Assessment and treatment of ADHD in kids, teens, and college students

I am passionate about my work with ADHD kids, teens, and adults because ADHD can have devastating effects on one’s home life, academic performance, occupational functioning, and overall physical health. For example, individuals suffering from ADHD have significantly lower socioeconomic status, higher rates of unemployment, increased medical problems, substance abuse, motor vehicle accidents, and unplanned pregnancies than the non-ADHD population.

The Assessment of ADHD

A comprehensive assessment for ADHD is critical in providing the optimal treatment plan for individuals suffering from ADHD. In my clinical psychology practice, this assessment consists of the following components:

1. Clinical interviews and direct patient observation
2. Review of academic and medical records
3. Review of family, and peer relationship history
4. Psychological testing which consists of comprehensive IQ and achievement testing, continuous performance testing of executive functioning, and behavior assessment scales completed by parents, child, and teacher, and personality testing when necessary.
5. Occupational history

Each of these assessment components are critical in assessing for ADHD for the following reasons:

For ADHD to be diagnosed, the symptoms are present in at least two different settings such as home, school, or work. The behavior rating scale reports from teachers and parents are critical in determining the levels of ADHD symptoms found in these two environments. In addition, these rating scales also uncover if other behavioral or mental disorders are of concern. For example, kids suffering
from ADHD often have either problems with externalizing problems such as oppositional and conduct disorders, or internalizing problems, such as having difficulties with depression, anxiety, or somatic complaints.

The **IQ testing** is critical in determining if the patient’s potential for learning is significantly different than his or her actual performance in reading, writing, oral language skills, and mathematics. Since 50% of ADHD individuals suffer from learning disabilities, it is critical to determine, what, if any learning disability is present in each case.

The Working Memory and Processing Speed IQ subtests are particularly sensitive to ADHD symptoms. Individuals suffering from ADHD typically have weaknesses on these cognitive tests because they require individuals to process information quickly, and require both short term memory and concentration.

It is helpful to compare an individual’s scores on **Working Memory and Processing Speed** with his/her scores on the other IQ measures of Verbal Comprehension and Perceptual Reasoning. A significant discrepancy (of 15 points or greater) between these subtests provides evidence to support a diagnosis of ADHD.

The **Continuous Performance Tests** are utilized because they specifically assess both attention for visual and auditory stimuli, as well as impulse control for auditory and visual stimuli as well. This test is also useful to determine if the patient’s attention problems are particularly visual, or auditory in nature. Moreover, these tests also assess the patient’s impulse control for both auditory and visual stimuli. Individuals suffering from ADHD have weaknesses in executive functioning, and these tests are able to document such weaknesses.

**Personality testing** is recommended when individuals being assessed complain of suffering from significant emotional distress. The personality test provides critical diagnostic information that helps determine if ADHD is a primary or secondary diagnosis, and if the patient suffers from an additional distinct mental disorder, such as major depressive disorder or Generalized Anxiety Disorder.

**The Treatment of ADHD for children, teens, and college students**

In my clinical psychology practice, the **treatment of ADHD** takes a multidimensional, multidisciplinary approach. This approach entails making interventions in the child’s school, home and social environment, as well as addressing his level of exercise, and the quality of his sleep and diet.
This approach also involves working with teachers, school psychologists, and school counselors to provide the highest quality learning environment for the student, taking into account the individual’s specific learning needs and challenges. It also involves collaborating with the individual’s physician to determine if he has nutritional deficiencies, such as inadequate protein and fiber in his diet, and if he suffers from vitamin and/or mineral deficiencies, as well as food allergies.

