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CASE REVIEW

An Evaluation of an Adult with Attention-Deficit/ Hyperactivity Disorder in Childhood: A Retrospective Case Study

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ABSTRACT

Many adult clients have repeatedly asked the authors if the onset of attention-deficit/hyperactivity disorder (ADHD) could happen during the adulthood. The current understanding of the condition of ADHD is that it is a neurodevelopmental disorder whose onset takes place in childhood before the age of 6 years. The triad of impairments in ADHD consists of inattention, hyperactivity and impulsivity. The exact cause of ADHD remains evasive and hence, it is unknown. However, current medical studies have strongly indicated neurogenetic causality pinpointing to its constitutional origin and development impairment of the executive functioning cortex in the brain. In other words, ADHD tends to run in families though environmental factors and lifestyle may worsen or improve the symptoms rather than causing the disorder. In this short paper, the authors have chosen to focus on a case study of a male vicenarian's ADHD whose onset purportedly happened during his emerging adulthood phase.

***Key Words:** neurodevelopmental disorder, adult-ADHD, childhood-ADHD, Wender-Utah rating scale*

1. INTRODUCTION

The question of whether ADHD can emerge in adulthood has generated considerable public and clinical interest. Many adults who experience symptoms such as distractibility, restlessness, or difficulty sustaining attention often wonder whether ADHD might be the underlying cause. This question is

particularly relevant for individuals who do not recall exhibiting such symptoms in childhood, given that ADHD is typically conceptualized as a neurodevelopmental disorder with onset before age 12 (DSM-5-TR, and ICD-11). Clinicians frequently encounter adults asking whether their difficulties may reflect an undiagnosed childhood condition or represent a new, adult-onset subtype.

Longitudinal research offers insight into this debate. Caye et al. (2016) investigated ADHD trajectories from childhood to young adulthood using data from the 1993 Pelotas Birth Cohort in Brazil, which followed over 5,000 individuals from birth to age 19. They found that while 8.9% of participants met ADHD criteria at age 11, 12.2% met criteria in young adulthood. Strikingly, only 17.2% of individuals with childhood ADHD continued to meet diagnostic criteria later, and only 12.6% of young adults with ADHD had a documented childhood history. These findings suggest that most young adults with ADHD symptoms did not have the disorder identified in childhood, supporting the possibility of a distinct "late-onset" or adult-onset presentation. Both childhood-onset and late-onset groups exhibited significant functional impairments, including higher rates of criminal involvement and traffic incidents, and sex differences were observed: childhood ADHD was more common in males, whereas late-onset ADHD appeared more prevalent among females, suggesting potentially different developmental or sociocultural pathways.

Similarly, Riglin et al. (2022) examined "late-onset" ADHD symptoms in young adulthood using longitudinal population cohort data. Their findings indicate that parent-reported late-onset ADHD shared many of the same genetic risk factors and cognitive impairments as childhood-onset ADHD, implying a shared neurodevelopmental liability. However, self-reports of late-onset ADHD did not consistently show these associations, highlighting variability in symptom reporting and suggesting that some late-onset cases may reflect delayed manifestation rather than a genuinely new adult-onset disorder.

In contrast, Faraone and Biederman (2016) critically evaluated evidence from longitudinal studies in Brazil and the United Kingdom and argued that reports of adult-onset ADHD challenge the traditional view of ADHD as solely childhood-onset. Nevertheless, they emphasized that methodological limitations (including short follow-up periods, underreporting of childhood symptoms, and diagnostic overlap with other psychiatric conditions) warrant cautious interpretation. They called for rigorous, long-term research to clarify whether adult presentations reflect undiagnosed childhood ADHD or a distinct syndrome.

