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

• 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

• 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

• 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

• 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

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

• Hundreds of known causes including
  – Environmental
  – Prenatal
  – Perinatal
  – Postnatal

• 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
  • Supported employment
  • Inclusion

• 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