Orthorexia Nervosa: Is it an Eating Disorder or a feature of Obsessive Compulsive Disorder?

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Learning Objectives

Differentiate between patients with orthorexia versus other eating disorders

Discuss Orthorexia Nervosa and proposed diagnostic criteria

Implement strategies to enhance detection and treatment in order to improve patient functioning.
Eating Disorders Review

- Complex systemic diseases
- Comorbid with many psychiatric and somatic disorders
- Tendency for chronicity
- Significant medical and psychiatric consequences
- High socioeconomic impact
DSM-5 Eating Disorder Diagnostic Categories

- Anorexia Nervosa (AN)
- Bulimia (BN)
- Binge Eating Disorder (BED)
- Avoidant/restrictive food intake disorder (ARFID)
  **Orthorexia Nervosa (ON)**
- Other specified feeding or eating disorders
- Unspecified Feeding or Eating Disorder

Anorexia Nervosa (AN)

- Restriction of energy intake relative to requirements
- Intense fear of gaining weight or becoming overweight, even though underweight
- Disturbance in how one’s body weight or shape is experienced
- Persistent Behaviors that interfere with weight gain

Subtypes

- F50.01 Restricting Type
- F50.02 Binge/eating/purging type

Bulimia Nervosa (BN)

Recurrent episodes of binge eating occurring on average at least once a week for 3 months

Eating within a 2 hour period more food than most people would eat in the same period of time under similar circumstances

A sense of lack of control over eating during the episode

Recurrent inappropriate compensatory behaviors in order to prevent weight gain

Purging  Non-purging  

**Binge Eating Disorder (BED)**

Eating within a 2 hour period more food than most people would eat in the same period of time under similar circumstances

Recurrent episodes of binge eating occurring on average at least once a week for 3 months, associated with 3 or more of the following:

- eating more rapidly
- until feeling uncomfortably full
- when not physically hungry
- eating alone due to embarrassment
- feeling disgusted with self, depressed or guilty

Binge Eating Disorder (BED) continued...

A sense of lack of control over eating during the episode

Marked Distress

Not associated with the recurrent use of inappropriate compensatory behavior

Unspecified Feeding or Eating Disorder (F50.9)

Symptoms characteristic of a feeding and eating disorder that cause distress and functional impairments are present, but full criteria is not met for other diagnosis.

Clinician chooses not to specify the reason the criteria is not met for a certain diagnosis, as well as when there is insufficient information to make a diagnosis.

Other Specified Feeding or Eating Disorder (F50.8) (Previously Eating Disorder NOS)

- Atypical Anorexia Nervosa
- Bulimia Nervosa of low frequency or duration
- Binge Eating Disorder of low frequency or limited duration,
- Purging disorder
- Night Eating Syndrome

Feeding and Eating Disorders

- **Rumination disorder** is the repeated regurgitation of food.

- **Pica** is the recurring ingestion of nonnutritive substances

Avoidant/Restrictive Food Intake Disorder (F50.8)

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).

2. Significant nutritional deficiency.

3. Dependence on enteral feeding or oral nutritional supplements.

4. Marked interference with psychosocial functioning.
Avoidant/Restrictive Food Intake Disorder continued

- **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.
Avoidant/Restrictive Food Intake Disorder continued

***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.
Neurotransmitters and Food Intake

- Dopamine (DA), serotonin (5HT), noradrenaline in hypothalamic and striatal regions regulate food intake
  - Affect hunger and satiety
  - Mediate reward and motivation of feeding
Dysregulation of Brain Reward System

- Alterations in dopamine, acetylcholine, and opioid systems in reward-related areas observed in patients with eating disorders

  - **AN** – Reduced dopaminergic serotonergic, and noradrenergic neurotransmission in hypothalamic and striatal regions
    - Changes in dopamine D2 receptors and 5HT2C/2A receptors, compensatory changes

  - **BN/BED** – Monoaminergic neurotransmission is downregulated in hypothalamic and striatal regions
    - Overactive alpha-2 adrenoreceptors may contribute to an attenuated response to food
Dysregulation of Brain Reward System

- Binging on palatable food – releases Dopamine (DA)
- Purging attenuates the release of Ach that might signal satiety
- **BED** Alterations within endogenous opioid system
  - Disparities in dopamine receptor and dopamine receptor transportation gene expression
  - Alterations within dopaminergic reward pathways
Diagnostic Survey for Eating Disorders (DSED) Time to Complete 30–40 Has 12 sections covering demographics, weight history and body image, dieting, binge eating, purging, exercise, related behaviors, sexual functioning, menstruation, medical and psychiatric history, life adjustment, and family history.

