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Eating Disorder vs Disordered Eating GI Dept Grand Rounds

DISCLOSURE STATEMENTS

- Within the past twelve months, I have not had any financial relationships with the manufacturers of health care products
- I WILL NOT BE DISCUSSING
 pharmaceuticals, medical procedures, or
 devices that are investigational or
 unapproved for use by the FDA.

Outline

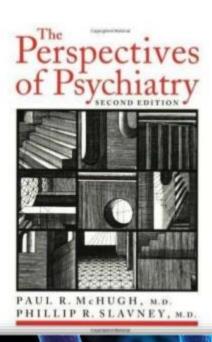


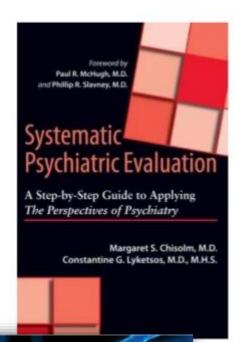
- Overlap of eating disorder and disordered eating, psychiatric and medical perspectives
 - National Neuroscience Curriculum Initiative perspective
 - Focus on mainly Anorexia Nervosa vs Avoidant/Restrictive Food Intake Disorder (ARFID)

The Challenge of Overlap



The Perspectives of Psychiatry





INTEGRATING A MODERN NEUROSCIENCE PERSPECTIVE
INTO EVERY FACET OF CLINICAL PRACTICE

ED Video from National Neuroscience Curriculum Initiative (NNCI)

- https://vimeo.com/159974327
- http://www.nncionline.org/course/dr-carriemcadams-eating-disorders/

DSM-5 Diagnostic Criteria

Anorexia nervosa

- 1. Restriction of energy intake that leads to a low body weight, given the patient's age, sex, developmental trajectory, and physical health
- 2. Intense fear of gaining weight or becoming fat, or persistent behavior that prevents weight gain, despite being underweight
- 3. Distorted perception of body weight and shape, undue influence of weight and shape on self-worth, or denial of the medical seriousness of one's low body weight

Bulimia nervosa

- 1. Recurrent episodes of binge eating characterized by BOTH of the following:
 - Eating in a discrete amount of time (within a 2 hour period) large amounts of food.
 - Sense of lack of control over eating during an episode.
- 2. Recurrent inappropriate compensatory behavior in order to prevent weight gain (purging).
- 3. The binge eating and compensatory behaviors both occur, on average, at least once a week for three months.
- 4. Self-evaluation is unduly influenced by body shape and weight.
- 5. The disturbance does not occur exclusively during episodes of anorexia nervosa

DSM-5 Criteria for Avoidant/Restrictive Food Intake Disorder (ARFID)

A. An eating or feeding disturbance (e.g., apparent lack of interest in eating or food; avoidance based on the sensory characteristics of food; concern about aversive consequences of eating) as manifested by persistent failure to meet appropriate nutritional and/or energy needs associated with one (or more) of the following:

- **1.** Significant weight loss (or failure to achieve expected weight gain or faltering growth in children).
- Significant nutritional deficiency.
 Dependence on enteral feeding or oral nutritional supplements.
- 4. Marked interference with psychosocial functioning.
- **B.** The disturbance is not better explained by lack of available food or by an associated culturally sanctioned practice.

C. The eating disturbance does not occur exclusively during the course of anorexia nervosa or bulimia nervosa and there is no evidence of a disturbance in the way in which one's body weight or shape is experienced.

D. The eating disturbance is not attributable to a concurrent medical condition or not better explained by another mental disorder. When the eating disturbance occurs in the context of another condition or disorder, the severity of the eating disturbance exceeds that routinely associated with the condition or disorder and warrants additional clinical attention.

Eating Disorder...or Disordered Eating?

- We don't have a DSM psychiatric illness to completely describe eating problems in patients with chronic medical illnesses
- Probably the closest approximation is avoidant/restrictive food intake disorder (ARFID)
- Treatments for other types of eating disorders can be helpful, e.g., for patients who aren't eating because of a medical illness

Disordered Eating

- Eating behaviors that deviate from cultural norms
- Includes food restriction, skipping meals, and over-eating
- Can lead to development of an eating disorder, which can challenge the paradigm of psychiatric treaters
- May be precipitated or triggered by GI disorder

Non-Fat Phobic AN

- Variously called EDNOS-W (without fat phobia) or atypical ED without drive for thinness (DT)
- Some will improve in standard ED cognitive behavioral treatment protocols
- They may genuinely deny fear of fatness and be more focused on GI somatic symptoms: gastric or colonic symptoms (bloating, nausea, epigastric discomfort, fullness, abdominal pain, constipation, and diarrhea) exacerbated by food ingestion—raising questions about role of somatization

Somatic symptom disorder

- A. One or more somatic symptoms that are distressing or disrupt daily life.
- B. Excessive thoughts, feelings, behaviors related to the symptom or health concern:
 - 1. Disproportionate and persistent thoughts about seriousness.
 - 2. Persistently high level of anxiety about health or symptoms.
 - 3. Excessive time and energy devoted to these concerns.
- A. Symptomatic for > 6 months (does not have to be the same symptom).
- No longer requires symptoms to be medically unexplained.

