# BRIEF INTERVENTIONS: ATTENTION DEFICIT HYPERACTIVITY DISORDER
## (Non Pharmacologic Approaches)

**BI-PED PROJECT (BRIEF INTERVENTIONS: PEDIATRICS)**
**Emotional Health Committee Maryland Chapter American Academy of Pediatrics**

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**While children must demonstrate sufficient symptoms of impulsivity, hyperactivity and/or inattention/distractibility compared to their cognitive and gender age mates in order to receive a diagnosis of ADHD, the other symptoms that these youngsters demonstrate can be quite variable. Interventions should be tailored to the specific problems of the individual child. In addition, some of the following non-medication interventions are appropriate to initiate even when the child's symptoms do not reach the threshold for a diagnosis of ADHD.**

**NOTE: This document can be given to parents who are looking for ways to work with their child**

### Educating Families

**The pediatric clinician can play a large role in educating families and children about ADHD. A discussion that reviews the major features including difficulties with attention, impulsivity and over activity can be very helpful. It is important for the clinician to emphasize to parents that many of these behaviors are *not intentional.* A discussion should also ensue with parents about associated problems often seen in children with ADHD including oppositional behavior, school academic and behavioral problems, organizational difficulties and difficulties with peers. The pediatric clinician can also be helpful in educating the family about co-morbid conditions that may be uncovered during the evaluation. For teenagers, discussion should address the potential for impulsive risk taking behaviors and a frank discussion about whether the teen is ready for driving and what the rules for driving will entail.**

**Behavior Plans**

**Medication, at least for children of school age, has been well documented to be a very effective intervention and is often necessary before children can benefit from other interventions. However, research data suggests that a multimodal approach that includes behavioral interventions also plays an important part in treating children with ADHD. When using behavioral interventions, expectations for desired behaviors are delineated and the child receives rewards if he or she meets the designated goal within the designated time frame. (see Behavior Modification module) Children with ADHD generally do better with a *single goal* or a *very short list of goals*. They also get "bored" with a specific behavioral intervention faster than the typical child, so they may need goals or rewards changed at frequent intervals. To be successful, a behavioral intervention must be created so that the child obtains the reward at least *75%* of the time. Otherwise the child may not "buy into" the plan.**

**When a behavioral plan is not working:**

- **Make sure the goals are realistic and matched to the child's abilities.**
- **Check to see how often the plan enables the child to earn "points." If it is *too difficult* to earn points, the plan will not work. The number of points or stickers required to earn rewards may need to be reduced so that the child experiences success.**
- **Make sure that rewards are still motivating to the child and be prepared to change them if necessary.**
- **Many children with ADHD need frequent reinforcement to change behavior and therefore may need rewards at the end of each half day in addition to receiving a larger award at the end of the week.**

**Interventions should be tailored to the child's specific needs and problems such as those listed below:**

**1. <u>Overactivity</u>**

**Children with ADHD often have a hard time sitting still and need to move around more than the typical child. If this is a problem for the child consider the following strategies:**

- **Provide lots of opportunities for activity.**
- **Make sure that the child can be active after school. After a long day of sitting in school, they may need to release some energy before beginning to tackle homework or engage in family activities.**
- **Be reasonable with expectations. Don't put children in situations where they need to sit quietly too long or where their activity level is likely to get them in trouble. For instance, many children with ADHD can handle a 15 minute grocery store trip but go wild on an hour-long trip. It may work better to schedule several short trips or to arrange for someone to watch the child while the parent makes a longer trip.**
- **Be sensitive to their need for movement. Also anticipate when their limit is approaching and remove them to someplace where they can be active without being disruptive.**
- **Consider enrolling the child in sports. Most children with ADHD do best with sports where they can be moving most of the time. Generally swimming, soccer, and martial arts work out better than sports like baseball (where there is a lot of stranding around time and a need for the child to pay attention and respond to the game). Make sure the coach or instructor knows about the child's problems so that they can be sensitive to the child's needs and remain positive with the child whenever possible.**

**2. <u>Attention problems</u>**

**Another large group of youngsters with ADHD have trouble sustaining attention. If a short attention span is an issue, consider the following:**

