HUNGRY FOR MORE: DIAGNOSIS AND TREATMENT OF EATING DISORDERS
Learning Objectives

• Describe the epidemiology and neurobiology of various eating disorders, including binge-eating disorder

• Implement evidence-based treatments for various eating disorders
Eating Disorders: DSM-IV-TR vs. DSM-5
Consolidation Into One Section, Inclusion of Binge-Eating Disorder

DSM-IV-TR

Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence (51)

FEEDING AND EATING DISORDERS OF INFANCY OR EARLY CHILDHOOD (71)

307.52 Pica (71)
307.53 Rumination Disorder (72)
307.59 Feeding Disorder of Infancy or Early Childhood (72)

Eating Disorders (263)

307.1 Anorexia Nervosa (263)
   Specify type: Restricting Type; Binge-Eating/Purging Type
307.51 Bulimia Nervosa (264)
   Specify type: Purging Type/Nonpurging Type
307.50 Eating Disorder NOS (265)

DSM-5

Feeding and Eating Disorders (169)

The following specifiers apply to Feeding and Eating Disorders where indicated:
a Specify if: In remission
b Specify if: In partial remission, In full remission
c Specify current severity: Mild, Moderate, Severe, Extreme

307.52 (___.) Picaa (169)
   (F98.3) In children
   (F50.8) In adults
307.53 (F98.21) Rumination Disorder (169)
307.59 (F50.8) Avoidant/Restrictive Food Intake Disordera (170)

307.1 (___.) Anorexia Nervosaab, c (171)
   Specify whether:
   (F50.01) Restricting type
   (F50.02) Binge-eating/purging type
307.51 (F50.2) Bulimia Nervosaab, c (172)
307.51 (F50.8) Binge-Eating Disorderab, c (174)
307.59 (F50.8) Other Specified Feeding or Eating Disorder (175)
307.50 (F50.9) Unspecified Feeding or Eating Disorder (176)
What is anorexia nervosa?

- Characterized by an intense fear of weight gain and a disturbed body image, which motivate severe dietary restriction or other weight loss behaviors such as purging or excessive physical activity
- Adolescent girls and young adult women are particularly at risk
- Cognitive and emotional functioning are markedly disturbed
- Serious medical morbidity and psychiatric comorbidity are the norm
- Commonly has a relapsing or protracted course
- Levels of disability and mortality are high, especially without treatment
- Quality of life is poor and the burden placed on individuals, families, and society is high

How do we diagnose anorexia nervosa?

• *DSM-5* highlights:
  – **Restriction** of energy intake leading to a significantly low bodyweight
  – **Intense fear of gaining weight** or of becoming fat, or persistent behavior that interferes with weight gain, even though at a significantly low weight
  – **Disturbance** in the way one’s bodyweight or shape is experienced
• Amenorrhea is no longer required

How do we treat anorexia nervosa?

- Assessments include both psychological and physical evaluations
- Psychological and behavioral interventions are core
- Nutritional interventions are necessary
- Pharmacological interventions have a limited role, other than treating comorbidities


Table 4: Behavioural treatments in adolescent and adult patients with anorexia nervosa

