Eating Disorders

Anorexia Nervosa

Bulimia Nervosa

(Binge Eating Disorder)

Anorexia Nervosa
Diagnostic Criteria for Anorexia

A. Refusal to maintain body weight at or above a minimally normal weight (weight loss leading to weight < 85% of expected for height) or failure to make expected weight gain during period of growth

B. Intense fear of gaining weight or becoming fat

C. Disturbance of body image

D. amenorrhea in postmenarcheal females (missed at least three consecutive menstrual cycles)

Subtypes

• restricting type
• binge-eating/purging type

Mental Disorder or Alternative Lifestyle?

The Pro-Ana Movement

...but
Anorexia is the most lethal of all mental disorders
Clinical Signs of Anorexia

- bradycardia (slower HR)
- hypotension
- hypothermia
- dry cracked skin (especially hands and feet)
- skin looks yellow (especially on palms)
- brittle nails
- hair loss
- lanugo (fine downy hair)

Medical Complications of Anorexia

**Cardiac Complications**  (in 87% of patients with AN)
- tachycardia (abnormal rapid HR)
- arrhythmia
- heart failure
- EKG abnormalities
- mitral valve prolapse (will reverse with weight gain)
- ipecac-induced heart muscle atrophy
- heart problems may be due to loss of muscle mass in heart or loss of electrolytes (which help regulate heart rhythm)

**Gastrointestinal Functioning**
- bowel dysfunction
- laxative-related partial paralysis of intestine

**Pulmonary Complications**
- purge-related stomach acid in lungs

**Skeletal Complications**
- decreased bone density leading to osteoporosis
- (can appear within one or two years after onset of AN)
- bone density is correlated with amenorrhea
- can result from reduced hormones, vitamin D and calcium loss
- bone density cannot be fully regained after recovery

**Immune Function**
- world-wide, starvation is associated with lower immune function
- but actually some evidence that Ans have fewer colds and flu
- more research needed here
Bulimia Nervosa

Diagnostic Criteria for Bulimia

A. Recurrent episodes of binge eating characterized by:
   1. Eating a large amount of food in a two-hour period
   2. A sense of lack of control over eating during the binge

B. Recurrent inappropriate compensatory behavior in order to prevent weight gain:
   • Self-induced vomiting
   • Fasting
   • Laxatives, diuretics, enemas
   • Excessive exercise

C. The binge/purge both occur at least twice a week for 3 months

D. Self-evaluation is unduly influenced by weight and body shape

E. The binge/purge does not occur exclusively in anorexic episode

Subtypes
   • purging type
   • nonpurging type

Clinical Signs of Bulimia

• erosion of dental enamel (teeth look ragged)
• callouses on backs of hands and fingers
• salivary gland enlargement (giving face chubby appearance)
Diagnostic Criteria for Binge Eating Disorder

(disorder recommended for further study)

A. Recurrent episodes of binge eating
   1. Discrete time period (two hours)
   2. Sense of lack of control over the eating

B. Binge-eating episodes are associated with three or more:
   1. Eating much more rapidly than normal
   2. Eating until feeling uncomfortably full
   3. Eating large amounts of food when not feeling hungry
   4. Eating alone because embarrassed by how much one is eating
   5. Feeling disgusted with oneself, depressed, or very guilty after eating

C. Marked distress regarding binge eating

D. Binges occur at least two days a week for six months

E. Bingeing is not associated with compensatory behaviors and does not occur exclusively within an anorexic episode

The Brain and Eating Disorders

Neuroanatomical (structural)

• anorexia is associated with reduced brain volume, less gray matter, and larger ventricles

Neurochemical (functional)

• most consistent finding is of serotonin dysregulation
• SE may be abnormally high in restricting Anorexics
• SE may be abnormally low in binge/purging episodes associated with AN, bulimia, and binge eating
• note that high levels of SE are associated with weight loss and satiety

