HEALTHCARE **DISPARITIES**ADHD

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HILE ADHD is one of the most prevalent neurodevelopmental disabilities, many individuals are faced with difficulties in accessing appropriate diagnostic and treatment services. Accurate diagnosis and treatment of ADHD can be challenging due to co-occurring conditions or behavioral problems, as well as inconsistencies in reported ADHD symptoms across different settings.

Disparities in ADHD diagnosis and treatment have long been documented, and trends in research suggest links to many factors, including geographic, economic, and demographic. Complicating matters further, these variables rarely exist in isolation, and, together, these barriers may make accessing appropriate ADHD services even more difficult.

While not exhaustive, this article will review common challenges to ADHD services in the hopes that, by coming to a shared understanding, providers, caregivers, and advocates can continue working collectively to reduce barriers and disparities.

Race and ethnicity

Racially and ethnically diverse children are often less likely to receive an ADHD diagnosis and related treatment, compared to their White counterparts. Notably, ADHD service discrepancies for racially and ethnically diverse individuals can occur throughout the lifespan, beginning in early childhood, and can occur regardless of the severity of symptoms. Moreover, research has highlighted disparities across multiple racial and ethnic minority groups (Latinx, Black, Asian, and Native American), and even when accounting for other characteristics (such as socioeconomic status). While some studies suggest the racial disparity gap may be closing in ADHD diagnosis, ADHD treatment disparities remain largely unchanged.

Several explanations have been offered to explain these differences in service delivery, including inconsistencies in behavioral ratings and historical racism in healthcare. What many of these explanations share, however, is the idea that adults working with racially and ethnically diverse children are susceptible to implicit biases and may therefore misinterpret ADHD symptoms. In other words, since ADHD diagnostic services and treatment are behaviorally determined, it stands to reason that they are influenced by our own cultural expectations for behavior (such as what is labeled as a "problem" in a household or classroom), assumptions, and personal worldviews.

Socioeconomic status

Socioeconomic status (SES) is oftentimes used as an umbrella term to refer to several factors (income, education, insurance, financial burden) that can impact ADHD service access in several unique ways. First, as one may expect, lower SES may result in lower rates of ADHD diagnosis and related services. Specifically, insurance (type and adequacy of coverage), as well as limited access to quality providers, often dictate who can be seen and why, before individuals and families even have the chance to voice their concerns.

Interestingly, SES has also been linked to overdiagnosis and overtreatment of ADHD for children from both higher and lower SES backgrounds. Notably, however, the mechanisms driving these disparities are likely distinct. For example, in high SES populations, overdiagnosis and treatment may be the result of increased resource access, as well as ease in navigating medical systems (being able to seek second opinions, having prior knowledge and familiarity with ADHD). In contrast, the overdiagnosis and treatment of ADHD in lower SES populations may be explained by a lack of quality care. Specifically, the increased risks of behavioral problems and co-occurring conditions linked with lower levels of SES (socioemotional or behavioral challenges due to food deserts, insecure housing, exposure to trauma, etc.) may require careful differentiation between ADHD and other concerns that, due to barriers to quality care, may not be available and lead to false-positives.



Gender and sex

The longstanding gender-based stereotype of the "high energy and disruptive boy" with ADHD continues to influence which children get referred by parents and teachers for further evaluation. While girls can certainly have both inattentive and hyperactive/impulsive symptoms, they tend to present with more inattentive symptoms compared to boys. Also, their hyperactive and im-

pulsive symptoms tend to be less disruptive than boys; for example, girls may be overly talkative and interrupt others as opposed to having difficulties keeping their hands to themselves or trouble staying seated. As a result, girls may fly under the radar as their struggles with distractibility, disorganization, daydreaming, and lack of motivation/effort are not thought of as symptoms of ADHD.