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Evidence</th>
<th>Effect (evidence level)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent anorexia nervosa&lt;sup&gt;24&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family-based treatment (FBT)</td>
<td>Strong*</td>
<td>+++ (1)</td>
</tr>
<tr>
<td>Maudsley family therapy (MFT)</td>
<td>Strong*</td>
<td>+++ (1)</td>
</tr>
<tr>
<td>Family system therapy (FST)</td>
<td>Moderate*</td>
<td>++ (2)</td>
</tr>
<tr>
<td>Adolescent focused therapy (AFT)</td>
<td>Moderate*</td>
<td>++ (2)</td>
</tr>
<tr>
<td>Cognitive behavioural treatment (broad; CBT-b)</td>
<td>Weak/moderate</td>
<td>-/+ (4)</td>
</tr>
<tr>
<td>Cognitive behavioural treatment (enhanced; CBT-E)</td>
<td>Moderate*</td>
<td>+ (4)</td>
</tr>
<tr>
<td>Adult anorexia nervosa&lt;sup&gt;25,26&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive behavioural therapy (CBT)</td>
<td>Weak</td>
<td>+</td>
</tr>
<tr>
<td>Cognitive behavioural therapy (enhanced; CBT-E)</td>
<td>Moderate*</td>
<td>+</td>
</tr>
<tr>
<td>Behavioural therapies (BT)</td>
<td>Weak</td>
<td>-/+</td>
</tr>
<tr>
<td>Interpersonal psychotherapy (IPT)</td>
<td>Weak</td>
<td>+</td>
</tr>
<tr>
<td>Psychodynamic therapy (PT)</td>
<td>Weak</td>
<td>+</td>
</tr>
<tr>
<td>Cognitive analytic therapy (CAT)</td>
<td>Weak</td>
<td>+</td>
</tr>
<tr>
<td>Focal psychodynamic psychotherapy</td>
<td>Moderate*</td>
<td>+</td>
</tr>
<tr>
<td>Maudsley model of anorexia nervosa treatment for adults (MANTRA)</td>
<td>Moderate*</td>
<td>++</td>
</tr>
<tr>
<td>Specialist supportive clinical management (SSCM)</td>
<td>Moderate*</td>
<td>+ (+)</td>
</tr>
</tbody>
</table>

Evidence grades are weak, moderate, or strong. Effect grades are: – for no beneficial effect; +/- for mixed result or still inconsistent result; + for slight beneficial effect; +/+ for moderate beneficial effect; ++ for moderate and lasting beneficial effect (further improvement shown in follow-up); and +++ for strong beneficial effect (superiority demonstrated in primary outcome of randomised trial). Evidence levels are: 1 for well established, 2 for probably efficacious, and 4 for experimental. *At least one multicentre randomised trial or more than one randomised trial.
More Common Than Anorexia Nervosa Are Bulimia Nervosa, and, Especially, Binge-Eating Disorder

- Nationally representative sample of US adults using data from the 2012–2013 National Epidemiologic Survey on Alcohol and Related Conditions (NESARC-III) comprising of over 36,000 respondents

<table>
<thead>
<tr>
<th>Disorder</th>
<th>12-Month Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anorexia nervosa</td>
<td>0.05%</td>
</tr>
<tr>
<td>Bulimia nervosa</td>
<td>0.14%</td>
</tr>
<tr>
<td>Binge-eating disorder</td>
<td>0.44%</td>
</tr>
</tbody>
</table>

- Caveat: There are reports of higher prevalence rates from older data, and lifetime prevalence rates are also higher

<table>
<thead>
<tr>
<th>Clinical Symptom</th>
<th>Bulimia Nervosa</th>
<th>Binge Eating Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of control</td>
<td>Binge eating with loss of control</td>
<td>Binge eating with loss of control</td>
</tr>
<tr>
<td>Presence of compensatory behaviors</td>
<td>Regular compensatory behaviors</td>
<td>No regular compensatory behavior</td>
</tr>
<tr>
<td>Overconcern with shape and weight</td>
<td>Overconcern about shape and weight required for diagnosis</td>
<td>Not part of diagnostic criteria, although often present</td>
</tr>
<tr>
<td>Behavioral indicators for binge eating</td>
<td>Not part of diagnostic criteria</td>
<td>Required for diagnosis</td>
</tr>
<tr>
<td>Distress about binge eating</td>
<td>Not part of diagnostic criteria</td>
<td>Marked distress about binge eating</td>
</tr>
<tr>
<td>Binge eating frequency</td>
<td>Binge eating occurs at least once weekly</td>
<td>Binge eating occurs at least once weekly</td>
</tr>
<tr>
<td>Duration of binge eating</td>
<td>Duration of at least 3 months</td>
<td>Duration of at least 3 months</td>
</tr>
</tbody>
</table>

How do we treat bulimia nervosa and binge-eating disorder?

