Eating Disorders in Primary Care

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Announcements

• New CAPP CME activity: CAPP Monthly Webinar Series recordings (on demand)
  • Can view webinar recordings on your own time and answer questions afterwards. If you get a passing score (>=66%), then you’re eligible for 1 hour CME and 1 hour American Board of Pediatrics MOC Part 2 credit for each webinar you complete in this way.
  • To sign up, please go to: http://tinyurl.com/bdhhzubn
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Eating disorders lead to severe medical consequences, including death
Mortality in Anorexia Nervosa

- Individuals with EDs have significantly elevated mortality rates (6-8%)
- AN has one of the highest mortality rates of the psychiatric disorders
  - More than double that of schizophrenia and almost triple that of bipolar or major depressive disorder
- About one-third of deaths in AN are due to heart problems and one-fifth to suicide

Arceau et al., 2011; Osby et al., 2000; Deter et al., 2005
A diagnosis is not necessary!

- Identify concerning growth patterns
- Identify concerning behaviors
- Initial medical management
- Refer when appropriate
Evolving Diagnoses

• Anorexia Nervosa
• Atypical Anorexia Nervosa (OSFED) - advocacy
• Bulimia Nervosa
• ARFID
• Binge Eating Disorder
• More!
Normal growth takes many shapes

Median BMI (mBMI) = 50th percentile for age and sex
Concern: falling off BMI curve
Concern: flat BMI curve

If gaining height, these pathways indicate weight loss.
Weight loss indicating malnutrition

<table>
<thead>
<tr>
<th>% mBMI*</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-90%</td>
<td>70-79%</td>
<td>&lt;70%</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>BMI Z-score</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
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<tbody>
<tr>
<td>-1 to -1.9</td>
<td>2 to 2.9</td>
<td>&gt;3 or greater</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Weight Loss**</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;10% body mass loss</td>
<td>&gt;15% body mass loss</td>
<td>&gt;20% body mass loss</td>
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</tbody>
</table>

* Percent median BMI
** Rapid weight loss may place a patient at increased risk of medical complications and increase severity of malnutrition

[SAHM Position 2015]
Weight Suppression

Comparing Jane to Typical AN

- Two girls with weight loss due to ED
- Both are 16 yr. old and 65 inches tall
- Both have lost “significant weight” via restriction, diet pills, purging, and excessive exercise

- Jill AN: 125 → 85 # → BMI 14.2 kg/m² = 40 # loss
- Jane AAN: 260 → 128 # → BMI 21.3 kg/m² = 132 # loss

→ Are these girls equally malnourished?
Weight Suppression

\[
\text{Weight} \times \text{suppression} = \left\{ \frac{\text{Highest historical weight} - \text{Weight at presentation}}{\text{Highest historical weight}} \right\}
\]

Jill AN: 125 \rightarrow 85 \text{ lbs} = 40\# \text{ loss}, 32\% \text{ suppressed}

Jane AAN: 260 \rightarrow 128 \text{ lbs} = 132 \# \text{ loss}, 51\% \text{ suppressed}
Weight suppression predicts illness severity

Patients with greater weight suppression:

- Weight suppression, not admit %mBMI, associated with lowest 48-hr HR ($\beta = -0.398$, 95% CI $-0.833$, -0.062, $p=0.021$) [Garber 2015]
- Persistent amenorrhea [Seetharaman, Golden et al. 2017]
- Lower T3 [Aschettino-Manevitz 2012]
- Worse ED psychopathology [Lavender 2015; Berner 2013]
### Rapidity of loss: another risk factor

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Percent of body weight lost</strong></td>
<td></td>
</tr>
<tr>
<td>1 mo</td>
<td>≤ 5%</td>
<td>&gt; 5%</td>
</tr>
<tr>
<td>3 mo</td>
<td>≤ 7.5</td>
<td>&gt; 7.5%</td>
</tr>
<tr>
<td>6 mo</td>
<td>≤ 10</td>
<td>&gt; 10%</td>
</tr>
<tr>
<td>12 mo</td>
<td>≤ 20</td>
<td>&gt; 20%</td>
</tr>
</tbody>
</table>

