“Eating Disorders in Children and Adolescents: A pediatric perspective”

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The Talk

- Definition
- Classification
- Psychological literature
- Biological literature
- Some medical aspects
- Conclusion

Learning Objectives

- To learn about current issues in diagnosis of eating disturbances in childhood and early adolescence
- To learn about classification of eating disorders in this age group
- To learn about aspects of assessment and how it differs from the older adolescent and adults

Eating Disorders

Excessive concern with the control of body weight and shape, accompanied by grossly inadequate, irregular or chaotic food intake

Background

### Eating Disorders in Children and Adolescents Epidemiology

- Increase recognition of problem 8-14 year olds with anorexia nervosa (Lask & Bryant-Waugh, 1993)
- Male children form a larger proportion 19-30%
- Incidence rates steadily increasing
- Prevalence of anorexia nervosa in 15-19 year olds = 0.48%, and overall 1%
- Prevalence of bulimia nervosa = 1-3%
- Mortality rate in excess of 10% (Litt)

### Eating Disorders in Children and Adolescents Differences from Adults

- A wider range of eating disorders
- Diagnostic criteria
- Physiologic differences
  - Weight loss as a diagnostic criteria
  - Growth and development
  - Reference data
  - Puberty
- More likely to have been brought to treatment
- Treatment differences

### ICD – 10 (WHO) 1992

- Anorexia nervosa (F50.0)
- Atypical anorexia nervosa (F50.1)
- Bulimia nervosa (F50.2)
- Atypical bulimia nervosa (F50.3)
- Overeating associated with other psychological disturbances (F50.4)
- Vomiting associated with other psychological disturbances (F50.5)
- Other eating disorders (F50.8)
- Eating disorder, unspecified (F50.9)

### DSM – IV (APA) 1994

- Anorexia nervosa (307.1)
  - Restrictive type
  - Binge eating / purging type
- Bulimia nervosa (307.51)
  - Purging type
  - Non-purging type
- Eating disorder not otherwise specified (307.50)

### Great Ormond Street (GOS) criteria for AN

- Determined weight loss (e.g. food avoidance, self-induced vomiting, excessive exercising, abuse of laxatives)
- Abnormal cognitions regarding shape and/or weight
- Morbid preoccupation with weight and/or shape

### Eating Disorders in Childhood

- Anorexia nervosa (and atypical or subclinical forms)
- Bulimia nervosa (and atypical or subclinical forms)
- Food avoidance emotional disorder (FAED)
- Selective eating
- Restrictive eating
- Food refusal
- Specific fear or phobia leading to avoidance of eating
- Pervasive refusal syndrome
- Appetite loss secondary to depression

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### Challenges in Diagnosis & Classification

- Demarcation between AN and BN
- Substantial number of cases do not meet criteria for AN/BN
- What is EDNOS?
- Utility and validity of Binge Eating Disorder
- AN: major concern about the weight criterion and requirement of amenorrhea
- Criteria for pre-pubertal/early onset AN
- Relationship of AN-R and AN-B/P subtypes

*(Walsh & Satir, 2005)*

- Assessment of objective and subjective binge episodes in BN
- Adolescents with BN and those who purge without objective binge eating
- Raises questions about the functionality of purging in BN/EDNOS and nosologic implications
  - Consider the person to have the disorder even if full criteria are not met “…diagnostic criteria as guidelines than as rigid rules” *(Walsh & Satir, 2005)*
- Essential role of diagnosis in research and treatment

### Comparison of Classification System

- 81 patients randomly selected from 226 (7 – 16 y/o)
- ICD 10 – DSM IV – GOS criteria
- 2 clinicians rated diagnosis blinded of each other
- Interrater reliability
  - ICD 10: 0.357
  - DSM IV: 0.636
  - GOS: 0.879
- The Classification for ED’s in childhood needs reevaluation


### Puberty & Menstruation Facts

- Menarche (median age): 12.43 years
- Mean cycle interval: 32.2 days in first gynecological year
- Menstrual cycle interval: typically 21 – 45 days
- Menstrual flow length: < 7 days
- Menstrual product use: 3 – 6 pads/tampons per day


### Adjustments for DSM-V criteria

#### AN
- Refusal maintain wt 85%
- Fear of weight gain
- Disturbance body shape
- Amenorrhea

#### BN
- Recurrent episodes binge eating
- Recurrent compensatory
- 2 x Wk for 3 months
- Self-evaluation wt/shape
- Not while having AN
- Types purging non purging


