Differentiating PTSD and ADHD

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ADHD vs. PTSD

• One is a disruptive behavior disorder and the other is a reaction to trauma…

….So what’s to differentiate???

• The goal of this presentation is to draw attention to areas of symptom overlap and aid in assessment of the disorders
Today’s Presentation

- Description of the disorders
- Epidemiology
- Conceptualization
- Review of Diagnostic Criteria
- Assessment
- Treatment
- Case Vignettes
ADHD

• Neurobehavioral developmental disorder with deficits in:
  – Behavioral inhibition
  – Sustained attention and inability to resist distraction
  – Regulation of one’s activity level to demands of situation

• Subtypes of ADHD
  – Predominantly Inattention, Predominantly Hyperactive Type, or Combined Type
Symptoms of Inattention

– Often fails to give close attention to details or makes careless mistakes . . .
– Often has difficulty sustaining attention . . . . .
– Often does not seem to listen when spoken to directly
– Often does not follow through on instruction and fails to finish . . . .
– Often has difficulty organizing tasks and activities
– Often avoids or dislikes tasks that requires sustained mental effort
– Often loses things . . . .
– Often easily distracted . .
– Often forgetful in daily activities
Symptoms of Hyperactivity

• Often fidgets with hands or feet or squirms in seat
• Often leaves seat in classroom or in other situations . . . .
• Often runs about or climbs excessively . .
• Often has difficulty playing or engaging in activities quietly
• Is often “on the go” or is “driven by a motor”
• Often talks excessively
Symptoms of Impulsivity

- Often blurts out answers . . . .
- Often has difficulty awaiting turn
- Often interrupts or intrudes on others
Diagnostic Criteria

• ADHD, Combined Type
  – 6 or more symptoms of inattention and hyperactivity/impulsivity

• ADHD, Inattentive Type
  – 6 or more symptoms of inattention

• ADHD, Hyperactive-Impulsive Type
  – 6 or more symptoms of hyperactivity/impulsivity

• Regardless of type:
  – Symptoms present for at least 6 months
  – Across 2 or more settings
  – Symptoms present before 7 years of age
  – Clear evidence of impairment
  – Not accounted for by something else
Epidemiology

• Rates vary depending on study
  – 3 to 7 % of childhood population & 2 to 5 % of adult population (Barkley, 2006)
  – 11.4 to 16.1% of elementary school aged children (Faraone, Sergant, Gillberg, & Biederman, 2003).
  – 3 to 5 % of U.S. children (APA, 2000)
  – 3 to 20 % of American children from age 4 to 18 (Calderon & Ruben, 2008)
Other Associated Facts

• Rates by type (Wilens, Biederman, & Spencer, 2002)
  – 50-75% have combined type
  – 20-30% have inattentive type
  – < 15% have hyperactive/impulsive type
• Typical onset - 3 to 6 years of age
• Changes in symptomatology across the lifespan
• Gender ratio: 3:1 males (Chemak et al., 1999)
• Comorbidity
  – Conduct & Oppositional Defiant Disorder (35%)
  – Mood disorders/depression (18%)
  – Anxiety Disorders (18%)
  – Speech & language impairment & learning disabilities (12-60%)
    • LD more frequent in inattentive & combined Types (Wolraich, Hannah, Baumgaertel, Pinnock, & Feurer, 1998)
Conceptualization

- Evidence for biological contributions
  - Heredity/genetics
  - Neurotransmitter abnormality
  - Frontal Lobe/Executive Functions
- Evidence for difficulties in pregnancy & delivery
  - Exposure to substances, premature birth, low birth weight, postnatal injuries
- Lack of evidence for:
  - Food additives, sugar intake, poor child rearing strategies, and too much TV. (just to name a few)
Assessment of ADHD

• Assessment must be multidisciplinary & comprehensive.
  – Employ a contextual approach (child & environment)
  – Assess impact of ADHD on:
    • Academic, emotional, and social functioning
  – Employ specificity in the assessment of presence and impact of comorbid disorders.

(Calderon & Ruben, 2008)
Evaluations Continued . . .

– Clinical Interview
– Observation (school vs. office)
– Intelligence Testing (e.g. WISC-IV, DAS)
– Academic Achievement Testing (e.g. WIAT-II; WCJ III-Tests of Achievement)
– Visual Motor Skills (e.g. VMI)
– Broad Band Measures (e.g. BASC-2; CBCL)
– Narrow Band Measures (e.g. Brown ADD scales, BRIEF, Conners’ Rating Scales-Revised, ADDES)
– Computerized Test of Attention (e.g. CPT; TOVA)
PTSD
Epidemiology

• Trauma Exposure
  – 25% experience trauma by age 16
  – 6% report trauma in past 3 months (Costello et al., 2002)

• PTSD
  – 36% of trauma exposed children develop PTSD
  – 13% of trauma exposed children meet criteria for ADHD

• Acute vs chronic, abusive trauma
  – Similar rates of PTSD
  – Differ in rates of ADHD (22% acute vs 11% chronic)
    • GAD, Panic, SAD similar patterns (Fletcher, 1994)
Conceptualization

