Journal Plus Education, ISSN: 1842-077X, E-ISSN (online) 2068 – 1151 Vol VI (2010), No. 1, pp. 244-254

Attention-deficit hyperactivity disorder in children

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I. The Hyperactive Child – More and More Parents and Teachers Have to Deal with the Issue of Hyperactivity

Attention deficit hyperactivity disorder (ADHD) is one of the most common childhood psychological disorders and can continue through adolescence and adulthood. Symptoms include difficulty staying focused and paying attention, difficulty controlling behavior, and hyperactivity (over-activity).

ADHD has three subtypes:

- Predominantly hyperactive-impulsive

a.Most symptoms (six or more) are in the hyperactivity-impulsivity categories.

b.Fewer than six symptoms of inattention are present, although inattention may still be present to some degree.

- Predominantly inattentive

a. The majority of symptoms (six or more) are in the inattention category and fewer than six symptoms of hyperactivity-impulsivity are present, although hyperactivity-impulsivity may still be present to some degree.

b.Children with this subtype are less likely to act out or have difficulties getting along with other children. They may sit quietly, but they are not paying attention to what they are doing. Therefore, the child may be overlooked, and parents and teachers may not notice that he or she has ADHD.

- Combined hyperactive-impulsive and inattentive

a.Six or more symptoms of inattention and six or more symptoms of hyperactivity-impulsivity are present.

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b.Most children have the combined type of ADHD.

Inattention, hyperactivity, and impulsivity are the key behaviors of ADHD. It is normal for all children to be inattentive, hyperactive, or impulsive sometimes, but for children with ADHD, these behaviors are more severe and occur more often. To be diagnosed with the disorder, a child must have symptoms for 6 or more months and to a degree that is greater than other children of the same age.

Children who have symptoms of inattention may:

- Be easily distracted, miss details, forget things, and frequently switch from one activity to another

- Have difficulty focusing on one thing

- Become bored with a task after only a few minutes, unless they are doing something enjoyable

- Have difficulty focusing attention on organizing and completing a task or learning something new

- Have trouble completing or turning in homework assignments, often losing things (e.g., pencils, toys, assignments) needed to complete tasks or activities

- Not seem to listen when spoken to

- Daydream, become easily confused, and move slowly

- Have difficulty processing information as quickly and accurately as others

- Struggle to follow instructions.

Children who have symptoms of hyperactivity may:

- Fidget and squirm in their seats

- Talk nonstop

- Dash around, touching or playing with anything and everything in sight

- Be constantly in motion

- Have difficulty doing quiet tasks or activities.

Children who have symptoms of impulsivity may:

- Be very impatient

- Blurt out inappropriate comments, show their emotions without restraint, and act without regard for consequences

- Have difficulty waiting for things they want or waiting their turns in games

- Often interrupt conversations or others' activities.

Scientists are not sure what causes ADHD, although many studies suggest that genes play a large role. Like many other illnesses, ADHD probably results from a combination of factors. In addition to genetics, researchers are looking at possible environmental factors, and are studying how brain injuries, nutrition, and the social environment might contribute to ADHD.

Genes. Inherited from our parents, genes are the "blueprints" for who we are. Results from several international studies of twins show that ADHD often runs in families. Researchers are looking at several genes that may make people more likely to develop the disorder. Knowing the genes involved may one day help researchers prevent the disorder before symptoms develop. Learning about specific genes could also lead to better treatments.

Environmental factors. Studies suggest a potential link between cigarette smoking and alcohol use during pregnancy and ADHD in children. In addition, preschoolers who are exposed to high levels of lead, which can sometimes be found in plumbing fixtures or paint in old buildings, may have a higher risk of developing ADHD.

Brain injuries. Children who have suffered a brain injury may show some behaviors similar to those of ADHD. However, only a small percentage of children with ADHD have suffered a traumatic brain injury.

Sugar. The idea that refined sugar causes ADHD or makes symptoms worse is popular, but more research discounts this theory than supports it. In one study, researchers gave children foods containing either sugar or a sugar substitute every other day. The children who received sugar showed no different behavior or learning capabilities than those who received the sugar substitute. Another study in which children were given higher than average amounts of sugar or sugar substitutes showed similar results.