[AND and ASPEN consensus, 2012]
Rapid weight gain

Binge Eating Disorder?
Normal growth does not rule out an eating disorder

- Bulimia nervosa
- ARFID
Medical Evaluation

- Height and Weight (in a gown)
- Vitals including orthostatics
- History and Physical Exam
- Careful review of growth charts
- EKG
- Laboratory Evaluation
- Referrals and Follow Up

Anorexia affects your whole body

- **Brain and Nerves**
  - Can't think right, fear of gaining weight, sad, moody, irritable, bad memory, fainting, changes in brain chemistry
- **Hair**
  - Hair thins and gets brittle
- **Heart**
  - Low blood pressure, slow heart rate, fluttering of the heart (palpitations), heart failure
- **Blood**
  - Anemia and other blood problems
- **Muscles and Joints**
  - Weak muscles, swollen joints, fractures, osteoporosis
- **Kidneys**
  - Kidney stones, kidney failure
- **Body Fluids**
  - Low potassium, magnesium, and sodium
- **Intestines**
  - Constipation, bloating
- **Hormones**
  - Periods stop, bone loss, problems growing, trouble getting pregnant, if pregnant, higher risk for miscarriage, having a C-section, baby with low birthweight, and post partum depression
- **Skin**
  - Irregular, dry skin, growth of fine hair all over body, get cold easily, yellow skin, nails get brittle
Medical Tests

• EKG (sinus bradycardia, prolonged QTc, arrhythmia)
• Initial Labs (CBC, CMP, Mag, Phos, Lipid Panel, ESR/CRP, TTG/IgA, Zinc, Vitamin D, TSH)
• Labs for medical stability: BMP, Mag, Phos
• Urine sample (specific gravity, pH, UDS, hcg)
• Dual-energy X-ray absorptiometry (DXA) scans when amenorrhea is present for at least 6 months
Primary Care Treatment

• Food is the best medicine
• Mobilize caregiver involvement
  • VERY nontraditional model for pediatricians when caring for AYA
• Medically stabilize abnormal vital signs and electrolytes
• Carefully monitor growth and development
Treatment Goal Weights

- Treatment goal weight (TGW) is a personalized, estimated target weight range for optimal recovery based on available growth records that takes into account normal expected growth in the next 12 months.
- **Return to historical growth trajectory (BMI) from age 4 on**
- If there is a lot of variation in growth history, consider what eating was like at various points (e.g., disordered eating, food insecurity) or weight at last menses
- If well above the growth curve (e.g., >99th percentile for BMI) and losing weight, minimum goal is no further weight loss
Treatment Goal Weights

Body mass index-for-age percentiles:
Boys, 2 to 20 years

Atypical
AN
Treatment Cadence

• If under treatment goal weight, frequent follow-up for weight check and vital signs until in TGW range or care established in an eating disorder program
  • Follow-ups every 1-2 weeks
• May space out visits once gaining weight steadily, in TGW range, or established with multidisciplinary team
• Touchpoint with family to empower caregivers with seriousness of illness and their critical role in recovery
Psychological eating disorder symptoms are heavily influenced by malnutrition

(And food is the ONLY medicine)
For weight gain, aim for at least 1-2 lbs of weight gain per week.
- Some reputable eating disorders outpatient programs aim for 3-4 lbs per week.
- Many individuals require ≈2500-5000 kcal/day to achieve this goal due to metabolic changes during nutritional rehabilitation!

Recommend 3 meals per day and 3 snacks
- Each meal/snack should include a caloric beverage (e.g., milk, juice)
- Snacks should be like small meals and contain more than one food group
- No diet foods (i.e., no sugar-free, low-carb, low-fat, or non-fat foods)
- Favor calorically dense foods (fats, proteins, carbs)
Counseling Caregiver(s)

- **Caregiver(s) are 100% in charge** of preparing and plating meals/snacks, and ideally supervised by caregiver(s) or a trusted adult.