- ***Get the child's attention first*, then ask the question or give the directive**
- **Ask the child to repeat back what they is supposed to do. Often when the child puts it into their own words, they can remember it longer. This can be a useful strategy when taking the child to a store. The parent can review the rules (e.g stay with me) and ask the child to repeat back the expected behavior.**
- **Use visual cues when possible. (e.g. a chart on the wall with pictures, directions written on homework, hand signals that reinforce verbal instructions, etc.)**
- ***Regular schedules and predictable ways of doing things* also help. If the child always takes their bath right after dinner, verbal direction will be less crucial in order for them to know what they are expected to do.**

**3<u>. Organizational difficulties</u>**

**Many children with ADHD also have *executive function problems* including difficulties with organization, planning, and time management. Interventions that help with organizational difficulties include the following:**

- **Use colors to help with organization. Examples of this would be having colored folders for each subject and matching them to the color used to cover the textbook for the same subject. This allows the child to grab the materials they need for a given class easily.**
- **Use colors to denote specific information. A child might use different color highlighters to highlight different kinds of information – blue for vocabulary words, yellow for main idea, pink for key names of people or places. Children who make review cards can use a similar scheme with their cards – blue for vocabulary, yellow for main ideas, and pink for key names.**
- **Belongings should have a designated place. It sometimes helps to place a label at those places and the child should be encouraged to put their belongings in their appropriate place as soon as they finish using them for the day. If necessary, fifteen minutes at the end of the day can be devoted to collecting items left around the house and putting them in their proper place.**
- **Materials necessary for school should have a spot near the door the child uses to leave for school. When a child remembers an item that**

**needs to go to school, they should be encouraged to put it at the designated spot near the door.**

- **The child should also be encouraged to put their completed homework in a folder and put the folder in their backpack and the backpack near the door they use when they leaves for school as soon as homework is completed.**
- **Parents may wish to check the child's folders and binder frequently to assist the child in keeping papers organized and in removing materials that are no longer needed. Even teenagers with ADHD may require this extra assistance from parents.**
- **It may also help to have a sign nearby or a calendar that reminds the child of what they need on a given day – shoes for PE on Mondays and Wednesdays, recorder for music on Thursdays, etc.**
- **Calendars may be helpful for children who have difficulty with time management. Long term tasks can be broken down into smaller tasks that need to be accomplished by certain dates so that the project is not left for the last minute.**

**4. <u>Difficulty getting ready in the mornings</u>**

**Mornings are often a challenging time for families with a child with ADHD. Strategies which families have found helpful include the following:**

- **Prepare as much as possible to get ready the night before – pack up the backpack and set it by the door, get lunches ready and store them in the refrigerator overnight, lay out clothes for the next day, etc.**
- ***Make a chart* with the child of what needs to be done in the morning before leaving the house (e.g. get out of bed, wash face and hands, put on clothes, put on shoes and socks, eat breakfast, brush teeth, etc.). If necessary, include *pictures* of each activity.**
- **Have the child use the chart to indicate what they have accomplished. If the child does all of the items by a certain time, provide a reward. Good examples of appropriate rewards would be:**
    - **Allowing ½ hour of TV time or a videogame time after school,**
    - **Getting to select dessert for the family (from a menu of acceptable options),**
    - **Getting an extra story at bedtime,**
    - **Getting to watch TV for 15 minutes before leaving for school (need to plan for this in the schedule if this is an option).**

- **When it is necessary to remind the child of what they needs to do, the adult can simply say, "check your chart." This approach deflects negative attention away from the child for what they have *no*t done, promotes self- responsibility and is less stressful on the parent.**
- **Be prepared to take the child to the bus or school in whatever state they are in. It will be embarrassing for that one day but may motivate them to try harder to get ready the next time.**
- **Consider setting the alarm 15-30 minutes earlier to allow for some built in dawdle time.**

**5. Oppositional behaviors (also see Discipline module)**

**Sometimes oppositional behaviors are an outgrowth of frustration in a child who frequently gets into trouble because they just can't "get it right." When this is the case, it is best not to be too hard on the child for behaviors they can't control and/or consider medication for their ADHD symptoms. On the other hand, sometimes the child is oppositional as a co-existing problem. Some of the following strategies may help:**