- Similar psychological and behavioral interventions: CBT
- Pharmacological interventions differ
  - Fluoxetine is the only FDA-approved medication for bulimia nervosa; higher doses used than for MDD
  - Lisdexamfetamine is currently the only FDA-approved medication for binge-eating disorder
  - In contrast, there are no FDA-approved medication treatments for anorexia nervosa
Deeper Dive: Binge-Eating Disorder

*The most commonly encountered eating disorder in YOUR clinical practice!*
What is binge-eating disorder (BED)?

- *DSM-5* defines BED as recurrent episodes of binge eating:
  - Eating, in a discrete period of time, an amount of food larger than most people would eat in a similar amount of time under similar circumstances
  - A sense of *lack of control* over eating during the episode
  - Occurring at least once a week for 3 months
  - Associated with marked distress
DSM-5 Associated Features

Binge episodes are also associated with ≥ 3 of the following:

1. Eating more rapidly than usual
2. Eating until feeling uncomfortably full
3. Eating large amounts of food when not feeling physically hungry
4. Eating alone because of feeling embarrassed by how much one is eating
5. Feeling disgusted with oneself, depressed, or guilty afterwards

*Not unusual for all 5 features to be present*

Levels of severity are based on the number of weekly binge eating episodes:

- Mild: 1–3
- Moderate: 4–7
- Severe: 8–13
- Extreme: ≥ 14

Severity level can be increased to reflect other symptoms and functional disability.

Validity of DSM-5 severity indicators uncertain.

Binge-Eating Disorder Diagnostic Caveats

- Although overvaluation of shape or weight is often seen (40%)…
  - It is not part of the *DSM-5* criteria for BED

- BED vs. bulimia nervosa?
  - BED is *not* associated with regular compensatory behaviors such as purging or excessive exercise, or with dietary restriction, although frequent dieting may be reported

- Since it is often a secretive behavior and associated with embarrassment or shame…
  - It is not ordinarily revealed unless the clinician makes a direct inquiry regarding eating patterns
Context is Important

- An excessive amount of food for a typical meal might be considered normal during a celebration or holiday meal.
- A single episode of binge eating ≠ one setting
  - I.e., from office to car to home.
- The food consumption **must** be accompanied by a **sense of lack of control**
  - E.g., not unusual for an individual to continue binge eating if the phone rings.
- Types of foods consumed can also be “healthy”
  - E.g., fruits, yogurt.
Etiology of Binge-Eating Disorder

- Multiple neurobiological explanations, including:
  - Dysregulation in reward center and impulse control circuitry
  - Potentially related disturbances in dopamine signaling (“wanting food”) and endogenous μ-opioid signaling (“liking food”)

- Additionally, there is interplay between genetic influences and environmental stressors
  - Functional polymorphisms of the dopamine D₂ receptor gene and of the μ-opioid gene may influence proneness to BED
  - Antecedents to binge eating include negative affect; interpersonal stressors; dietary restraint; negative feelings related to body weight, body shape, and food; and boredom

Binge-Eating Disorder is the Most Common Eating Disorder

- Estimated lifetime prevalence of 0.85% among US adults
  - BED > bulimia nervosa and anorexia nervosa
- Lifetime prevalence for BED:
  - 0.42% for men and 1.25% for women
- Important caveats:
  - Although many people with BED are obese (BMI ≥ 30 kg/m\(^2\)), roughly half are not (yet)
  - Odds Ratio BED with severe obesity (BMI > 40) is 4.61
Binge-Eating Disorder is the Most Common Eating Disorder (cont’d)

• Roughly comparable across ethnic/racial groups:
  • Non-Latino white (0.94%)
  • Latino (0.75%)
  • African-American (0.62%)

