



ADHD:

What educators
and parents
should know.

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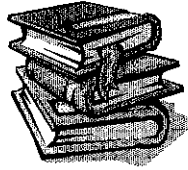


Table of Contents

- 1. Introduction - Why is ADHD important for parents and teachers to understand? pg 1**

- 2. What ADHD is and what causes it... pg 3**

- 3. Behaviors in children with ADHD... pg 9**

- 4. Diagnosis of ADHD pg 14**

- 5. What are some of the treatments available for children with ADHD? pg 21**

- 6. ADHD Myths pg 33**

- 7. A parent's view of her son's life with ADHD pg 34**

- 8. Techniques and Strategies for Teachers and Parents pg 39**

- 9. Leading to Success pg 47**

- 10. References**

Why is ADHD important for parents and teachers to understand?

Attention-Deficit Hyperactivity Disorder (ADHD) affects millions of people in different ways throughout the world. According to the Centers for Disease Control and Prevention (CDC), in the United States alone, around 1.6 million children have been diagnosed with ADHD within the elementary school system. According to this information, “7% of United States children aged 6 to 11 have the disorder” (Gottlieb, 2002, p.1296). Therefore, educators and parents have a strong connection with children who have ADHD. Both teachers and parents are very important people in children’s lives. Teachers and parents have an active role in all children’s lives, which would surely include children with attention deficit hyperactivity disorder. Therefore, I believe that as a teacher or as a parent of a child with ADHD, we all need to work together towards making the challenges in that child’s life a little easier.

With this guide, I hope that as a teacher or parent, you will be able to better manage the activities and tasks of ADHD children. I believe that it’s important to understand ADHD and to learn different strategies and coping techniques to better help our children. Teachers will have to deal with children who are at all different levels and set up their classrooms accordingly. It is important for them to understand how ADHD children respond to different situations and what would help them out in the classroom.

One good example of this relationship between the teacher and children with this disorder is provided in an essay entitled ADD in the Classroom: A Teacher’s Perspective. The author of this essay is a second grade public school teacher by the name of Caron L. Mosey. She presents her experience with children with ADHD through examples and instances that have happened within her classroom. In her classroom, 6 out

of a class of 25 have ADD or ADHD diagnosis. Three of these students are using some kind of medication. Mosey lists examples of some of the students she has had in class. One of them, when not medicated, is described as a boy who's "handwriting is not legible, he cannot read, and he is a behavioral nightmare" (Mosey, 2002, p. 1). However, the opposite occurs when he is on the medication. He is described as "a loving, affectionate, hard-working child who wants to do well" (p. 1)

Another student that she has had in class is one that isn't on medication by request of the mother. This child is described as one who cannot sit still and remain focused on the material. He needs constant assistance and encouragement to stay on task. Under many situations, she cannot read his handwriting because of his many misspelled basic words. She discusses how he needs a change in the normal curriculum to meet his basic needs. She provides him with material that is pleasing to him so that he can remain focused and use his own creativity (Mosey, 2002).

Examples like the ones listed above are important for an educator to know about. As a parent or an educator of a child with this diagnosis, it is important to know the behavior of the child and what can be done to help him or her cope with life's challenges. There are many different ways of managing ADHD, and I would like to provide the community with these different types of strategies. Therefore, I hope with the information provided in this guide, the reader will be able to use some of its content towards helping out a child with ADHD. The information provided within this guide will give readers knowledge about what ADHD is, what causes it, and how it can be managed. The more knowledge we have about this disorder, the better resources we have towards helping and understanding children with Attention-Deficit Hyperactivity Disorder.

What ADHD is and what causes it...

According to Rebecca Kajander in conjunction with the *Institute for Research and Education HealthSystem Minnesota*, "Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder. *Neuro* means affecting the brain; *developmental* means that symptoms change as the person grows older" (Kajander, 1995, p. 3).

According to ADHD An Information and Action Handbook for School Nurses, ADHD is "a neurobehavioral disorder characterized by developmentally inappropriate inattention, hyperactivity, and impulsivity." Therefore representing that ADHD deals with the behavioral or actions affected (Handbook for School Nurses, 2002, p. 5). "ADHD is a pervasive problem affecting all areas of the child's interaction with the environment" (Pachel, 2002, p. 1). There is no definite cure for this disorder but there are many strategies towards managing ADHD.

