Eating Disorders and Disordered Eating: Overview and Considerations for Recognition and Treatment in Youth

1550-1650

"Medically Ready Force…Ready Medical Force"

Presenter(s)

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Disclosures

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Learning Objectives

At the conclusion of this webinar the participants will be able to:

1) Define the symptoms that characterize full and subthreshold eating disorders
2) Identify factors to consider when evaluating for an eating disorder in youth
3) Recognize unique factors and/or risk within specific subgroups
4) Understand levels of care and multi-disciplinary approach to eating disorder treatment

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DHA Clinical Communities Speaker Series

26 March 2020

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Overview

What are we talking about?

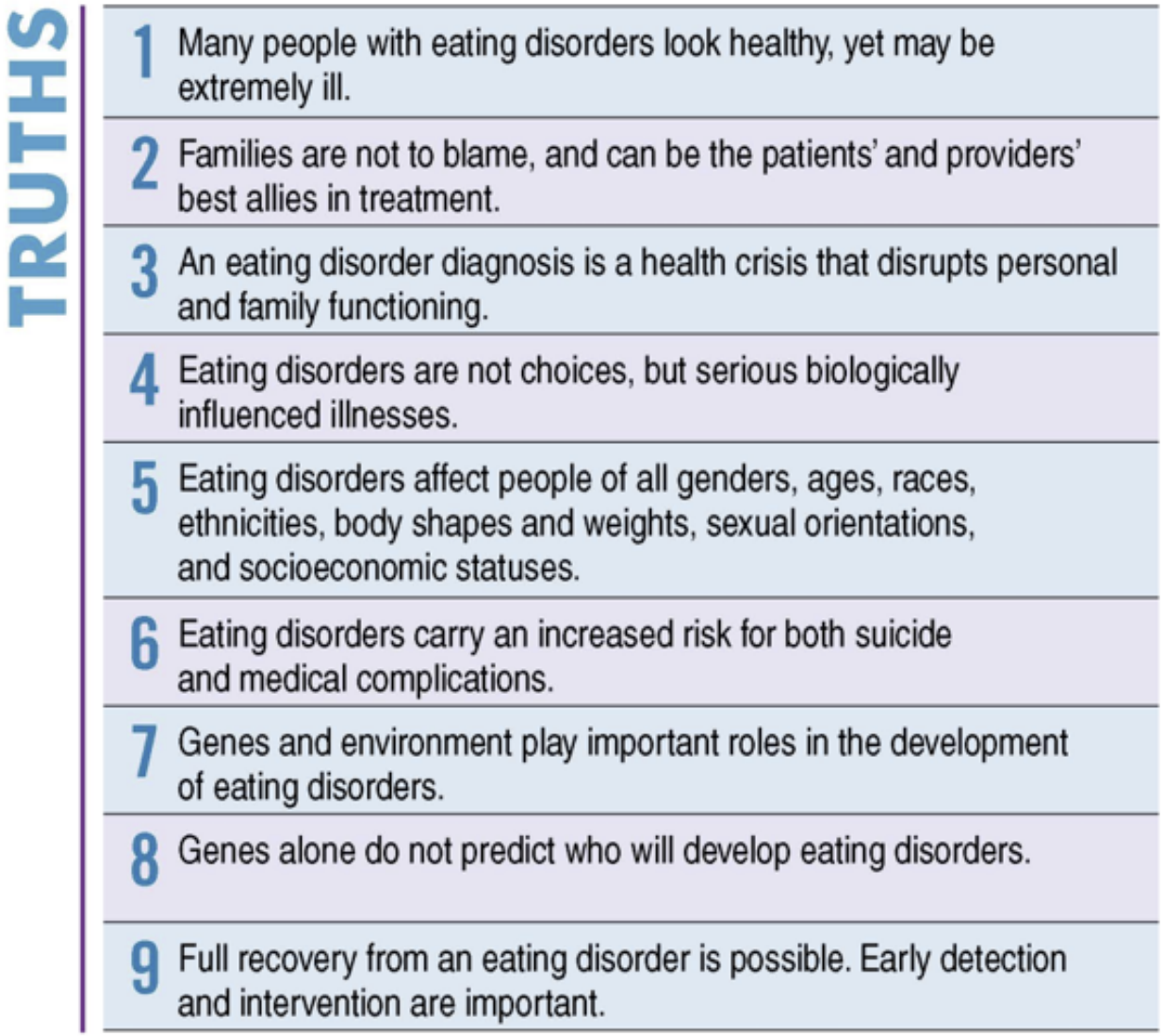
- Eating disorders are serious psychiatric illnesses characterized by a persistent pattern of unhealthy eating or dieting behavior that can cause health problems and/or emotional and social distress