Examples of interventions for ADHD kids in grades K-12 include the following:

1. Developing IEP or 504 plans that specifically provide accommodations for the ADHD child. These plans may include the following:
   1. Giving the child up to double time to complete tests, particularly in his/her weakest subject(s).
   2. Providing as much opportunity as possible to complete homework at school. Often times, schools can provide kids with a “homework club” or last period of the day to complete homework.
   3. Reducing the quantity of homework in the subjects the child is struggling to complete. For example, giving the student math homework in which only the odd numbered, or even numbered problems are required to complete. Many parents helplessly watch their child spend hours suffering through homework that should only take 20 minutes to complete. This experience may damage the child’s self-concept, and can lead to either rebellious behavior, or feelings of despair or fear.
   4. Requesting that the school complete IQ and achievement testing to assess for learning disabilities that are found in approximately 50% of children suffering from ADHD. If the child displays a significant discrepancy between his IQ score and his achievement levels in Math, Reading, Writing, or Oral Language abilities, then specific accommodations such as tutoring would be recommended. I recommend that this testing be completed in my psychology practice, but families may not have insurance benefits to provide coverage for these services, and schools can provide these services for kids in need.
   5. Providing as distraction free a learning environment as possible, such as enabling the child to sit near the front of the classroom, away from disruptive students and activities.
6. Providing easy access to the school counselor to provide emotional support for the ADHD student who is prone to either act out his frustrations, or feel dejected or anxious about not doing as well as his peers in school.

7. Helping organize opportunities for the child to have a “study buddy” to help keep him focused on completing his schoolwork, and to encourage his positive social development.

8. Providing a small class size with as much one-on-one instruction as possible for ADHD kids that are unable to keep up with schoolwork due to behavioral problems, learning disabilities, or other mental disorders.

9. Providing an alternative learning environment if all the steps taken above fail to help the child pass his classes. For example, I treated an ADHD boy who spent several years in a Behavioral Learning Class as a result of his learning problems and behavioral outbursts in the classroom. Over the course of 3 years of therapy, and with the benefit of being in a small sized classroom with teachers trained to work with kids suffering from ADHD and behavioral problems, this child thrived, and now is being mainstreamed as he enters middle school. This success is all the more remarkable because he is not being medicated for his ADHD with medication.

10. Providing assistance with note taking for class lectures given the working memory and processing speed weaknesses that are typically found in ADHD kids.

11. Providing parents with a clear syllabus of class requirements for all of the teen’s classes.

12. Providing daily opportunities for aerobic exercise during the course of the school day. Unfortunately, many schools continue to use taking away recess as a punishment for ADHD children who misbehave or do not stay on task in the classroom. This intervention is one of the worst
options to take in response to behavioral or academic difficulties, because research clearly demonstrates that ADHD symptoms are reduced by vigorous physical exercise.

13. With younger children, providing a positive time-out place for the child to practice self-soothing, and using a “comfort basket” of favorite, soothing objects to turn to when distressed. It is critical that the time-outs are not delivered in a punitive way, which could lead to rebellious, acting out behaviors in response.

14. Providing parents with daily or weekly electronic records of their teen’s progress both in class and with homework so parents can reinforce their teen’s success and provide appropriate responses if their teen is not completing their required work for each of their classes. Consistency in receiving these records is critical in helping the ADHD student stay on task with his or her studies.

15. Encourage teachers to focus on positive reinforcers, not the mistakes kids make. For example, my son’s former 4th grade teacher once informed me that she focuses on the negative by taking away points on the white board when kids misbehave, as opposed to putting points on the board for successes!

16. For ADHD students that have significant difficulty organizing their written work, the use of the Power Point computer program is helpful to write ideas that can be later sorted into an organized outline for essays.

17. College students suffering from ADHD significantly benefit from meeting a life coach or tutor at least 1-2 times a week to ensure that the student is well organized, completes academic tasks in a timely manner, and successfully maintains a study schedule that takes into account the student’s need for exercise, sleep, social activities, healthy eating habits, and study time for assignments and exam preparation.
II. Working with parents, this approach emphasizes developing a consistent set of family rules and expectations that will help the child thrive at home and at school. In addition, parent counseling is utilized to help parents develop a unified approach to assist their child with their academic, social, and behavioral challenges. This unified approach emphasizes ensuring that both parents consistently support each other as they maintain consistent goals for their child/teen. Examples of effective parenting strategies for ADHD kids include the following:

1. **Encourage your child to complete school/homework before playing** or spending time with friends. This effort builds emotional intelligence in children because doing work before play teaches children how to delay gratification, and how to cope with the frustration of not getting what they want the instant they want it.

