How Childhood Trauma Could Be Mistaken for ADHD

Some experts say the normal effects of severe adversity may be misdiagnosed as ADHD.

Dr. Nicole Brown’s quest to understand her misbehaving pediatric patients began with a hunch.
Brown was completing her residency at Johns Hopkins Hospital in Baltimore, when she realized that many of her low-income patients had been diagnosed with attention deficit/hyperactivity disorder (ADHD).

These children lived in households and neighborhoods where violence and relentless stress prevailed. Their parents found them hard to manage and teachers described them as disruptive or inattentive. Brown knew these behaviors as classic symptoms of ADHD, a brain disorder characterized by impulsivity, hyperactivity, and an inability to focus.

When Brown looked closely, though, she saw something else: trauma. Hyper-vigilance and dissociation, for example, could be mistaken for inattention. Impulsivity might be brought on by a stress response in overdrive.

“Despite our best efforts in referring them to behavioral therapy and starting them on stimulants, it was hard to get the symptoms under control,” she said of treating her patients according to guidelines for ADHD. “I began hypothesizing that perhaps a lot of what we were seeing was more externalizing behavior as a result of family dysfunction or other traumatic experience.”

Inattentive, hyperactive, and impulsive behavior may mirror the effects of adversity, and many doctors don't know how—or don't have time—to tell the difference.

Considered a heritable brain disorder, one in nine U.S. children—or 6.4 million youth—currently have a diagnosis of ADHD. In recent years, parents and experts have questioned whether the growing prevalence of ADHD has to do with hasty medical evaluations, a flood of advertising
for ADHD drugs, and increased pressure on teachers to cultivate high-performing students. Now Brown and other researchers are drawing attention to a compelling possibility: Inattentive, hyperactive, and impulsive behavior may in fact mirror the effects of adversity, and many pediatricians, psychiatrists, and psychologists don’t know how—or don’t have the time—to tell the difference.

Though ADHD has been aggressively studied, few researchers have explored the overlap between its symptoms and the effects of chronic stress or experiencing trauma like maltreatment, abuse and violence. To test her hypothesis beyond Baltimore, Brown analyzed the results of a national survey about the health and well-being of more than 65,000 children.

Brown’s findings, which she presented in May at an annual meeting of the Pediatric Academic Societies, revealed that children diagnosed with ADHD also experienced markedly higher levels of poverty, divorce, violence, and family substance abuse. Those who endured four or more adverse childhood events were three times more likely to use ADHD medication.

Interpreting these results is tricky. All of the children may have been correctly diagnosed with ADHD, though that is unlikely. Some researchers argue that the difficulty of parenting a child with behavioral issues might lead to economic hardship, divorce, and even physical abuse. This is particularly true for parents who themselves have ADHD, similar impulsive behavior or their own history of childhood maltreatment. There is also no convincing evidence that trauma or chronic stress lead to the development of ADHD.

For Brown, who is now a pediatrician at Montefiore Medical Center in the Bronx, the data are cautionary. It’s not evident how trauma
influences ADHD diagnosis and management, but it’s clear that some misbehaving children might be experiencing harm that no stimulant can fix. These children may also legitimately have ADHD, but unless prior or ongoing emotional damage is treated, it may be difficult to see dramatic improvement in the child’s behavior.

“We need to think more carefully about screening for trauma and designing a more trauma-informed treatment plan,” Brown says.

Dr. Kate Szymanski came to the same conclusion a few years ago. An associate professor at Adelphi University’s Derner Institute and an expert in trauma, Szymanski analyzed data from a children’s psychiatric hospital in New York. A majority of the 63 patients in her sample had been physically abused and lived in foster homes. On average, they reported three traumas in their short lives. Yet, only eight percent of the children had received a diagnosis of post-traumatic stress disorder while a third had ADHD.

“I was struck by the confusion or over-eagerness—or both—to take one diagnosis over another,” Szymanski says. “To get a picture of trauma from a child is much harder than looking at behavior like impulsivity, hyperactivity. And if they cluster in a certain way, then it’s easy to go to a conclusion that it’s ADHD.”

A previous edition of the Diagnostic and Statistical Manual of Mental Disorders urged clinicians to distinguish between ADHD symptoms and difficulty with goal-directed behavior in children from “inadequate, disorganized or chaotic environments,” but that caveat does not appear in the latest version. Unearthing details about a child’s home life can also be challenging, Szymanski says.
It's not clear how many children are misdiagnosed with ADHD annually, but the number could be nearly 1 million.

A child may withhold abuse or neglect to protect his family or, having normalized that experience, never mention it all. Clinicians may also underestimate the prevalence of adversity. The Adverse Childhood Experiences Study, a years-long survey of more than 17,000 adults, found that two-thirds of participants reported at least one of 10 types of abuse, neglect, or household dysfunction. Twelve percent reported four or more. That list isn’t exhaustive, either. The study didn’t include homelessness and foster care placement, for example, and the DSM doesn’t easily classify those events as “traumatic."

It’s not clear how many children are misdiagnosed with ADHD annually, but a study published in 2010 estimated the number could be nearly 1 million. That research compared the diagnosis rate amongst 12,000 of the youngest and oldest children in a kindergarten sample and found that the less mature students were 60 percent more likely to receive an ADHD diagnosis.