Taylor et al. (2022) further examined the adult-onset ADHD hypothesis and proposed alternative explanations. Their review of longitudinal, clinical, and epidemiological studies suggests that many cases labeled as adult-onset ADHD may instead reflect subthreshold or unrecognized childhood symptoms, recall bias, or ADHD-like behaviors secondary to depression, anxiety, or substance use disorders. Methodological issues such as retrospective reporting and inconsistent diagnostic criteria have likely contributed to misinterpretations of late-onset cases. Consequently, they reaffirm that ADHD is best conceptualized as a neurodevelopmental disorder originating in childhood and that clinicians should carefully consider alternative explanations before diagnosing adult-onset ADHD.

Taken together, while emerging research has reignited interest in late-onset ADHD, the bulk of evidence suggests that most apparent adult-onset cases likely reflect undiagnosed childhood ADHD, delayed symptom expression, or comorbid conditions rather than a truly new adult-onset disorder. These findings underscore the need for longitudinal, methodologically rigorous studies to clarify ADHD's developmental course and refine diagnostic boundaries across the lifespan.

2. ADHD: WHAT IS IT?

The term attention-deficit disorder (ADD) was first introduced in the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III; American Psychiatric Association [APA], 1980), which

served as the standard reference for diagnosing mental conditions in the United States. In 1994, the definition of ADD was revised in the DSM-IV to include three subtypes: (i) predominantly hyperactive-impulsive, (ii) predominantly inattentive, and (iii) combined type. In the current DSM-5, these are referred to as “presentations.”

ADHD is a neurodevelopmental disorder characterized by persistent and age-inappropriate levels of inattention, hyperactivity, impulsivity, and recklessness. In adulthood, hyperactivity may manifest as inner restlessness, while impulsivity can lead to maladaptive decision-making. These behaviors are typically pervasive and impairing across multiple domains of life (DSM-5; APA DSM-5 Task Force, 2013 DSM-5 Task Force; ICD-11, World Health Organization [WHO], 2018). Some individuals with ADHD also experience difficulties with emotional regulation (often termed emotional dysregulation) and executive dysfunction, which can further complicate daily functioning (Barkley, 2010; Retz et al., 2012).

ADHD is frequently comorbid with other mental health conditions, including depression, anxiety, bipolar disorder, personality disorders (Ray & Hinnant, 2009), and substance use disorders (Zulauf et al., 2014). These comorbidities often exacerbate functional impairments. Although individuals with ADHD may struggle to maintain attention on tasks that are mundane or unrewarding, they can display prolonged and intense focus on activities that interest or engage them, a phenomenon known as hyperfocus (Hupfeld et al., 2019; Phillips, 2018; Katzman et al., 2017).

For a diagnosis of ADHD, symptoms must cause significant impairment in at least two settings (e.g., home, school, or workplace) for a minimum period of six months. In children, difficulties sustaining attention in class can contribute to academic under-performance. The DSM-5 updated the age-of-onset criterion, raising it from “symptoms causing impairment before age 7” (DSM-IV-TR; APA, 2004) to “several inattentive or hyperactive-impulsive symptoms present prior to age 12” (DSM-5; APA DSM-5 Task Force, 2013). According to Sanders et al. (2019), this change both increases the age threshold and removes the requirement that symptoms must have caused impairment at onset, thereby broadening the definition of ADHD and potentially expanding treatment recommendations.

Currently, there is no single medical, genetic, or physical test to diagnose ADHD. According to the National Resource Center on ADHD (2008), a comprehensive evaluation by a qualified mental health professional or physician (for the purpose of gathering information from multiple sources) is required. Diagnosing ADHD can be challenging because its core characteristics (e.g., difficulties with attention, working memory, organization, time management, and emotional regulation) are common to many other conditions (Bressler, 2022). The gold-standard approach relies on evidence-based assessment, adherence to DSM-5 criteria, and the use of multi-informant, multi-method evaluation tools that incorporate validated research and, where possible, objective testing to strengthen clinical confidence (Bressler, 2022).