- Limit negotiation and discussion around meals and snacks; limit child’s presence in kitchen during meal preparation to limit negotiation.

- Encourage caregivers to feed their child the foods that their family has always eaten.

- Patient should return to all foods eaten prior to eating disorder onset.

- Families do not need to eat the same portions as the patient.
Psychopharmacology: Evidence Is Minimal

Use of SSRIs in EDs

• Food = medicine
• Typically do not start serotonergic medications until around 85% TGW
• If clear mood symptoms predated the eating disorder – could get SSRI on board sooner, beware side effects
• Fluoxetine is FDA approved for BN
  • Improves binge/purge frequency even in absence of mood disorder
Hospitalization Criteria

- **Bradycardia**: HR <50 daytime, <45 at night
- **Hypotension**: BP <90/45 mmHg
- **Hypothermia**: Temp <96° F
- **Orthostasis**: Increase in pulse (>40 bpm) or decrease in BP (>20 mmHg systolic, >10 mmHg diastolic)
- **Weight**: <75% expected body weight or ongoing weight loss despite intensive management
Hospitalization Criteria

- **Acute food refusal**: severe and/or prolonged food refusal (48 hours)
- **EKG abnormalities**: e.g., prolonged QTc, arrhythmia
- **Electrolyte abnormalities**: low potassium, phosphorus, magnesium, sodium, glucose
- **Other acute symptoms**: syncope, esophageal tears, intractable vomiting, hematemesis
Eating disorders transcend race, ethnicity, gender identity, sexual orientation, age, socioeconomic status, body shape or size…
Prevalence Rates
Identity & Socioeconomic Correlates of Adolescent Eating Disorders Prevalence

- **Anorexia Nervosa**
  - Some studies show no group differences, some show trend toward higher rates in non-Latinx White

- **Bulimia**
  - Latinx & Black with highest prevalence

- **Binge Eating**
  - Trend towards increased prevalence in non-Latinx Black & Latinx

People of color with eating/weight concerns were significantly less likely than white people to have been asked by a doctor about eating disorder symptoms (Becker, 2003) and given access to evidence-based care (Marques et al., 2011)
Identity & Socioeconomic Correlates of EDs

Socioeconomic status NOT associated with eating disorders

Food insecurity is associated with increased Eating Disorders

Eating disorder prevalence higher among sexual and gender minority populations (when compared with cisgender heterosexual populations)

Huryk et al., 2021; Hazzard et al., 2020; Nagata et al., 2020
Early Signs

- Cutting back on food intake or skipping meals
- Avoiding eating with others/family
- Changing food selections (cutting out foods, becoming vegetarian/vegan)
- Exercising more
- Making comments about body (often brought up by parents)
- Reading recipe books, getting involved in cooking
- Food going missing
- Using bathroom after meals / vomit residue in toilet or shower

Be curious
If concerns noted, evaluate:

- Feeling out of control with eating
- Pressure to look a certain way
- Obsessive thinking

24-hour diet recall

Exercise pattern

Goals with eating/exercise pattern changes

What have caregiver(s) done to help?

What is the youth’s response?

Any compensatory behaviors

- Vomiting
- Obsessive/compulsive exercise
- Fasting
- Laxatives
- Diet pills
- Other

Note: explicit desire to lose weight or body image concern is not necessary for someone to meet criteria for an eating disorder.
**Patient vs Caregivers**

**Patients**
- I’m not bingeing
- I’m not vomiting
- I’m getting my period regularly
- I’m an athlete. I’m not exercising to lose weight
- I’m fine with my body
- I’m fine with my weight
- I’m not scared of gaining weight

