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Psychiatry and Addictions Case Conference

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ADHD MANAGEMENT IN PRIMARY CARE: HOW TO OVERCOME THE TIME AND COMPLEXITY BARRIERS?

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KADLEC FAMILY MEDICINE RESIDENCY



GENERAL DISCLOSURES

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SPEAKER DISCLOSURES

- ✓ There are no conflicts of interest to declare.

OBJECTIVES

Case Scenarios of varied age ranges and complexities will be used to critically consider:

1. Diagnoses and differentials associated with ADHD.
2. Assessments that can be time efficiently used in primary care.
3. Appropriate referral decisions.
4. Management discussions based upon case complexities.

CASE SCENARIO 1

- L.I. is a 12-y. 10-m. old Caucasian male.
- Presenting problems: inattentiveness, inability to complete school work, problems in math.
- Assessment Plan: Broad measures versus narrow measures of ADHD.

ADHD AFFECTS ACADEMIC PERFORMANCE

- **ADHD's core symptoms—inattention, hyperactivity, and impulsivity—**
- Core symptoms of ADHD make meeting the daily rigors of school challenging (Zentall, 1993).

CORE SX.S IMPACT:

- Difficulty sustaining **attention** to a task: may contribute to missing important details in assignments, daydreaming during lectures and other activities, and difficulty organizing assignments.
- **Hyperactivity** may be expressed in either verbal or physical disruptions in class (Comparisons between children and adults).
- **Impulsivity** may lead to careless errors, responding to questions without fully formulating the best answers, and only attending to activities that are entertaining or novel.

ASSESSMENT CONSIDERATIONS

- Onset: prior to age 12 years.
- Duration: At least 6 months.
- Impact: The symptoms must have a negative impact on the child's academic or social life.
- Settings: Multiple settings.

ADHD ASSESSMENT GUIDELINES:

American Academy of Pediatrics (2011):

- Age: 4-18
- DSM 5 symptom criteria
- More than one setting
- Differential dx.
- Comorbid conditions

ADHD PC ASSESSMENTS

- Vanderbilt Assessment Scale.
- Behavior Assessment Scale for Children-3rd edition (BASC-3).
- <https://www.pearsonclinical.com/education/products/100001402/behavior-assessment-system-for-children-third-edition-basc-3.html>
- Pros and cons of one versus the other.
- *Conners Continuous Performance Test (CCPT) 3rd Ed. TM

CASE SCENARIO 1

- L.I. is a 12-y. 10-m. old Caucasian male.
- Presenting problems: inattentiveness, inability to complete school work, problems in math.
- Assessment Plan: Broad measures versus narrow measures of ADHD.

SAMPLE BASC-3 REPORT L.I.



COMORBIDITIES IN ADHD

- Learning Disorder, (LD) ADHD and Autism: High comorbidity.
- ADHD, LD comorbid with depression, anxiety, low self-esteem, etc.
- ADHD high comorbidity with Oppositional Defiant Disorder and Conduct Disorder.

CASE SCENARIO L.I.

- Diagnostic Impressions of Psychological Evaluation:

314.00 Attention Deficit Hyperactivity Disorder-Predominantly Inattentive Presentation.

315.1 Specific Learning Disorder with impairment in Mathematics.

300.00 Unspecified Anxiety Disorder.

CASE SCENARIO 2

- JL a 12-y. 8-m. old Caucasian female.
- Referred by parents: inattentiveness, “slow information processing speed”, and anxiety in enclosed spaces.
- In gifted program.
- Large disconnect between parent and teacher concerns.
- Family hx.: Dad rx.

J.L.: IQ

Full Scale IQ (FSIQ)	*	General Ability Index (GAI)	119 High Average
Similarities (SI)	15	Block Design (BD)	13
Vocabulary (VC)	12	Picture Concepts (PCn)	12
Comprehension (CO)	13	Matrix Reasoning (MR)	11
Verbal Comprehension Index	119	Perceptual Reasoning Index	112
Digit Span (DS)	12	Digit Symbol Coding (CD)	7
Letter-Number Sequencing (LN)	12	Symbol Search (SS)	6
(Arithmetic)	11	Cancellation	6
Working Memory Index	110	Processing Speed Index	80 Low Average

J. L. ACADEMIC ACHIEVEMENT

Letter-Word Identification	113	Broad Reading	112
Reading Fluency	104		
Story Recall	103	Brief Math	117
Understanding Directions	99		
Calculation	115		
Math Fluency	76	Written Expression	95
Spelling	129	Oral Language	100
Writing Fluency	96		
Passage Comprehension	109	Academic Skills	126
Applied Problems	112	Academic Fluency	94
Writing Samples	95		
Story-Recalled Delayed	106		