Girls with ADHD also tend to have co-occurring internalizing problems like anxiety or depression, which can be less obvious to others, and they often try to compensate for or hide their struggles from others. When they do get evaluated, those internalizing symptoms can get misinterpreted as the primary problem, and the underlying ADHD can get overlooked. This is true for both girls and women.

In adulthood, women often face significant societal pressure and gender role expectations to be the CEOs of their households, family, and children's lives. Women with undiagnosed ADHD may be more likely to attribute challenges they face in juggling all of their responsibilities as a moral failing instead of a neurodevelopmental difference, which can profoundly impact their sense of self and self-worth. Furthermore, during the transition to menopause, symptoms of ADHD that may have previously been less noticeable or impairing can increase as hormones fluctuate.

Age

Roughly two-thirds of youth diagnosed with ADHD go on to continue having ADHD symptoms that are impairing in adulthood, with the National Institute of Mental Health (NIMH) finding the lifetime prevalence of ADHD in US adults (age 18-44) to be 8.1%. Unfortunately, there is far less attention given to identifying and providing services for adults with ADHD compared to children.

As discussed in CHADD's ADHD Public Health Summit 2019 white paper, several factors contribute to agebased disparities for adults with ADHD:

• First, because ADHD was perceived for a long time to be a disorder that is outgrown, most professional organizations that produce national diagnostic and treatment



guidelines are child-focused (for example, the American Academy of Pediatrics and the American Academy of Child & Adolescent Psychiatry).

- Second, many healthcare providers receive limited training about what ADHD may look like over the life course (see sidebar), and may not assess for symptoms of ADHD unless it is brought up.
- Third, many adults with ADHD also experience mental health concerns, sometimes as a consequence of their ADHD symptoms, like depression, anxiety, and substance use. Too often, those other concerns might be seen as the primary problem (instead of their ADHD).

People diagnosed with ADHD in adulthood may regret not being diagnosed in childhood, and some adults wonder if appropriate treatment earlier on could have prevented problems in their education, work, and relationships with others. Some undiagnosed adults first consider they may have ADHD, too, only after their child has been diagnosed.

Just like kids with ADHD, adults with ADHD are more likely than adults without ADHD to experience difficulties in executive functioning (planning, organizing, getting started, keeping track of details), work settings, and in relationships with peers and families. A diagnosis can offer an explanation for these difficulties, and just like for children, stimulant medication is the first choice medication treatment for adult ADHD.

Urban versus rural access to care

Despite the need for all youth with ADHD to have support from the medical system and in school, there are significant disparities in access to services between rural and urban children. In rural settings, parents of kids with ADHD may face barriers due to lack of access or availability of services within their community, long distances required to travel to receive services, and challenges in affording services that are not readily available.

Based on the most recent National Health Interview Survey by the US Centers for Disease Control and Prevention, children who live in rural areas—compared to urban areas—are more likely to receive have received a diagnosis of ADHD (11.4% of children in rural areas, compared to 9.2% of children in urban areas). The same survey also suggests kids who live in rural areas are significantly less likely to have seen a mental health professional, therapists (speech, physical, occupational, respiratory), or to have had a well-child check-up visit in the past year. School is also impacted, with children living in

Adult ADHD Symptoms

YMPTOMS OF ADHD in adults can look different than in kids and adolescents. The Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist is freely available online. Check out the first six of the eighteenquestion checklist, where answering four or more of these questions as "often" or "very often" is highly consistent with a diagnosis of ADHD:

- 1. How often do you have trouble wrapping up the final details of a project, once the challenging parts have been done?
- 2. How often do you have difficulty getting things in order when you have to do a task that requires organization?
- 3. How often do you have problems remembering appointments or obligations?
- 4. When you have a task that requires a lot of thought, how often do you avoid or delay getting started?
- 5. How often do you fidget or squirm with your hands or feet when you have to sit down for a long time?
- 6. How often do you feel overly active and compelled to do things, like you were driven by a motor?

rural areas and with a developmental disability (such as ADHD) being less likely to receive early intervention services or special education services than children with a developmental disability in urban areas.