- Even if an individual does not meet the formal criteria for an eating disorder, he or she may experience disordered eating attitudes and/or behaviors that cause substantial distress and may be harmful to both physical and psychological health

- Biopsychosocial illness
  - Etiology/maintenance
  - Consequences

APA, 2013; Culbert et al., 2015

Nine Truths about Eating Disorders



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Produced in collaboration with Dr. Cynthia Bulik, PhD, FAED, who serves as distinguished Professor of Eating Disorders in the School of Medicine at the University of North Carolina at Chapel Hill and Professor of Medical Epidemiology and Biostatistics at the Karolinska Institutet in Stockholm, Sweden. "Nine Truths" is based on Dr. Bulik's 2014 "9 Eating Disorders Myths Busted" talk at the National Institute of Mental Health Alliance for Research Progress meeting.

Publicly available at:
https://www.aedweb.org/resources/online-library/publications/nine-truths

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Why are eating disorders important to consider, especially in youth?

- Seriousness
  - Eating disorders have among the highest mortality rates of any psychiatric disorder
  - Eating disorders are associated with serious health consequences
    - Potentially lasting consequences for youth
- Course and Timing
  - Many experience a protracted symptom course, even with treatment
  - Average age of onset for many eating disorders is during youth
  - Early intervention may produce better long-term outcomes

APA, 2013; Arcelus et al., 2011; Keel & Brown, 2010; Mitchell & Crow, 2006; Treasure & Russell, 2011

ED Prevalence in Youth

- US Epidemiology: Lifetime prevalence
- 10,123 youth age 13-18

	AN	BN	BED	Sub-AN	Sub-BED
Total	0.3%	0.9%	1.6%	0.8%	2.5%
Female	0.3%	1.3%	2.3%	1.5%	2.3%
Male	0.3%	0.5%	0.8%	0.1%	2.6%

APA, 2000; Swanson et al., 2011

Co-Occurring Disorders in Youth with EDs

- 10,123 youth age 13-18

	AN	BN	BED
Mood Disorder	10.9%	49.9%	45.3%
Anxiety Disorder	23.9%	66.2%	65.2%
Substance Use Disorder	13.0%	20.1%	26.8%
Behavioral Disorder	31.7%	57.8%	42.6%

APA, 2000; Swanson et al., 2011

What to Look For

Anorexia Nervosa (AN)

- Diagnostic Criteria
  - Restricted energy intake resulting in significantly low body weight (i.e., less than minimally normal in adults or less than minimally expected in youth)
  - Intense fear of weight gain or fear of becoming fat, or persistent behavior interfering with weight gain despite low weight
  - Disturbance in experience of body weight or shape, body weight or shape overvaluation, or persistent lack of recognition of seriousness of current low body weight

  - Subtypes
    - Restricting
    - Binge-eating/purging

APA, 2013

Bulimia Nervosa (BN)

- Diagnostic Criteria
  - Recurrent binge eating behavior
    - Consuming in a discrete period of time an unusually large amount of food
    - Experiencing a sense of lack of control over eating during the episode
  - Recurrent inappropriate compensatory behaviors to prevent weight gain (e.g., purging, fasting, excessive exercise)
  - Binge eating and compensatory behaviors both occur ≥ 1x/wk for 3 mo
  - Overvaluation of body shape and weight
  - Does not occur exclusively during anorexia nervosa

APA, 2013

Binge Eating Disorder (BED)