• The onset of BED occurs at a later median age (21 years) than anorexia nervosa (17 years) or bulimia nervosa (16 years), and with a much wider distribution

• The mean persistence of BED is about 16 years

Binge-Eating Disorder: The “Invisible Disorder”

• BED is often a secret disorder—spouse and children often unaware
• BED is often shameful—reluctance to bring it up
• BED is an unknown disorder to patients—many have not heard of it
• BED is an under-recognized disorder to clinicians
  • Among the 22,397 respondents to an Internet survey:
    • 344 participants (1.5%) met the DSM-5 criteria for BED in the past 12 months
    • Of these 344 respondents with BED, only 11 (3.2%) had ever been diagnosed with BED by a health care provider

| ! | Every clinician has patients with unrecognized BED: They come for treatment of other disorders! |

How to Ask?
Make it Routine

• We already ask about disturbances in appetite and change in weight, both up and down—a barometer for general health.

• **How** a person eats is not always a subject for discussion:
  
  • ASK: “Have you ever eaten more than you intended?”
  • Follow up with: “Did you feel like it wasn’t possible to stop?”

---

There is often miscommunication about the severity of binge-eating episodes, as well as judgment, bias, and shame surrounding BED.

### How to Ask? Preferred Words

<table>
<thead>
<tr>
<th>Preferred Words? ✓</th>
<th>Words to Avoid? X</th>
</tr>
</thead>
</table>
| • Preferred obesity-related terms  
  • “weight”  
  • “BMI”  
| • “fatness”  
| • “excess fat”  
| • “large size”  
| • “heaviness”  
| • “obesity”  
| • “willpower”  

• Preferred binge-related descriptions  
  • “kept eating even though not physically hungry and loss of control”

Share the Binge-Eating Disorder Criteria With Your Patient

• The *DSM-5* criteria are a useful educational tool

• If asked, patients will endorse that they have the symptoms

• They will feel validated that these symptoms “are real”

• They will feel validated that this is a “real” disorder

• They will be more open to share their thoughts and feelings about this “shameful secret” they have kept to themselves for years
Comorbidities

• Comorbidities bring the patient in for treatment → associated BED often goes unrecognized

• Typical physical comorbidities (even with normal BMI, include a heightened risk for metabolic syndrome):
  • Sleep disturbances
  • Pain (musculoskeletal, headaches)
  • Gastrointestinal conditions
  • Menstrual irregularities
  • Shortness of breath
  • Diabetes
  • Low health-related quality of life
Comorbidities (cont’d)

• Psychiatric comorbidities are ubiquitous…
  • Mood disorders
  • Anxiety disorders
  • Substance use
  • Attention deficit disorder

\[ \text{80\% of patients with BED will meet criteria for other psychiatric disorders} \]

• Suicide attempt risk is elevated in individuals with BED, even after accounting for the presence of major depressive disorder

• Psychiatric comorbidity is linked to the severity of binge eating and not to the degree of obesity

Burden of Binge-Eating Disorder: Functional Impairment

Role Impairment Associated with BED
Data from the National Comorbidity Survey Replication (N=9282)

Hudson JI et al. Biol Psychiatry 2007;61(3):348-58;
Figure adapted from: Kornstein SG. J Clin Psychiatry 2017;78 Suppl 1:3-8.
Psychological Treatments for Binge-Eating Disorder

- Cognitive behavioral therapy (CBT) and interpersonal psychotherapy (IPT) can reduce binge-eating behavior
  - Access to such treatments may be limited because of local availability and/or cost
- 33-50% of patients with BED do not appear to benefit completely or sufficiently from psychological and behavioral treatment
- Generally little to no weight loss, although successfully eliminating binge eating can protect against future weight gain