**Caregivers**
- I found bags of junk food hidden in her room
- They run to the bathroom right after meals, and we find vomit residue on the toilet
- I haven’t bought sanitary products for her in 6 months
- Their coach says they train beyond what their teammates do
- They wear only baggy clothes
- He weighs himself a few times a day
- They won’t eat more than 500 kcal per day
Weight is just one aspect of recovery, but often coincides with a recovered mind state.
**Treatment Goals**

- **Weight restoration or stabilization**
- **Normalization of eating patterns (regular, sufficient amount, increase variety)**
- **Cessation of binge eating and compensatory behaviors**
- **Later: Reduced weight/shape concerns; body acceptance**

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- Body image concerns typically do not improve until weight is restored and eating patterns are normalized
  - We cannot “talk someone out of” body image concerns
  - Providers can redirect from debate about body shape/size “Right now, I know that the most important thing is that your body needs consistent nutrition”
Evidence-Based Treatment for Youth EDs

- Family-Based Treatment (initially puts caregivers in charge of nutrition)
- Cognitive-Behavioral Therapy (with family involvement when appropriate)
- Less evidence for youth but sometimes used: Dialectical Behavior Therapy
- Estimate 6-12 months of outpatient therapy
- Higher levels of care (IOP, PHP, Residential) sometimes needed, but not generally evidence-based
Behavioral Targets for Adolescents

- Emphasis on **behavioral recovery** (regular eating, decrease in ED behaviors such as purging, driven exercise) rather than insight or cognitive change

  - Cognitive change typically follows behavioral recovery and often occurs on its own

- Family-based approaches are best supported by the evidence
  - ED prevents good decision-making around nutrition; caregivers generally well-equipped to assist
Integrated Multidisciplinary Care

- Psychotherapy (individual or family evidence-based treatment)
- Medical monitoring and treatment, gown weights, support therapy, hospitalize if necessary
- Nutrition counseling (sometimes)
What if the patient doesn’t want treatment?

If an adolescent is NOT interested in treatment

If family is unable participate

Use motivational interviewing

*Elicit-Provide-Elicit*

*What do you know about anorexia?*

*(strategically add info, correct misperceptions)*

“What are your thoughts about what I shared?”

*Amplify – but don’t INSERT change talk*

“You mentioned that the eating disorder has made it hard to be with friends, can you tell me more about that?”

enlist the family with Family-Based Treatment
How do I support the family when specialty care is not available?

- Psychoeducation
- Illness externalization
- Early goal: increased and/or regular eating, decrease compensatory bxs
  - If wt gain needed: prescribe 3 meals and 3 snacks daily
  - If wt gain not needed, prescribe 3 meals and ≥1 snack daily, not going for more than 3-4 hrs w/o eating
- Note: regular eating decreases binge episodes
- Role of reinforcement (restrictive EDs and ARFID)
Externalizing the Illness

Externalizing language (e.g., “The eating disorder will get them to do sneaky things” (i.e., the eating disorder—rather than the adolescent—is sneaky)
How do I support the family when specialty care is not available?

• Involving caregivers or loved ones when possible
  
  • **Empowerment** – in most cases, caregivers have excellent instincts about their child’s nutritional/rest needs, and the ED is trying to convince them otherwise
  
• Meal/snack support
  
  • When appropriate, ask caregivers to decide what, when, and how much the patient will eat, and monitor for completion
  
• Protect against compensatory behaviors (e.g., use bathroom before meals, monitor afterward)
Caregiver-led nutritional rehabilitation is NOT:

• Force feeding
• Meant to be punitive

Caregiver-led nutritional rehabilitation IS:

• An act of LOVE
  • Most caregivers love their kids, and want to support them to fight an illness that they typically cannot fight consistently on their own
• A balance of warmth (toward the child) and firmness (against the ED)
  • “I see that the eating disorder is giving you a really hard time right now, and I need you take another bite. I will sit here next to you while you finish.”
How do I support the patient when specialty care is not available?