- Diagnostic Criteria
  - Recurrent binge eating behavior (large amount + loss of control)
  - Binge eating episodes associated with ≥ 3:
    - Eating much more rapidly than normal
    - Eating until uncomfortably full
    - Eating large quantities of food when not physically hungry
    - Eating alone because of embarrassment over how much one is eating
    - Feeling disgusted, depressed, or very guilty afterwards
  - Marked distress about binge eating
  - Binge eating occurs ≥ 1x/wk for 3 mo
  - No recurrent use of compensatory behavior and does not occur exclusively during anorexia nervosa

APA, 2013

Avoidant/Restrictive Food Intake Disorder (ARFID)

- Diagnostic Criteria
  - Feeding/eating disturbance (e.g., apparent lack of interest in eating food; avoidance based on the sensory features of food; worry about aversive consequences of eating) leading to failure to meet appropriate nutritional and/or energy needs involving (one or more):
    - Significant weight loss or failure to achieve expected weight gain/growth
    - Significant nutritional deficiency
    - Dependence on enteral feeding or oral nutritional supplements
    - Marked interference with psychosocial functioning
  - Not due to lack of available food or a culturally sanctioned practice
  - Rule out AN and BN, no disturbance in body image
  - Not attributable to a concurrent medical condition and not better explained by another mental disorder

APA, 2013

Additional Feeding Disorders

- Rumination Disorder
  - Repeated regurgitation of food > 1 mo; re-chewed, re-swallowed, or spit out
  - Not attributable to a GI or other medical condition
  - Rule out AN, BN, BED, ARFID
  - If occurring in context of other mental disorder, severe enough to warrant additional clinical attention

APA, 2013

Additional Feeding Disorders

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- Pica
  - Persistent eating of nonnutritive, nonfood substances > 1 mo
  - Inappropriate to the individual's developmental level
  - Not part of a culturally supported or socially normative practice
  - If occurring in context of other mental disorder or medical condition, severe enough to warrant additional clinical attention

APA, 2013

Subthreshold Presentations

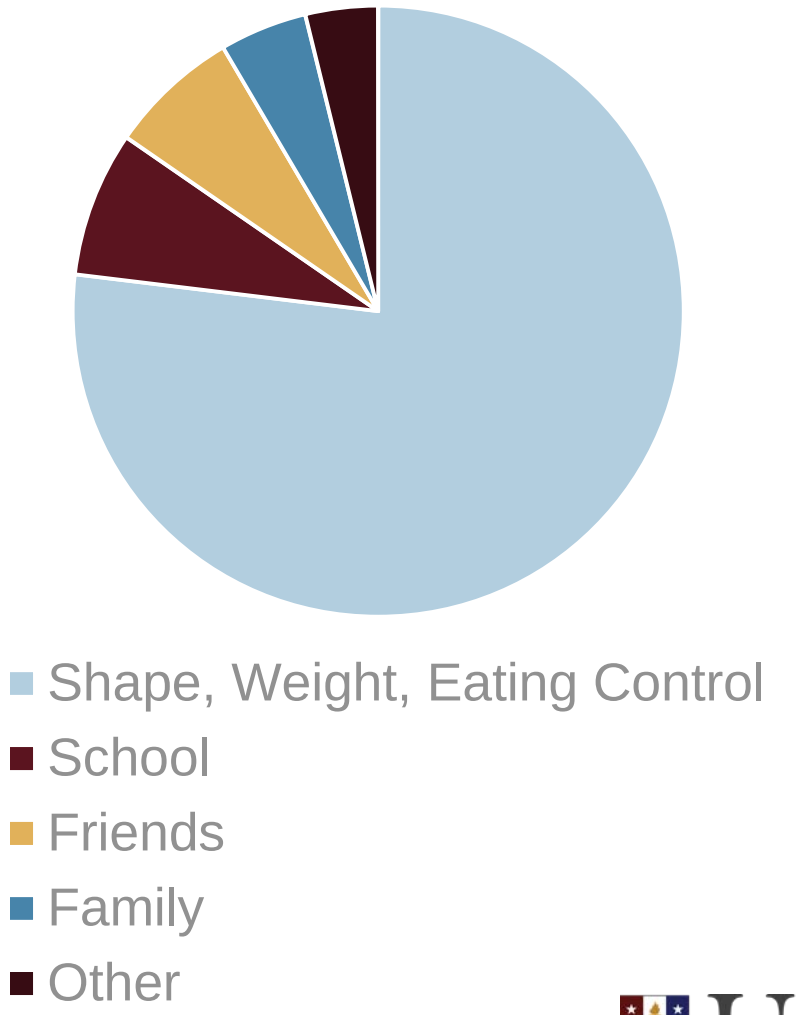
- **Other Specified Feeding or Eating Disorder**
  - Feeding or eating disorder symptoms that cause clinical distress or impairment, but do not meet the full criteria for any of the disorders
  - Examples
    - Atypical AN: all criteria for anorexia nervosa are met, *except* that despite significant weight loss, weight is within or above the normal range
    - Purging Disorder: recurrent purging behavior to influence weight or shape in the absence of binge eating
    - BN or BED (of low frequency and/or limited duration): criteria for BN or BED are met, except lower behavior frequency or less than 3 mo