2. **Give your child at least 5 bits of praise for every bit of constructive criticism**, making sure that when making a critique, you focus on the behavioral concern, and not over-generalizing about your child. For example, if your child initially refuses to do schoolwork, a reasonable response would be, “I see you are having a hard time getting started on your math homework. Do you need any help with your math assignment? An example of overgeneralizing, and criticizing the person rather than the behavior, would sound like this: “Why aren’t you doing your homework? I see you are being lazy again, what’s wrong with you?”

3. **Brain studies have shown that our brains remember negative experiences** and tend to forget positive experiences and interactions with others. As a result, research shows that to maintain a healthy self-concept in your kids, finding every opportunity to share your appreciation for their efforts, and for who they are helps reduce the likelihood that they develop a negative self-concept. This is especially true for ADHD kids, who tend to have lower self-esteem than their peers due to their academic and social struggles.

4. **Help your child develop a distraction free study environment**, free from electronic devices that are not being used to complete homework or to study for exams. Because of the impulsivity issues common among ADHD kids, these distractions need to be removed for them to effectively and efficiently complete their academic work. Often times, it is very helpful to have your child study in a library, where he is free from the distractions and temptations of his home environment.

5. **50% of ADHD kids suffer from learning disabilities**, and as a result often benefit from having a tutor to provide one-on-one
Attention, teaching the child about the subject she/he is struggling with. If one or both parents are able to assist the child in their weakest academic subjects without power struggles, then providing that structure and assistance for your child would clearly benefit him.

6. **Help your child develop a list of activities, games, or places she would like to do or go as a result of successfully completing her schoolwork.** It is important, particularly for younger children, and for kids with severe ADHD symptoms to have immediate positive reinforcers to help change the subject from their “despised work,” to their prized activity, whether that is being with a favorite friend, playing on their favorite electronic device, or going to a fun place— the same day they were successful completing their work.

7. With the help of parents or a tutor/mentor, **the teen develops a daily schedule that accounts for her need for study, exercise, social activities, and free time to play.** ADHD children perform best when they have a structured routine that they count on to successfully complete their daily tasks. In addition, the ADHD teen would benefit from input from parents or tutors in developing alternate schedules for teens as they prepare for final exams or other activities that cannot be accomplished by using the child’s standard schedule. In this way, the ADHD teen develops an appreciation for both the benefit of having a routine schedule, as well as developing the flexibility necessary to cope with the demands of academic life, particularly in high school and college.

8. **The ADHD child has a special need for aerobic exercise at home, as well as at school,** ideally on a daily basis. Neuropsychological research has clearly demonstrated that children/teens who engage in daily aerobic exercise perform better in school tasks requiring attention and concentration than their sedentary peers. In addition, aerobic exercise also has been proven to reduce levels of anxiety and depression often experienced in ADHD individuals. Often times ADHD teens have no interest in aerobic exercise. My advice to their parents is as follows: Offer your teen the opportunity to choose among dozens of opportunities for aerobic exercise. But emphasize that your child needs to pick one, because regular healthy exercise is critical for their long-term health and success in life.

9. **The ADHD child and adolescent benefits from instructor led group movement exercises such as Yoga and Tai Chi.** Research has demonstrated a significant reduction in ADHD symptoms in teens that completed a Yoga training program.
10. **The ADHD child also benefits from engaging in Martial Arts classes that emphasize concentration, self-control, and respect for others.** The ethics taught in martial arts programs helps improve the ADHD child’s executive functioning.

11. **Therapeutic massage has been found to improve academic functioning, and reduce ADHD symptoms in children and teens.** Deep tissue, rather than light massage has been found to have the greatest effect in reducing ADHD symptoms.

12. **The ADHD child benefits from a high protein breakfast and lunch to maximize academic performance.** Research shows that children perform better in school when they have a steady breakfast and lunch routine that contains healthy levels of either animal or plant proteins. Most ADHD kids I treat struggle to eat a healthy breakfast and lunch because of their problems with disorganization, impulsivity, forgetfulness, and poor time management. As a result, parental involvement is critical in assisting your child as he organizes his time so that he can sit down and eat a healthy protein based breakfast and lunch.

