# Predictable Solutions



For **ADHD Medications** - The 10 Biggest Problems -

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# Predictable Solutions For ADHD Medications - The 10 Biggest Problems -

If words are not things, or maps are not the actual territory, then, obviously, the only possible link between the objective world and the linguistic world is found in structure, and structure alone.

Alfred Korzybski1

I wish I had an answer to that, because I'm tired of answering that question.

Yogi Berra

#### **Brief Introduction**

In any basic global assessment regarding the diagnosis and treatment for ADHD, practitioners in the USA emerge as the world thought leaders. We use stimulant medications and regularly write for stimulants as essential treatments for ADHD presentations, and our pharmaceutical insights have dramatically improved ADHD medical interventions worldwide.

Why, then, do so many professionals not pay attention to the important medical and scientific details of the medications used for paying attention? Simple answer: ADHD is far more complex than we give it credit for – and it just looks too easy to treat on the front end.

Looks can be deceiving. New maps are changing the ADHD treatment territory. New brain measurement technology provides fresh treatment applications to deal with that complexity, and yet that same ground-breaking technology is still held in considerable suspicion by many doing the research on stimulant medications for ADHD. Furthermore, brain evidence-based treatment applications involving such objectives as neurotransmitter precursors now rapidly evolve at a rate not appreciated by most everyday practitioners.

Upon considering the current treatment of ADHD, looks are indeed quite deceiving.

On superficial review, it does first appear that stimulant medications are simple to adjust - because when starting from a clinical baseline of rather obvious ADHD problems, and suddenly experiencing some improvement with medications, one can claim apparent symptomatic success quite easily, with almost no effort, and little thought.

<sup>&</sup>lt;sup>1</sup> Korzybski, A, Science and Sanity, 5th Ed, 1995

This history of unusual success with almost thoughtless interventions on completely obvious presentations leads many to think that ADHD treatment indeed requires no thought – that one can use routine, cookie cutter medication protocols, that one can whimsically titrate stimulant medications, even that one can direct the patients to manage their own titration strategies. "If it's too much, you'll feel weird." Those directions just don't sound right, do they? In the light of many new, more complex brain and body biomedical discoveries it makes sense that casual, uninformed directions rarely work well.

We do need significantly more thought to remain world thought leaders.

This brief report condenses specific solutions to many of the vexing and complex ADHD medication problems. To meet the promise of "Predictable Solutions" in the title I have also briefly outlined examples of some specific medication solutions that I do hope you will find useful, knowing that the deeper reasoning and details will take more time to fully explain, and can be found in detail in my recent book <u>New ADHD Medication Rules -</u> <u>Brain Science & Common Sense.</u>

The reason to read *New ADHD Medication Rules* is quite simple: because *New Rules* spells out the absolutely essential medication treatment details like no other text available today, period. It provides easily useful solutions to the many problems witnessed daily with the casual use of ADHD medications.

Fresh New Rules tools encourage more effective ADHD medical treatments.

ADHD medications are, of course, not the only intervention for ADHD challenges, but other treatment options are beyond the scope of this brief medications report. Many do use medications first, and without knowing important essentials regarding precise ADHD diagnosis and streetwise ADHD brain function presentations, it's more difficult to understand any supplement or medication intervention process. The ADHD targets and the medication management process remains just too unscientific.

During medication checks too many just don't know what to talk about.

First identify the specific *functional* ADHD problems, and then consider the biologically *predictable* ADHD solutions. Remember, words - labels - are not things, and those maps are not the actual territory. Our real mind targets are changing. How things *look* is not at all necessarily *how they function* beneath the surface appearance. And if you, or a loved one, suffers with ADHD, it's highly likely you will have experienced personal challenges with these pervasive medication confusions.

The most effective treatment process is determined by understanding the easy details of functional challenges - not through superficial labels. We should be treating real people as they live, not as shallow diagnostic categories.

*Predictable Solutions* outlines some answers to 10 of the most prevalent problems with ADHD medications. For your reading convenience these 10 complications are listed with some of the specific solutions. Let's start with important fundamental challenges concerning problems with diagnostic appearances and inaccurate, insufficient ADHD diagnosis:

#### Problem #1: Overlooking Targets - Beyond Diagnostic Labels

Let's start with the basics. ADHD diagnostic labels currently focus almost entirely on the surface, the description, the *appearance of ADHD*. Hyperactive, Inattentive and Combined are topical, veneer descriptions enduring from years ago, now an ancient time, when we had no scientifically validated measuring tools to look at the biological activity of each person's brain.

From specific biomedical testing<sup>2</sup> we can now see *how* brains function, - even down to cellular and molecular physiologic mechanisms actively at work in the brain cells. This new brain science gives us dramatically more treatment opportunities. Laboratory testing for biomarkers of actual brain activity increasingly brings additional inarguable evidence to the functional diagnostic process beyond those outdated, superficial labels. Now we can often treat the previously untreatable - problems that present as ADHD symptomatically, but arise from a multiplicity of previously unrecognized central biomedical challenges.