- **Unspecified Feeding or Eating Disorder**
  - Used when clinician chooses not to specify the reason that criteria are not met, including when there is insufficient information or time to make a diagnosis

APA, 2013; Keel, 2007; Moskowitz & Weiselberg, 2017

A Closer Look: Cognitive Symptoms

- **Body Image Disturbance**
  - **Overvaluation of body weight and shape**
  - **Fear of weight gain**
  - **Body image distortion**



APA, 2013; Ahrberget al., 2011; Glashouwer et al., 2019; Sattler et al., 2019

A Closer Look: Behavioral Symptoms

- Types of eating disturbance
  - Overeating
    - Eating an unusually large amount of food given context
  - Loss of control eating
    - Eating while experiencing a sense of loss of control (e.g., unable to stop)
  - Binge eating
    - Objective: eating unusually large amount of food + loss of control
    - Subjective: loss of control, regardless of the amount of food eaten
  - Restriction
    - Limiting quantity or type of food
    - Fasting: going long periods without eating

A Closer Look: Behavioral Symptoms

- Compensatory behaviors
  - Purging behaviors
    - Self-induced vomiting
    - Laxative, diuretic, or other medication misuse (e.g., insulin)
  - Non-purging behaviors
    - Fasting
    - Exercise
      - Driven/compelled or excessive

APA, 2013; Bryden et al., 1999; Keel, 2007; Mond et al., 2006

Beyond the diagnoses…

- Other behaviors to look for
  - Food rituals
    - Excessive chewing, doesn't allow foods to touch, cutting foods into small pieces
  - Body checking
    - Checking thickness of joints (e.g., wrists), checking body parts for fat, mirror checking or avoidance
  - Apparent preoccupation with weight, food, calories
    - Frequently talking about or focus on dieting or weight loss
    - Extreme focus on calorie counting or macronutrient content of food
  - Problems with social or occupational functioning due to…
    - Rigid exercise routine
    - Avoidance of eating in front of others

Sunday et al., 1995; Walker et al., 2018

Medical Complications

Medical Complications

- Considerations to Start
  - Every organ system in the human body can be affected by an eating disorder
    - Major metabolic changes
    - Cardiovascular, fluids and electrolytes, musculoskeletal/growth, reproductive, gastrointestinal
  - Malnutrition
    - Can be present even with normal or high body weight
    - Amount and speed of weight loss can be as important as current body weight
  - Most medical complications appear reversible, though some may be irreversible

Forney et al., 2016; Katz & Vollenhoven, 2000; Mitchell & Crow, 2006; Robinson et al., 2016; Rome & Ammerman, 2003

Medical Complications

- Cardiovascular
  - Bradycardia
    - Don’t confuse with indication of athleticism
  - Hypotension (including orthostatic) or hypertension
  - Poor peripheral perfusion
    - Feeling cold
  - Number one cause of death in eating disorders, especially AN

Casiero et al., 2006; Forney et al., 2016; Mitchell & Crow, 2006; Rome & Ammerman, 2003

Medical Complications

- Fluids and Electrolytes
  - Causes of dehydration and/or electrolyte abnormalities
    - Poor intake of fluids, vomiting, laxative or diuretic use
  - Potential consequences
    - Kidney dysfunction, altered cognition, cardiac arrhythmia/arrest