- **Have a limited number of rules that are consistently enforced. Frame the rules positively (e.g what the child is *expected* to do stay such as "stay seated at your desk during homework" vs. "stop running around").**
- **Set realistic consequences for breaking the rules. Consequences that are easily implemented and that parents can easily follow through on are more likely to be successful. For instance, cutting off TV for a month is not easy to implement but limiting TV privileges for one night is easily implemented**
- **Make sure children receive *positive feedback* for good behavior and for a*ttempts* at good behavior. If children only receive attention for misbehavior, they will continue to misbehave in order to receive ongoing attention. For many children, negative attention is still better than receiving no attention at all.**
- **Provide choices when possible among acceptable alternatives. This gives the child some control in the situation and can also be a good diversionary tactic. For example, the parent might ask the child whether they would like their red or their blue pajamas to go to bed and even give in and let them wear the green ones –diverting the child away from resisting going to bed.**

- **Choose battles carefully and avoid conflict over issues that are not important. When dealing with oppositional behavior parents should ask themselves if the particular behavior is important enough to address. If it is, then insist that they follow the directive. If it is not important, parents should be prepared to *let it go.***
- **Avoid getting embroiled in repeated arguments with the child. Parents can either send the child into "time out" or consider putting themselves into time out by removing themselves from the situation until everyone can settle down.**

**6. Homework issues**

**Homework is often a challenging endeavor for children with ADHD. They are tired of academic activities, there are many more appealing things competing for their attention, and often the assignments are too much on top of a long school day.**

**Interventions that may help include the following:**

- **Identify a quiet place where the child can work that is equipped with the materials they need.**
- **Limit distractions such as TV, video games and screens while doing homework. For some children, playing music cuts down on the distraction of other sounds in the home while others need complete quiet.**
- **Help the child figure out for themselves which approaches work best. Is it better to complete the more difficult tasks first or is it better to do the easy assignment first so they can feel like they are getting things accomplished?**
- **Set a timer for a reasonable amount of time to perform the homework and then plan on a short (5-15 minute break). It may also be helpful to set the timer to signal when to get back to work as well.**
- **Talk to the child's teacher about what is a reasonable amount of time to spend on homework. Ask the teacher if it is acceptable for the child to stop after that time if the parent provides a note stating that he spent the requisite time even though they did not finish the homework.**
- **An extra set of texts at home is helpful for children who frequently forget to bring their textbooks home.**
- **Consider asking for modification of homework as part of a "504 plan" for the child. A 504 plan sets reasonable accommodations for a person with a disability so they can fully participate in public places/activities.**

**Accommodations might include giving short answers rather than having to answer in complete sentences or answering only alternate problems in order to allow the child to complete the assignment within the time interval. (see Sample 504 letter)**

- **A daily teacher checklist can be implemented that asks teachers of each subject to check off whether homework was turned in and whether new homework was assigned. These types of checklists are an effective way to tighten communication between teachers and parents by providing parents with regular feedback. Many children with ADHD suffer poor grades because homework that has been completed does not get turned in. Some teachers and parents prefer to maintain communication by email. The 504 plan may also include having a teacher directly request homework from the child if it has not been handed in to avoid penalizing the student for being disorganized.**
- **Parents often will need to provide active oversight of homework to ensure that it is completed appropriately and placed in a folder to be handed in. Parents of teenagers with ADHD may find that this form of structured supervision is still necessary.**

**7. <u>School accommodation plans</u>**

**Pediatric practitioners can advise parents to request classroom accommodations. These accommodations may be informal or may be part of a more formal plan for the child. When a more formal plan is necessary, the pediatric clinician will need to send a letter to the school stating the diagnosis so that the school can develop a more formal plan. (see Sample 504 Letter) Depending on the *specific needs* of the child and the particular school, this plan may be an informal one, may be part of a 504 plan, or may be included in the child's individual educational plan (IEP). Section 504 of The Americans with Disabilities Act stipulates that children who have difficulty with attention that impedes their learning can be candidates for classroom accommodations in schools that receive public funding. Some children may need more extensive interventions at school. If the interventions cannot be supplied within the regular classroom, an Individual Educational Plan (IEP) is required. Examples of accommodations include:**