Risk factors overlap for somatoform and eating disorders and disordered eating

Risk Factors

Co-morbid depression and/or anxiety.

History of trauma.

History of abuse.

Low level of social support.

Not Included in DSM-5

- Orthorexia
 - Obsession with eating healthy food
 - Fixated on quality or purity rather than quantity
 - Excessive anxiety about food choices
 - May eliminate entire food choices
 - Interferes with role function or causes significant distress, frank malnutrition

ED Mimic: Cannabinoid Hyperemesis Syndrome

- Persistent nausea and vomiting, abdominal pain (cyclic vomiting) relieved by hot showers/baths in context of marijuana use disorder
- Generally resolves after quitting cannabis
- Substance use disorder (SUD) and ED are comorbid 23-37%
- Most studies suggest ED predates SUD

Diabulimia

- Manipulation by reduction or omission of insulin in order to lose weight by diabetic pts
- Insufficient insulin leads to excretion rather than absorption of sugars—form of purging
- Increased mortality, blindness, kidney failure, other diabetic complications
- Watch for unexplained ketoacidosis, hypoglycemia, persistently elev Hgba1c

Gastrointestinal disorders

- Caused by disruptions in the gastrointestinal tract
- Include disorders such as celiac disease (CD), irritable bowel syndrome (IBS), and inflammatory bowel disease
- Significant disease burden
- Prevalence is increasing
- Symptoms include nausea, bloating, constipation, diarrhea, abdominal pain, and weight changes
- Management often involves dietary modification with avoidance of symptom-triggering foods

GI Disorders and Eating Behavior

- Food aversions may develop as a result of distressing
 GI symptoms and lead to restriction of certain foods
- Dietary-controlled GI disorders require a prescribed dietary restriction
 - May promote development of harmful thoughts and attitudes towards food and body weight

Disordered Eating & ED in GI Disease

- Prevalence of disordered eating (DE) among those with GI disorders exceeds the rates found in the general population (5.3-44.4%)
- In some studies, individuals with dietarycontrolled health conditions were twice as likely to have been diagnosed with an ED compared with controls (Quick, McWilliams, & Byrd-Bredbenner, 2012).
- Food restriction was the most common form of DE; bulimic patterns and excessive exercise were also reported, though less frequently

DE Correlates

- Correlates of DE: depression, anxiety, dietary adherence, decreased quality of life
- Fear and anxiety around GI symptoms may perpetuate restrictive DE behaviors
- Both poor and good adherence to prescribed diet have been correlated with DE

DE and Relation to Dietary Adherence

- Complex role of adherence to dietary management and disordered eating behavior
- 2 possible paths:
 - Poor dietary management → increased intake of trigger foods → increased GI symptoms → weight loss
 - Good dietary management → development of food aversions → increased food restriction

Findings which might suggest organic disease

History

- Involuntary weight loss (with normal body image)
- Deceleration of linear growth
- Localized persistent abdominal pain (RUQ or RLQ)
- Nocturnal awakening for abdominal pain
- Non-induced vomiting (bilious, blood, cyclical, and protracted)

- Persistent heartburn/GER D (with cough, aspiration, sleep awakening, dysphagia, and odynophagia)
- Hematochezia /melena
- Chronic noninduced severe diarrhea
- Unexplained fevers
- Family history of IBD

Physical exam

- Localized abdominal tenderness (RUQ or RLQ)
- Localized abdominal fullness or mass
- Costovertebral angle tenderness
- Hepatosplenomegaly
- Perianal abnormalities
- Occult blood in stool

Bern & O'Brien, 2013.