J.L. BASC-2

Clinical Scales	Mother's report	Father's Report	Teacher's Report
Behavioral Symptoms Index	58,,Average	58, Average	42, Average
Externalizing Problems	48, Average	44, Average	44, Average
Hyperactivity	52, Average	52, Average	43, Average
Aggression	48, Average	43, Average	45, Average
Conduct Problems	44, Average	39, Low	44, Average
Internalizing Problems	59, Average	58, Average	39, Low
Anxiety	64, At-risk	64, At-risk	38, Low
Depression	51, Average	58, Average	42, Average
Somatization	58, Average	48, Average	43, Average
School Problems			40, Average
Attention Problems	66, At-risk	74 Clinically Significant	40, Average
Learning Problems	Not on parent report	Not on parent report	41, Average
Atypicality	65, At-risk	54, Average	45, Average
Withdrawal	57, Average	54, Average	47, Average
Adaptive Skills	40, Average	45, Average	67, High
Adaptability	33, At-risk	47, Average	66, High
Social Skills	43, At-risk	49, Average	71, Very High
Leadership	47, Average	47, Average	66, High
Study Skills			62, High
Functional Communication	39, At-risk	36, At-risk	58, Average
Activities of Daily Living	45, Average	52, Average	Not on teacher report

J.L. DIAGNOSTIC IMPRESSION

314.00 Attention Deficit Hyperactivity Disorder-Predominantly Inattentive Type.

315.2 Disorder of Written Expression.

300.00 Anxiety Disorder Not Otherwise Specified.

CASE SCENARIO 3

- A 5-year-old, biracial male M.L.
- Referred by the case worker at DCFS for ADHD rule-in/out and med. management.
- Mom's: thought content is tangential, significant pressure of speech, dilated pupils, and refuses to let child be interviewed alone.

M.L.

- Mom-Jamaican origin and dad-African American.
- Parents endorse following the Rastafarian culture, marijuana use.
- Parents: Low income; mental health, inconsistent reporting, homelessness after the birth of pt.

M.L. PRESENTATION

- Child gives you a hug and is very friendly when he sees you. Asks you to play with him. Tries to get your attention every minute.
- Moves rapidly from one toy to another. Does not focus on one or few toys eventually. Your office is a mess when he leaves.
- Session time exceeds by 15 minutes every time they are in.
- When it is time to leave mom has to grab him and carry him out. The clinic comes to a stand still every time the family is in.

DIAGNOSTIC CONSIDERATIONS M.L.

- Will this child meet criteria for ADHD?
- What is the bigger picture here?

ADULT ADHD ASSESSMENTS

- Barkley Adult ADHD Rating Scale-IV (BAARS-IV)
- <https://www.guilford.com/books/Barkley-Adult-ADHD-Rating-Scale-IV-BAARS-IV/Russell-Barkley/9781609182038/contents>
 - 18-89 y.o.
 - Multiple Raters
 - Norms
- Differentials

ADULTS: DEPRESSION AND ADHD

- Prevalence rates (Kessler et al. , 2006): MDD + ADHD is 18.6%;
Dysthymic Disorder + ADHD is 12.8%
- Prevalence in those w/o ADHD: 7.8% (MDD) and 1.9%
(Dysthymia)

CASE SCENARIO 4

- An 18-y.o. female patient N. B. Asian/Indian American origin reports that 'she has ADHD' and would like to be on medication.
- She complains of very poor focus and poor performance in school.
- Presents as jumpy and restless.

N.B.

- Reports difficulties with focusing for the past 2-3 years.
- Schoolwork very difficult; she 'procrastinates' and usually needs her family members to prompt her to focus back on her work.
- She reports feeling not relaxed, often day dreaming or 'zoning out' and being in anticipation of having to complete the work.

N.B.

- Pt. reports schoolwork is usually not difficult however it is most difficult for her to get to completing it.
- She has difficulties in planning and organizing and has missed several schooldays

N.B.

- Endorses a significant sexual abuse history at the age of 6 or 7.
- Abuse continued for about 2 years.
- While there was no report of abuse beyond that period she along with her family has significant contact with the perpetrators who are extended family members

N.B.

- How does the information in the last slide change dx. and tx. Considerations for you?

N.B. DIAGNOSTIC IMPRESSION

- Meets criteria for PTSD.
- Assessment and Treatment considerations.

CASE SCENARIO 5

- MC is a 31-year-old, Caucasian male, who referred himself for assessment of ADHD.

M.C. PRESENTING PROBLEMS

- MC has a longstanding history of difficulties with **sustained attention and learning related problems.**
- Produced a report from kindergarten: teacher noted problems with “assignment completion, staying on task, ignoring lessons and accepting responsibilities”.

BACKGROUND INFO. (Contd.)

- MC is pursuing a PhD in Cognitive Psychology.
- Reports feeling stressed out by:
 - ✓ academic difficulties
 - ✓ a relationship break-up in March, 2013.
 - ✓ He often ruminates over the reasons for the break-up.
 - ✓ This coupled with the challenges of graduate school, **self doubt**, problems with **time management and planning** made the past few months particularly tough.

CASE HISTORY (Contd.)