What to do?

Unfortunately, these disparities are longstanding and many reflect the history of how our society has developed over time, which makes them hard to change quickly. But there can be movement. Working for change can (and, ideally, is) both an "internal" and "external" process:

• Internal, such as through gentle, non-defensive acknowledgement and processing of your own experience—what aspects of ADHD diagnosis, intervention, management, and/or support have been especially hard or difficult? What has been easier? Are there system- or policy-level disparities, some of which (but certainly not all) are highlighted above, to consider? Are there disparities you want to learn more about? Two good starting points can be found on the CHADD website: The section on diverse populations (https://chadd.org/diversity/), which provides information about ADHD specific to Black, Hispanic, and military communities, as well as the section on women and girls (https://chadd.org/for-adults/women-and-girls/), which provides information about ADHD specific to girls and women.

• External, such as working for positive change outwardly, through advocacy in local government, school boards, or the state legislature. While this can sound intimidating, CHADD has an excellent advocacy manual to help get you started; find it at https://chadd.org/policy-positions/. Speaking up, sharing accurate information, and engaging in conversations with those around you helps to raise awareness. @



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SOURCES

CHADD. (2019, October 7). The adverse health outcomes, economic burden, and public health implications of unmanaged attention deficit hyperactivity disorder (ADHD): A call to action to improve the quality of life and life expectancy of people with ADHD. Proceedings of the ADHD Public Health Summit, Washington, DC. Unpublished paper, accessible at https:// chadd.org/policy-positions/.

Kessler, R. C., Adler, L., Ames, M., Demler, O., Faraone, S., Hiripi, E. V. A., ... & Walters, E. E. (2005). The World Health Organization Adult ADHD Self-Report Scale (ASRS): A short screening scale for use in the general population. Psychological Medicine, 35(2), 245-256.

Morley, C. P. (2010). Disparities in ADHD Assessment, Diagnosis, and Treatment. The International Journal of Psychiatry in Medicine, 40(4), 383-389. https://doi.org/10.2190/ PM.40.4.b

Morley, C. P. (2010). Disparities in ADHD Assessment, Diagnosis, and Treatment. The International Journal of Psychiatry in Medicine, 40(4), 383-389. https://doi.org/10.2190/

National Institute of Mental Health. (n.d.). Attention-Deficit/Hyperactivity Disorder (ADHD). https://www.nimh.nih.gov/health/statistics/attention-deficit-hyperactivity-disorder-adhd

Shi, Y., Hunter Guevara, L. R., Dykhoff, H. J., Sangaralingham, L. R., Phelan, S., Zaccariello, M. J., & Warner, D. O. (2021). Racial Disparities in Diagnosis of Attention-Deficit/ Hyperactivity Disorder in a US National Birth Cohort. JAMA Network Open, 4(3), e210321. https://doi.org/10.1001/jamanetworkopen.2021.0321

Tumaini R. Coker, Marc N. Elliott, Sara L. Toomey, David C. Schwebel, Paula Cuccaro, Susan Tortolero Emery, Susan L. Davies, Susanna N. Visser, Mark A. Schuster; Racial and Ethnic Disparities in ADHD Diagnosis and Treatment. Pediatrics, September 2016; 138 (3): e20160407. 10.1542/peds.2016-0407

Young, S., Adamo, N., Ásgeirsdóttir, B. B., Branney, P., Beckett, M., Colley, W., ... & Woodhouse, E. (2020). Females with ADHD: An expert consensus statement taking a lifespan approach providing guidance for the identification and treatment of attentiondeficit/hyperactivity disorder in girls and women. BMC Psychiatry, 20(1), 1-27.

Zablotsky, B., & Black, L. I. (2020). Prevalence of Children Aged 3-17 Years with Developmental Disabilities, by Urbanicity: United States, 2015-2018. National Health Statistics Reports. Number 139. National Center for Health Statistics.