Bermudez & Beightol, 2004; Forney et al., 2016; Mitchell & Crow, 2006; Rome & Ammerman, 2003

Medical Complications

- Fluids and Electrolytes
  - Causes of dehydration and/or electrolyte abnormalities
    - Poor intake of fluids, vomiting, laxative or diuretic use
  - Potential consequences
    - Kidney dysfunction, altered cognition, cardiac arrhythmia/arrest
  - Water loading
    - Excessive drinking of water
    - Dilution and imbalance of electrolytes, particularly sodium
  - Refeeding Syndrome
    - A serious and potentially fatal complication of changes in metabolism accompanying nutritional restoration
    - Primarily related to related phosphorus, potassium, and/or magnesium

Bermudez & Beightol, 2004; Forney et al., 2016; Mitchell & Crow, 2006; Rome & Ammerman, 2003

Medical Complications

- Reproductive
  - Low estradiol in girls, low testosterone in boys
  - Clinical effects depend on stage of development
    - Incomplete pubertal development
      - Pubertal delay/arrest
    - Complete pubertal development
      - Women: Amenorrhea, infertility
      - Men: Decreased sex drive

Forney et al., 2016; Hetterich et al., 2019; Katz & Vollenhoven, 2000; Mitchell & Crow, 2006; Rome & Ammerman, 2003

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      - Women: Amenorrhea, infertility
      - Men: Decreased sex drive
- Gastrointestinal
  - Constipation
    - Effects on malnutrition
    - Laxative abuse
  - Delayed gastric emptying
    - Fullness and bloating after meals
  - Acid reflux
  - Pancreatitis
  - Gallstones

Forney et al., 2016; Hetterich et al., 2019; Katz & Vollenhoven, 2000; Mitchell & Crow, 2006; Rome & Ammerman, 2003

Medical Complications

- Musculoskeletal
  - If growth is not complete
    - Height stunting
  - Decreased bone density/bone loss
    - Related to low weight, decreased sex steroid production (estrogen and testosterone), and increased cortisol (stress)
    - Risk of pathological fractures

Forney et al., 2016; Mitchell & Crow, 2006; Robinson et al., 2016; Rome & Ammerman, 2003

Other Considerations for Assessment/Evaluations

General Areas to Consider in Assessments/Evaluations

- History (youth and family)
  - Eating patterns, body image concerns, trauma, major life events
  - Lifetime highest and lowest weights, recent weight change
  - Previous treatment for eating disorder or other psychiatric disorder
  - Family history of eating disorders or other psychiatric disorders

- Basic eating patterns
  - General daily intake
    - Number of meals, snacks, time between eating
  - Attitudes toward food/eating
    - Interest in/enjoyment of eating?
    - Rules? Good vs Bad foods?
    - Time spent thinking about food
    - Eating in public or social settings

General Areas to Consider in Assessments/Evaluations

- General attitudes/behaviors related to shape/weight
  - Description of current body type
  - Reaction to hypothetical weight gain
  - Weighing frequency/monitoring, calorie counting

- Psychosocial functioning
  - Family
  - Peers
  - School and/or work

General Areas to Consider in Assessments/Evaluations

- Social media and app use
  - Calorie counting, fitness, weight-related apps
    - May be without parental knowledge/supervision
  - Social media
    - #Thinspo, thinspiration
    - #Fitspo, fitspiration
    - Pro-ana and pro-mia
    - Fat talk, weight-based teasing

- Participation in activities with strict weight control and/or appearance focus
  - Athletics, especially certain sports
  - Dance
  - Modeling

Rodgers et al., 2016; Simpson & Mazzeo, 2017

Additional Considerations for Youth

- Binge Eating
  - Challenge in identifying 'unusual quantity' for an objective binge
    - Take into account gender, changing caloric needs with age and developmental stage
  - In youth, the focus is commonly on just loss of control eating, regardless of the amount of food consumed (subjective binge)

- Developmental level and food access/independence
  - Older youth have more access to and independence of food choice
  - Role of parents/caregivers, and family approaches to eating