CBT = cognitive-behavioral therapy; IPT = interpersonal psychotherapy

<table>
<thead>
<tr>
<th>Study, Year (Reference)</th>
<th>RR (95% CI)</th>
<th>Events, n/N</th>
<th>Factors placebo</th>
<th>Favors treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dingemans et al, 2007</td>
<td>3.48 (1.39–8.81)</td>
<td>19/30</td>
<td>4/22</td>
<td></td>
</tr>
<tr>
<td>Peterson et al, 1998</td>
<td>7.56 (1.13–50.45)</td>
<td>11/16</td>
<td>1/11</td>
<td></td>
</tr>
<tr>
<td>Peterson et al, 2009</td>
<td>5.09 (2.42–10.71)</td>
<td>31/60</td>
<td>7/69</td>
<td></td>
</tr>
<tr>
<td>Tasca et al, 2006</td>
<td>6.17 (2.37–16.06)</td>
<td>29/47</td>
<td>4/40</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>4.95 (3.06–8.00)</td>
<td>90/153</td>
<td>16/142</td>
<td></td>
</tr>
</tbody>
</table>

Pharmacologic Treatments for Binge-Eating Disorder

- Antidepressants (SSRIs, SNRIs, NDRIs)
  - Can reduce BE frequency
  - Not effective for weight loss
  - May increase appetite
- Anticonvulsants (topiramate)
  - Efficacious in reducing BE and weight
  - Negative impact on cognitive function
- Anti-obesity/anorectic agents that target appetite and weight (sibutramine)
- Medications for addictive disorders (naltrexone)
- ADHD medications (lisdexamfetamine)
- Dual-acting dopamine and norepinephrine reuptake inhibitor (dasotraline)

None indicated for BED

Falls short in terms of robustness of effect, tolerability, or both

Sole agent approved for BED

Phase 3 for BED

SSRI = selective serotonin reuptake inhibitor; SNRI = serotonin–norepinephrine reuptake inhibitor; NDRI = norepinephrine–dopamine reuptake inhibitor

Pharmacologic Treatments for Binge-Eating Disorder

Effect of Lisdexamfetamine, 50 mg/day or 70 mg/day (Top), and Second-Generation Antidepressants (Bottom) on Abstinence From Binge Eating

<table>
<thead>
<tr>
<th>Study, Year (Reference)</th>
<th>RR (95% CI)</th>
<th>Treatment</th>
<th>Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td>McElroy et al, 2015</td>
<td>2.11 (1.28–3.48)</td>
<td>60/130</td>
<td>14/64</td>
</tr>
<tr>
<td>SPDB489-343, 2015</td>
<td>2.84 (1.92–4.19)</td>
<td>77/192</td>
<td>27/191</td>
</tr>
<tr>
<td>SPDB489-344, 2015</td>
<td>2.73 (1.83–4.09)</td>
<td>71/195</td>
<td>26/195</td>
</tr>
<tr>
<td>Overall</td>
<td>2.61 (2.04–3.33)</td>
<td>208/517</td>
<td>67/450</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study, Year (Reference)</th>
<th>RR (95% CI)</th>
<th>Treatment</th>
<th>Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td>McElroy et al, 2015</td>
<td>2.11 (1.28–3.48)</td>
<td>60/130</td>
<td>14/64</td>
</tr>
<tr>
<td>SPDB489-343, 2015</td>
<td>2.84 (1.92–4.19)</td>
<td>77/192</td>
<td>27/191</td>
</tr>
<tr>
<td>SPDB489-344, 2015</td>
<td>2.73 (1.83–4.09)</td>
<td>71/195</td>
<td>26/195</td>
</tr>
<tr>
<td>Overall</td>
<td>2.61 (2.04–3.33)</td>
<td>208/517</td>
<td>67/450</td>
</tr>
</tbody>
</table>