In another study, children who were considered sugar-sensitive by their mothers were given the sugar substitute aspartame, also known as Nutrasweet. Although all the children got aspartame, half their mothers were told their children were given sugar, and the other half were told their children were given aspartame. The mothers who thought their children had gotten sugar rated them as more hyperactive than the other children and were more critical of their behavior, compared to mothers who thought their children received aspartame.

Food additives. Recent British research indicates a possible link between consumption of certain food additives like artificial colors or preservatives, and an increase in activity. Research is under way to confirm the findings and to learn more about how food additives may affect hyperactivity.

Children mature at different rates and have different personalities, temperaments, and energy levels. Most children get distracted, act impulsively, and struggle to concentrate at one time or another. Sometimes, these normal factors may be mistaken for ADHD. ADHD symptoms usually appear early in life, often between the ages of 3 and 6, and because symptoms vary from person to person, the disorder can be hard to diagnose. Parents may first notice that their child loses interest in things sooner than other children, or seems constantly "out of control." Often, teachers notice the symptoms first, when a child has trouble following rules, or frequently "spaces out" in the classroom or on the playground.

No single test can diagnose a child as having ADHD. Instead, a licensed health professional needs to gather information about the child, and his or her behavior and environment. A family may want to first talk with the child's pediatrician. Some pediatricians can assess the child themselves, but many will refer the family to a mental health specialist with experience in childhood mental disorders such as ADHD. The pediatrician or mental health specialist will first try to rule out other possibilities for the symptoms. For example, certain situations, events, or health conditions may cause temporary behaviors in a child that seem like ADHD.

Between them, the referring pediatrician and specialist will determine if a child:

- Is experiencing undetected seizures that could be associated with other medical conditions

- Has a middle ear infection that is causing hearing problems
- Has any undetected hearing or vision problems
- Has any medical problems that affect thinking and behavior
- Has any learning disabilities
- Has anxiety or depression, or other psychiatric problems that might cause ADHD-like symptoms

- Has been affected by a significant and sudden change, such as the death of a family member, a divorce, or parent's job loss.

A specialist will also check school and medical records for clues, to see if the child's home or school settings appear unusually stressful or disrupted, and gather information from the child's parents and teachers. Coaches, babysitters, and other adults who know the child well also may be consulted.

The specialist also will ask:

- Are the behaviors excessive and long-term, and do they affect all aspects of the child's life?

- Do they happen more often in this child compared with the child's peers?

- Are the behaviors a continuous problem or a response to a temporary situation?

- Do the behaviors occur in several settings or only in one place, such as the playground, classroom, or home?

The specialist pays close attention to the child's behavior during different situations. Some situations are highly structured, some have less structure. Others would require the child to keep paying attention. Most children with ADHD are better able to control their behaviors in situations where they are getting individual attention and when they are free to focus on enjoyable activities. These types of situations are less important in the assessment. A child also may be evaluated to see how he or she acts in social situations, and may be given tests of intellectual ability and academic achievement to see if he or she has a learning disability.

Finally, if after gathering all this information the child meets the criteria for ADHD, he or she will be diagnosed with the disorder.

Treatments can relieve many of the disorder's symptoms, but there is no cure. With treatment, most people with ADHD can be successful in school and lead productive lives. Researchers are developing more effective treatments and interventions, and using new tools such as brain imaging, to better understand ADHD and to find more effective ways to treat and prevent it.

II. How Can the Teacher Give Help to the ADHD Child?

1. The pupils have to be aware of the class rules and the consequences following disobeying these rules.

2. The class environment has to be organized such that the distracting stimuli to be avoided as much as possible.

3. The duties given in class have to be divided into sub-duties so that the children can enjoy as many immediate rewards as possible and the necessary feedback.

4. The pupils are encouraged both when their behavior is close to the desired one and when there is a failing situation.

5. They have to be given responsibilities that would develop their leadership skills and their self-confidence when following instructions.

6.It is recommended the activities to be organized in small groups and oriented towards individual work.

7. The unacceptable behaviors have to be spotted and changed into acceptable ones.

8. The instructions have to be clearly and concisely formulated, being optimal that they are expressed both verbal and through images.

9. The pupils are allowed to move around the classroom as long as they are not a source of disruption. They can focus better if they don't have to stay quiet and still.