Table 1. Assessment Tools for ADHD in Children and Adults

Children	Adults
• Behavior Assessment System for Children (BASC-3) • Child Behavior Checklist (CBCL) • Connors Comprehensive Behavior Scale (CBRS)	• Adult ADHD Self-Report Scale (ASRS-v1.1) • Barkley Adult ADHD Rating Scale-IV (BAARS-IV) • Conners Adult ADHD Rating Scales (Conners-3, CAARS)

The gold-standard approach relies on evidence-based assessment, adherence to DSM-5 criteria, and the use of multi-informant, multi-method evaluation tools (see Table 1) that incorporate validated research and, when possible, objective testing to strengthen clinical confidence (Bressler, 2022). To facilitate accurate diagnosis, a range of assessment tools is available for both children and adults, targeting core ADHD symptoms, functional impairments, and comorbid conditions. Table 1 provides

examples of commonly used ADHD testing instruments for different age groups, highlighting their purpose and applicability in clinical settings.

3. IS THERE AN ADULT-ADHD?

The focus of this paper is on the Adult-ADHD (A-ADHD): a mental health condition with a short attention span, hyperactivity, and socio-occupational dysfunction. Its symptoms are generally understood to emerge during early childhood and persist into adulthood, though in some cases ADHD is not clearly recognizable or properly diagnosed until the individual is an adult. “Adult-ADHD symptoms may not be as clear as ADHD symptoms in children” (Mayo Clinic, 2022, para. 2). In adults, although the severity or frequency of hyperactivity may decrease, struggles with impulsiveness, restlessness, and difficulties sustaining attention often remain.

According to Katzman et al. (2017), A-ADHD is associated with “profound functional and psychosocial disability, leading to serious personal and societal costs”. Attentional dysfunction is the most prominent feature and is correlated with impairment in focused and sustained attention (Bálint et al., 2009). Adults with ADHD also experience neuropsychological challenges, including deficits in inhibition (Murphy, 2002; Ossmann & Mulligan, 2003), working memory (Alderson et al., 2013; Ossmann & Mulligan, 2003), executive functioning (Spencer et al., 2008), decision-making (Mowinckel et al., 2015), and emotional regulation (Retz et al., 2012). A-ADHD also negatively impacts self-esteem and interpersonal relationships, affecting interactions with co-workers, colleagues, and significant others (Kirono et al., 2015).

However, the assumption that A-ADHD always stems from childhood-onset ADHD has been questioned. Moffitt et al. (2015) conducted a four-decade longitudinal study of over 1,000 individuals in Dunedin, New Zealand, and found that while childhood ADHD was associated with male predominance, neurocognitive deficits, and polygenic risk, only about 10% of adults with ADHD had a documented history of childhood ADHD. Moreover, A-ADHD cases did not show the same neuropsychological impairments or genetic risk factors as childhood-onset cases. These findings suggest that many Adult-ADHD presentations may not arise from a neurodevelopmental disorder originating in childhood, highlighting the need for careful evaluation and potential reconsideration of the disorder’s classification and etiological understanding.

4. A CASE STUDY OF AN ADULT WITH A-ADHD

This is a retrospective case study[1] of a foreign male student, XY, in his mid-twenties, who had already completed his studies at a private college long before the time of this writing. XY self-referred to a counselor via e-counseling, following a friend’s recommendation, after being repeatedly pressured by his ageing parents for over a decade about his “weird” behavioral problems, including suspected chronic depression. These included the common explicit traits such as impatience, irritability, frequent outbursts of anger, and short temper (Komijani et al., 2025), mood swings (Brown, 2011), and possibility of suspected depression (Riglin et al., 2021). All of these signs and symptoms were suspected to result from poor impulse control. As external party not involved in the counseling of XY, the authors (being educational therapists in practice) were consulted to help the counselor and her client better understand the condition of ADHD.