Please take a moment to understand this point: I am not suggesting that we rush out and throw away descriptive diagnostic tools and insights – to categorically replace them with *only* functional measures. (So often new science comes down to an 'either/or' disagreement, when the real solution is more 'yes/and.'<sup>3</sup>) Nor am I suggesting that everyone needs a SPECT brain scan for informed diagnosis. I am emphatically saying that functional brain imaging evidence, and comprehensive neurophysiologic inquiries do dramatically change our medication treatment protocols. Biomarkers matter.

<sup>&</sup>lt;sup>2</sup> Experts weigh in on the evolution of neuroscience at CoreBrain Journal

<sup>&</sup>lt;sup>3</sup> Kuhn, T, The Structure Of Scientific Revolutions, 1996

Remember "functional"<sup>4</sup> is how the brain actually works, static labels only show what it looks like from the outside. First consider this brief review [many more details in *New ADHD Medication Rules*] of these three *functional* ADHD targets/presentations. While you're reading about these three working memory challenges consider how often these subsets are completely overlooked:

#### I. Acting ADHD: Acting Without Thinking

Many people think that Hyperactivity, that superficial, descriptive subset, is the *only* ADHD diagnosis, while in actuality it covers less than 20% of the entire diagnostic field. Acting ADHD includes many levels of acting without thinking, from acting impulsively, to those with pure physical hyperactivity. Action with diminished cognition/thinking creates a functional impairment that often results in acute problems.<sup>5</sup> If you act without thinking on a regular basis, your judgement is off and you will have problems with family, friends and work colleagues. ADHD diagnosis encompasses far more assessment of brain function than a description of simply hyperactivity.

#### II. Thinking ADHD: Thinking Without Acting - Most Overlooked

With SPECT brain imaging we can see Thinking ADHD<sup>6</sup> associated with cingulate hyperperfusion, and, in addition, ADHD may also arise from other PFC dysfunction, even without cingulate hyperactivity [as first explained by Daniel Amen, in *Healing ADHD<sup>7</sup>*]. Today cost-effective <u>biomedical testing</u> takes us far beyond SPECT into hard brain and body data rendered from molecular physiology.

Cognition without action will cost over time. This excessive thinking, mentally hyperactive subset, frequently becomes overwhelmed with "unmanageable cognitive abundance," and arrives at a frozen state of "mental constipation." Too much thinking will make a person stuck and out of phase with the changing scene of life. [Look for many more details and examples in *New ADHD Medication Rules* - hereafter just *New Rules*.]

<sup>&</sup>lt;sup>4</sup> Functional ADHD Diagnosis Explained: Brief Video

<sup>&</sup>lt;sup>5</sup> Acting ADHD - Impulsivity Explained: <u>Brief Video</u>

<sup>&</sup>lt;sup>6</sup> Thinking ADHD - Anxiety, OCD and ADHD Explained: Brief Video

<sup>&</sup>lt;sup>7</sup> Amen, D, <u>Healing ADHD</u>, 2002

Thinking ADHD folks become overwhelmed by thinking/cognitive anxiety and the unbearable consequences of indecision in that vacillation process. The hallmark features: worrying all the time, indecision, and cognitive dependence in relationships – stuck thinking. Indecision delays or prohibits doing, and opportunities pass. In *New Rules* I describe three specific subsets of Thinking ADHD that just aren't on the radar with most providers at this time.

#### III. Avoidant ADHD: Not Thinking & Not Acting - Considered Personality

Avoidant ADHD<sup>8</sup> can look like Clint Eastwood in *Gran Torino*, or any hobo drifter. They "don"t need a shrink, don't need counseling, don't need medication, and really don't need anyone," thank you. This presentation of refusal to think appears as a reflex safety mechanism against being overwhelmed by the variables in personal relationships, conversation, groups, or projects (changing reality) - or even insight therapy.

Those with Avoidant ADHD can appear on the surface as phobic individuals, with *social anxiety* - but, when closely reviewed, demonstrate a thinking/cognitive abundance they regularly seek to avoid. The avoidance often appears as ADHD symptoms when witnessed in the context in early academic work - those early years of grade school. In *New Rules* I break Avoidant ADHD down into four easily recognizable subsets.

Without predictable, clinically measurable targets, medical teams continue to shoot at vapors and phantoms, and medication outcomes become increasingly illusory.

These three diagnostic profiles, Acting, Thinking and Avoidant, not only simplify any ADHD office diagnostic process, but also provide more precise targets for medication management. Why not make ADHD medication management easier, more precise, and functionally relevant, as opposed to vague, imprecise and unpredictable?

<sup>8</sup> Avoidant ADHD - Avoiding Explained: Brief Video

Brain science sounds complicated, but this new, functional, evidence-based way of thinking about prefrontal cortex challenges delivers utilitarian targets for that can apply to almost every ADHD problem and every ADHD medication. Diagnosis beyond appearances changes the target objectives. Improved, nuance targets change the treatment game.

