated with at least three:
  1. Eating much more rapidly than normal.
  2. Eating until feeling uncomfortably full.
  3. Eating large amounts of food when not physically hungry.
  4. Eating alone because of embarrassment.
  5. Feeling disgusted with oneself, depressed, or very guilty after overeating.
- Marked distress regarding binge eating.
- At least once a week for 3 months.
- No recurrent use of inappropriate compensatory behavior.
Binge Eating Disorder

• Used to describe individuals who binge eat but do not use extreme compensatory behaviors such as fasting or purging to lose weight.

• Many of these individuals suffer from debilitating patterns of eating for self-soothing rather than following physiological cues to eat.

• 2 distinct subcategories of binge eating:
  • Deprivation-sensitive
    – Appears to be the results of weight loss diets or periods of restrictive eating, both of which result in binge eating episodes.
  • Addictive or dissociative binge eating
    – The practice of self-soothing with food unrelated to prior restricting. Many individuals report feelings of numbness, dissociation, calmness, or regaining of inner equilibrium after binge eating.
Clinical Presentation-BED

- Most common eating disorder in males
- Obesity, including severe obesity in 50% of patients (BMI ≥40), Most patients/subjects with BED are in larger bodies but can be of normal weight
- 30% of individuals in weight-loss programs have BED
- 25% to 50% of patients seeking bariatric surgery have BED
- Experience many other psychiatric and physical illnesses including metabolic syndrome
- Patients with BED commonly ask for help with depression or weight gain rather than binge eating per se
- BED symptoms often increase during stress
- Experience body image concerns too!
Differentiating BN and BED

BN
- Binge eating, often episodes more severe
- Compensatory behavior
- Over concern regarding shape/weight
- Once/wk x 3 months
- Generally in normal weight range

BED
- Binge eating
- Absence of compensatory behavior
- Indicators of loss of control (re: binge eating)
- Marked distress, often with weight/shape concerns
- Once/wk x 3 months
- Generally have larger body sizes
Feeding or Eating Condition Not Otherwise Classified

**Atypical Anorexia** - All of the criteria for Anorexia Nervosa are met, except that, despite significant weight loss, the individual’s weight is within or above the normal range.

**Subthreshold Bulimia Nervosa (low frequency or limited duration)** - All of the criteria for Bulimia Nervosa are met, except that the binge eating and inappropriate compensatory behaviors occur, on average, less than once a week and/or for less than 3 months.

**Purging Disorder** - Recurrent purging behavior to influence weight or shape, such as self-induced vomiting, misuse of laxatives, diuretics, or other medications, in the absence of binge eating. Self-evaluation is unduly influenced by body shape or weight or there is an intense fear of gaining weight or becoming fat.
Psychiatric COMORBIDITY IS THE RULE!

- Depression/Mood challenges
  - 33-50% in AN, nearly 50% in BN and nearly 50% in BED (Ulfevbrand et al. 2015)
- Anxiety Disorders (OCD, GAD, Panic, PTSD)
- Alcohol and other substance abuse disorders are 4 times more common than in the general populations (Harrop & Marlatt 2010).
- Personality Disorders
- Non-suicidal self-injury
- Suicidal Ideation and attempts
  - Occurs across the spectrum of disorders
  - 1 in 5 deaths in AN related to suicide (Arcelus et al. 2011)
- Acute effects of malnutrition impact mood and anxiety AND eating disorder behaviors often serve to manage mood/anxiety for patients albeit temporarily
The etiology of eating disorders is multifactorial

- Biology/Genetics
- Social/Environmental factors
- Psychological traits/Temperament

Treatment must be focused on all three areas!
Biologic Risk Factors

- Genetics (family history)
- Instrumental delivery
- Twins
- Low birth weight
- Temperament
- Early or late puberty
Predisposing genetic factors-AN and BN

- Family studies- female relatives of someone with an ED have >x4 risk of BN and >x11 risk AN than someone with no family history (probably higher for subclinical and partial syndromes)
- Twin studies – (MZ:DZ concordance) – AN has estimated heritability of 58 -76 %, BN from 31 – 83%
- These heritability estimates are in line with those of Major Depression, Bipolar Disorder and Schizophrenia
- Heritability estimate for breast CA is about 27% (Lichtenstein, 2000)
Biologic Perpetuating Factor of Starvation
Semi-Starvation Experiment Ancel Keys et al.