Functional gastrointestinal disorders among eating disorder patients

- Up to 98% of ED patients may have a functional gastrointestinal disorder (FGID)
 - Among 101 patients admitted to an ED unit (AN 44%, BN 22%, unspecified 34%), diagnostic criteria were met for the following:
 - Irritable bowel syndrome 52%
 - Functional heartburn 51%
 - Functional abdominal bloating 31%
 - Functional constipation 24%
 - Functional dysphagia 22%
 - Functional anorectal pain disorder 23%
 - 3 or more FGIDs 52%
 - The direction for this relationship appears to be EDO → FGID
 - ED can cause alteration in GI motor physiology and sensitivity disturbance that is related to the eating behavior
- Once established, the psychiatric and physiological disturbances can perpetuate one another

Key Differences Between ED and DE

ANOREXIA/BULIMIA NERVOSA

- Fear of gaining weight or becoming fat
- Disturbed perception of own body weight or shape
 - Tied to self-evaluation
- Compensatory behaviors such as purging are intended to prevent weight gain

AVOIDANT/RESTRICTIVE FOOD INTAKE DISORDER

- Not interested in food or avoiding it because of a reason NOT related to body image
- This does not fit exactly because part of the criteria is that disorder cannot be better explained by a medical condition (flawed?).
 - But the motivation behind not eating may not predict response to behavioral treatment

Key Points

- Organic GI disease and eating disorders can coexist, and when both are present they may perpetuate one another.
- Thorough history, physical exam, and diagnostic work-up are essential in diagnosis and appropriate management.
- Inconsistencies in weight loss, nutritional intake, and objective findings may raise suspicion for a clinical eating disorder.
- Exploration of body image satisfaction, attitudes towards food, compensatory behaviors, and motivation/intent for weight loss may help guide diagnosis. Validated eating attitudes scales may be useful.
- A biopsychosocial approach that involves a multi-disciplinary team may be most helpful in conducting a thorough assessment and implementing treatment.

What UIHC's Eating Disorder Treatment Entails—cognitive behavioral therapy

- Therapeutic targets in addition to weight restoration include:
 - Understanding negative thoughts and symptoms
 - Improving self-worth, minimizing negative body perceptions
 - Improving coping skills and stress management
 - Teaching healthy habits
 - Building support network
- Many of these targets are also applicable to patients who are avoiding or restricting food due to a medical illness

Key questions to help identify ED vs DE:

- Is the driving force behind the weight loss or poor weight gain due to a distortion in body image and desire for thinness?
- Do you suspect psychiatric complexity beyond expected demoralization about their illness?
- Is the patient reluctant to work with you on improving weight because of a fear of gaining weight?
- Is the anxiety about eating out of proportion to their limitations due to medical illness?

Sources

- Association AP. Diagnostic and statistical manual of mental disorders (fifth edition). American Psychiatric Association, Washington, DC; 1980.
- Bayle, F. and Bouvard, M., 2003. Anorexia nervosa and Crohn's disease dual diagnosis: a case study. European Psychiatry, 18 (8). 421-422.
- Bern, E. and O'Brien, R., 2013. Is it an eating disorder, gastrointestinal disorder, or both? Current Opinion in Pediatrics, 25 (4). 463-470.
- Boyd, C., Abraham, S., and Kellow, J., 2005. Psychological features are important predictors of functional gastrointestinal disorders in patients with eating disorders. *Scandanavian Journal of Gastroenterolgoy*, 40 (8). 929-935. Fletcher et al., 2008. I'l know this is bad for me but...". A qualitative investigation of women with irritable bowel syndrome
- and inflamatory bowel disease. Part II.
- Janssen, P. (2010), Can eating disorders cause functional gastrointestinal disorders? Neurogastroenterology & Motility, 22: 1267-1269.
- Leffler et al., 2007. The interaction between eating disorders and celiac disease: an exploration of 10 cases. European Journal of Gastroenterology & Hepatology, 19 (3). 251-255.

 Quick et al., 2013. Chronic illness and disordered eating. A discussion of the literature. Advances in Nutrition, 4 (2013). 277-
- Satherley, R., Howard R., and Higgs, S., 2015. Disordered eating practices in gastrointestinal disorders. Appetite, 84 (1),
- Wildes, J. E., et al. (2013). "Characteristics and stability of empirically derived anorexia nervosa subtypes: towards the identification of homogeneous low-weight eating disorder phenotypes." J Abnorm Psychol 122(4): 1031-1041.
- Abbate-Daga, G., et al. (2007). "An attempt to understand the paradox of anorexia nervosa without drive for thinness." Psychiatry Řes 149(1-3): 215-221.
- Dalle Grave, R., et al. (2008). "Underweight eating disorder without over-evaluation of shape and weight: Atypical anorexia nervosa?" Int J Eat Disord 41(8): 705-712.
- Dunn, T. M. and S. Bratman (2016). "On orthorexia nervosa: A review of the literature and proposed diagnostic criteria." Eating Behaviors 21: 11-17.
- Brewerton, T. D. and O. Anderson (2016). "Cannabinoid hyperemesis syndrome masquerading as an eating disorder." International Journal of Eating Disorders.