#### Some Medication Solutions Discussed In Detail in Rules:

1. ADHD is best treated with stimulant medications, not SSRIs, - certainly not tricyclic antidepressants such as desipramine. Video: http://corepsych.com/balance

2. SSRIs *aggravate* ADHD, and often increase impulsivity - and look like bipolar disorder.

3. Phobias and cognitive anxiety, *if secondary to ADHD*, will respond poorly to the national standard of treatment for OCD: SSRIs

4. Context for ADHD<sup>9</sup> is important; ADHD is most frequently not a 24x7 diagnosis. Doing well with video games does not rule out ADHD.

5. Remember: Many with personality/character presentations often do suffer with ADHD - avoidance and thinking often look too much like "personality problems."

#### Problem #2: Neglecting the Evidence of Metabolic Rate:

Don't worry; this \*metabolic rate\* thing will be easy. Think *burn rate*: fast or slow burn. Fast burn rates require much more medication to correct the symptom picture, and slow burn rates require much less medication. Slow burn rates can create unpredictable toxicity, even with "average" doses. Think about it: Fast burn is like pine wood on a fire, slow burns like an oak Yule log. Fast needs more meds, slow rates need lower doses. Many are simply not paying attention to the way medications burn, or the body biologic factors that effect the actual, biologically-based burn rate of ADHD meds.

Age, weight, body size, gender, *do not* consistently effect the burn rate. Autism, brain injury,<sup>10</sup> Asperger's, and a wide variety of metabolic variables *often do* effect the burn rate, and become far more indicative of sensitivity to medications than those

<sup>&</sup>lt;sup>9</sup> Context and changing reality matter: Brief Video On ADHD Context

<sup>&</sup>lt;sup>10</sup> CorePsych Article: Brain Injury and ADHD - Often Overlooked

previous markers – often creating a very slow burn rate. Remember that slow burn rate will almost always show a relative toxicity, resulting in unwanted side effects, even at even low doses. ADHD meds will become far too stimulating, and just won't work right.

Knowing burn rate, understanding the underlying metabolic challenges, will make medication adjustments far more predictable.

#### The Therapeutic Window

One of the easiest ways to evaluate burn rate is through considering objective assessments of The Therapeutic Window.<sup>11</sup> Effective medication management works best with a workable window, with explicit sides, a top, and a bottom. I have outlined The Window on one page in *New Rules* for easy reference and further distribution. The Therapeutic Window will help keep all of your medical team on target as they assess treatment objectives and medication predictability.

#### Genetic Variations Create Medication Unpredictability

Not commonly appreciated by many is the somewhat obscure fact that Ritalin like products (MPH – methylphenidate) and Adderall like products (AMP – amphetamine) are metabolized *through different pathways*, different liver pipelines. The only pipeline for AMP products is CYP 450 2D6 (short form: 2D6)<sup>12</sup> and varies genetically, so a few, about 5% Caucasians, will have marked difficulty with AMP metabolism.

Metabolic rates determine the Duration of Effectiveness (DOE)<sup>13</sup> with shorter (less than 24 hr) half-life stimulant medications used to treat ADHD. The history of stimulant mediations has for years focused on lengthening the half-life with longer acting, time-release agents.<sup>14</sup> Half-life is the expected DOE – and that highly specific burn rate will modify the duration of effectiveness, based on each individual's metabolism.

#### **Medication Solutions:**

<sup>&</sup>lt;sup>11</sup> Details On the <u>Therapeutic Window</u>

<sup>&</sup>lt;sup>12</sup> <u>Drug Interaction Principles for Medical Practice</u>, by Wynn, Cozza, Armstrong, et al.

<sup>13</sup> DOE - Duration of Effectiveness Details Explained More On This Brief Post

<sup>14</sup> Vyvanse Dosage Adjustment DOE Reviewed In Detail

1. Go low and slow starting every stimulant medication. Titration, dosage strategy, is *the most commonly overlooked challenge* with stimulant medications.

2. Review the Therapeutic Window on the article linked below in this footnote and in Problems #7 on page 15 here in *Predictable Solutions*.

3. Watch carefully at the outset for the specific DOE to maximize the dose and effectiveness of each medication. Each medication has it's own expected burn rate to predict when the DOE indicates the correct dosage:

a. Ritalin immediate release [IR] – 4 hr

b. Ritalin extended release [XR] – 8 hr

c. Concerta [XR] – 8 -9 hr

d. Adderall IR – 5-6 hr

e. Adderall XR – 10 hr

f. Dexedrine IR – 5 hr

g. Dexedrine XR – 7 hr

h. Metadate CR [is an XR] – 8 hr

i. Focalin IR – 4 hr

j. Focalin XR – 8 - 9 hr

k. Daytrana [MPH] Patch - 10-12 hr

l. Vyvanse [AMP] - 12-14 hr

4. Insufficient dosage = less effective/shorter DOE across any medication. If the dose is too low the duration is too short - too high the DOE is too long, beyond the expected.