40 healthy male volunteers (Conscientious Objectors of WW II)

- **3 month** observation
- **6 month** semi starvation
  - Emotional and personality changes
    - Depression, irritability, apathy, obsessionality
  - Preoccupation with food, food hoarding, binge eating, altered taste/preferences
- **3-9 month** refeeding and observation
- **2 mo. - 2 years** to return to baseline
Biologic Perpetuating Factor- Starvation

• Low body weight and dieting can result in eating disorder behavior and thinking.

• Treatment goal is to normalize weight before we can expect to normalize behavior and thinking.
Psychological Predisposing Factors

• Perfectionism
• Obsessive-compulsiveness
• Negative emotionality
• Harm avoidance
• Core low self-esteem
• Avoidant personality disorder traits
• Specific additional personality traits may be associated with each type of eating disorder
• Prolonged starvation induces change in cognition, behavior, and interpersonal characteristics
Body Image

• Society associates being “thin”, with “hard-working, beautiful, strong and self-disciplined.” Being “fat” is associated with being “lazy, ugly, weak and lacking will-power.”

• According to the NEDA
  – the average American woman is 5ft 4in and weighs 140lbs.
  – the average American model is 5ft 11in and weighs 117lbs.

• The female ideal has become progressively thinner, so that typical female models are now often as much as 20% underweight (with 15% underweight the diagnostic criterion for anorexia nervosa).
Sociocultural Factors: S.I. - Over The Years

1965

2011
**Sociocultural Factors**

- **Dieting**
  - Dieters at 5-year follow-up were at significantly higher risk for ED behaviors, and at greater risk for obesity (Neumark-Sztainer, Wall, Story, Haines, & Eisenburg, 2006)
  - In another study, dieters were 5 times more likely to develop an ED, severe dieters 18 times. (Patton, Selzer, Coffey, Carlin, & Wolfe, 1999)
  - Caloric restriction combined with stress produces binge eating in animals.

- **Transitions, loss**

- **Violence or abuse**
Sociocultural Factors Continued

• Western Ideals of thinness
• Parent child interactions
• Family structure
• Ethnicity
• Conflict between traditional and modernizing roles for women
• Peer influences: sororities, sports (dancers, gymnasts, wrestlers, jockeys)
• Media
• Eating disorders are viewed as “disorders of choice” caused by striving for cultural ideal
• Devalues the seriousness of the disorders
• Deprioritizes EDs as fund worthy
• Hinders basic research
Putting It All Together

- GENETICS
- Vulnerability to ED
- BIOLOGICAL FACTORS
- SOCIOCULTURAL FACTORS
- Trauma
- Life transition
- Family problems/tension
- Stress
- Life change
- Physical Development
- Nutritional Insufficiency
- “Get Healthy”, Dieting
- Ongoing stress
- Ongoing family tension
- Social Withdrawal
- EATING DISORDER
Stress

“Make healthy changes”

Anxiety
Mood

Weight Loss

Dieting: regain + 10%

Anxiety
Mood

Neurobiological changes
“The Click”

Nutritional Restoration

Address temperament, stress history, family dynamics & coping

• Rules/Rituals
  • Preoccupied with thoughts about weight/shape/food/appearance
  • Social Withdrawal
  • Denial

• Culture Change: e.g. Middle school, college
• Physical Change: e.g. Puberty, pregnancy, acute illness
• Relationship Change: e.g. Parental divorce, loss of friend
• Trauma: e.g. Bullying, assault

• Anxious
• Obsessional
• Perfectionistic
• Routine Oriented
• Rule Follower
• Risk Averse
• Low expressed emotion
• Conflicts Avoidant
• Well liked
• Successful
• Low self esteem

• Impulsive
• Risk Taker
• Struggles with rules/authority
• High emotional expression
• Interpersonal Reactivity
Stress

Anxiety
Mood

Diet or “Health Plan”

Weight Loss
Regain (plus 10%)

Anxiety
Mood

Neurobiologic changes
“The Click”

Abnormal Eating Habits
Food-related behaviors
- Avoidance
- Addiction-like

Culture Change: e.g. Middle school, college
Physical Change: e.g. Puberty, pregnancy, acute illness
Relationship Change: e.g. Parental divorce, loss of friend
Trauma: e.g. Bullying, assault

Nutritional Restoration

Address temperament, stress history, family dynamics & coping style

“Disgusting.” “Wrong.”

