Diagnosis: ADHD—or Is It Trauma?

Hyperactive, yes. Attention problems, check. But it's not ADHD.

By Maia Szalavitz for MSN Health & Fitness

When Dawn adopted her 7-year-old nephew, Dylan (not their real names), she expected a difficult initial adjustment. The 51-year-old Wisconsin homemaker, who is married to an attorney, has 10 children—eight adopted, two biological—and jokes that her occupation is "laundry." She knew that Dylan had been starved and neglected by his cocaine-addicted mother.

But what Dawn didn't expect was for her nephew to be diagnosed with attention-deficit/hyperactivity disorder. "He was climbing the walls," she says. "He couldn't even sit still to eat." At school, he wasn't learning because he was in constant motion.

Dawn suspected that Dylan's main problem wasn't really ADHD. Her pediatrician wanted him evaluated and suggested medication. "It was tempting," she says, but "I had a gut feeling I should wait." Dawn believed that her nephew's inattention and over-activity were linked instead to his disrupted parental relationships and chaotic early experience.

Identifying trauma

Dawn's maternal intuition about the effects of trauma on attention is increasingly backed by science. "The big problem is that people just don't identify trauma in kids," says Claude Chemtob, professor of psychiatry and pediatrics at Mt. Sinai Medical School in New York City, who recently published a study of children who were attending preschools near the World Trade Center on Sept. 11, 2001.

Though we tend to think of traumatic experiences as rare, in fact, by age 16, seven of 10 children have been exposed to at least one potentially traumatic event—such as a natural disaster, severe car accident, child abuse or the loss of close family member—according to a study of a representative sample of more than 1,400 children living in North Carolina published in 2007.

In Chemtob's 9/11 study, even children who saw people jump from the towers tended not to have lasting problems. But preschoolers who had experienced multiple traumatic events were 16 times more likely to have attention problems—and 21 times more likely to be overly emotionally reactive and/or to show symptoms of depression and anxiety—than children who had not had such experiences.

But, if other studies of similar children are a guide, many of these severely affected children would probably not meet criteria for post-traumatic stress disorder. Studies following children with known trauma exposure find that they are much more likely to suffer other anxiety disorders or depression than classic PTSD.

Indeed, despite the high prevalence of potentially traumatizing experiences, less than half a percent of the children followed in the North Carolina study could be diagnosed with PTSD. However, 40 percent of those who had had such experiences qualified for at least one diagnosis, often depression or anxiety disorders.

As a result, many traumatized children whose behavior has clearly been affected by their experiences aren't diagnosed with PTSD—or diagnosed at all. Chemtob notes that "virtually none" of the children in his study were getting any kind of treatment, despite symptoms severe enough to warrant it.

Other children are vulnerable to being labeled with an alphabet soup of diagnoses, including ADHD, because trauma profoundly affects many different parts of the brain and can produce widely varying behaviors and outcomes.

Not hyperactive, but hypervigilant

Dylan had seen his mother use drugs and had witnessed a stabbing. In response, his developing brain—in an effort to protect himself—would have tried to predict which adult moods were most likely to erupt in violence.

"These children are hypervigilant because they are looking for dangers or threats," says Frank Putnam, professor of pediatrics and psychiatry at Cincinnati Children's Hospital. "They become exquisitely attuned to sights, sounds and especially facial expressions or tones of voice that might be linked with impending trouble. ″

Hypervigilance can look like hyperactivity or inattentiveness in school because these children are paying attention to "distractions" like the teacher's face or another child's movements, not their schoolwork. A slammed door might prompt them to jump from their seats—and cause a "fight or flight" response that might seem aggressive or defiant.

Trauma can also produce what's known as a "dissociative" reaction. When a threat is physically inescapable, the body prepares for injury by slowing heart rate and breathing. The brain is flooded with endogenous opioids—the brain's own painkillers—which cause numbness. In extreme cases, the person feels like he has "left his body" and is watching events from outside.

A sight, sound, smell or memory can trigger a return to this state. "Children may space out and appear to be daydreaming," Putnam says. "They lose contact with reality and become involved in an internal world. Teachers see a child who is never paying attention. They still have their math book out when the teacher has moved on to history."

Many children who are diagnosed with ADHD, Putnam believes, may actually be suffering from trauma. "There is probably a significant group of kids with traumatic hypervigilance or dissociation that interferes with attention and increases arousal and activity levels," who are misdiagnosed, he says.

What's worse, children suffering trauma symptoms actually have higher than normal levels of neurotransmitters like adrenaline and noradrenaline (norepinephrine), according to Putnam. These same transmitters are raised even further by stimulants like Ritalin that are commonly prescribed for ADHD.

"Does it make sense to give kids who already have higher levels of these neurotransmitters a stimulant?" Putnam asks.

Interestingly, a second-line medication mostly used for young children with ADHD, called clonidine, reduces the release of these neurotransmitters. Clonidine is also used to treat traumatized children for exactly that reason—because it calms the hyper-active stress system.

Diagnosis: ADHD—or Is It Trauma?

(continued)

Parents need to be proactive

"To some extent, it really doesn't matter what you call it, but how you treat it," says William Copeland, assistant clinical professor of psychiatry at Duke University Medical Center, an author of the North Carolina study.

Copeland, however, disagrees that trauma symptoms are frequently mistaken for ADHD. "I think it's fair to say that there are some situations where they can look the same," he says, but, he explains, by taking a thorough history, most clinicians will discover the truth. It's also possible to have both conditions: In fact, ADHD itself has been linked with an increased risk for PTSD.

Unfortunately, most traumatized children are treated by pediatricians who receive little training in childhood behavioral disorders. Although half of a typical practice involves behavior problems, most pediatricians only get six weeks of training in these issues, according to Floyd Sallee, professor of psychiatry at the University of Cincinnati.

"Very few pediatricians take a detailed history of traumatic events and they are certainly reluctant to look for things like possible sexual abuse," Sallee says. In fact, discomfort about asking parents about abuse issues in the World Trade Center sample led to such questions being excluded from the trauma screening used in the study.

So if parents even suspect that their children's attention problems might be trauma-related, they are the ones who need to bring it up with their doctors, experts agree. If, like Dylan, a child comes from a known chaotic environment or has been adopted from an orphanage or foster care, screening for traumatic symptoms is essential, says Sallee. Placement itself (except adoption of a newborn or extremely young infant) is considered potentially traumatic.

As for Dylan, he's 13 now and not on medication. Dawn calls him "a loving, caring, beautiful boy," and says that what helped was counseling, lots of food, a very predictable household routine—and an abundance of love and family support.

Read More on MSN Health & Fitness:

- 9/11 Exposure Linked to Behavior Trouble in Kids
- Severe Stress May Damage Children's Brains
- 5 Social Strategies for ADHD Kids
- The Link Between ADHD and Nutrition

- Parents’ Secrets for Letting ADHD Kids Shine
    - Our Kids: The Sickest Generation?