5. The most effective medications last most of the day, covering the late PM.

6. See this comprehensive <u>CorePsych article on how to use Intuniv</u>, a nonstimulant medication with its own specific titration strategy.

7. Medication compliance in the late afternoon often drops when adding another IR [Immediate Release] dose, often leaving the evening with the family disorganized and troubled.

#### Problem #3: Multiple Diagnoses, Emotional Baggage, and ADHD

Multiple diagnoses, and the biologic complexity associated with ADHD is far more common than simple, unadorned ADHD. Miss this key point and you miss *most of the action*. The key medical word describing multiple diagnoses for ADHD matters is

"comorbidity." The importance of multiple diagnoses are several: using the right medications for each of the associated specific diagnosis, correctly organizing several medications with multiple diagnoses, and understanding the differences of each mediation's possible side effects.

When ADHD presents with comorbid bipolar and depression, medications require a specific protocol: 1. First the mood stabilization. 2. Then the antidepressant - and 3. Then the ADHD stimulant medication - all carefully detailed in *New Rules*.

Most frequently seen in the office: Depression and anxiety treatable with SSRIs, associated with comorbid ADHD. Complex situations such as these often suffer from multiple neurotransmitter and medication challenges. I use and recommend neurotransmitter biomarker testing in all complex presentations. Biologic evidence provides more predictable outcomes.

**Medication Solutions:** 

1. Treat comorbid conditions in the correct order.

2. Multiple diagnoses require carefully adjusted multiple medications.

3. Complex presentations require more metabolic review and a better look at neurotransmitter precursors.

4. Watch carefully for side effects that might reveal any of these comorbid conditions below.

5. *Untreated* depression *combined with ADHD stimulant meds* can look remarkably bipolar.

6. Each psychiatric medication requires its own dosage strategy, - has it's own characteristic burn rate/metabolic signature. Stimulants require the most careful attention for a variety of reasons - including the fact that they don't last all day.

#### Problem #4: Overlooking Depression with ADHD

Depression with ADHD requires special focus. If depression is overlooked with ADHD, the stimulant medications can *significantly aggravate suicidal thinking and intent*. Do I have your attention? This topic alone is the reason for the associated details in *New Rules* - you and yours will benefit from *New Rules* because I go over this topic in detail.

Look for this important pharmacologic dynamic: Think of a seesaw. On one end of the board sits serotonin, the neurotransmitter that mainly effects depression, anxiety, and feelings - and on the other end sits dopamine, the primary neurotransmitter for ADHD, thinking and cognition. If the patient suffers from both conditions, the seesaw is lowered on both sides forming the shape of the roof of a house. Both neurotransmitters are down in number.

Serotonin associated with the depression is down/diminished on the left; dopamine with ADHD symptoms is down/diminished on the right.

Correct either one individually, bring either one up toward a level horizon, and the consequence for the other, because they are connected on the seesaw, *is to bring the opposite side further down*. **Alert:** Treat only the ADHD with a coexisting depression, and the depression worsens; treat depression without recognizing the ADHD, and the PFC looses control as the ADHD symptoms mushroom. Memorize this one. Spread the word.

#### **Medication Solutions:**

1. Always check for different signs of depression, *- both* thinking/cognitive and feeling/affective depression. All depression is not just *feeling* down.

2. Cognitive depression shows as apathy, indifference, attitude, and silence - disconnected. "Guy depression" looks like negative frustration, is often still depression, and beyond gender.

3. Watch for both sides of the seesaw in any clinical evaluation and any clinical history. In adults: a long history of poor response to antidepressants with cognitive confusion after a few days [often ADHD], and with children: the hard crash in the PM when the stimulant dose wears off [often depression]. If you look, you will see it.

4. Don't mix Paxil or Prozac with either AMP or MPH as they both interact significantly with both medication families, most especially with AMPs, by plugging the 2D6 pipeline. With mismanaged care and an uninformed emphasis on primitive generic antidepressants, drug interactions abound. Dangerous interactions will most likely become an unpleasant surprise months down the line, if not watched carefully, - another medication challenge with potentially catastrophic consequences.

5. In *Rules* I cover these drug interaction issues in detail - and they remain overlooked by most practitioners even today. Check the references, the details are in the literature.

#### Problem #5: Overlooking Bipolar with ADHD

The current wastebasket diagnosis for many with these misunderstood brain function, diagnostic, and pharmacologic issues is bipolar disorder [BPD]. Talk about diagnosis by appearance! The new tongue-in-cheek diagnostic axiom: "If your mood swings, it's bipolar." And, yes, in some cases, it is. But too often, BPD is simply overdiagnosed.