• General **coping** to address distress before/during/after meals, when having urges to engage in compensatory bxs, with wt checks, etc

  • Focus on **active coping** (eg distraction, deep breathing) rather than introspective or passive techniques (eg quiet mindfulness, reading, noticing body sensations)

• **Motivational interviewing** about how the ED is getting in the way

  • “How, if it at all, is the constant thinking about calories making it hard to do the things you like to do?”

• **Reinforce** any small changes
  
  • “That’s awesome that you added cheese back to your sandwiches – well done”

  • “I’m so glad that you were restful this week instead of going for a run”
Nutrition

• ALL families (regardless of resources) should feed what they normally serve their family

• When weight gain is needed:
  • Favor high density foods (proteins, fats, starches)
  • Caloric beverages with every meal and snack
  • Fruits, veggies, and other low-calorie foods should be used as garnish or vehicle for fats (e.g., carrots w/ ranch)
“We worried whether our food would run out before we got money to buy more.”

Was that often, sometimes, or never true for your household in the past 12 months?
- Often true
- Sometimes true
- Never true
- Don’t know

“The food that we bought just didn’t last, and we didn’t have money to get more.”

Was that often, sometimes, or never true for your household in the past 12 months?
- Often true
- Sometimes true
- Never true
- Don’t know

Food Insecurity & Low Resources

Radandt, 2018

Food Bank consider providing info to all families

Nutritional Supplementation Consider prescribing, most insurances cover
Physical Activity

• If weight gain needed, rest typically recommended
  • Especially if vital signs are declining
• Rest is time-limited – goal is supporting patient to return to physical activity when they are ready

• When supporting patients to return to exercise:
  • Go low and slow
  • Consider both physical and psychological implications of exercise
  • If exercise is part of the eating disorder
    • Return only when eating disorder symptoms are improving
    • Encourage patient and family to identify physical activity that is enjoyable
Provider Tips

• Avoid commenting on appearance
• Do not collude with eating disorder
• Avoid shame
• Adolescents may not like their FBT therapist

Benign comments can be loaded:
• “You look so healthy” = “Whoa, you’ve gained a ton of weight”
• “You look fantastic” = “Wow, you’re so fat”
• “You’re made so much progress” = “You’re failing, you shouldn’t be going along with this plan to eat so much food”
When Hospitalization Is Needed: How to discuss with families

*Not yet medically unstable:*
- The hospital is a safety net. If you aren’t able to eat, your body may become medically unstable. If that happens, we will need you to be taken care of in the hospital.

*Medically unstable:*
- Right now, the malnutrition is impacting X’s [heart, body temperature, etc], and X needs support to increase their nutrition and restore their [heart functioning, etc]
  - Without this support, X’s medical condition may worsen
- In the hospital, X will focus on eating, with lots of support from people who work with lots of young people with eating difficulties
  - The doctors will monitor X’s body to make sure it’s safe
  - Loved ones can visit, and a caregiver can stay overnight
  - You can bring your own clothes and some personal belongings
  - The hospital team will help you communicate with your school
- When X’s body is medically stable, X will go home – this could take a few days or a few weeks
How do I avoid reinforcing diet culture for all families?

• Eating
  • Regular eating (3 meals/day + snacks)
  • Eating foods from all food groups
  • If more variety needed: focus on adding foods, not taking them away
  • Dieting is a powerful predictor of eating disorders (and predicts weight cycling/gain)

• Physical activity
  • Goal: enjoyment and general wellbeing
  • (NOT: influencing weight or shape)
  • Encouraging families to find activities that they enjoy
Takeaways

1. Eating disorders are serious, and impact people of all backgrounds
   • Persistent and harmful myths about who is impacted by eating disorders keep folks from receiving appropriate care

2. Caregivers/parents DO NOT cause eating disorders, and are usually an important part of the care team

3. Nutrition and rest are the most important aspects of treatment
   • Body image will not improve until nutrition is restored

4. PCPs play an important role in ED detection and care
CAPP Resources

https://capp.ucsf.edu/content/eating-disorders

• Referral information
• Family and PCP guides for supporting young people with eating disorders