Additional Considerations for Youth

- Parents/caregiver reports
  - In addition to assessing the youth directly, get reports and assessments regarding the youth from the parents/caregivers
  - Consider meetings both together and individually; when speaking with youth, be clear about nature and limits of confidentiality

- Comprehension, minimization
  - Age-appropriate questions, explanations, assessments
  - Consider assessing specific issues with multiple similar questions
  - Elicit examples when possible
  - Understand that denial, shame, embarrassment, etc. may affect responding

Additional Considerations for Military Dependent Youth

- Stressors
  - Stress can be a risk factor and trigger for disordered eating behaviors
    - Parental deployments
    - Combat-related parental safety
    - Relocations with PCS (school transitions, loss of peer groups)

- Body composition and fitness standards
  - Weight/shape-based attitudes more salient
  - Potential modeling of stricter weight control behaviors

Esposito-Smythers et al., 2011; Link & Palinkas, 2013; Ruff & Keim, 2014; Tanofsky-Kraff et al., 2013

Males and Youth with Overweight/Obesity

Males

- Overview
  - Eating disorder symptoms are more common among males than historically recognized
    - Traditional 10 to 1 ratio
  - Still under-represented in clinical/treatment samples; prevalence from community samples shows differences are smaller
    - AN: M (.3%) vs F (.3%); BN: M (.5%) vs F (1.3%); BED: M (.8%) vs F (2.3%)
  - Apparent sex differences
    - Later average age of onset (full-threshold)
    - History of overweight
    - Treatment-seeking less and later
    - More psychiatric comorbidity

Lavender et al., 2017; Murray et al., 2017; Raevuori et al., 2014; Swanson et al., 2011

Males

- Body Image
  - Two dimensions
    - Body fat/leanness
    - Muscularity
  - Over time, there has been…
    - Increasing exposure to muscular male body across various forms of media
    - Increasingly positive connotation of muscular male body
    - Greater commercial value of muscular male body

Karazsia et al., 2017; Lavender et al., 2017; Murnen & Karazsia, 2017; Murray et al., 2017

Evolution of the Male Body Ideal

https://www.telegraph.co.uk/men/active/11822364/Are-action-figures-giving-boys-body-image-anxiety.html)

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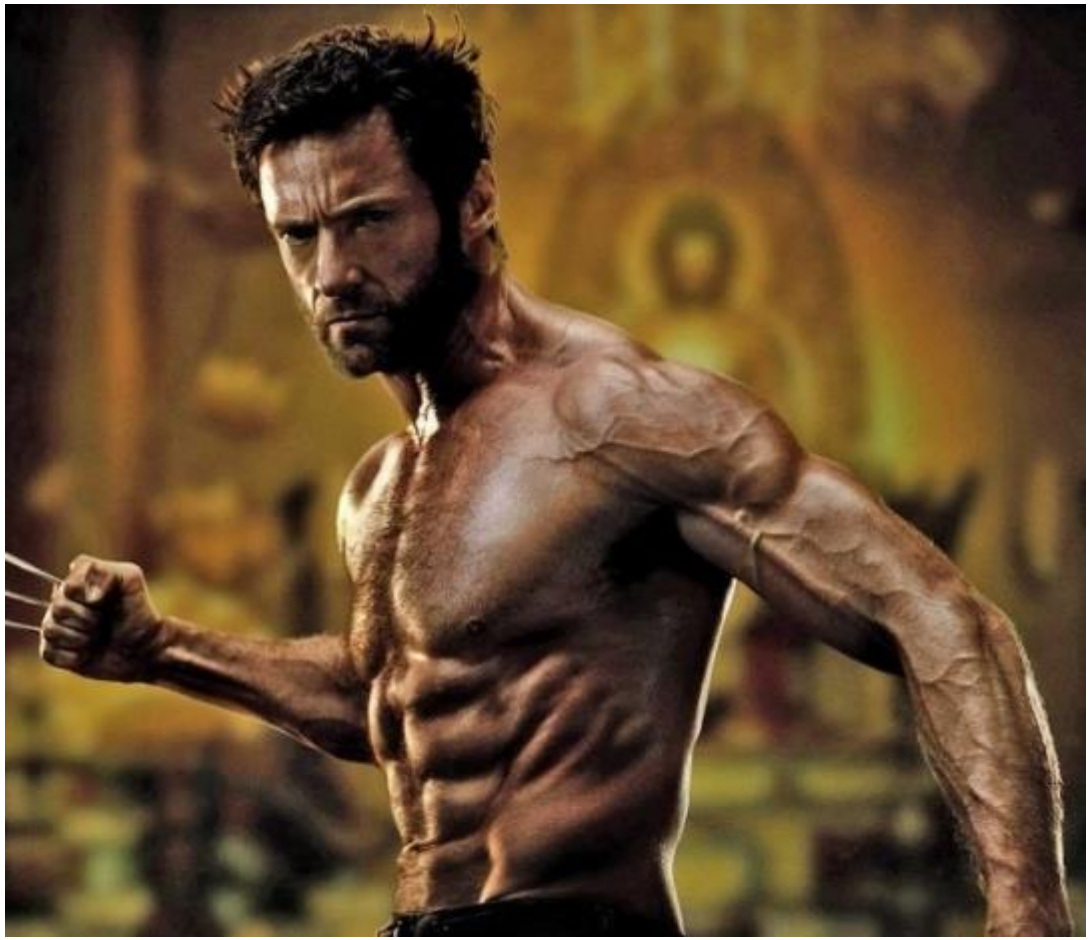