In far too many presentations of ADHD with mood swings the bipolar diagnosis is too hastily thrown into the mix. Diagnosis by appearance remains the standard. Often the mood swing complexity, the underlying biomedical causes, are simply overlooked. Just because you have mood swings doesn't make you bipolar [thus, according to many, subject to another rule: no stimulants] - and only the heavy, weight gaining, side effect ridden tranquilizers indicated for treating bipolar disorder are recommended.

Often missed are significant challenges with drug interactions, immune system dysregulation, and hormone imbalances - to say nothing of completely ignoring issues of burn rate mentioned above and detailed in *Rules*.

Consider these bipolar proactive solutions:

**Medication Solutions:** 

1. Bipolar mood swings do not exclude, as some indicate, the possibility of using antidepressants or stimulants. Some academics disagree, but those in the trenches frequently use both mood stabilizers and stimulants, as well as antidepressants as clinically indicated. Caution is, however, clearly recommended.

2. Use the treatment priorities outlined in Problem #2 above when considering treatment of comorbid BPD and ADHD.

3. Titrate [adjust dosages for] stimulant drugs far more carefully, adjusting dosage over longer periods. No rapid stimulant additions. We cannot prevent all mood swings, but stabilization with stimulants, if indicated, can significantly contribute to overall emotional re-stabilization.

4. Look carefully in the childhood history for signs of ongoing unmanageable cognitive abundance. ADHD moods often show a contrite self-reflection – bipolar less so. Thinking too much is most often a direct effect of working memory, executive function challenges.

5. If mood disordered, always review carefully for substance abuse. Warn others about substance abuse; street drugs with the combination of ADHD and bipolar can create havoc. With stimulant use: at first you feel smart and bulletproof, then you become stupid, and dangerous to yourself.

6. If large mood swings are present, attempt to differentiate and investigate head injury, brain trauma with functional brain imaging such as SPECT. Often MRI and CT scans don't show serious functional brain impairment.

# Problem #6: Overlooking Brain Injury with ADHD

At first blush, ADHD diagnosis seems quite simple; just make the focus and attention diagnosis with various testing tools, watch for comorbid diagnostic issues, and start ADHD medications. But overlooked Traumatic Brain Injury [TBI] can completely unwind the treatment process. If you miss TBI, stimulant medications can create massive difficulties from psychosis, to physical destructiveness, to aggravation of substance abuse problems. Oftentimes individuals who suffer with injury simply don't recall the event, and often only with SPECT brain scans in hand do they remember the entire injury – so careful questioning is in order.

One very interesting person in my office simply could not remember injury, until I repeatedly questioned him about various possibilities. After a pregnant pause in the interview he asked, "Does getting struck by lightning count?" They thought he was dead for 10 minutes. And remember, you don't have to be completely knocked out to suffer a brain injury – whiplash alone can create an injury process.

**Medication Solutions:** 

1. With TBI, brain injury, treatment is not a one trick pony. Always provide more interventions than just stimulant medications. Stimulants will help somewhat, but the underlying reality, as it is with all of these brain dysregulations, is restoring the brain,

helping it re-grow, and form new neural pathways. We want to support the neuroplasticity,<sup>15</sup> the neurophysiology, the neurotransmitters, the nutrition – everything.

2. Use low dose stimulants for TBI carefully, focusing on the Therapeutic Window, and the specific targets of cognitive dysfunction, not primarily for the depression or moods. Use that Window as a guide regarding DOE, but start ADHD medications, if indicated, at less than ½ of a small child's dose with TBI.

3. Consider neurofeedback, the positive results in the literature, with my colleagues, and in our office have been significant.

4. HBOT, Hyperbaric Oxygen Therapy, has proven extremely helpful to press healing oxygen into the brain cells.

5. In these complex presentations, *no single intervention* can cover the entire complexity for neuronal recovery.

#### Problem #7: Overlooking the Therapeutic Window

Dosing strategies require specific oversight. The Therapeutic Window can effectively keep all eyes on this productive process with medication adjustments. Correct functional diagnosis sets the target; the Therapeutic Window sets how you get there.

Finding that Window sounds complicated at first, but it's easy, and the benefits are clearly measurable. If medications are correctly adjusted, the patient lives right inside that Therapeutic Window with little or no side effects: They don't go out the top, nor do they bump on the bottom - they float in the air, right inside that important window. Simply stated: The Window Top correlates with too much, the Bottom with too little, and the sides, the DOE, help add that burn rate, additional perspective. The "sweet spot" is there in between these Window edges. The simple objective: think *inside* of this box, and you'll actually be thinking outside of the box.

<sup>&</sup>lt;sup>15</sup> <u>The Brain That Changes Itself</u>, 2007 Diodge, N., Specific case reports on the subject of neuroplasticity.

#### The Therapeutic Window

Represents the body's ability to metabolize the medication effectively. If you simply pay attention to these simple details the possibility of the most common two problems with dosing ADHD medications are almost naturally corrected.

Consider these easy 7 tips on finding the Therapeutic Window.

