

Outpatient Identification and Medical Management of Eating Disorders

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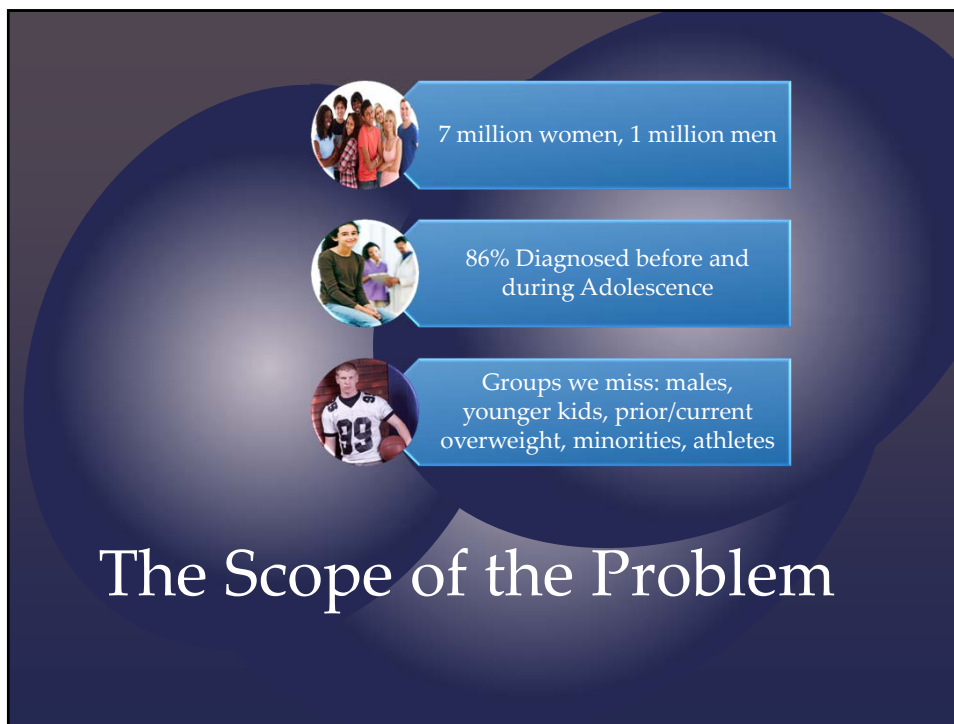
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- ⌘ Identify Common Presentations of Eating Disorders in Adolescents
- ⌘ Recognize need for hospitalization in patients with an Eating Disorder
- ⌘ Develop a strategy for medically monitoring and treating common Eating Disorders
- ⌘ Develop strategy for coordinating care in multi-disciplinary team in Eating Disorder management

Learning Objectives

Identifying Eating Disorders

{ Scope, DSM-5, Clinical Scenarios



The infographic features three circular images on the left, each connected to a blue text box on the right. The top image shows a group of diverse young women, with a text box stating '7 million women, 1 million men'. The middle image shows a young woman sitting on a bench talking to a healthcare professional, with a text box stating '86% Diagnosed before and during Adolescence'. The bottom image shows a young man in a white football jersey with the number 89, with a text box stating 'Groups we miss: males, younger kids, prior/current overweight, minorities, athletes'.

7 million women, 1 million men

86% Diagnosed before and during Adolescence

Groups we miss: males, younger kids, prior/current overweight, minorities, athletes

The Scope of the Problem



The infographic consists of a white rectangular box with a thin pink border containing nine numbered truths. Below the box, the title '9 Truths about Eating Disorders' is written in a large, white, serif font against the dark blue background.

Nine Truths about Eating Disorders

Truth #1: Many people with eating disorders look healthy, yet may be extremely ill.

Truth #2: Families are not to blame, and can be the patients' and providers' best allies in treatment.

Truth #3: An eating disorder diagnosis is a health crisis that disrupts personal and family functioning.

Truth #4: Eating disorders are not choices, but serious biologically influenced illnesses.

Truth #5: Eating disorders affect people of all genders, ages, races, ethnicities, body shapes and weights, sexual orientations, and socioeconomic statuses.

Truth #6: Eating disorders carry an increased risk for both suicide and medical complications.

Truth #7: Genes and environment play important roles in the development of eating disorders.

Truth #8: Genes alone do not predict who will develop eating disorders.

Truth #9: Full recovery from an eating disorder is possible. Early detection and intervention are important.