- Trauma exposure does NOT justify diagnosis of PTSD
  - Necessary but not sufficient

- Majority of Children with trauma exposure do not meet criteria for PTSD
Conceptualization

• PTSD
  – Traumatic experience overwhelms child’s coping mechanisms
  – PTSD involves 3 primary processes
    • Re-experiencing
    • Avoidance
    • Hypervigilance
Conceptualization

- Factors that contribute to development of PTSD
  - Social support
  - Parent level of functioning
  - Family history
  - History of life stressors or previous trauma
  - Gender
  - Comorbid psychiatric diagnoses
Diagnostic Criteria

A. The person has been exposed to a traumatic event in which both of the following were present:

1. The person experiences, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury or a threat to the physical integrity of self or others.

2. The person’s response involved intense fear, helplessness, or horror.

Note: In children, this may be expressed instead by disorganized or agitated behavior.
B. Reexperiencing traumatic event (1)

- Recurrent and intrusive distressing recollections.  
  (young children may be repetitive play)
- Recurrent distressing dream (in children may be frightening dreams without recognizable content)
- Acting or feeling as if even is happening again (in children trauma re-enactment may occur)
- Psychological distress to internal or external cues
- Physiological reactivity to internal or external cues
C. Persistent avoidance of stimuli associated with trauma and numbing of general responsiveness (not present before the trauma) (3+)

- Efforts to avoid thoughts, feelings, or conversations associated with trauma
- Efforts to avoid activities, places, or people that arouse recollections of trauma
- Inability to recall important aspects of trauma
- Markedly diminished interest or participation in activities
- Feeling of detachment from others
- Restricted range of affect
- Sense of foreshortened future
Diagnostic Criteria

D. Persistent symptoms of increased arousal (not present before the trauma) (2+)
   – Difficulty falling or staying asleep
   – Irritability or outbursts of anger
   – Difficulty concentrating
   – Hypervigilance
   – Exaggerated startle response
Diagnostic Criteria

E. Duration of disturbance (symptoms in B, C, & D) is greater than 1 month

F. Disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Specify:
Acute: <3mo duration
Chronic: >3mo duration
Delayed Onset: onset >6mo after stressor
Assessment

• Clinical Interview
  – Family history
  – Trauma exposure
  – Specific behavioral description of symptoms
  – Time line of symptom presentation
  – Normative developmental behaviors
Assessment of PTSD

• Standardized Measures

• Trauma Specific
  – Trauma Symptom Checklist for Children
  – Trauma Symptom Checklist for Young Children
  – UCLA-PTSD Index
Assessment

- General Behavioral Problems
  - Child Behavior Checklist (CBCL)
  - Behavior Assessment Scale for Children (BASC)
Issues in Differential Diagnosis

• ADHD may predispose child to higher likelihood of trauma exposure
  – Interpersonal & self-regulatory problems

• ADHD may increase risk of:
  – Accidental traumas
  – Maltreatment
Issues in Differential Diagnosis

• Comorbid ADHD & PTSD
• PTSD & ADHD may co-occur
  – Shared risk factors
  – Genetic predisposition to physiological reactivity in PTSD
  – In maltreatment sample, higher rates of ADHD in kids diagnosed with PTSD than non-PTSD (37% vs 17%) (Famularo, 1996)
Issues in Differential Diagnosis

• Trauma and PTSD may exacerbate pre-existing ADHD
  – Shared biogenetic and psychosocial risk factors
  – Trauma reaction may increase inattention, impulsivity, hyperactivity
  – Trauma reaction may increase social difficulties
Issues in Differential Diagnosis

• Misdiagnosis of Symptoms
  – Misinterpretation of symptoms can occur with bias towards either ADHD or PTSD

• Re-experiencing (Criterion B)
  – Often an internal symptom
  – You may not know unless you ask!
  – Nightmares
Issues in Differential Diagnosis

• Avoidance (Criterion C)
  – Can be difficult to diagnose in children
  – Detachment from others
  – Avoidance of activities that remind
  – Decreased interest or participation in activities
Issues in Differential Diagnosis

• Increased Arousal (Criterion D)
  – Difficulty concentrating
    • 41% of children with PTSD endorse
  – Hypervigilance
  – Anger
  – Sleep Difficulty
Treatment Implications

• First Line Treatment
  – ADHD
    • Medication
    • Educational interventions
    • Cognitive behavioral therapy
  – PTSD
    • Trauma-focused cognitive behavioral intervention
  – PTSD & ADHD
    • Clinical judgment in treatment decisions
Case Example

• Referral for “anger issues”

Peter, is a 9 yr old male referred due to increased academic problems and acting out. He lives with bio parents. Family reports stress related to financial problems. Mother reported father also has temper problem.

• What else do we need to know?
Final Thoughts

• Be aware of biases due to familiarity
• Be aware of base rates in the population you assess
• For accurate diagnosis assess broadly and specifically
• Follow DSM-IV criteria