1. The Problem with Stimulant Meds: The fundamental difference with stimulant medications: they don't last all day - thus the problem with timing. Every medication, each body is built different metabolically, each with a different size pipeline, using different pipelines, and different kinds of speeds - thus the problems with dosage. Cookie cutter dosing strategies create significant problems.

2. The Custom Job - Beyond Genetics: The Therapeutic Window is specific for each individual adult or child, not based on your mother, father, sister, brother, or great aunt's experience with medications in general or stimulants specifically. Yes, some families manifest medication sensitivities that may appear genetically related, but don't necessary exclude a low-dose, careful trial.

3. The Top is Toxic: The dosage is too high, and side effects occur, such as feeling over-focused, agitated, or stoned. If your sleep is significantly disturbed, or your appetite is gone, either the dose of the medications or the medication itself may be incorrect. Always identify dosage carefully from the moment you begin. Start low, go slow, and don't increase more than weekly or every other week. See the Breakfast section in *New Rules* for more specific help.

4. The Bottom Doesn't Work: Start low at the outset, and dose upward to find the specific range/accuracy markers. Vyvanse often needs little titration - it remains quite stable in dosage over time, and characteristically provides a more cognitive, less anxious clarity to executive function. AMP products require a bit more attention to keep within the Window, but show better efficacy. MPH products appear more forgiving, but still need specific adjustments. Vyvanse, due to its unique prodrug metabolic pattern, is both more predictably effective and more forgiving, although it isn't for everyone.

5. Sides Show the Duration of Effectiveness - DOE: Measure the hours exactly: The AM side: when did you take it, and the other, PM side – when did it quit working?

Each stimulant medication lasts only a specific duration. If you are below that expected duration, you are under-dosed. If you go past that expected DOE, you are on too much.

6. **Drug Interactions:** Non-stimulant drugs can clog the system, and cause unpredictable problems if they are ignored. This caution involves drugs that interact with the stimulants, especially some antidepressants and marijuana.

7. Denial of The Therapeutic Window: If you don't consider it, if you don't know it's there, you simply cannot target it. If you don't target the Window specifics, you are either trying to shoot geese at night, or simply throwing cans of paint at the barn door, then declaring it painted. Without clear visualization of the target, without paying attention to the details and the edges, initial positive results become predictably negative over time. Stability over time is predictable with consistent parameters.

#### Medication Solutions:

1. Start medication by looking for duration of effectiveness [DOE] and side effects. Videos: http://corepsych.com/dose

2. Know/teach the DOE for every medication you use, noted above.

3. Begin at the outset to ask every member, especially children and adolescents, who, *too often, are not consulted,* to provide input regarding the Therapeutic Window. Feedback with The Therapeutic Window encourages self-mastery, self-esteem, and precise solutions.

4. Use The Therapeutic Window as a guidepost, not an absolute path.

# Problem #8: Overlooking The Protein Breakfast

"Who cares about breakfast? It's a great thought, but who has the time?" And if you want to look good, it's an easy diet thing, an irresistible meal to skip. "Hey, I'm doing OK without it, why bother? Pop-Tarts and cereal will do it, no problem – I'm always in a rush in the morning."

The best brain reason for eating a protein breakfast is simple: proteins are neurotransmitter precursors. Yes, neurotransmitters do carry the messages, but if you

don't have sufficient neurotransmitters, you can't manipulate them to work better. This is basic.

So how do you grow your neurotransmitter resources? Protein breakfast fuels the fire. Details matter, and are discussed in an entire Breakfast chapter in *New Rules*.

#### **Medication Solutions:**

1. Start at the beginning of stimulant medication treatment with a focus on breakfast proteins, especially with "picky eaters."

2. Bring the child into the discussion of food choices and work hard to create alternative palate options that include forms of protein.

3. Medication improvements have been reported with protein doses as low as 8 Gm, such as those found in protein breakfast drinks. My own recommendation is to use higher doses of protein, cleaner doses with fewer sugars, such as found in breakfasts with eggs, protein powder on cereals, and protein bars [many have 20+ Gm of protein]. Smaller children obviously require less.

4. Best strategy for breakfast at school: some protein [a shake or protein drink?] given at home, before the medication, then the school breakfast.

#### Problem #9: Overlooking Sleep

Sleep may appear to be the easiest of problems to correct, but it is often the hardest. The sleep experts say we need 8.25 total average hours to defrag the fragmented brain – but, as I often say to the irritated adolescents, I won't hold you to that .25! Insufficient sleep will almost always generate more unpredictable outcomes.

If you open Systems Utilities on your PC, you know it takes quite awhile to defrag your desktop, and so it is with your brain. Interestingly, and quite unexpectedly, correcting the ADHD problem with stimulants will often completely correct sleep challenges. Sleep is a far more complex issue than commonly appreciated and directly effects ADHD symptom proliferation. Sleep patterns to measure from the outset of medical intervention are:

#### Total Average Hours - TAH

Begin sleep assessment by doing the TAH math. You know the target is 8.25 hrs, and less than that will bring problems. Do you have trouble is falling asleep, staying asleep, or awakening too early in the morning? 7 hours may work, 5 hours doesn't work.