Sex and Cross-Cultural Differences

• cross-culturally in U.S. lifetime prevalence of Anorexia is .3-1%
• bulimia prevalence is approx. 1%
• but on college campuses, bulimia may approach 8% of females
• age of onset is under 25 years (peaks at 14-18 years)
• 90% diagnosed are women
• less common in women of color
• but evidence that diagnosis in black women is on the rise
• when immigrants come to this country, they become more vulnerable
• some evidence that anorexia and bulimia in men are on the rise
• Adonis Complex: a variant in men?
  • binge eating, fear of fat + compensatory behaviors:
  • weightlifting and exercise obsessions, anabolic steroids
Comorbidity

Anorexia (restricting):
  - depression
  - OCD symptoms
Anorexia (binge/purgeing) and Bulimia:
  - depression
  - OCD symptoms
  - personality disorders
  - Borderline symptoms
  - impulsivity
  - substance abuse
  - stealing
  - self-mutilation

Note that binge/purgers have more serious psychopathology

SocioCultural Factors

• intense emphasis on thinness in females in Western society
• steady decrease in the BMI of female celebrities
• *Playboy* centerfolds and Miss Americas (Garner et al, 1980)
• Barbie dolls
• peer pressure (teasing, etc)

<table>
<thead>
<tr>
<th></th>
<th>Average woman</th>
<th>Barbie</th>
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<tbody>
<tr>
<td>Height</td>
<td>5’ 4”</td>
<td>6’ 0”</td>
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<tr>
<td>Weight</td>
<td>145 lbs.</td>
<td>101 lbs</td>
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<tr>
<td>Dress size</td>
<td>11 - 14</td>
<td>4</td>
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<tr>
<td>Bust</td>
<td>36 - 37”</td>
<td>38”</td>
</tr>
<tr>
<td>Waist</td>
<td>29 - 31”</td>
<td>18”</td>
</tr>
<tr>
<td>Hips</td>
<td>40 - 42”</td>
<td>34”</td>
</tr>
</tbody>
</table>
Family Factors

- typical anorexic family  
  (Hsu et al, 1990)
- successful, hard-driving, concerned about appearances
- family members deny or ignore conflicts or negative feelings
- attribute problems externally
- mothers (Pike & Rodin, 1991) “society’s messengers” thinness is important
dieting themselves, perfectionistic
- Keel et al (1997): eating disorders predicted by mother’ dissatisfaction with
  own weight plus mother’s and father’s critical comments

Personality Factors

- low self esteem
- perfectionism
- neuroticism

Other Predictors

- eating disorders in the family
- overweight as child or young teen
- obesity in family
- sexually abused as a child

Biological Factors

Genetic

- evidence that eating disorders run in families
- BUT may be individual predictors that run in families
  such as propensity for obesity, impulsivity, compulsions

Neurochemical

- evidence of serotonin dysregulation
Treatment of Anorexia

Inpatient Treatment

Treatment is multimodal (combination of therapies)

- first goal is to promote weight gain
- cognitive therapy
- family therapy
- group therapy

- SSRIs (limited effectiveness but may help prevent relapse)

Treatment of Bulimia

Multimodal

- behavioral
- cognitive
- group therapy
- SSRIs

In one study, 33% of anorexics were fully recovered after treatment, 50% were partially improved.

Relapse rate is very high.

Even for those who regain weight to normal levels, weight may be a lifelong preoccupation.

Even after recovery, many anorexics have difficulties with other psychopathology such as depression.
Somatoform Disorders

Somatization

The reporting of bodily symptoms in the absence of a causal medical or biological condition

- pain
- paralysis
- anesthesia
- bodily dysfunction

Who tends to exhibit somatic symptoms?

