The Self-Reg
View on Series.

by Dr. Stuart Shanker

The Self-Reg View on: ADHD

The first question that we need to ask is perhaps the most important: are we, in fact, witnessing an ADHD epidemic? The data certainly seems to indicate that this is the case. The percentage of 4-17 year-olds in the U.S. diagnosed with ADHD has risen from 7.8% in 2003, to 9.5% in 2007, to 11% in 2011-12. Two-thirds of them are boys, but girls are starting to catch up. Between 2003 and 2011 the growth rate was 55% for girls as compared to 40% for boys.

The very fact that the growth rate has exploded in this fashion is obviously a cause for great concern. But by the same token, it raises the important question as to whether what we are actually seeing is an epidemic of "over-diagnosis." The danger here is that many of the symptoms used to diagnose ADHD are, in fact, behaviours that are quite typical in young children. So what might be happening is that we are "pathologizing" a large number of children whose brain maturation is simply a bit slower than their peers, or who are being subjected to academic pressures before they are developmentally ready.

The problem is that we can't diagnose ADHD with something like the sort of blood test that we use to diagnose diabetes. Diagnosing ADHD is more of an art than a science: one that requires, not just considerable expertise, but careful observation over time under different conditions. And the truth is that in a disturbingly high number of cases, children and youth are being diagnosed with ADHD without anything like this kind of methodical approach.

What's more, even if a child or youth should display a number of the symptoms used to diagnose ADHD, that does not signify that he has one of the neurodevelopmental features that are associated with (and we assume are the cause of) true ADHD. There are so many other physical or psychological reasons as to why a child might be displaying these symptoms. The child might have deficits in visual and/or auditory processing; an attachment disorder; a head injury; depression; anxiety; familial stress; or may have suffered from abuse or trauma. Each of these conditions—and this is just a short list of the many possible causes of the suite of symptoms seen in ADHD proper—requires its own unique type of intervention. And, in far too many of these cases, subjecting such children to a stimulant medication can seriously exacerbate rather than alleviate their problems, as well as expose them to a number of further risks.

This is far from a trivial issue; for the fact is that, whether rightly or wrongly diagnosed, the great majority of these children will be put on a stimulant medication (approximately 70%). And here too the issue is very complicated. There are, of course, studies reporting significant benefits for as many as 70-80% of all children and youth who truly have ADHD: i.e., those children who, for biological and/or experiential reasons, do not have enough dopamine receptors; or have problems in functional connectivity between different parts of the brain; or possibly a delay in the maturation of the brain's "default network".

These "benefits" are invariably described in terms of a reduction in the severity of the child's symptoms: principally, distractibility, impulsivity, and restlessness. But as every parent who goes down this road knows only too well, these benefits have to be counter-balanced against some worrying side effects: jittery feelings, trouble sleeping and eating, headaches, irritability, and in extreme cases, serious cardiac or psychological problems. What's more, the benefits commonly disappear when use is discontinued, and a high percentage of youths do indeed discontinue because the side effects become intolerable. Another big issue concerns the effects of these medications on the child's physical growth, and the subsequent functioning of their Reward System, although there is some evidence that the medication may actually have a neuroprotective effect.

The point is that whether or not to put a child on a stimulant medication is a profoundly vexing question, as every parent who has agonized over this issue knows only too well. At the very least it means carefully weighing up the pros and cons, cautiously administering the medication, and ensuring that the child is constantly and closely monitored by a trained health professional. Yet far too often, the medication is seen as a "simple fix" with little medical oversight.

It is certainly not hard to appreciate why some parents might long for a magic bullet; for getting a child with ADHD to sleep or eat properly, managing the explosions, or trying to get him to stay on task can be a daily ordeal. Yet there are just as many parents who shy away from this route because of fears about dependency; or because just getting the child to take the medication is an ordeal; or because they want to avoid being stigmatized because of a lingering archaic attitude that, as was once the case with autism, sees poor parenting as the cause of the disorder.

The situation may not be all that different for teachers. After all, they are trained in "classroom management," and an unruly class is often seen as a reflection of poor skills in this respect. It's hardly surprising that a great many teachers see medication as a solution, not just in terms of managing the child's behaviour, but also in terms of the child's own social and academic interest, as well as a benefit for the other students in the class, and for that matter, the teachers themselves.

Yet medication must never be seen as a way of "managing behaviour." Rather, it should, when deemed beneficial, be seen as a way of facilitating a child's capacity to learn how to manage his or her own arousal. This last point is absolutely pivotal, and the key to why the Self-Reg view of ADHD is so vital. That is not to say that Self-Reg is the much longed for panacea for ADHD ("We tried the Feingold diet and gingko biloba and EEG biofeedback so now let's try Self-Reg"). But it is absolutely imperative that whatever we do to help a child with ADHD is grounded in Self-Reg.

To understand why it is so important to work on Self-Regulation—regardless of whether a child has been correctly or incorrectly diagnosed with ADHD—we need to understand the significance of stress here: not just the stress of parenting or teaching a child with ADHD, or the stress on other students, but the actual effect of stress on the affected child or youth.