In the discussion with XY’s counselor, the authors were convinced there is evidence that poor impulse control can contribute to disruptive symptoms discussed above (i.e., impatience, irritability, frequent

[1] Retrospective case study is defined as a research approach that examines past events, records, or experiences related to a specific individual, group, or situation to understand causes, outcomes, or patterns that have already occurred.

outbursts of anger, a short temper, mood swings, and can increase the risk of depression). For instance, Yang et al. (2024) did a longitudinal study of Chinese adolescents found that higher impulsivity (a facet of poor impulse control) significantly predicted increased depressive symptoms six months later. In another study done by Judd et al. (2013) on adults with unipolar major depression found that overt irritability/anger was associated with poor impulse control, among other factors, and tended to mark a more severe, chronic, and complex form of depression. Therefore, while poor impulse control alone may not *cause* all these symptoms, it is clearly linked with emotional dysregulation (anger, irritability, outbursts) and mood disorders (including depression).

Based on the counselor's feedback, during XY's internship at a local food and beverage (F&B) company amid the COVID-19 pandemic, he reported difficulties focusing and prioritizing multiple tasks. As a result, it led to missed project deadlines and forgotten meetings or social engagements. XY also shared with his counselor that he had experienced several unstable relationships, low motivation in both academic and work settings, poor self-esteem, and depressive symptoms, which he had never disclosed to his parents (or anyone else) for fear of worrying them.

Through e-counseling, XY was asked whether he had ever seen a psychologist or medical practitioner as a child for learning or behavioral concerns. He was unsure, and through the counselor's contact with XY's parents, they confirmed he had never sought any medical attention for his condition. Recollections from his school years suggested he was disorganized, poor at planning and time management, easily stressed, frustrated, or anxious, quick-tempered, and struggled with multitasking.

With no prior psychological or medical assessments available, a definitive diagnosis of ADHD could not be made. In consultation with XY's counselor, it was decided to administer the 25-item Wender-Utah Rating Scale (WURS-25) for ADHD (Ward et al., 1993), a validated retrospective screening (not diagnostic) tool for childhood ADHD (C-ADHD) in adults. The WURS-25 was chosen for administration because it can be used with adults even if they never had an ADHD assessment as a child. In fact, it was specifically designed to help retrospectively identify childhood ADHD symptoms based on adult self-report. The scale asks adults to recall and rate behaviors and traits they experienced before age 12, allowing clinicians to estimate the likelihood that ADHD was present in childhood: a core requirement for an adult ADHD diagnosis (Ward et al., 1993).

The WURS-25 shows strong psychometric properties, with studies consistently reporting high internal consistency (Cronbach's α ranging from 0.91 to 0.94) and satisfactory test-retest reliability ($r \approx 0.80$), indicating stable measurement of retrospective childhood ADHD symptoms in adults (Brevik et al., 2020; Kouros et al., 2018). Its validity is also well supported. The original study found high sensitivity (86%) and specificity (99%) for distinguishing adults with ADHD from controls, and later research confirmed strong discriminative validity (AUC ≈ 0.95) across translations (e.g., Swedish, German, Turkish).

Through the counselor's contact with her client, WURS-25 was disseminated to XY for his input. The completed questionnaire was returned to the authors for scoring and interpretation. XY scored 53 on the WURS-25, surpassing the cutoff score of 46, suggesting the presence of childhood ADHD. While this indicates a retrospective C-ADHD, other coexisting conditions could not be ruled out at this stage.

As noted in Ward et al. (1993), a WURS-25 score of 46 or higher correctly identifies 86% of adults with ADHD, 99% of adults without ADHD, and 81% of adults with depression. XY's results indicate that he likely experienced C-ADHD, and now as an adult, he may be showing symptoms consistent with adult ADHD (A-ADHD) alongside depressive features (Seymour & Miller, 2017). Epidemiological studies report a median odds ratio of 5.5 (95% CI 3.5-8.4) for co-occurring ADHD and depression (Angold et al., 1999). Additionally, XY demonstrates signs of executive dysfunction, a common ADHD comorbidity affecting attention, working memory, flexible thinking, and organization/time management skills

(Sonuga-Barke et al., 2008). A detailed exploration of executive dysfunction is beyond the scope of this paper.