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Muscularity-Oriented Disordered Eating

- Disordered eating practices
  - Protein (over) consumption
    - Rigid rules
    - Compensatory efforts
  - Extreme dietary restriction
  - Bulking & cutting phases
  - Continual access to food
  - Eat for ‘functionality’
  - Eat beyond feeling full
  - “Cheat days”
  - APED use

Lavender et al., 2017; Murray et al., 2017; Murray et al., 2018; Murray et al., 2019;

Muscle Dysmorphia

- Preoccupation with insufficient leanness/muscularity
- Distress and/or impairment
  - Giving up important activities to maintain workout/diet schedule
  - Avoiding situations where one's body is exposed to others
  - Continuing to work out, diet, or use appearance/performance enhancing substances despite adverse consequences

Pope et al, 1997; Pope et al., 2005; Tod et al., 2016

Other Considerations for Males

- Assessments/Evaluations
  - Shame/perceived stigma related to eating disorders being 'feminine'
  - May be less familiar with eating disorders, require more psychoeducation and/or more motivation to seek treatment
  - If using an existing questionnaire or interview…
    - Most were developed and tested with only women, and are focused mostly on drive for thinness, weight loss, fear of weight gain, and related behaviors
  - Take into account gender and developmental status when considering what is an unusually large amount of food (e.g., adolescent male)

Andersen & Holman, 1997; Darcy et al., 2012; Griffiths et al., 2015; Lavender et al., 2017; Strother et al., 2012

Youth with Overweight/Obesity

- Higher weights among youth with eating disorders/disordered eating
  - Strong overlap between binge/loss of control eating and higher weight
  - Similar factors can contribute to both disordered eating and overweight/obesity
    - Genetic factors (e.g., metabolic predispositions)
    - Psychological factors (e.g., stress, personality)
    - Cultural/environmental factors (e.g., sociocultural ideal body types, food environment)
  - Overweight/obesity during youth is a risk factor for eating disorders in adulthood

Anzman-Frasca et al., 2012; Culbert et al., 2015; Fairburn et al., 1998; Haines & Neumark-Sztainer, 2006; Parsons et al., 1999

Youth with Overweight/Obesity

- The energy balance model of obesity is the foundation of most weight management programs
- 'Dieting' has been considered a risk factor for eating disorders
- Consider disordered eating, current or risk of new onset behaviors, when managing weight among youth
- Avoid shame and blame
- Ask about weight-based teasing/bullying
- Be aware of weight stigma in actions and language
  - Overweight vs chubby
  - High BMI vs obese
  - Unhealthy weight vs fat

Puhl et al., 2020; Puhl & Latner, 2007; Puhl & Suh, 2015; Neumark-Sztainer et al., 2002; Schvey et al., 2019

