NU675: Aiden Case Study

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Attention deficit hyperactivity disorder (ADHD) is one of the most prevalent neurodevelopmental disorders affecting children. According to APA (n.d.), ADHD is usually marked by traits of hyperactivity, lack of attention, and impulsivity which may alter the child's development or functionality. Aiden's case, a six-year-old boy, exhibits a multifaceted clinical presentation, including emotional reactivity, behavioral disruptions in different settings, and academic challenges, requiring further comprehensive assessment of differential diagnoses, definitive diagnosis, and a patient-centered treatment plan. This paper explores the possible differential diagnoses, the primary diagnosis, and provides evidence-based pharmacological and non-pharmacological treatment plans for the patient.

Differential Diagnoses

A number of disorders can present with overlapping symptoms of impulsivity, emotional dysregulation, and hyperactivity as in the case of Aiden. His academic and behavioral profiles indicate several possible conditions, requiring a keen clinical diagnosis.

1. *Attention Deficit Hyperactivity Disorder*: Aiden presents with the typical symptoms of ADHD, such as impulsivity (blurting out answers and interrupting others), restlessness, difficulty maintaining attention, distractibility, and emotional reactivity at home and in school. His inability to manage his impulses and hyper-focus on his preferred activities are hallmark symptoms for ADHD (APA, n.d.). Furthermore, his symptoms have persisted since his childhood when he was around age four and occur across different settings (in school and at home), thus fulfilling the DSM-5-TR criteria (APA, n.d.)
2. *Oppositional Defiant Disorder (ODD)*: Aiden displays a confrontational behavior, exhibits frequent outbursts, and is often defiant towards instructions from authority

figures, which suggest a possibility of ODD, often co-occurring with ADHD (Kim et al., 2023). Although some defiance behaviors could be associated with frustrations, secondary to ADHD symptoms, his argumentative and reactive behavior necessitates considering ODD as a comorbid condition instead of a primary disorder.

3. *Specific Learning Disorder (SLD)*: Aiden exhibits traits that could be associated with learning delays or SLD, such as his inability to print his last name, recall his home address, or recognize pre-primer words, which could be a sign of a learning disability affecting written or reading expression (APA, n.d.). Nevertheless, it is critical to conduct further assessments with psychoeducational testing to distinguish his learning deficits from attentional disorders.
4. *Anxiety Disorder*: Aiden experiences sleep disturbances, emotional impulsivity, frustration, and irritability which may indicate a possible underlying anxiety disorder. However, primary anxiety symptoms such as persistent worry and avoidance behaviors or somatic anxiety symptoms are not projecting enough to backup anxiety as a primary diagnosis in his case (APA, n.d.).

Diagnosis

Based on the DSM-5-TR criteria, Attention Deficit/Hyperactivity Disorder-Combined Presentation (ADHD-C) with possible Oppositional Defiant Disorder (ODD) comorbidity is the most relevant diagnosis for Aiden (APA, n.d.). Aiden's inattention symptoms, such as forgetting instructions, easy distractibility, and poor task completion are typical symptoms of ADHD. In addition, he displays hyperactivity or impulsivity symptoms which justifies ADHD as a diagnosis, such as running around, emotional impulsivity, interrupting, restlessness, and blurting

out answers. Furthermore, his symptoms have been present since at least age four and occur in different settings (home and school), thus meeting the diagnostic criteria.

When looking into ODD as a possible comorbid condition, Aiden's confrontational behavior, defiance, and frequent outbursts may be presenting secondary to ADHD-associated frustrations. However, these symptoms are frequent and adequately disruptive to suggest the possibility of ODD as a comorbid condition (Kim et al., 2023). We will rule out learning delays and anxiety because, even though learning delays and emotional reactivity are displayed, they could be occurring secondary to attentional deficits instead of primary disorders.

Treatment Plan

Pharmacological Treatment

Aiden can be treated using stimulant medications with methylphenidate or amphetamine formulations, which are first-line pharmacological treatment approaches with proven effectiveness in enhancing attention and reducing hyperactivity/impulsivity in ADHD (Bellato et al, 2025; Wolraich et al., 2019). Medication prescriptions should be patient-centered and started with the lowest effective dose alongside keen monitoring of the patient's mood changes, appetite suppression, and insomnia. Non-stimulant options like extended-release guanfacine or atomoxetine may be used in the case of stimulant intolerance or persistent sleep disturbances. Non-stimulant medications also have additional advantages, such as reducing emotional dysregulation, which may be effective in improving oppositional behaviors.

Non-Pharmacological Treatment

Non-pharmacological treatment approaches will include behavioral intervention, psychoeducation, sleep hygiene interventions, and academic support. According to Huang et al. (2021) combining parent training with evidence-based behavioral interventions, such as

structured routines and positive reinforcement can effectively minimize disruptive behavior and enhance compliance. Cognitive behavioral therapy, for instance, can help with social skills training, emotional impulsivity, and frustration tolerance, which can effectively address ODD if it is confirmed. Aiden and his parents should also be engaged in psychoeducation about ADHD, impulse control, emotional regulation, and copying mechanisms. Due to Aiden's sleep disturbances, he should have a consistent bedtime schedule, be taught self-soothing techniques, and have minimal screen time in the evening and before bed to minimize nighttime wakefulness and improve sleep quality. To support his learning limitations, Aiden should be enrolled in an Individualized Education Plan (IEP) or Section 504 plan to provide learning support such as task breakdown, shorter instructions, providing visual cues, and extra reading support.

Comparison to Expert Opinion

Empirical evidence from American Academy of Pediatrics (Wolraich et al., 2019) recommends combining medication with behavioral interventions alongside school support, to adequately support children below seven years old. Aiden's proposed treatment plan aligns with the guidelines and combines parent and teacher involvement, which helps to improve functioning in school and at home. Experts stress the need for timely diagnosis and treatment interventions, which results in quality social and academic outcomes necessary for this case.

Personal Reflection

This case underscores the relevance of comprehensive assessment, including medical, psychological, and educational assessments. I have learned that ADHD usually co-occurs with other behavioral and learning limitations, necessitating a holistic treatment plan. The most effective treatment plan for complex co-occurring mental health conditions, such as ADHD should combine behavioral therapies with pharmacologic medications, non-pharmacologic

approaches, psychiatric education, and extra support or accommodation in different living environments in order to achieve quality health outcomes (Wolraich et al., 2021). The case study further stresses the need for timely diagnosis and interventions together with collaborative care involving parents, teachers, and mental healthcare providers. In my future practice, I will prioritize timely screening, mixed interventions, and collaborative patient-centered care approaches for children presenting with similar symptoms.

References

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