#### Practice Sleep Hygiene

Yeah, I laughed at the phrase "Sleep Hygiene" too when I first heard it, but, listen up, it works. In a short summary like this, we cannot cover all the nuances of sleep hygiene. Suffice it to say that:

- a. Sleep time should be consistent
- b. No eating or watching TV from the bed
- c. No caffeinated beverages in the PM
- d. Exercise earlier in the day
- e. Watch that stimulant medications don"t create sleep problems

#### Identify and Treat Comorbid Conditions That Effect Sleep

Depression, mood disorder, bipolar illness, immune dysfunction, stress, brain injury, estrogen dominance [e.g. polycystic ovaries], are just a few of the many comorbid conditions which require their own targeted treatment.

#### **Medication Solutions:**

- 1. Consider specific pharmaceutical sleep medications for a prompt response.
- 2. Melatonin is an easy, over-the-counter starting point.

3. The inhibitory neurotransmitters L-Taurine 500-1000 mg, and L-Theanine 100-200 mg are also over-the-counter and may prove helpful with out prescriptions. Testing will tell you specifically what is needed.

4. Clonidine at low doses is sedative, not addictive, and often can be used as needed at the 0.1 mg dose for sleep.

5. Consider sleep apnea evaluation if indicated, even in children, as sleep apnea will significantly contribute to poor medication responses treating ADHD.

#### Problem #10: Overlooking The Significance of Medical Teamwork

Don"t just sit on the bench [and privately complain] with your medical team during the stimulant medication game. Medical team play is essential to recovery. First, understand the easy, basic medication details, then, discover how to use simple medication rules to help manage your care for the long term. When you understand the simple guidelines in this review, your cooperation will make you become a valuable team member.

Do take a personal moment at the outset to discuss with your medical team this precise medication management process. It will help set the stage for further improved communication. Having spoken to many hundreds of docs over many years about these issues, I can assure you that most will appreciate your insight and perceptions.

What To Say To Set The Stage With Your Medical Team

Some basic points for your ADHD medical team that may need more attention:

1. Plan to address progress regarding specific functional objectives such as thinking, avoidance, and impulsivity as outlined in the first section.

2. Ask for medical support with nutrition/protein breakfast with ADHD children.

3. Discuss the importance of sleep, and ask for medical help with less than 7 hr of sleep.

4. With children, bring your kids into the dialogue, to affirm/process questions asked to you about them.

5. Feedback connections build self-esteem with anyone taking stimulant medications. If you don't/can't participate they can be blamed for not understanding your problems.

**Medication Solutions:** 

Just a few closing overview tips for medication management:

1. All the studies recommend that medication treatment over weekends and the summer does provide outcomes that are more predictable. If appetite is an issue, work to correct it through dosage or protein breakfast.

2. Take the time to research more information regarding brain function and ADHD. Do sign up for updates on all of the diversity of diagnostic and treatment matters at <u>CoreBrain Journal</u>.

#### Why You Should Read New ADHD Medication Rules

Let's make this next step completely uncomplicated. If you read this paper, if you appreciated the helpful, condensed points I've made here, you will appreciate *New Rules* even more.

•*New Rules* is without a doubt the most easily understandable, most easily available, and most useful book currently available that tells you specifically how to use ADHD medications correctly.

• *New Rules* is downloadable as an eBook or Audio/Audible on Amazon and carries all the easily available hot links for even further reading and resource downloading.

• A casual search of Amazon will confirm that no medical author provides *specific solutions* for these pervasive ADHD Medication problems specifically written for the public.

• Reading *New Rules* will confirm that these many ADHD medication challenges can be reasonably addressed, and that the associated lifelong downstream effects of these abundant misunderstandings can actually resolve.

• *New Rules* is designed to bring medical professionals together with these solutions, not to incite polemics or overly simplify the complexity of ADHD diagnosis and treatment. The last chapter is devoted to working on these issues with your medical team.

*New Rules* will make you an informed ADHD medication consumer wherever you are, and provides solutions that can contribute to the resolution of frustration and confusion with ADHD medications for years to come.
The current ADHD diagnostic labels need serious revision, and far more details about those suggested revisions are contained in the *New Rules* details.

The most important reason I wrote *New Rules* is because I've seen so much suffering from inattention to the ADHD diagnosis and medication details - and the details aren't that hard to understand. You only have to see one person who tried suicide on a missed ADHD diagnosis or an obvious ADHD medication drug interaction to become immensely passionate about preventable problems, predictable solutions, and predictable brain science.

I wrote *New Rules* to save you significant money, time, and most importantly, heartbreak with treatment failure. I hate to see the many who suffer with multiple visits and medications, often over many years, that either work ineffectively, or simply don't work at all. *New Rules* is my serious attempt, after 40+ years of the most comprehensive training and experience available in the country,<sup>16</sup> to share with you just-exactly-how-to-get-ADHD-meds-right.