10. The difficult and tiring tasks have to be alternated with the easy and relaxing ones.

11. The important changes that appear at the class level have to be communicated to all the pupils.

12. The school requirements have to be real challenges so that the children get involved out of curiosity and interest.

13. The parents have to be informed of the evolution of their child so that they could be a pole of support.

14. It is advised to use humor when interacting with the pupils and to appreciate their creativity and spontaneity when is the case.

When working with the ADHD students, the teacher can use the following disciplinary methods:

- Perseverance is the golden rule.

- A quarrel is an opportunity to explain why this behavior cannot be tolerated.

- The pupil has to be rewarded and praised every time s/he has a positive behavior.

- The child has to be accustomed to a daily schedule.

- The established goals have to be real.

- There has to be a schedule of activities for the child.

- Time is needed to form skills.

- The pupil needs help to focus.

- It is necessary for the pupil to do sports.

- S/he is rewarded and encouraged at every attempt.

- The child's diet has to be carefully supervised.

- It is necessary that s/he has a regular rhythm of life.

- Those working with such pupils have to be really patient and perseverant.

- The doctor is the one that comes up with the diagnosis.

- The kinesthetic method of learning can be applied.

- Dynamic activities can be organized.

III. Methods and Strategies for Pupils with Behavioral Issues

Teachers who are successful in educating children with ADHD use a three-pronged strategy. They begin by identifying the unique needs of the child. For example, the teacher determines how, when, and why the child is inattentive, impulsive, and hyperactive. The teacher then selects different educational practices associated with academic instruction, behavioral interventions, and classroom accommodations that are appropriate to meet that child's needs. Finally, the teacher combines these practices into an individualized educational program (IEP) or other individualized plan and integrates this program with educational activities provided to other children in the class. The threepronged strategy, in summary, is as follows:

- Evaluate the child's individual needs and strengths. Assess the unique educational needs and strengths of a child with ADHD in the class. Working with a multidisciplinary team and the child's parents, consider both academic and behavioral needs, using formal diagnostic assessments and informal classroom observations. Assessments, such as learning style inventories, can be used to determine children's strengths and enable instruction to build on their existing abilities. The settings and contexts in which challenging behaviors occur should be considered in the evaluation.

- Select appropriate instructional practices. Determine which instructional practices will meet the academic and behavioral needs identified for the child. Select practices that fit the content, are age appropriate, and gain the attention of the child.

- For children receiving special education services, integrate appropriate practices within an IEP. In consultation with other educators and parents, an IEP should be created to reflect annual goals

and the special education-related services, along with supplementary aids and services necessary for attaining those goals. Plan how to integrate the educational activities provided to other children in your class with those selected for the child with ADHD.

Because no two children with ADHD are alike, it is important to keep in mind that no single educational program, practice, or setting will be best for all children. Successful programs for children with ADHD integrate the following three components:

- Academic Instruction;

The first major component of the most effective instruction for children with ADHD is effective academic instruction. Teachers can help prepare their students with ADHD to achieve by applying the principles of effective teaching when they introduce, conduct, and conclude each lesson. In addition to this, effective teachers of students with ADHD also individualize their instructional practices in accordance with different academic subjects and the needs of their students within each area. This is because children with ADHD have different ways of learning and retaining information, not all of which involve traditional reading and listening. Effective teachers first identify areas in which each child requires extra assistance and then use special strategies to provide structured opportunities for the child to review and master an academic lesson that was previously presented to the entire class.

- Behavioral Interventions;

The second major component of effective instruction for children with ADHD involves the use of *behavioral interventions*. Exhibiting behavior that resembles that of younger children, children with ADHD often act immaturely and have difficulty learning how to control their impulsiveness and hyperactivity. They may have problems forming friendships with other children in the class and may have difficulty thinking through the social consequences of their actions.

The purpose of behavioral interventions is to assist students in displaying the behaviors that are most conducive to their own learning and that of classmates. Well-managed classrooms prevent many disciplinary problems and provide an environment that is most favorable for learning. When a teacher's time must be spent interacting with students whose behaviors are not focused on the lesson being presented, less time is available for assisting other students. Behavioral interventions should be viewed as an opportunity for teaching in the most effective and efficient manner, rather than as an opportunity for punishment.