- Experienced a few stressors in his young adulthood years:
 - ✓ Lost a cousin in the Virginia Tech shooting
 - ✓ He was deployed to Afghanistan (before grad school)...was in physical proximity to a grenade explosion site during this time.

Differential diagnoses.

M.C. ASSESSMENT CONSIDERATIONS

- Adult ADHD: Barkley and Murphy (2006) scales.
 - Multi rater
 - Norms
- PTSD: Did not meet criteria

CLIENT MC ASSESSMENT SCORES

- Inattention: 15; Hyperactivity: 17 (self report) (Mean = 5.5; S.D. = 4.4) and 17 on the Hyperactive/Impulsive scale (Mean = 6.7; S.D. = 4.3). (**more than 2 S.D.s**)
- Childhood Symptoms Other Rx. Form: Inattention (4 sx.s)
Hyper. (5 sx.s)
- BDI score of 22
- Disorder of Written Expression

M.C. DIAGNOSTIC IMPRESSION

- 314.01 Attention Deficit Hyperactivity Disorder, Combined Type
- 315.2 Disorder of Written Expression
- 309.28 Adjustment Disorder With Mixed Anxiety and Depressed Mood, Acute.

EXECUTIVE FUNCTIONS:

- a collection of mental/cognitive processes that influence other cognitive processes and action selection. It includes, 'working memory,' planning, set shifting, cognitive flexibility, etc. (Pennington, 2009). Wisconsin Card Sorting Test.

WORKING MEMORY:

- to hold and manipulate information in immediate awareness while performing a mental operation on the information; focused attention.

(Wechsler Adult Intelligence Scale-IV: Digit Span Forward and Backward.)

PROCESSING SPEED:

- is typically defined as speed of completion of a task with reasonable accuracy

(Jacobson et al., 2011). Tasks typically are simple but have to be performed

under time pressure. (Wechsler Intelligence Scale for Children-V: Coding

subtest).

NEUROPSYCHOLOGICAL DEFICITS/CORRELATES OF ADHD

- 3 models of deficit (McGrath & Peterson, 2009): Single vs Multiple: Relevance of assessments and interventions.
- ❖ Executive dysfunction: frontostriatal circuit.
- ❖ Delay aversion: orbitofrontal.
- ❖ Cognitive energetic model: slower and more variable.

SUMMARY OF DEFICITS AFFECTING LEARNING:

- Cognitive and fine motor speed deficits
- Verbal working memory.
- Visual working memory (greater deficits).
- Overlap with Learning Disorder (LD)
- Organization
- Time management
- Monitoring of Errors
- Behavioral Inhibition

INTERVENTIONS

- Successful programs for children with ADHD integrate the following three components (U.S. Dept. of Education):
 - Academic Instruction;
 - Behavioral Interventions; and
 - Classroom Accommodations.
- American Academy of Pediatric (AAP) guidelines.
- Behavioral therapy followed by medication management: better outcomes (Pelham et al., 2016).

AMERICAN PSYCHOLOGICAL ASSOCIATION (APA) DIVISION OF CHILD AND ADOLESCENT PSYCHOLOGY (DIV. 53) EFFECTIVECHILD THERAPY.ORG

Child & Adolescent ADHD

<p>Works Well What does this mean?</p>	<p>Behavior Therapy Behavioral parent training (BPT) Behavioral classroom management (BCM) Behavioral peer interventions (BPI) Combined behavior management interventions Organization training</p>
<p>Works What does this mean?</p>	<p>Combined training interventions</p>
<p>Might Work What does this mean?</p>	<p>Neurofeedback training</p>
<p>Unknown/Untested What does this mean?</p>	<p>Cognitive training</p>
<p>Not Effective What does this mean?</p>	<p>Social skills training</p>

Source: Steven W. Evans , Julie Sarno Owens & Nora Bunford, *Journal of Clinical Child & Adolescent Psychology* (2014): *Evidence-Based Psychosocial Treatments for Children and Adolescents with Attention-Deficit/Hyperactivity Disorder*, *Journal of Clinical Child & Adolescent Psychology*, DOI: 10.1080/15374416.2013.850700

INTERVENTIONS: PARENT PSYCHOEDUCATION

- Behavior therapy followed by medication management more efficacious.
- Structure in the environment
- Multi Step instructions
- Rewards and consequences:
 - expect to change them as needed
 - immediacy of rewards/consequences
 - when and how of time-outs
- Advocacy for patient/families (IEP vs 504 Plan)
- Preparing for college

DAILY REPORT CARDS



CLASSROOM ACCOMMODATIONS



QUESTIONS AND ADDITIONAL RESOURCES FOR FAMILIES:

- <http://www.chadd.org/>
- <http://ccf.fiu.edu/for-families/clinical-services/summer-treatment-program/1st-6th-grade/>
- <http://www.amazon.com/Taking-Charge-ADHD-Third-Edition/dp/1462507891>
- Smart But Scattered.

QUESTIONS?