### EDE with Children

- EDE types of scores:
  - Individual item scores
  - 4 subscales scores (restraint, eating, weight & shape concern)
  - A global score *(Fairburn & Cooper, 1993)*
- 16 children and adolescents 7 – 14 y/o (10F – 6M)
- 11 AN & 5 EDNOS
- Similar results with weight & shape concerns for the AN group when compared to adult normative data

### Food Avoidance Emotional Disorder

- Children with emotional disorders and food avoidance
  - A history of food avoidance or difficulties for at least 1 month
  - A failure to meet criteria for AN
  - Absence of organic brain disease, psychosis, illicit drug use, or prescribed drug related side effects
- Low weight & growth impairment common
- No issues with body image
- Family pattern of non-specific illness

Higgs JF., Goodyer IM., & Birch J. Anorexia nervosa and food avoidance emotional disorder. *Archives of Disease in Childhood* 1989;64:346-351.

### Selective Eating

- Narrow range of preferred foods for at least 2 years
- Normal growth parameters
- More males than females
- No concerns with weight and shape like in EDs
- Also differ from FAED since they eat appropriate calories
- Recommended to monitor linear growth and pubertal development


### Restrictive Eating

- Eat little, no enjoyment or interest on eating
- No evidence of mood disturbance
- Linear growth: small and light; but WNL
- Small appetite
- No body image distortion
- They may present with weight loss around puberty or failure to gain weight
- Monitor through pubertal growth spurt and offer supplementation

### Food Refusal

- Common phenomenon in younger children
- Developmentally normal in toddler not in older children
- Less consistent in their refusal of food than in FAED
- No body image issues
- It may interfere with family relationships
- Normal growth

### Specific fear or phobia leading to avoidance of eating

- Functional dysphagia & texture of foods
- Fear of swallowing or choking
- Precipitating event
- No weight or shape concerns
- May impact linear growth and pubertal development

### Pervasive Refusal Syndrome

- Profound and pervasive refusal to eat, drink, walk, talk, or care for self
- Extreme form of PTSD
- Extreme dehydration, malnutrition and refusing nourishment
- Invariable requires hospital admission
- Underlying trauma, personality traits & somatising tendencies need to be explored

Appetite Loss Secondary to Depression

- Well recognized sign of mood disorders
- Appetite loss
- Primary ED vs. primary Affective & Mood Disorder
- Over 50% of youth with AN have been found to be depressed (Cooper, et al. 1987)

The Nosological status of Early Onset Anorexia Nervosa

- Comparison with later onset AN
- 126 patients were assessed with the EDE & K-SADS
- 86 (EO) / 38 (AN) / 25 (FAED) / 17 (SE) / 6 (other)
- Early onset similar to late onset AN (psychopathology)
- The other eating disturbances did not have this similar psychopathology

Early Onset EDs CPS Perspective

- 2003 – 05’ 160 cases were confirmed for incidence of 2.6 per 100,000
- Children are seriously ill with an average weight loss of 7.4 kg ± 5 and 48% required hospitalization
- Many cases did not meet criteria for an DSM-IV
- For early detection of early-onset EDs, the use of growth charts is strongly recommended.

Calgary Eating Disorder Program: Age by Diagnosis (Fiscal Year 2007-2008)

Body Composition in Early Onset EDs

- Comparing Fat & Fat-free mass in children and young adolescents with Ed’s
- 172 (7 – 16 yr) vs 157 controls
- FMI & FFMI were reduced in EDs associated with malnutrition & AN patients
- BN & SE patients were similar to controls

Psychological Treatment for Adolescent Anorexia Nervosa

- 8 uncontrolled studies, all involving family therapy
- 5 randomized trials
- most research suggests family therapy is helpful in younger patients with a short duration of illness
- comparing family interventions – only tentative conclusions
- involving parents in actively addressing the AN (Maudsley research) “seem the most effective”
- family-based treatment “the treatment of choice for adolescent AN”

(Katzman DK., Morris A., & Pinhas L. Canadian Pediatric Society Surveillance Program – Early-onset eating disorders, 2005 results. CPS publication.)


(Maudsley research)

(Le Grange & Lock, 2005)
Psychological Treatment for Adolescent AN: Update

- manualized family-based treatment for adolescent AN (Lock et al., 2001)
- now have a tool, can test the treatment in varying settings
- multiple-family day treatment (MFDT) for adolescent AN (Dare & Eisler, 2000; Scholz & Ansch 2003)
- contrast to typical outpatient family therapy
- preliminary findings only
- how much treatment is needed? (Le Grange & Lock, 2005)

Summary

- Presentation of children and adolescents with EDs is different from adults
- There still remain major challenges in diagnosis and classification
- Eating disturbances present in childhood with a wider array of symptomatology
- To date family-based treatment appears to be the choice for adolescent AN