Bulimia Test—Revised (BULIT-R) Brief (36-item) measure designed to assess eating behaviors and attitudes related to bulimia.

Eating Disorder Examination—Questionnaire (EDE-Q) Time to complete 8–10 Self-report version of the EDE, designed for situations in which an interview cannot be used; validated against the EDE.
Self-Report Measures

**EDE Eating Disorders Inventory–2 (EDI-2)** Completion Time 15–20
Standardized measure of psychological traits and symptom clusters presumed to have relevance to understanding and treating eating disorders; 11 subscales presented in 6-point, forced-choice format; three scales assess attitudes and behaviors concerning eating, weight, and shape; eight assess more general psychological traits

**Eating Disorders Questionnaire (EDQ)** Completion Time 45–60
Addresses eating disorder and associated symptoms, time course, and treatment

**Questionnaire on Eating and Weight Patterns (QEWP)** Completion Time 5–15 Measures the nature and quantity of binge eating episodes to assess binge eating disorder
Eating Attitudes Test (EAT)

- **Time to complete 5–10 Brief (26-item),
- Assess "eating disorder risk"
- Widely used standardized self-report screening test of symptoms and concerns characteristic of eating disorders
- iPhone application called Psych On Demand.
Treatment of Eating Disorders - Multidimensional

- Early treatment focuses on (associated with a more favorable prognosis):

  - A. restoration of nutritional status and somatic health, including psycho-educational counseling

  - B. support offered to the patient and his/her family.
Diagnosis and treatment

- Require a **multidisciplinary** approach.
  - A. Psychological factors related to the condition should be assessed.
  - B. The most severe weight loss should be reversed before psychotherapeutic treatment.
  - C. Nutritional counselling is recommended,
  - D. Individual and/or family therapy are considered in accordance with the patient's age, development, symptomatology and comorbid psychiatric disorders.
Psychotherapy

Cognitive Behavioral Therapy (CBT)

Interpersonal Therapy (IPT)

Dialectical Behavior Therapy (DBT)

Family Therapy
Goals of Nutrition Rehabilitation

- Restore weight
- Normalize eating patterns
- Achieve normal perceptions of hunger and satiety.
- Registered Dietician Role
Medication treatment

Useful in the treatment of bulimia nervosa and certain comorbid symptoms of anorexia nervosa.

AN - ? Antidepressant and antipsychotic trials disappointing

BN – FDA approved tx - Fluoxetine 60mg, SSRIs high dose, TCAs,
Duloxetine, Orlistat

BN/BED –, Topiramate, 300mg/day, Zonisamide 436mg/day,
Naltrexone, high dose, Atomoxetine 106mg/day,
Lisdexamfetamine dimesylate(LDX),
Orthorexia Nervosa (ON)

- Term coined by Dr. Steven Bratman (1997)
- Pathological obsession with healthy eating

- Greek word ortho, meaning “straight” or “correct”
- “orexi” meaning appetite
“Righteous Eating”

- People with orthorexia nervosa remained consumed with what types of food they allow themselves to eat, and feel badly about themselves if they fail to stick to their diet.
Background

- Health Food Junkies – by Dr. Bratman and David Knight
- 2004 Italian study by Donini, Marsili, Graziani, Imbriale, & Canella) – this seminal paper gave credibility to the condition and the term used to describe it

Case Studies

- 2005 Zamora, Bonaecchea, Sanchez, and Rial - 28 year old woman
- 2011 Park et al. - 30 year old male
- 2012 Saddichha, Babu, and Chandra - 33 year old woman
- 2015 Moroze et. al - 28 year old male
U.S. Public Awareness of Orthorexia Nervosa

- Summer of 2014

- Jordan Younger, author of a successful blog called “The Blonde Vegan”

- “I would just stand in front of the refrigerator for 20 minutes totally panicking that I wasn’t going to be eating the right thing for my body,” she told ABC News. “I was a slave to food.”
What is Orthorexia?