13. **The ADHD teen needs special assistance managing his temptation to spend endless hours playing with his favorite electronic device.** If your teen is successful completing all homework, long-term assignments, and preparing for exams, his time spent on electronic devices should still be monitored and regulated due to his impulse control problems. Brain studies on the effects of computer and video games on the brain indicate that children develop a need for more and more hyper-stimulation to maintain focus as a result of their time spent on excessively stimulating video games. This effect on the brain makes it very difficult for a school teacher to compete with video games for the teen’s attention.

14. **The ADHD teen tends to have poor time-management skills, particularly when it comes to getting the sleep she needs to function well the next day.** As a result, parental involvement is also critical in providing the external structure necessary for the teen to get her necessary 8-10 hours of sleep per night to perform optimally in school the next day.

15. **As a parent, you may wonder, “I thought my teen should be more independent, and you are telling me he needs more supervision, not more independence. Why?”** This question poses one of the most difficult issues in managing your ADHD teen. He or she naturally is craving and demanding more independence, while you, as the parent, realize...
that your teen is failing to meet his or her obligations as a student. The best way to address this problem is to **constantly encourage your teen to earn** the independence he so desperately desires by demonstrating that he can effectively manage a schedule in which he eats balanced meals, gets at least 8 hours of sleep a night on average, studies sufficiently so that he is able to give his best effort in his studies, has sufficient time for aerobic exercise, time with friends, and family, and free time for play, rest and entertainment. The more successful your teen, the more gradual independence your teen can earn.

16. **Most ADHD kids and teens will initially display resistance** to the increased level of structure their parents place on them. However, in almost all cases, if both parents maintain a united front, and do not waiver under the pressure from their child, the child inevitably feels relieved that he has the necessary structure necessary to be successful in his daily life.

17. **Remember, as parents, one of the least helpful things we can do for our kids is get into power struggles with them**, or say things in anger that we, as parents do not mean to say. When parents get into power struggles with their teen, they lose their ability to teach their child how to react in emotionally intelligent ways because power struggles lead to angry confrontations, and impulsive speech, something we especially do not want to model for our ADHD child.

18. **ADHD teens are susceptible to drug and alcohol use.** Encouraging your teen to get involved in extracurricular activities in which he is surrounded by peers that value not experimenting with drugs and alcohol, and has other adult role models available to encourage him to make healthy choices on a daily basis. The added structure of extracurricular activities, such as organized sports, clubs, or youth group is a strong form of prevention from potential drug and alcohol abuse.

19. **Individual and family therapy** sessions can be utilized to teach your teen **methods to self-sooth, wind-down to prepare for sleep, and to improve attention and concentration by learning mindfulness relaxation techniques.** Brain research of individuals who regularly practice mindfulness of breathing exercises document that these individuals enhance their ability to concentrate and attend to details in a school setting, and reduce their tendency to act in impulsive ways. In addition, practicing these mindfulness exercises help prevent excessive problems with performance anxiety, particularly for tests and public speaking requirements.
20. It is helpful for parents to divide tasks into small, manageable steps, so the ADHD child does not get discouraged or overwhelmed, and so the child can experience some success!

III. The collaboration between physician and clinical psychologist

When I work with physicians, I recommend the following plan:

1. **Provide the physician with a comprehensive psychological assessment report** that determines if the child suffers from ADHD or other mental disorders, as well as the severity of the disorder(s), and my treatment recommendations.

2. **Make recommendations about the use of medication or natural remedies for the ADHD**, depending on the severity of the condition, and the preferences of the parents and child.

3. **Request that the child have a comprehensive medical evaluation to rule out medical disorders** or nutritional deficiencies that can cause ADHD-like symptoms. Examples of disorders that can cause ADHD attention problems include: Anemia, Thyroid Disorder, Diabetes, Magnesium, Zinc, and Vitamin B Deficiencies, and Hypoglycemia. In addition, obstructive sleep apnea and other sleep disorders are more common in the ADHD population. Sleep deprivation symptoms can mimic ADHD symptoms in that it can cause reduced concentration, cognitive speed, and working memory abilities. A 2011 study found a comorbidity rate of 20-30% between sleep apnea and ADHD.

4. **Encourage fish oil supplementation**. Omega 3-6-9 fish oil supplementation improved the attentional abilities of ADHD students in comparison to a control group in a 2008 study.