More Details About Lisdexamfetamine

- Lisdexamfetamine is indicated for the treatment of moderate to severe BED and is not indicated for weight loss.
- Cardiac disease and risk of abuse must be assessed when prescribing.
- Recommended starting dose 30 mg/day.
- Titrated in increments of 20 mg at approximately 1 week intervals to achieve the recommended target dose of 50–70 mg/day.
- Lisdexamfetamine is taken once daily in the morning with or without food.
  - Afternoon doses are to be avoided because of the potential for insomnia.
Lisdexamfetamine Clinical Trials

- One 11-week, Phase II, proof-of-concept, placebo-controlled study that tested fixed doses of lisdexamfetamine (30, 50, and 70 mg/day)

- Two 12-week, Phase III, placebo-controlled studies examining lisdexamfetamine (50-70 mg/day)

- Statistically significant reductions in binge eating days/week, the primary outcome measure, were observed at doses of 50 and 70 mg/day with large effect sizes

- Large effects were observed on reductions in the Yale-Brown Obsessive Compulsive Scale modified for binge eating
Phase 3 Acute Studies

- Two 12-week, randomized, double-blind, multi-center, parallel-group, placebo-controlled dose-optimization studies (N=374; 350)
- In both studies, LDX was superior to placebo in reducing binge days/week (primary outcome)
- LDX was also superior to placebo for global improvement, 4-week binge eating cessation rates, and reduction of obsessive-compulsive binge eating symptoms

LDX, lisdexamfetamine dimesylate; PBO, placebo; SD, standard deviation

Lisdexamfetamine and Specific Adverse Events

Number and percentage of participants with common adverse events and NNH vs. placebo and 95% CIs from the Phase 2 or 3 double-blind, 11- to 12-week placebo-controlled trials of lisdexamfetamine in adults with BED

<table>
<thead>
<tr>
<th>Adverse Event</th>
<th>Lisdexamfetamine (all doses) (N=569)</th>
<th>Placebo (N=435)</th>
<th>NNH (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry mouth</td>
<td>207 (36.4%)</td>
<td>32 (7.4%)</td>
<td>4 (3–5)</td>
</tr>
<tr>
<td>Decreased appetite</td>
<td>70 (12.3%)</td>
<td>13 (3.0%)</td>
<td>11 (8–17)</td>
</tr>
<tr>
<td>Insomnia</td>
<td>79 (13.9%)</td>
<td>21 (4.8%)</td>
<td>11 (8–18)</td>
</tr>
<tr>
<td>Headache</td>
<td>81 (14.2%)</td>
<td>39 (9.0%)</td>
<td>19 (11–75)</td>
</tr>
<tr>
<td>Constipation</td>
<td>35 (6.2%)</td>
<td>6 (1.4%)</td>
<td>21 (15–40)</td>
</tr>
<tr>
<td>Feeling jittery</td>
<td>30 (5.3%)</td>
<td>2 (0.5%)</td>
<td>21 (15–35)</td>
</tr>
<tr>
<td>Nausea</td>
<td>47 (8.3%)</td>
<td>22 (5.1%)</td>
<td>32 (16–696)</td>
</tr>
<tr>
<td>Irritability</td>
<td>36 (6.3%)</td>
<td>23 (5.3%)</td>
<td>97 (ns)</td>
</tr>
<tr>
<td>Fatigue</td>
<td>31 (5.4%)</td>
<td>21 (4.8%)</td>
<td>162 (ns)</td>
</tr>
</tbody>
</table>

NNH = number needed to harm; ns = not significant.

Lisdexamfetamine Maintenance

- A 39-week, long-term maintenance of efficacy study of lisdexamfetamine for BED, N=275 randomized
- During the 26-week, double-blind, randomized-withdrawal phase of the study, lisdexamfetamine demonstrated superiority over placebo on time to relapse.

Observed relapse rates for lisdexamfetamine vs. placebo were 3.7% vs. 32.1%, resulting in an NNT of 4.

Hudson JI et al. JAMA Psychiatry 2017;74(9):903-10.