Brief Eating Disorders Treatment 101

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Multidisciplinary Team Approach

- Treating an eating disorder generally involves a combination of psychological therapy and nutritional counseling, with medical and psychiatric monitoring
  - Psychologist/therapist, psychiatrist, dietician/nutritionist, physician
  - Address the symptoms and medical consequences, and psychological, biological, interpersonal, and/or cultural forces that contribute to or maintain the eating disorder
  - For patients who are underweight, weight restoration is a primary and essential goal
  - Decisions about type of treatment, level of care, and other clinical issues are based on the patient's developmental level, symptom presentation and severity, and other relevant factors

Components

- Psychotherapy
  - Individual/Group: Cognitive-behavioral therapy, interpersonal therapy, dialectical behavior therapy
  - Family: Family-based therapy
    - The strongest evidence based for treatment of youth, especially with AN

  - Targets vary by diagnosis and form of therapy
    - Restoring weight and normalizing eating patterns
    - Reducing restraint/restriction that prompts binge eating
    - Improving interpersonal relationships/functioning
    - Challenging cognitive distortions (e.g., about body image)
    - Engaging parents/caregivers to re-establish healthy eating in youth
    - Improving coping and emotion regulation

Campbell & Peebles et al., 2014; Couturier et al., 2013; Hay, 2013

Components

- Nutrition/dietary education and counseling
  - Develop individualized plans based on patient needs
  - Working with a registered dietician to address knowledge and understanding of nutrition, metabolism, etc.
  - May assist with meal planning and related skills (e.g., shopping, food preparation)
  - Important for experience with eating disorders, because goals/considerations may be different than other groups

Ozier & Henry, 2011

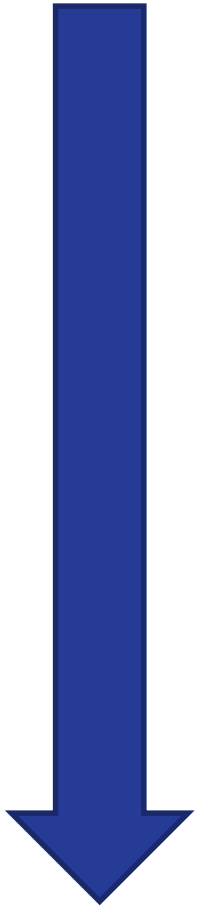
Components

- Psychopharmacotherapy
  - Medications directly targeting the disorder
    - No FDA approved medication for AN
    - Fluoxetine FDA approved for BN
      - Bupropion associated with seizure potential in BN
    - Lisdexamfetamine FDA approved for BED
  - Other medications are used to treat co-occurring psychiatric symptoms commonly found in patients with eating disorders (e.g., mood/anxiety symptoms, impulse control difficulties)
- Medical management

Hay & Claudino, 2012; Himmerich & Treasure, 2018; Mehler & Anderson, 2017;

Levels of Care

Intensity



Level of Care	Description
Hospital (Inpatient)	- Short-term - Medical stabilization, rapid weight gain
Residential	- Longer-term care - 24 hours/day treatment
Partial Hospital (PHP)	- 5-6 days per week, 6-10 hours per day - Tightly structured treatment programming with multiple meals/snacks
Intensive Outpatient (IOP)	- Multiple days per week, ~4 hours per day - Tightly structured treatment programming, with some meal support
Outpatient	- Individual outpatient sessions with members of multidisciplinary treatment team - Psychotherapy ~1-2 per week

Anderson et al., 2017; Derenne, 2017

Key Takeaways

- Eating disorders are biopsychosocial illnesses characterized by a diverse array of symptoms with serious psychosocial and health consequences that can affect youth of any weight status from any background
- Although males can experience symptoms consistent with traditional DSM-5 eating disorders, they may also exhibit muscularity-oriented disordered eating behaviors related to the unique idealized male body
- Evaluating youth for eating disorders should include reports from both the youth and parents/caregivers, and family-based interventions have the strongest evidence base for treatment of youth with eating disorders
- Treatment for eating disorders is a multi-disciplinary endeavor and can occur within different contexts and levels of care depending on a patient's needs and symptom severity

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