5. **Counsel the parents or adult ADHD patient about the negative impact of consuming artificial food dyes and preservatives**. Due to numerous studies demonstrating negative effects of consuming these chemicals, the British Government requested that most food dyes be removed from food products. One research study documented "adverse effects" of these substances on a group of 3 year old and 8-9 year old children in comparison to a placebo group.
6. Counsel patients regarding the effects of pesticides (Organophosphates) on children. A 2010 study of 1139 ADHD and non-ADHD kids found that over 20% of the ADHD kids had unusually high levels of organophosphates in their urine.

7. Remain in close communication with the physician once he/she prescribes medication, or nutritional supplements to provide regular feedback about the child’s progress in treatment.

8. Discuss with physician his/her assessment of the child’s medical condition to rule out physical causes of child’s ADHD-like symptoms.

IV. Individual therapy for the ADHD child or teen

1. One focus of individual Therapy is to teach the child to reward himself for monitoring his own behavior, and to reward himself for acting in a responsible manner in which he is respectful to those around him.

2. Provide cognitive and behavioral therapy to teach the child/teen new coping strategies to develop their emotional intelligence so that they learn to be accepting when things don’t go their way, or when they have to do something they do not like. ADHD kids struggle with these two common problems: Getting something they do not want, and wanting something they cannot have. Medications reduce impulsivity and distractibility, but do not teach how to behave in emotionally intelligent ways.

3. The research shows that behavioral and cognitive therapy is a successful strategy for teaching ADHD kids alternative behaviors to hitting, screaming, or ignoring others when they do not get what they want. This new behavior includes taking time outs when feeling overwhelmed, practicing self-soothing techniques such as breathing exercises, and learning respectful, assertive communication techniques.

4. More specifically, Teaching mindfulness of breathing exercises to the ADHD kid to help them learn how to self-soothe and become more capable of acting in emotionally intelligent ways. Deep breathing exercises change the brain to be more capable of...
utilizing the higher brain centers to problem solve. When the brain is in reactive mode of flight or fight, unfiltered emotional responses tend to be displayed. Turning on the parasympathetic nervous system gives the child a much higher probability of coping with a stressful situation, in which he might otherwise blow up, argue, refuse adults’ requests, or attempt to run away from the situation.

5. **Dr. Nicole Tacoma describes examples of helpful mindfulness exercises for ADHD children.** Examples of these exercises include the following: A. Having the child lie on the floor with his favorite stuffed animal on his stomach, and have the child observe the movement of the stuffed animal with each deep breath he takes. B. Have the child sit straight on a couch or chair and have him breathe deeply as he has his feet flat on the floor and his hands on his knees. Instruct him to notice that when his body feels wiggly to simply notice that feeling but not act on it, as he imagines he is a statue and cannot move. Do this practice for a minute or two to start, and then add a minute to the exercise each additional time it is practiced. It is useful to teach the kid’s parents to practice these mindfulness techniques at home with their child.

6. **The younger ADHD child benefits from having a non-directive play therapist** available to express his feelings both non-verbally through the play materials, and with open verbal communication with a therapist that provides him unconditional positive regard, and a positive mirror throughout the play therapy sessions.

7. **Teaching the child/teen effective, structured techniques to remember to complete class assignments in a timely manner, and turn them in successfully.** It is amazing how many ADHD teens I treat spend hours and even days on projects, and then forget to turn these projects in, even when they have the project in their binder!

8. **Individual therapy with teens also is utilized to help learn how to effectively set boundaries with peers, as well as how to respect the boundaries of their friends.** ADHD kids and teens have difficulty knowing when to stop talking or engaging in a favorite activity with a friend.
9. **ADHD kids and teens also can benefit from individual therapy to learn how to contain their impulse to want to choose the game or activity and learn to patiently share**, and accept that they will not be able to always set their favorite agenda, whether with friends, siblings, or parents.

10. **Individual therapy is utilized to build up the child’s damaged self-esteem as a result of social and family problems** caused by their ADHD symptoms. ADHD kids are frequently called lazy, irresponsible, selfish, and unhelpful, and need a safe place to experience feeling totally accepted, no matter their past behaviors.