- Features
- Proposed Diagnostic Criteria
- Treatment options
A Disease Disguised as Virtue

- Obsessive Food Allergy Avoidance

- Quality of the Obsession
  - Absence of moderation
  - Loss of perspective and balance
  - Transfer of too much meaning onto food
  - Escape from life
The Dangers of Orthorexia

- Compulsion begins to override free choice
- Begin to judge everyone else on the basis of diet rather than character and personality
- Spending more hours thinking about food, not simply making dietary choices.
The Dangers of Orthorexia

- Priorities are upside down
- Obsessive Compulsive Disorder
- Social Isolation
- Disease transmission – Children
- Addiction
Orthorexia Diagnostic Tool

- **ORTO – 15** created by Dr. Donini - 15 question multiple choice self-administer questionnaire
  
  Based on the original 10 item questionnaire by Bratman

  - <40 – indicative of ON
    
    ** Need to explore the Obsessive Compulsive aspect of this pathology in further research**
Hidden Causes of Orthorexia

- The Search for Safety
- Desire for Complete Control
- Covert Conformity
- Searching for Spirituality in the Kitchen
- Food Puritanism
- Creating an Identity
- Fear of Other People
The Healing/Extreme Diets

- Food allergies and imperfection
- Raw food theory
- Macrobiotics
- The Zone
- Candida and Other Simple Solutions
- Eat right for Your Blood Type

About to eat my vegan, gluten free, soy free, antibiotics free, raw, non GMO, organic, fat free, low carb dinner.
Is Recovery Possible?

- Steps
- Hidden agendas
- Eating Healthy without Obsession
Intervention

- Easy Decisions
- The Gray Zone
- Proselytizing
Health Professionals should Intervene when....

1. When the diet goes past the point of safety
2. When the diet is making a person miserable
3. When someone admits they would like to quit an extreme diet but can’t
4. When it seems a third party is involved (dietary cult)
5. When the diet seems to have become an emotional illness
Proposed Diagnostic Criteria

- **Criterion A:** Obsessive focus on “healthy” eating as defined by a **dietary theory or set of beliefs** whose specific details may vary; marked by **exaggerated emotional distress** in relationship to food choices perceived as unhealthy; weight loss may ensue as a result of dietary choices, but not the primary goal.

- As evidenced by the following:
Proposed Diagnostic Criteria - Criterion A continued

1. **Compulsive behavior and/or mental preoccupation** regarding affirmative and restrictive dietary practices believed by the individual to promote optimum health.

2. Violation of self-imposed dietary rules **causes exaggerated fear** of disease, sense of personal impurity and/or negative physical sensations, accompanied by **anxiety and shame**.

3. **Dietary restrictions escalate** over time, ad may come to include elimination of entire food groups and involve progressively more frequent and/or severe “cleanses” (partial fasts) regarded as purifying or detoxifying. This escalation commonly leads to weight loss, but the desire to lose weight is absent, hidden or subordinated to ideation about healthy eating.
Proposed Diagnostic Criteria - Criterion B

- The compulsive behavior and mental preoccupation becomes clinically impairing by any of the following:

1. **Malnutrition**, severe weight loss or other medical complications from restricted diet.

2. **Intrapersonal distress or impairment** of social, academic or vocational functioning secondary to beliefs or behaviors about healthy diet.

3. Positive body image, self-worth, identity and/or satisfaction excessively dependent on compliance with self-defined “healthy” eating behaviors.
PARADIGMS

- Perfectionism
- Optimal Diet

What is your paradigm about food?
Redefining our Paradigm

“The problem is you’re a perfectionist. You don’t always have to be totally evil. Sometimes it’s OK to just be annoying.”
Bringing it Together

- One Rule Lifestyle
- New Ways of Thinking
- Commonsense approaches
- Tweaking your underlying beliefs
- Key principles of true health
- Simplify your world
The orthorexic fixates on the quality of food, rather than quantity.

Life becomes about food obsession (planning, preparing, purchasing, eating meals)

Compulsion overrides free choice

Psychological malnutrition impacting quality of life
In Conclusion …

- Intervention must be done carefully - trust is essential

Questions ?
Thank you for your time and attention!
References