You will appreciate, and probably already know, one of my favorite axioms from the days when I set up and ran addiction treatment programs: "The true definition of insanity is repeating the same thing, expecting different results." Thousands are awash in medication repetition without targets, medication trajectory awareness or specific ADHD treatment strategies.

The everyday details from *New Rules* have worked for me and my medial teams for many years, and helped us provide answers for second opinion consults from clients all over the country and the world. I don't profess to get every medication intervention right on the front end every time, but almost always get it right over time with these new and often overlooked biomedical assessments. Functional brain science changes the game. Everyday we successfully treat numerous folks who have bounced hard with other less insightful treatment strategies.

<sup>&</sup>lt;sup>16</sup> Parker Bio

If you are interested in the *how*, the specific street applications for the best use of ADHD medications, and want to become the most informed consumer for you and your family, do read *New ADHD Medication Rules* and drop a comment at CorePsych as other's have about how *New Rules* works for you.

# Order Rules Here

Global Link: New ADHD Medication Rules - Brain Science & Common Sense

#### Please Pass These Complimentary Predictable Solutions On To Others

The connections for this brief review are in these next hyperlinks. Your patients, friends, and colleagues can download their own complimentary hyperlinked and referenced pdf copy of *Predictable Solutions* with all of the specific details and connections at: <u>http://corepsych.com/predictable</u>

#### Thanks

Thanks for taking the time to join me in this brief review of the evolving science for treatment of ADHD presentations with stimulant medications. I do hope these remarks will help you, your family, and your clients more successfully address some of the challenges seen with ADHD medications.

#### More Connections

Subscribe to <u>*CoreBrain Jouranl*</u> with your email for postings to keep you updated on expert opinion about the evolution of neuroscience. "ADHD" opens the door for more informed care. If we're treating thinking without thinking about thinking, what does this mean for the rest of psychiatric diagnosis and treatment?

#### Twitter

Life is too short! For fun and hanging out with interesting updated ADHD and brain info, sign up for Twitter, and join me and neuroscience friends at:

#### http://www.twitter.com/drcharlesparker

#### You Tube

See the numerous specific Parker YouTube Tutorial Videos on ADHD Meds at: <a href="http://www.corepsych.com/youtube">http://www.corepsych.com/youtube</a> and *subscribe for the updates* for more than 90 videos on ADHD and beyond.

# More Teaching Tools for Executive Function "ADHD" DETAILS DO MATTER http://CoreBrainJournal.com/youtube

If you can't describe what you are doing as a process, you don't know what you're doing. W. Edwards Deming, Management Consultant

#### READ: Learn Predictable Details To Diminish Guesswork

- Start Here: New ADHD Medication Rules Brain Science & Common Sense to understand the science for meds. Available in paper, Kindle, Audible, Nook and other digital bookstores - a best seller at Amazon – Global Amazon Link: <u>http://geni.us/adhd</u>
- Articles on ADHD: Type any keyword into SEARCH at the top of the page at CorePsych: <u>http://www.corepsych.com</u> ~ 460 Articles with 10 years of details.

#### LISTEN: Interviews That Address Multiple "ADHD" Med Problems

1. *CoreBrain Journal ADHD Experts:* <u>http://corebrainjournal.com/teens</u>

- 2. *CBJ Discussion with Dr. Ned Hallowell:* <u>http://corebrainjournal.com/179</u>
- 3. *Sign Up / Updates:* <u>http://corebrainjournal.com/about</u>

# WATCH: Video Tutorials – Executive Function: More than "ADHD"

- 1. *Video Channel For ADHD Topics*: <u>http://youtube.com/drcharlesparker</u>
- 2. *Basic ADHD Diagnosis Video Tutorial* clarity on functional targets for medications beyond behavioral appearances:

http://corepsych.com/diagnosis

- 3. ADHD Medication Dosage Tutorial: <u>http://corepsych.com/dose</u>
- 4. ADHD & Immunity: Mind & Gut Tutorial: <u>http://corepsych.com/gi</u>
- 5. ADHD Medication Mastery Video Training:
  - Start ADHD Treatment 3 Basic Videos: http://corepsych.com/basic-3
  - Learn From Afternoon Med Crashes: http://corepsych.com/drop
  - Understand Medication Balances: http://corepsych.com/balance
  - Comparison Of ADHD Meds: http://corepsych.com/amp

CONNECT: With our Team at *CorePsych* 

1. Sign up CorePsych Newsletter Updates:

http://www.corepsych.com/services

2. Appointments: CorePsych Testing: http://corepsych.com/appointments

# TREATMENT FAILURE: Testing Options Reveal Biomedical Challenges

 Testing Options References, Links, Videos - in PDF: <u>http://corepsych.com/tests</u>
 CBJ Testing Experts: <u>http://corebrainjournal.com/testing</u>

LINKS: This YouTube *Details Page* in PDF with live Links: <u>http://corepsych.com/details</u>