THRIVE EMERGE

MEDICATION MANAGEMENT AND ASD – PART ONE

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The autistic brain is a wonderfully complex place. Some of the complexity manifests as the unique personality traits that we see in our children – the way their minds might structure social communications, for example, or experience sensation and thought and emotion.

From a neurodiversity perspective, the spectrum of autism represents a range of experiences that – although different from the experiences of the neurotypical world – don't need to be "fixed." Indeed, autistics will often say that if the neurotypical world would make certain adjustments, many of the challenges that they experience in their social, work and school lives would be remedied.

I believe, however, that that is only part of the story. Autistic brains are prone to the same kinds of glitches as any human brain. Disorders of mood, anxiety, attention as well as many other psychiatric conditions are prevalent in the autistic and neurotypical communities. Diagnosing and treating these conditions is critical to providing the highest level of functionality and quality of life.

My observation of my autistic patients is that, if I dig a bit deeper, I can observe an underlying "dysregulation" in how the brain processes information that appears to lie at the root of many of the challenging experiences that autistics have in dealing with the world.

If we think of the brain as a collection of "software packages" for processing sensory, cognitive, physiologic and emotional data, we might notice that in autistics there is often a glitch in the package that controls the amount of data that shows up in the conscious mind. I'll call this the "sorting software."

Let's use an analogy to make this more clear: for the neurotypical brain, experiencing the world can be likened to having to look at only one computer screen at a time. To get my job done – to function in the world – all I have to do is pay attention to a relatively smaller set of data that appears on my screen (my conscious mind). I don't need to know what goes on in the computer behind the screen (my subconscious mind).

Although we don't know the exact proportions, let's say that 90% of the brain's data resides in the subconscious mind, having been sent there by our "sorting software." For example, even though we might be aware of our hearts beating, we are not privy to the internal neurologic signals that drive that process.

And so it is for breathing, digestion, and lower levels of sensory and emotional and cognitive processing. All of this data is sorted to the subconscious, and only the information we need to make adaptive decisions is sorted to the conscious mind.

If I am in a classroom, I need to be aware of a limited amount of information. If the teacher asks a question, I need to pay attention just to her – and not to the bird outside the window, or the noise another student is making, or what I did that morning. That is, I need to look at one computer screen – not hundreds.

My clinical observations with autistic patients (and with many ADHD patients as well) is that the sorting software is glitchy is this particular way: it seems to flip the sorting process on its head, almost like an iceberg flipped upside down, with 90% of the data above the water line – in my conscious mind – and only 10% in my subconscious.

I want to be careful with this analogy. It arises from clinical observations, the exact percent of what data is subconscious vs conscious is not known and it is not rooted in specific neuroscience research. It does, however, provide us with a powerful tool for framing the experience of our autistic patient that goes beyond more simple diagnostic categories (e.g., depression, anxiety) and helps us clarify a better treatment approach.

Before we move on to medication management, let's consider the computer analogy one more time. For the autistic who is trying to cope with the normal external and internal barrage of psychological data (e.g., sensory, emotional, etc), remaining functional means having to look at not just the computer screen, but to experience what is happening the central processing unit behind the screen – and not just on one computer but on let's say hundreds simultaneously.

Inner experience then becomes a dizzying world of too much – too much sensory data, too much emotional data, too much cognitive data and so on. Figuring out how to make the best decision in any one moment becomes a non-stop, exhausting process of screening out extraneous information just to apprehend the few nuggets necessary to be successful in one's actions.

Autistics I know will often talk about the challenging experience of this overload. Here are some of the things I have heard:

- "I can't sit in the classroom. People feel too close and there is too much sound."
- "If I am in an airport, there is so much happening that after a while it all blurs together and all I perceive is a whiteout."
- "By the middle of the day, I can't focus anymore because I have run out of energy. By the time I get home, I need a four hour nap just to recover."
- "Social encounters require too much effort and are really draining. It's so much easier to be quiet by myself."

The world holds some quality of being threatening for many autistics because of this data onslaught, and I conjecture that their nervous systems tend to function in the fight or flight mode much more frequently than neurotypicals. Hence the occurrence of disorders of anxiety, social connection, attention, impulse control, sensory and mental flexibility. Hence the propensity for

numbing and avoiding behaviors, such as electronics and substance overuse and addictions. And with the wear and tear of time, the development of depressive disorders.

What then does medication management mean in the setting of the autistic brain? How do we manage the underlying dysregulation of the sorting process and the overload that it brings to daily experience as well as the psychiatric sequelae I describe above.

This is the challenge of treating the autistic with medication: while being careful not to impinge on those unique qualities of the individual – i.e., not to “fix autism” with meds – we strive to decrease the burden on functioning and quality of life imposed by glitchy sorting software

In my next article, I will explore some of the specific treatments I use frequently with my autistic patients; and will discuss aspects of the neurodivergent patient-provider relationship that require special attention if the unique needs of this group of individuals is to be met with compassion and care.