Because this disorder deals with how the brain functions, "ADHD is not a disease" (Kajander, 1995, p. 1). Some of the functions of the brain are not the way they should be. Some of the parts that deal with attention and behavior did not grow and function the way that they should have. Studies have shown that there are fewer chemical activities in the brains of people who have this disorder than people who do not. This leaves them with the inability to control many behaviors. ADHD "is five times more common in boys than in girls (p. 3). These children have consistent problems with anomalous behaviors, which result in problems within the classroom and environment (Handbook for School Nurses, 2002).

FOREBRAIN

Cortex

"Executive Center"

*neocortex
prefrontal cortex*

MIDBRAIN

Limbic

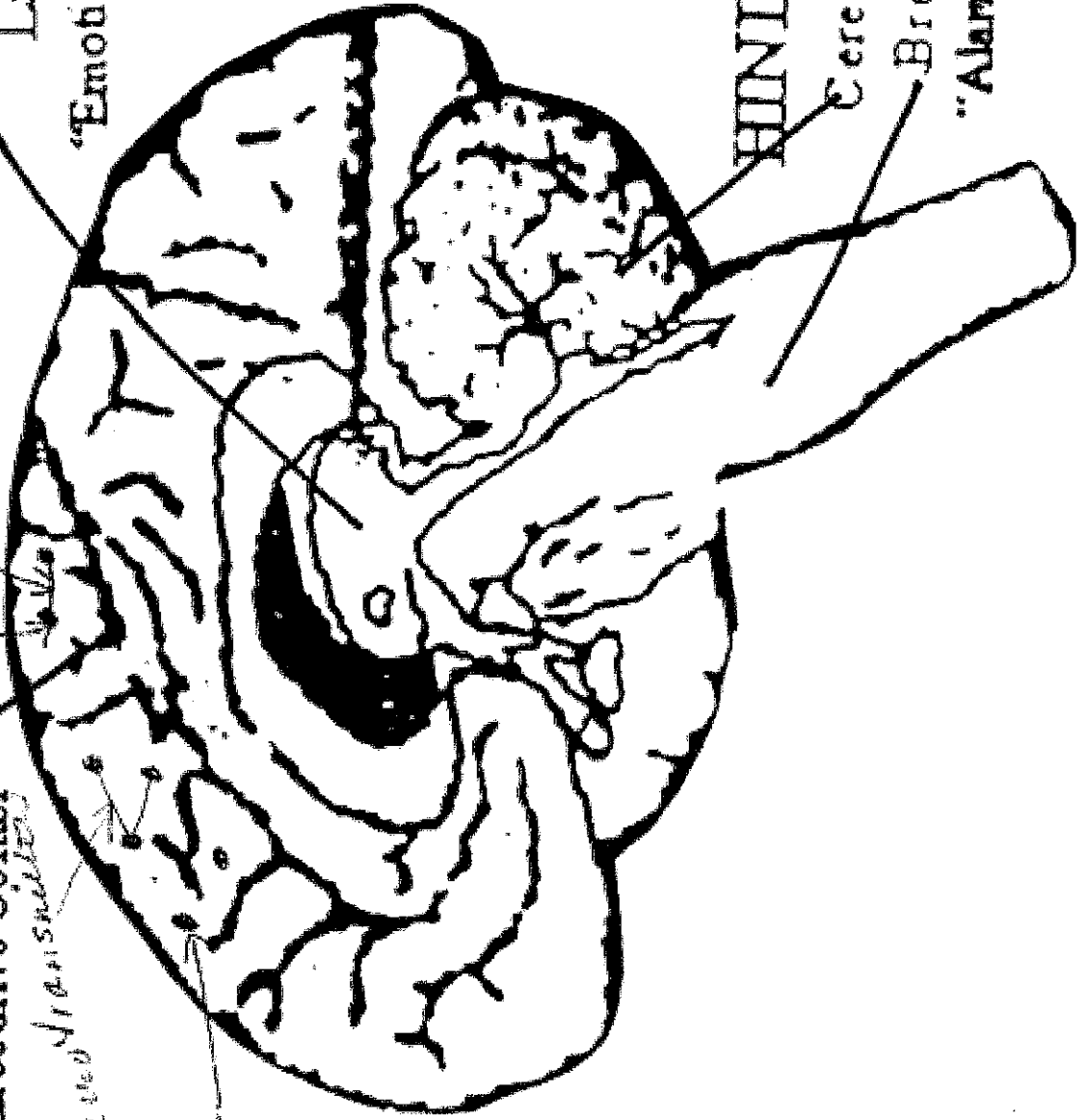
"Emotional Center"