- Children
- Women
- Non-industrialized societies
- Rural areas
- People with lower education levels
- Combat veterans
Psychodynamic Theory

- somatic symptoms are the result of massive repression of unacceptable psychic anxiety. Repressed material leaks out in form of symptoms or may be converted (displaced) from original source of anxiety to bodily part or function

Behavioral Theory

- an individual has learned to associate relief of anxiety with a bodily symptom (conditioning). Thus, whenever confronted by anxiety, bodily symptoms are produced to relieve anxiety (secondary gains may also be classically conditioned)

Sociocultural Theories

- lower education levels may lead to less knowledge about how the body actually works and stress symptoms are misinterpreted
- social expectations may prohibit the expression of emotional symptoms and thus anxiety and depression may be expressed through medical symptoms which are more acceptable
- somaticizers may represent members of the underclass who may unconsciously manifest symptoms to gain attention of superiors

Biological Theories

- the CNS of somaticizing individuals is more sensitive, and thus the somatic effects of stress are more distressing
- the sensory organs and associated cortical regions are more sensitive to stimulation, and thus normal stimulation is perceived as painful or incapacitating
Somatoform Disorders

- In pain disorder, chronic pain results in distress
- Conversion disorder involves a change in sensory/motor function
- Somatization disorder involves recurrent, multiple somatic complaints
- Body dysmorphic disorder involves a preoccupation with an imagined physical defect
- Hypochondriasis is a preoccupation with disease

Conversion Disorder

- the “Talking Cure” of Freud was developed in conjunction with cases of hysteria (Conversion Disorder)
- Conversion disorder reached a height in 19th century Europe
- Conversion disorder has declined in America and Europe
- Was it associated with sexual repression of the Victorian era?
- frequency rate in U.S. is reported to be 15-22 per 10,000
- cultural factors seem to be significant in prevalence rates

DSM IV Criteria for Conversion Disorder

- one or more symptoms or deficits are present that affect voluntary motor or sensory function that suggest a neurological or other medical condition
- Psychological factors are judged to be associated with the symptom or deficit because conflicts or other stressors precede the initiation or exacerbation of the symptom
- The symptom is not intentionally produced or feigned
- The symptom causes clinically significant distress or impairment in social or occupational functioning or merits medical attention
**Conversion Disorder**

- Conversion Disorder involves sensory or motor symptoms
  - Not related to known physiology of the body
    - E.g. glove anesthesia
  - Conversion symptoms appear suddenly
  - Conversion symptoms are related to stress
  - The person experiencing conversion disorder may not be distressed by sudden paralysis or blindness
    - *la belle indifference*

**Hysterical Anesthesia**

- Actual patterns of neural innervation shown on left.
- Typical areas of anesthesia shown in blue on right.
- Hysterical anesthesias are not anatomically possible.
- *(carpal tunnel syndrome)*

**Therapy for Conversion Disorders**

- Conversion disorder clients seek help from physicians and resent referrals to psychotherapists
  - hypnosis
  - cognitive-behavioral approach involves pointing out selective attention to physical sensations and discouraging the client from seeking medical assistance
  - A recent study found *exposure plus response prevention* to be effective (Visser & Bouman, 2001)
Body Dysmorphic Disorder
Diagnostic Criteria

• preoccupation with an imagined defect in appearance
• preoccupation results in impairment in occupational/social functioning
• not better accounted for by eating disorder

Treatment for Body Dysmorphic Disorder
(some believe BDD is a form of OCD)

• biological
  SSRIs

• psychodynamic
  • help patient gain insight into real concern about body part

• cognitive-behavioral
  • cognitive restructuring about importance of body part
  • exposure to feared situations regarding body part
  • response prevention

Question of the Week:
Massive media exposure to the near-naked “perfect bodies” of models and athletes has been shown to have a negative effect on body image and mental health of young people. (Example: what young children can see on the magazine covers in the checkout line of the super market.) Do you think there should be public policy changes (e.g. censorship or boycotts) on media images of bodies that give children and adolescents an unrealistic concept of what a body should look like? Why or why not?

Recommended Movie of the Week:
The Three Faces of Eve or Sybil
starring Joanne Woodward or Sally Field