Preoccupied with thoughts about weight/shape/food/appearance
- Social Withdrawal
- Denial
- Poor treatment responsivity

Rules/Rituals

Extreme cognitive rigidity

Isolation

Risk Averse

Preoccupied with thoughts about weight/shape/food/appearance

Anxiety
Mood

Well Liked

Successful

Low self esteem

Identity is fused with ED

Anxious

Obsessional

Perfectionistic

Routine Oriented

Rule Follower

Conflict Avoidant

Low expressed emotion

Culture Change:
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Nutrition Treatment of Eating Disorders

Nutrition Philosophy

• No “good” and “bad” foods
• Balance, variety, moderation
• AVOID food restriction or low calorie meal planning.
Importance of Weight Restoration

• Prevent serious health consequences (i.e., Osteoporosis)
• Improve physical and cognitive effects of low body weight
  • Fatigue, weakness
  • Food preoccupation
  • Decreased concentration
  • Social withdrawal
  • Depression, anxiety
• Improved ability to use psychotherapy

**Full weight restoration is essential for full recovery from Anorexia Nervosa**
Treatment of Eating Disorders

Interrupting Behaviors and PRACTICE

- Restricting
- Binging
- Purging
- Exercise
- Common Meal Behaviors
Treatment of Eating Disorders

Levels of Care

• Inpatient (IP)
• Residential (RES)
• Partial Hospitalization Program Plus (PHP+)
• Partial Hospitalization Program (PHP)
• Intensive Outpatient (IOP)
• Outpatient (OP)
• All decisions are made to protect the ED
• Familiar
• Not acute/uncomfortable
• Dependence
• Isolation
• Despair, Dissatisfaction
• Death

“Tipping Point”
• Hope
• Understanding
• Full nutritional stabilization
• Build a life, establish relationships that preclude the ED

• 3 Pillars of Recovery
  • Mindsight
  • Values
  • Connections

• Decisions are present centered
• Identity development
• Spiritual development
• Vocational development
Treatment of Eating Disorders: Addressing Maintaining Factors

• Unmanaged anxiety, depression, OCD, mood disorder
• Identity Development and Values Work: Worth determined by physical attributes
• Ongoing trauma or trauma responses
• Interpersonal communication skills
Be A Positive Role Model

- Refrain from talking about your child’s shape and size
- Refrain from ‘Fat Talk’ - Be aware of comments you make about your own body
  - If you are a parent, talk to your children about images in the media
  - Encourage non-biased conversations about food and exercise
  - Focus on who people are, not what they look like
- Demonstrate balance, variety, moderation

*When we engage in ‘fat talk’ and critique our own bodies or the bodies of others, we teach children to value thinness above all else.*

-Ovídio Bermudez, MD, FAAP, FSAHM, FAED, CBDS
Resources For You!

- Academy for Eating Disorders (AED) – www.aedweb.org
- Anorexia Nervosa and Related Eating Disorders, Inc. (ANRED) – www.anred.com
- International Association of Eating Disorders Professionals (IAEDP) – www.iaedp.com
- National Association of Anorexia Nervosa and Associated Disorders (ANAD) – www.anad.org
- National Association to Advance Fat Acceptance (NAAFA) – www.naafa.org
- National Center for Overcoming Overeating (NCOO) – www.overcomingovereating.com
- National Eating Disorders Association – www.nationaleatingdisorders.org
- Eating Disorder Hope – www.eatingdisorderhope.com
- National Association for Men with Eating Disorders (NAMED) – www.namedinc.org
NO BODY is perfect
Questions?