Table 2. WURS-25 Results

WURS-25	Scores	Remarks
WURS Score	53	based on 25 items associated with ADHD
Cutoff Score	46	Predictive having childhood-ADHD
Maximum Score	100	
Minimum Score	0	

Both C-ADHD and A-ADHD are neurodevelopmental disorders with onset in childhood, affecting learning, behavior, and everyday functioning. The classical triad of ADHD symptoms (i.e., impulsivity, inattention, and hyperactivity) can manifest differently in each individual, with some requiring more support than others. Importantly, the presence of one or a few symptoms alone does not confirm ADHD; comprehensive assessment, as demonstrated with the WURS-25 in XY's case, is essential for accurate diagnosis.

5. CONCLUSION

At the outset of this paper, the authors emphasized that ADHD does not suddenly emerge in adulthood. According to the DSM-5 criteria, a formal diagnosis of ADHD requires that key symptoms causing functional impairment must have been present before the age of 12. This clearly indicates that ADHD is a neurodevelopmental condition with onset in childhood, and its presence in adulthood reflects a continuation of symptoms rather than a new, adult-onset disorder. Consequently, the term A-ADHD may be somewhat misleading, as it implies the development of the condition later in life, whereas in reality, these individuals have carried ADHD traits since childhood.

In the case of XY, the evidence suggests that he experienced ADHD symptoms during his formative years, though the condition went unrecognized and undiagnosed until adulthood. The retrospective assessment using the WURS-25 highlighted a history consistent with C-ADHD, while his current challenges (including attentional difficulties, impulsivity, and potential depressive symptoms) reflect the persisting impact of the condition into adult life. This case underscores the importance of early recognition and intervention, as unaddressed ADHD can have lasting effects on academic performance, occupational functioning, emotional regulation, and overall psychosocial well-being.

Moreover, XY's case illustrates that a formal diagnosis in adulthood often requires careful retrospective evaluation, corroborating childhood histories, and the use of validated assessment tools. By identifying ADHD in adults through such comprehensive approaches, practitioners can not only clarify the developmental trajectory of the disorder but also provide targeted interventions that address both longstanding and current functional impairments, thereby improving quality of life and adaptive functioning.

The authors acknowledge that this retrospective case study, which aimed to examine whether ADHD symptoms in adulthood reflect a childhood-onset disorder, is subject to several limitations. These include: (i) the absence of direct contact with the client, XY, with information obtained solely through his counselor; (ii) restricted assessment opportunities, limited to the administration of the WURS-25; and (iii) the authors' role as external consultants rather than members of the counseling team, which may have constrained their insight into the broader therapeutic context.

Despite these limitations, the retrospective case study of XY has offered valuable learning points: First, the utility of retrospective tools: Even in the absence of direct contact, screening tools such as the WURS-25 can provide meaningful insights into the presence of childhood-onset ADHD symptoms in adults. It goes to highlight the potential of structured retrospective assessments in clinical and research

contexts for educational therapists. Second, the importance of secondary sources and collaboration: Information obtained through XY's counselor (or other intermediaries, if any) demonstrates how secondary reporting can contribute to understanding a client's condition. It has also highlighted the value of multi-informant approaches when direct access to the subject is not possible. In other words, these two crucial points reinforce practical strategies for assessing and studying ADHD in real-world constraints that educational therapists often encounter in their practice.

In conclusion, this retrospective case study of XY's experience highlights that ADHD is a neurodevelopmental disorder with symptoms that originate in childhood and can continue into adulthood. It underscores the importance of early identification, comprehensive assessment, and timely support to effectively manage its long-term impact on functioning and well-being.

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The authors have declared that no competing interests exist.

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10. DATA AVAILABILITY STATEMENT

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11. ETHICS APPROVAL

Not applicable. This study did not require ethics approval.

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