- **preferential seating (this can be near the teacher or in a spot where the child can stand to work without distracting those around him)**
- **breaking assignments into smaller chunks**
- **extra time to complete class work or tests**

- **decreasing the classroom work load/ reducing homework (e.g. do every other problem)**
- **repeating directions individually to the child**
- **redirecting off task behaviors (e.g. teacher taps child gently on the shoulder or taps quietly on his desk to remind them to focus)**
- **providing organizational assistance**
- **arranging opportunities for extra movement (e.g. handing out materials, taking a note to the principal)**

**8. Sleep problems**

**Many school age children with ADHD have difficulty settling down at bedtime. Some helpful guidelines for parents include:**

- **Begin preparing the child for bed at least one hour before their bedtime. Quiet activities, warm milk, a bath and reading time help to settle the child down.**
- **The child should not watch violent TV programs or movies or engage in animated video or computer games during this hour before bedtime. Parents should make sure that the child also avoids horse play with parents or siblings during this time so that the child is not stirred up. Children should also avoid texting their friends and using the computer for social activities during this time.**
- **Bedtimes should be at a consistent time and include a predictable routine (e.g. take a bath, brush teeth, climb into bed, read a story, then lights out).**
- **Sometimes the stimulants that children take for their ADHD may make it more difficult for the child to fall asleep. In such cases medication doses or the time that medication is administered may need to be adjusted.**
- **However, keep in mind that insomnia may also be related to the anxiety that often co-exists with ADHD and may have nothing to do with medication. If that seems to be the case, doing something that is quiet but engages the mind right before bed sometimes helps. Examples of this would be word search puzzles or Sudoku puzzles. It may also help to have the child write down their worries in a small notebook. Then they do not need to keep replaying them in his head. (see Anxiety module)**

**9. Focus on successes and develop problem solving skills**

**When the child is successful, help them reflect on what they did (by themselves or with the help of others) to achieve success. This reinforces that they are capable of attaining success, empowers them, and helps them to articulate what strategies made a difference. For instance, if they get 100% on their spelling test, have them think about how they prepared for the exam. Did they write the words out? Did they make flash cards? Did they go over the words with a parent the night before? Did they study the words while bouncing a basketball? Once the child identifies what strategies made a difference, they can repeat the successful strategy and see if it works again. Identifying effective strategies will help them to repeat success and allow them to learn how to engage in problem solving when confronted with new challenges. It is also important to help the child to identify and participate in activities that make them feel successful. Activities outside of school such as sports, music or art may create an arena for success and bolster self- esteem. Parents may be tempted to discontinue these activities if the child is doing poorly in school. However, it may be better for the child to continue in activities that are a source of success.**

**Children with social skill deficits may be helped by having them participate in non academic social activities such as sports, clubs, religious youth groups or scouts. These activities allow children to develop and practice skills that involve interacting with peers.**

**10. Driving:**

**Adolescents with ADHD are two to four times more likely to have a motor vehicle accident than their non ADHD peers. Driving performance appears to improve with the use of stimulant medications. Parents should be encouraged to seriously consider whether their teenager is mature enough to drive based on their particular degree of inattentiveness, impulsivity and predilection for risk taking behaviors. Parents who allow their teenagers with ADHD to drive need to be advised to closely monitor the situation and develop clear rules for how and when the car is to be used. Parents also need to have a low threshold for removing driving privileges for infractions of established rules. In some cases, parents may need to hide keys or place a locked bar on the steering wheel if they are concerned that their impulsive teen will use the car without permission. Discussions should take place regarding alcohol and drug use**

**while driving or by passengers and limitations on the number of passengers allowed in the car to reduce distractions.**

**11. <u>Diversion of medications and non compliance</u>:**
**Parents should keep an eye on medications and monitor whether the meds are being used more quickly than expected or are accumulating. Some adolescents or college students may give medications away to peers. Some children and teenagers may also forget or intentionally neglect to take their medications if they are not supervised. Parents need to remain attuned to these possibilities.**

**<u>Reference:</u>**

**Wolraich ML, Hagan JF, Allan C, et al. Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents. Pediatrics. 2019;144(4):e20192528.**