To diagnose an "attentional deficit" the child has to demonstrate six or more of the symptoms of inattention listed in DSM-5™ and to diagnose a "hyperactivity disorder" six or more of DSM's hyperactivity/impulsivity symptoms.

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Self-Reg, ADHD-The Self-Reg View of ADHD

As we repeatedly see with all of the internalizing/externalizing problems, each of these symptoms is exacerbated by excessive stress, and in some cases, may actually be caused by excessive stress. That is not, however, to deny that ADHD is a neurodevelopmental disorder. One of the key findings made by neuroscientists studying ADHD is that the affected individual has significantly fewer dopamine receptors in the different areas of the brain that subserve the Reward System and motor planning; hence the problems in motivation and/or restlessness (as the child seeks to "ramp himself up" through heightened activity). But whether this deficit is heritable or experiential is another matter, for toxic stress in the early years can "turn off" dopamine receptors in vulnerable children (i.e., children who are born with short alleles of the genes that regulate dopamine production). Such "toxic stress" may occur in utero (as the effect of drugs, cigarettes, or alcohol) or postnatally (cases of abuse or severe neglect).

The sad truth is, however, that we rarely think of a child's stress level when he is being inattentive or disruptive, unless we are already doing Self-Reg! The self-control mindset is so strong, or our own stress level so great, that even knowing that a child has ADHD and that this affects his dopamine levels doesn't prevent the automatic reaction that he needs to make a greater effort to compensate for his lack of motivation or to control his impulsivity. All too often, the child is then subjected to some sort of behavioural intervention that relies on punishment and reward to enforce compliance. But the real problem here is that of confusing stress-behaviour with misbehaviour.

A child with ADHD is not choosing to be inattentive or restless. What he is really doing is trying to Self-Regulate, perhaps by avoiding a problem that he finds overly taxing, or with movements that he finds calming. Like all developmental disorders, ADHD is a source of great stress for the individual, and it profoundly reduces his or her ability to deal with stress. This is the reason why so many leading ADHD specialists have focused on the role that compulsory education has played in the "ADHD epidemic." But school is only one source of the stress that the child or youth is under: and, one might argue, a necessary and indeed a positive stress. But not if the child's stress levels are already too high! Then the stresses to which the child is exposed at school (social and prosocial as well as cognitive and emotional) tip him over into the cluster of problematic attentional or behavioural symptoms ADHD.

Hinshaw and Scheffler tell a very interesting story in the opening chapter of *The ADHD Explosion* about "Jose," who was 5 years old at the time of writing. His problems had started very early. He had been expelled from his first two preschools for explosive and disruptive behaviours and because he found it impossible to follow rules. But, in fact, his problems had started far earlier. He had rarely slept more than seven hours a night since the age of 2. This was a little boy whose motor was always racing. A child who, for undiagnosed biological reasons, was in a constant state of chronic stress overload.

Understanding the reasons why his stress load was so high would require a careful Self-Reg analysis across all five domains. One suspects, because of the early sleep problems that he was struggling with a number of internal and external sensory issues. One of the big consequences of the DSM-5 framework is that it narrows our focus and leads us to search for neural correlates of attentional and/or behavioral deficits. Yet parents typically complain of a much broader range of problems, invariably starting early: problems with sleep, eating, irritability, explosiveness.

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So one question we need to seriously address is whether stimulant medication actually causes these "side-effects" or exacerbates preexisting conditions, and whether the severe attentional or behavioural issues of ADHD are a downstream consequence of a chronically over-stretched autonomic nervous system? Is the child's greatest need for rest and recovery, rather than dopamine reuptake? It is a question that demands serious consideration, especially bearing in mind the research showing that psychosocial stress reduces dopamine.

What I am suggesting here is that ADHD itself may need to be reframed. We think of ADHD as a purely internal disorder: a problem stemming from congenital anomalies in the brain. Yet studies show that something as simple as a shift in parenting style, from authoritarian or inconsistent to authoritative, is effective in reducing symptoms. So with all developmental disorders, the expression of the syndrome of ADHD is dyadic.

What must not go missing in any consideration of how to treat ADHD is the role of the Interbrain. This applies especially to the school environment where, for clearly identified reasons, the stress is pronounced. So we need to recognize from the outset that the catalogue of ADHD symptoms reflects a shift to "pre-social engagement" strategies for dealing with stress, whatever its causes. So much of the debate about treating ADHD has focused on "How can we change the child so as to get him to socially engage," rather than: "How can we change our style of social engagement so as to help that child?" Our first priority is to help the child feel safe and secure in the school environment.

That is hardly to suggest that ADHD is not neurodevelopmental; only that the neurobiological factors involved may be far more complicated than we thought, and that, like all developmental disorders, the child may be struggling with a number of biological challenges that result in attentional, social, or behavioural problems that we seek to suppress rather than understand. So what can we do to help the child in the meantime? Self-Reg.

We need to go through the five steps of Self-Reg in our own thinking about the child, and help him in his personal mastery of these five steps. We need to look at all of the stressors he is struggling with, across all five domains, leading him to become locked in an "inattentive/hyperactive" stress cycle. And maybe we need to think very carefully about precipitately assigning a diagnostic "label" that can profoundly influence how we see and interact with a child.