Though ADHD is thought to be a genetic condition, or perhaps associated with lead or prenatal alcohol and cigarette exposure, there is no brain scan or DNA test that can give a definitive diagnosis. Instead, clinicians are supposed to follow exhaustive guidelines set forth by professional organizations, using personal and reported observations of a child’s behavior to make a diagnosis. Yet, under financial pressure to keep appointments brief and billable, pediatricians and therapists aren’t always thorough.
“In our 15-minute visits—maybe 30 minutes at the most—we don’t really have the time to go deeper,” Brown says. If she suspects ADHD or a psychological condition, Brown will refer her patient to a mental health professional for a comprehensive evaluation. “You may have had this social history that you took in the beginning, but unless the parent opens up and shares more about what’s going on in the home, we often don’t have the opportunity or think to connect the two.”

Caelan Kuban, a psychologist and director of the Michigan-based National Institute for Trauma and Loss in Children, knows the perils of this gap well. Four years ago she began offering a course designed to teach educators, social service workers and other professionals how to distinguish the signs of trauma from those of ADHD.

“It’s very overwhelming, very frustrating,” she says. “When I train, the first thing I tell people is you may walk away being more confused than you are right now.”

In the daylong seminar, Kuban describes how traumatized children often find it difficult to control their behavior and rapidly shift from one mood to the next. They might drift into a dissociative state while reliving a horrifying memory or lose focus while anticipating the next violation of their safety. To a well-meaning teacher or clinician, this distracted and sometimes disruptive behavior can look a lot like ADHD.

Kuban urges students in her course to abandon the persona of the “all-knowing clinician” and instead adopt the perspective of the “really curious practitioner.”

Rather than ask what is wrong with a child, Kuban suggests inquiring about what happened in his or her life, probing for life-altering events.
Jean West, a social worker employed by the school district in Joseph, Missouri, took Kuban’s course a few years ago. She noticed that pregnant teen mothers and homeless students participating in district programs were frequently diagnosed with ADHD. This isn’t entirely unexpected: Studies have shown that ADHD can be more prevalent among low-income youth, and that children and adolescents with the disorder are more prone to high-risk behavior. Yet, West felt the students’ experiences might also explain conduct easily mistaken for ADHD.

Kuban’s course convinced West to first consider the role of trauma in a student’s life. “What has been the impact? What kind of family and societal support have they had?” West asks. “If we can work on that level and truly know their story, there’s so much power in that.”

As a school official, West sometimes refers troubled students to a pediatrician or psychiatrist for diagnosis, and meets with parents to describe how and why adversity might shape their child’s behavior. In her private practice, West regularly assesses patients for post-traumatic stress disorder instead of, or in addition to, ADHD.

Though stimulant medications help ADHD patients by increasing levels of neurotransmitters in the brain associated with pleasure, movement, and attention, some clinicians worry about how they affect a child with PTSD, or a similar anxiety disorder, who already feels hyper-vigilant or agitated. The available behavioral therapies for ADHD focus on time management and organizational skills, and aren’t designed to treat emotional and psychological turmoil.

Instead, West teaches a traumatized child how to cope with and defuse fear and anxiety. She also recommends training and therapy for parents who may be contributing to or compounding their child’s unhealthy
behavior. Such programs can help parents reduce their use of harsh or abusive discipline while improving trust and communication, and have been shown to decrease disruptive child behavior.

Szymanski uses a similar approach with patients and their parents. “I think any traumatized child needs individual therapy but also family therapy,” she says. “Trauma is a family experience; it never occurs in a vacuum.”

Yet finding a provider who is familiar with such therapy can be difficult for pediatricians and psychiatrists, Szymanski says. Though some hospitals have centers for childhood trauma, there isn’t a well-defined referral network. Even then, insurance companies, including the federal Medicaid program, may not always pay for the group sessions commonly used in parent training programs.

Faced with such complicated choices, Szymanski says it’s no surprise when clinicians overlook the role of trauma in a child’s behavior and focus on ADHD instead.

**Inattentive and hyperactive behavior can be traced back to any number of conditions—just like chest pains don't have the same origin in every patient.**

While there are few recommendations now for clinicians, that will likely change in the coming years. The American Academy of Pediatrics is currently developing new guidance on ADHD that will include a section on assessing trauma in patients, though it won’t be completed until 2016.
Dr. Heather Forkey, a pediatrician at University of Massachusetts Memorial Medical Center, who specializes in treating foster children, is assisting the AAP. Her goal is to remind doctors that inattentive and hyperactive behavior can be traced back to any number of conditions—just like chest pains don’t have the same origin in every patient. Ideally, the AAP will offer pediatricians recommendations for screening tools that efficiently gauge adversity in a child’s life. That practice, she says, should come before any diagnosis of ADHD.

When speaking to traumatized children inappropriately diagnosed with ADHD, she offers them a reassuring explanation of their behavior. The body’s stress system, she says, developed long ago in response to life-or-death threats like a predatory tiger. The part of the brain that controls impulses, for example, shuts off so that survival instincts can prevail.

“What does that look like when you put that kid in a classroom?” Forkey asks. “When people don’t understand there’s been a tiger in your life, it looks a lot like ADHD to them.”

---

This story was produced for ACEs Too High

ABOUT THE AUTHOR

Rebecca Ruiz is a reporter based in Oakland. She has written for NBC News, Forbes, and The American Prospect.

? Twitter