NNT = number needed to treat
LDX Clinically Relevant Outcomes

**RESPONSE**
- LDX (N = 556): 86.0%
- Placebo (N = 422): 47.9%
- **NNT = 3**

**REMISSION**
- LDX (N = 553): 39.6%
- Placebo (N = 421): 14.7%
- **NNT = 4**

**UNACCEPTABILITY**
- LDX (N = 569): 4.6%
- Placebo (N = 435): 2.3%
- **NNH = 44**

---

LDX Clinically Relevant Outcomes

**Response**
- Responder rate (CGI-I = 1 or 2)
  - LDX (N = 556): 86.0%
  - Placebo (N = 422): 47.9%
- NNT = 3

**Remission**
- Remission rate (No BE in last four weeks)
  - LDX (N = 553): 39.6%
  - Placebo (N = 421): 14.7%
- NNT = 4

**Unacceptability**
- Discontinuation rate due to AEs
  - LDX (N = 569): 4.6%
  - Placebo (N = 435): 2.3%
- NNH = 44

**LDX Clinically Relevant Outcomes**

**Likelihood to be Helped or Harmed**

- LHH for response vs. discontinuation because of an AE is $44/3 = 14.7$
  - LDX is about 15 times more likely to result in response than in discontinuation because of an adverse event
- LHH for remission vs. discontinuation because of an AE is $44/4 = 11$
  - LDX is 11 times more likely to result in remission than in discontinuation because of an adverse event

**NNT** = 3

**NNH** = 44

Tips for Rx Lisdexamfetamine for Binge-Eating Disorder

• Explain that the goal is to decrease the frequency of binge episodes and that lisdexamfetamine is not being Rx’d for weight loss or for obesity
  − Weight loss will probably occur and you should continue with weighing the patient at every visit

• Warn that dry mouth will probably occur

• Ask that you be told right away if they experience being “revved up” or irritable, or otherwise feeling not themselves

• Be open-minded about dosing
  − The clinical trials compared groups of patients, but we treat individuals
What about combination therapy: CBT+Rx?

- Adding pharmacotherapy to CBT failed to enhance binge eating outcomes in 6 of 7 published studies testing a variety of medications.

- One study with statistical advantage for a combined approach: topiramate + CBT
  - Produced better outcomes than placebo + CBT for reducing both binge eating and weight.

- CBT plus lisdexamfetamine has not been tested.

Binge-Eating Disorder: Summary

- BED is different from overeating and requires the presence of distinguishing features, notably and specifically **loss of control**, marked distress, and strong feelings of shame and guilt.

- Psychiatric and somatic co-occurrences are very common, as are functional impairments.

- **BED may go undiagnosed** for many years because patients are not always specifically asked about their eating behaviors.

- BED occurs in both men and women across racial and ethnic groups, and although BED is frequently associated with obesity, many adults with BED are of healthy weight or overweight.

- Effective treatment modalities include certain specific psychotherapy (**CBT, IPT, behavioral weight loss**) and pharmacologic approaches, of which **lisdexamfetamine** has received regulatory approval, and **dasotraline** is in Phase 3 of clinical development.
Eating Disorders: Summary

• Anorexia nervosa, bulimia nervosa, and binge-eating disorder are distinct from one another but share some similarities on psychopathology

• All three can be treated with psychological/behavioral therapies

• Medication treatments have been established for bulimia nervosa (fluoxetine) and binge-eating disorder (lisdexamfetamine, and possibly dasotraline in the near future), but not for anorexia nervosa

• Anorexia nervosa and bulimia nervosa are associated with behaviors that are more difficult to hide than binge-eating disorder, so that persons with binge-eating disorder are often unrecognized and untreated
Posttest Question

Which of the following clinical symptoms can be used to differentiate bulimia nervosa and binge-eating disorder?

1. Binge eating frequency
2. Duration of binge eating
3. Loss of control over binge eating
4. Presence of compensatory behaviors