Effective teachers use a number of behavioral intervention techniques to help students learn how to control their behavior. Perhaps the most important and effective of these is verbal reinforcement of appropriate behavior. The most common form of verbal reinforcement is praise given to a student when he or she begins and completes an activity or exhibits a particular desired behavior. Simple phrases such as "good job" encourage a child to act appropriately. Effective teachers praise children with ADHD frequently and look for a behavior to praise before, and not after, a child gets off task. It is important to keep in mind that the most effective teachers focus their behavioral intervention strategies on *praise* rather than on *punishment*. Negative consequences may temporarily change behavior, but they rarely change attitudes and may actually increase the frequency and intensity of inappropriate behavior by rewarding misbehaving students with attention. Moreover, punishment may only teach children what not to do; it does not provide children with the skills that they need to do what is expected. Positive reinforcement produces the changes in attitudes that will shape a student's behavior over the long term.

For many children with ADHD, *functional behavioral assessments* and *positive behavioral interventions and supports*, including behavioral contracts and management plans, tangible rewards, or token economy systems, are helpful in teaching them how to manage their own behavior. Because students' individual needs are different, it is important for teachers, along with the family and other involved professionals, to evaluate whether these practices are appropriate for their classrooms.

- Classroom Accommodations.

The third component of a strategy for effectively educating children with ADHD involves physical *classroom accommodations*. Children with ADHD often have difficulty adjusting to the structured environment of a classroom, determining what is important, and focusing on their assigned work. They are easily distracted by other children or by nearby activities in the classroom. As a result, many children with ADHD benefit from accommodations that reduce distractions in the classroom environment and help them to stay on task and learn. Certain accommodations within the physical and learning environments of the classroom can benefit children with ADHD. One of the most common accommodations that can be made to the physical environment of the classroom involves determining where a child with ADHD will sit. Skilled teachers use special instructional tools to modify the classroom learning environment and accommodate the special needs of their students with ADHD. They also monitor the physical environment, keeping in mind the needs of these children.

IV. Principles in Dealing with Children with Behavior Developmental Disorders

There is a certain group of children in the educational systems that have developmental disorders. The teacher has to try several methods when dealing with these pupils. In order to understand them, it is necessary to know their typical behaviors as well as the reasons behind them. The need to control, the exaggerated fury, violence, mistrust in authority, depression, the self-destructive attitude, getting into fights, running from home, all of these are behaviors with physiological or environmental causes.

The teacher has to carry on his/her activities based on some principles. The pupils can be aggressive, naughty, impertinent, or even dangerous. For these reasons, a lot of patience and professionalism is necessary when dealing with them. Their verbal attack can't be taken personally; the teacher has to remember that s/he represents the authority and the pupils don't respect this authority. Trust can be gained in time. The environment of these children is chaotic. They can relax if a predictable and structured environment is created. The programs function under the condition that the teacher is interested in working with the pupil, believes in her/ him and cares for the results. The pupil has to be eager of change and to collaborate.

One of the most precious gifts that the teacher can have is the capacity to grin and bear it. A lot of problems can be solved using humor. A teacher that is interested in the pupils, that is appreciated by them and puts a lot of soul can reach exhaustion if s/he is not careful. Some causes of the burnout are: losing professionalism, a too great involvement in the issues of the child, permitting work to interfere with personal life and with other's opinion. Verbal attacks are not to be taken on a personal level. The child's behavior can exhaust everyone. The school health counselor should be a good support in these cases. It is hard for a teacher that got involved in solving the issues of ADHD children to see them failing. As a reminder, some children can be helped, while there is little to no chance for others.

Therefore, the teacher must stay strong looking on the bright side. A teacher's work can interfere with personal life in different ways: the teachers have the feeling that they always must be in control of the situation, they are pouring out their fury and negative feeling on their own family or threat their own children as if they were exhibiting behavior development disorders.

Conclusion

It is hard for a parent to have a child with behavioral issues. Nor the work of a teacher is easy with such children. S/he has to be always documented, to use appropriate methods, to tackle inter-children relationships with pedagogical tact so that s/he can more easily facilitate the integration of the ADHD child. It is necessary that the other parents also show understanding. Working with the psychiatrist makes it easier to overcome the difficulties. It is never to be forgotten that they are just some children and it's not their fault that they have problems. Each and one of them is a little soul that should be helped as much as possible. This little soul is troubled and sometimes nobody notices. S/he is born with the idea of being loved. Teaching children is a delicate task.

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