9 Truths about Eating Disorders

- * Restricting type x 3 months
- * Binge Eating -Purging type x 3 months

- * Refusal to maintain healthy weight >85% of IBW
- * Distorted body image or refusal to see seriousness of current low weight
- * Intense fear of gaining weight or behaviors that sabotage weight gain

ANOREXIA NERVOSA DSM 5

- * Recurrent episodes of binge eating (eating in a discrete time large amounts of food with a sense of lack of control during the episodes)
- * Recurrent inappropriate compensatory behavior to prevent wt gain (self-induced vomiting, laxatives, diuretics, enemas, fasting or excessive exercise)

BULIMIA NERVOSA

- * The binge eating and compensatory behaviors occur **at least once a week for 3 months**
- * Self-evaluation is unduly influenced by body shape and weight
- * The disturbance **does not** occur exclusively during episodes of **anorexia nervosa**

BULIMIA NERVOSA

- * Recurrent episodes of binge eating
- * Marked **distress** regarding binge eating
- * The binge eating occurs, at **least once a week for three months**
- * The binge eating is **not** associated with the recurrent use of inappropriate compensatory behavior

BINGE EATING DISORDER

- ↳ Eating or feeding disturbance
 - ⌘ Lack of interest in eating/food
 - ⌘ Sensory avoidance
 - ⌘ Concerns about adverse consequences of eating
- ↳ Resulting in
 - ⌘ Significant weight loss or failure to grow appropriately
 - ⌘ Nutritional deficiency
 - ⌘ Dependence on enteral feeds or supplements
 - ⌘ Interference with psychosocial functioning

Avoidant Restrictive Food Intake Disorder (ARFID)

- ↳ Atypical Anorexia
 - ⌘ Significant weight loss
 - ⌘ normal weight
- ↳ BN or BED of low frequency or limited duration
- ↳ Purging Disorder
- ↳ Night Eating Syndrome

Other Specified Feeding or Eating Disorder (OSFED)

AN criteria except for weight; often prior overweight

Just as serious as full-threshold AN

- ⊗ Physiologically
 - ⊗ Equally low heart rates
- ⊗ Hormonally
 - ⊗ Equal incidence amenorrhea
- ⊗ Psychiatrically
 - ⊗ Equally impaired to AN

'Atypical' AN

- ⊗ 16 year old female presents to General Pediatrics for annual exam
 - ⊗ 40lb weight loss since you saw her last 1 year ago
 - ⊗ HR 47, BP 81/45, RR12, T 97.5F, BMI 15
 - ⊗ Hx: strong desire to lose weight, training for sports 4-5 hours per day, restricting to 300-400kcal per day, no purging, all started about 9-10 months ago.
- ⊗ 15 year old male presents to GI due to recurrent hematemesis for 3-4 months
 - ⊗ Overweight with BMI 28
 - ⊗ Reports losing control around food and eating so much he has to make himself throw-up 2-3x every day
 - ⊗ He describes subjective palpitations as well
 - ⊗ You check electrolytes and he has a K of 3.1.

How do you respond?

{ Anorexia Nervosa

- ⊗ HR <50BPM daytime
<45BPM nighttime
- ⊗ SBP <90mmHg
- ⊗ Orthostatic change in
HR >20 (increase), BP
>10 (decrease)
- ⊗ Arrhythmia
- ⊗ T <96F
- ⊗ <75% GBW
- ⊗ Body Fat < 10%
- ⊗ Refusal to eat
- ⊗ Failure to respond to
outpatient treatment

{ Bulimia Nervosa

- ⊗ Syncope
- ⊗ Serum K <3.2
- ⊗ Serum Chloride <88
- ⊗ Esophageal tears
- ⊗ Arrhythmia
- ⊗ Hypothermia
- ⊗ Suicidal ideations
- ⊗ Intractable vomiting
- ⊗ Hematemesis
- ⊗ Failure to respond to
outpatient treatment

Admission Criteria

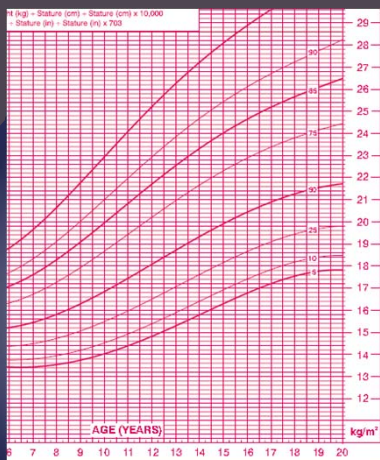
- ⊗ 17 year old female with
restricting, excessive
exercise, and
malnutrition. Concern
for AN...

- ⊗ VS are normal
- ⊗ Physical exam shows
lanugo, hair loss, cool
extremities, and
slightly enlarged
parotids, and
decreased bowel
sounds

- ⊗ How do you proceed?

Another case...





- 50th Percentile BMI
- Prior growth curves
- BMI = kg/m^2
- GBW = (goal BMI)(M²)
- MOVING TARGET!

Determining Goal Body Weight

- ⌘ Endocrine Disorders
 - ⌘ Thyroid, DM, Adrenal Insufficiency...
- ⌘ Psychiatric Disorders
 - ⌘ Depression, OCD, anxiety...
- ⌘ Gastrointestinal Disorders
 - ⌘ Celiac, IBD...
- ⌘ Other...
 - ⌘ Malignancy, SMA, MALS, Prolactinomas, substance abuse, HIV...



