Developmental Disorders – Chapter 14

Attention Deficit/ Hyperactivity Disorder: Clinical Description

- Symptom clusters:
  - Inattention
    - Doesn't seem to listen when spoken to directly
    - Often loses things necessary for tasks or activities
    - Often fails to give close attention to details or makes careless mistakes in schoolwork, work or other activities
  - Hyperactivity
    - Often fidgets with hands or feet or squirms in seat
    - Often leaves seat
    - Often is "on the go" or acts as if "driven by a motor"
  - Impulsivity
    - Often blurts out answers before questions have been completed
    - Often has difficulty awaiting turn
- Must have 6 or more symptoms of Inattention or Hyperactivity–Impulsivity
- Secondary problems
  - Poor academic performance
  - Unpopular and rejected by peers
  - Negative feedback from parents & teachers
  - Low self–esteem
  - Increased risk for substance abuse & conduct problems

AD/HD: Statistics

- Prevalence
- Developmental Progression

Causes

- There appears to be a hereditary factor
- Brain damage
- Very little evidence supporting association of allergens or food additives with AD/HD
- Smoking during pregnancy

AD/HD: Treatment

- Biological Interventions
  - Psychostimulant medication (e.g., Ritalin & amphetamines; Cylert; Adderall
- Psychosocial Interventions
  - Behavioral interventions
  - Parent training
  - Stop & Think

Learning Disorders: Clinical Description

- Reading disorder (Dyslexia)
  - Achievement below expected performance
    - Significant discrepancy between reading achievement & predicted achievement based on age, intellectual ability, & education
- Mathematics disorder
- Disorder of written expression
- Communication Disorders are closely related

Learning Disorders:Statistics

- Incidence & Prevalence
- Secondary problems
  - Dropping out of school
  - Low employment rates

Causes

- Diverse & complex origin including genetic neurobiological & environmental factors
  - Possible genetic basis
  - Subtle brain damage
- Reading disorders more common in English–speaking countries due to complexity

Learning Disorders: Treatment

- Educational intervention
  - Efforts to directly remediate the underlying basic *processing* of problems
  - Efforts to improve *cognitive* skills through general instruction in listening, comprehension, & memory
  - Targeting the *behavioral* skills needed to *compensate* for specific problems with reading, mathematics, or written expression

Pervasive Developmental Disorders Autistic Disorder: Clinical Description

- Impairment in Social Interaction
  - Nonverbal communication Peer interaction
  - Joint attention
  - Emotional reciprocity
- Impairment in Communication
  - Delay in language development
  - Impaired ability to have conversations
  - Stereotyped & repetitive or idiosyncratic language
  - Impaired development of pretend play

- Restricted Behavior, Interests, & Activities
  - Encompassing preoccupations & interests
  - Adherence to nonfunctional routines or rituals
  - Motor stereotypies
  - Preoccupations with parts of objects

Features

- A Spectrum Disorder
- Diagnosis is Developmental
- Diagnosis is Retrospective

- Early diagnosis with M-CHAT
  - The earliest signs of autism or PDD are the failure of these behaviors to develop:
    - Joint Attention
      - Protodeclarative pointing (indicating interest in something)
      - Following a point
      - Bringing objects to show a parent
    - Social Relatedness
      - Interest in other children
      - Imitation
    - Communication
      - Responding to name

Autistic Disorder: Statistics

- Prevalence
- Gender differences
- Universal phenomenon
- There are people with autism along the continuum of IQ scores

Causes

- Psychological & Social Dimensions
  - Not the result of refrigerator moms
- Biological Dimensions
  - Genetic Influences
  - Neurobiological Influences
    - CT scan & MRI findings

- Asperger's Disorder
  - Similar to Autistic Disorder, but the individual usually has IQ scores within the average range & does not have language delays
    - This may represent a form of Autistic Disorder that falls at the upper end of the spectrum, rather than representing a separate disorder

Autistic Disorder:Treatment

- Applied Behavior Analysis (ABA)
  - Discrete trial method (Lovaas)
- Developmental Intervention
  - Floortime (Greenspan)
    - Continuous "circles of communication" rather than stimulus–response
- Other psychosocial interventions
  - Social skills / pragmatic teaching
  - Peer training
  - Parent training
  - Inclusion

- Biological Treatments
  - Medical intervention has had very little success
  - Some medications can play a very limited role in improving social interaction & communication and decreasing hyperactivity, impulsivity, aggression, and obsessive preoccupations
- Experimental Approaches
  - Sensory integration
  - Facilitated communication

Mental Retardation:Clinical Description

- People with MR display a broad range of abilities & personalities
- Included on Axis II of DSM–IV
- Diagnostic criteria
  - Significantly subaverage intellectual functioning (IQ at about 70 or below)
  - Concurrent deficits or impairments in adaptive functioning
    - Communication, self–care, home living, social/interpersonal skills, use of community resources, self–direction, functional academic skills, work, leisure, health, safety
  - Onset before age 18

- Almost all classification systems differentiate individuals with MR in terms of their ability. In DSM–IV:
  - Mild: IQ between 50 or 55 to 70
  - Moderate: IQ between 35-40 and 50-55
  - Severe: IQ between 20-25 and 35-40
  - Profound: IQ below 20-25

Mental Retardation:Statistics

- Incidence & Prevalence
- Gender Differences
- Chronic course
- Prognosis varies considerably

Causes

- Hundreds of known causes including
  - Environmental
  - Prenatal
  - Perinatal
  - Postnatal

- Genetic influences
  - Dominant
    - Tuberous sclerosis
  - Recessive
    - Phenylketonuria (PKU)
  - X–linked
    - Lesh–Nyhan syndrome
- Chromosomal influences
  - Down Syndrome
    - Trisomy 21
    - Most common chromosomal form of MR
    - Incidence is tied to maternal age

- Chromosomal influences
  - Fragile X syndrome
  - Williams syndrome
    - Caused by microdeletion involving 16-20 genes on one copy of chromosome 7q.11.32
    - First identified as a syndrome in 1961
    - Physical phenotype – insufficient elastic
      - Cardiovascular problems
      - Gastrointestinal problems can appear in late adolescence or early adulthood
      - Extreme oversensitivity to sounds
      - Premature aging
      - Elfin faces
    - Average IQ is 55-60 with a normal distribution
    - Speech & language
      - Language is at age level
      - Very expressive & articulate; good narrative & discourse skills; initially appear bright

- Psychological & Social Dimensions
  - Cultural–familial retardation
    - Presumed cause of up to 75% of cases of MR
    - Tend to score in the mild range of MR & have relatively good adaptive skills
    - Contributions include abuse, neglect, & social deprivation
    - Two views:
      - Difference View
      - Developmental View

Mental Retardation:Treatment

- Involves teaching these individuals the skills they need to become more productive & independent
- Early intervention can target those who are at risk for developing cultural–familial retardation because of inadequate environments, e.g., Head Start
- Behavioral interventions
  - To teach basic self–care as dressing, bathing, feeding, & toileting
    - Task analysis
    - Chaining
    - Reinforcement

- Behavioral interventions
  - Communication training: teaching them to make their needs & wants known for personal satisfaction & participation in most social activities
  - To address behavior problems such as aggressive or self–injurious behavior
    - Punishment
    - Alternatives to punishment – functional analysis
- Supported employment
- Inclusion