Medical Evaluation

- ⌘ CBC, ESR
- ⌘ CMP, phosphorus, magnesium
- ⌘ Prealbumin, Zinc, Vitamin D, Thiamine
- ⌘ TFTs, Prolactin, FSH, LH, Estradiol/Testosterone
- ⌘ Celiac screen
- ⌘ ECG if bradycardia, hypokalemia
- ⌘ DXA if amenorrhea >6 months

LABORATORY EVALUATION



- ⌘ Family Based Treatment
- ⌘ Nutrition
- ⌘ Psychiatry

Care Coordination/Referrals

- ⊗ Basic Principles
 - ⊘ Agnostic
 - ⊘ Family Central
 - ⊘ Providers as advisors/consultants
- ⊗ 3 Phases each ~6 mo
 - ⊘ Phase 1
 - ⊘ Phase 2
 - ⊘ Phase 3



Basics of Family Based Treatment

- ⊗ Total Energy Expenditure (TEE) = Resting Energy Expenditure (REE) x Activity Factor
- ⊗ WHO Equation for REE

Boys:

3-10 yo: $22.7(\text{kg}) + 495$
 10-18 yo: $17.5(\text{kg}) + 651$

Girls:

3-10 yo: $22.5(\text{kg}) + 499$
 10-18 yo: $12.2(\text{kg}) + 746$

- ▶ Activity Factor
 - ▶ Healthy child: 1.3-1.5
 - ▶ Catch-up growth: 1.6-1.8
 - ▶ FBT (early onset): 2-3
 - ▶ FBT (12+ yo): 2.5-3.5

Predicting Caloric Needs

Needs are often in 2000-4000+ kcal/day range!

- ↳ IDENTIFICATION!!!
- ↳ Start the conversation
 - ⌘ Say the words “eating disorder”
- ↳ Identify need for admission
- ↳ Medical evaluation for possible medical etiologies
- ↳ Partnership with mental health and nutrition
- ↳ Monitoring
 - ⌘ Set weight goals
 - ⌘ Help with caloric goals
 - ⌘ Monitor medical recovery
 - ⌘ Vital signs
 - ⌘ Monitor electrolytes, UA, etc.
 - ⌘ Weekly early on, space to monthly once improving,
 - ⌘ Provide medical clearance regarding activities, school, camp, etc.

What do I do as a medical provider?

Resources for Providers

- ↳ [The Role of the Pediatrician in Family-Based Treatment for Adolescent Eating Disorders: Opportunities and Challenges](#) by Debra Katzman, MD, Rebecka Peebles MD, Susan Sawyer, MBBS, MD, James Lock MD, PhD, and Daniel LeGrange, PhD, J Adol Health, 2013
- ↳ [Eating Disorders in Children and Adolescents: State of the Art Review](#) by Kenisha Campbell, MD, and Rebecka Peebles, MD, Pediatrics, 2014.
- ↳ [Treatment Manual for Anorexia Nervosa, Second Edition: A Family-Based Approach](#) by James Lock MD PhD, Daniel Le Grange PhD and Gerald Russell MD
- ↳ [Treating Bulimia in Adolescents: A Family-Based Approach](#) by Daniel Le Grange PhD and James Lock MD PhD
- ↳ [Eating Disorders in Children and Adolescents: A Clinical Handbook](#) by Daniel Le Grange PhD and James Lock MD PhD

Books for Parents & Providers

- ↳ Help Your Teenager Beat an Eating Disorder (James Lock & Daniel Le Grange)
- ↳ Anorexia and other eating disorders: Help Your Child Eat Well and Be Well (Eva Musby)
- ↳ Give Food a Chance (Julie O'Toole)
- ↳ Brave Girl Eating (Harriet Brown)
- ↳ Throwing Starfish Across the Sea (Laura Collins & Charlotte Bevan)
- ↳ Feeding Your Anorexic Adolescent (Clare Norton)
- ↳ My Kid is Back (June Alexander)
- ↳ Decoding Anorexia (Carrie Arnold)

Helpful Websites and Forums:

- ↳ www.maudsleyparents.org
- ↳ www.feast-ed.org
- ↳ www.aroundthedinnertable.org
- ↳ [Facebook – Eating Disorder Parent Support](#)

Videos for Families and Providers:

- ↳ http://www.youtube.com/watch?v=JhA_C5hr7tU&lr=1
- ↳ <http://vimeo.com/user543367>
- ↳ http://www.youtube.com/watch?v=pPSLdUUITWE&list=P_Lmy40N4PX61Yb46HMETjFC5Vc8vZ3V69u&index=34&feature=plpp_video

Websites/Videos