HINDBRAIN

Cerebellum &

Brainstem

"Alarm Center"



This inactivity in the brain is from the scarcity of neurotransmitters that are found in the frontal lobes within the brain. Colleen Pachel, who wrote a chapter for Project Exceptional MN, presented a good example of how this works. Create in your mind a picture of a circuit panel with several terminals with wires connecting each terminal together. When these are all in place and leading to each other, messages can be sent within the wires to the required terminals. However, these messages cannot be sent if one or more of these wires are not connected. This can be correlated to the cortex or frontal lobe within the brain. Within this area, many neurons are connected by neurotransmitters. Each of these is part of our thought processes that support us in our decision-making (Pachel, 2002).

Attention deficit therefore means that there is a deficiency of neurotransmitters causing thoughts to be unconnected to each other (Pachel, 2002). These activities in the brain's chemistry are due to reduced levels of dopamine and norepinephrine, two types of neurotransmitters (Handbook for School Nurses, 2002). This causes behaviors such as inattentiveness, hyperactivity, and impulsiveness (Pachel, 2002).

These three behaviors are also discussed in David Paltin's The Parent's Hyperactivity Handbook. Paltin (1993) characterizes ADHD children "with lower impulse control, difficulty with attention, and excessive activity and movement" (p. 13). Impulsive behavior is behavior that is sudden and instantaneous. When children with ADHD act out, they do it without anticipation and before thinking about consequences. A common example of this would be yelling out or acting out during class. These children are unable to focus and change toys and materials quickly. They may be unable to complete games and problems that involve a lot of attention and time (1993).

Many children are affected in some way by attention problems, but ADHD children are affected by these problems almost continuously. ADHD children's seatwork and quiet time are affected because of their inability to pay attention. Another behavior of a child with this disorder is hyperactivity, which is characterized by a need to keep moving, fidgeting, or rocking. "The term hyperactivity covers a child's general degree of activity as well as specific, repetitive, movements, which would include rocking" (Paltin, 1993, p. 14). These three behaviors are looked at during the process of diagnosis in the amount that the behaviors occur and the time between each occurrence (1993).

Arthur L. Robin (2002) provides a good research update on ADHD. He explains that there are multitudes of information and research published on ADHD all the time. One of the areas that Robin highlights is the cause of ADHD. The cause of ADHD is shown through evidence of research done on heredity. The statement that ADHD is inherited is also supported by research stated by Rebecca Kajander (1995). She also comments on the fact that if ADHD is present in a family tree it is possible that others in that family will also have ADHD. Adults also have this condition because one cannot outgrow ADHD altogether, it can only be managed and treated. Many symptoms of ADHD, however, can be outgrown by the time the person is around 20 years old (ADHD Information Library, 2002).

Arthur Robin's summary on the facts of ADHD heredity were based on the work of Dr. Russell Barkley, who found the correspondence between identical twins and ADHD to be extremely high, meaning that the "chances that if one twin has ADHD, the other twin will also have it" (Robin, 2002, p. 1). This suggests that there is a correlation

between heredity and hyperactivity/impulsivity (Robin). In psychiatry, ADHD is most common known as a genetic-based disorder (Handbook for School Nurses, 2002).

Colleen Pachel describes genetic transmission within the family. "Genetic transmission involves the genes for the neurotransmitter dopamine (especially in families with a history of ADHD, learning problems, depression, alcoholism or drug abuse)" (Pachel, 2002, p. 2). Attention deficit symptoms can be present in children and babies born from mothers using or taking maternal drugs or alcohol, problems at birth, or minor head damage. All of these can affect areas of the brain leading to symptoms of ADHD. These effects on the child can lead to developmental problems in response to learning and behavior (Pachel). Exposure to smoking will also put a child at a greater risk of having ADHD. Therefore, if a mother is smoking during pregnancy, the child's chances of having ADHD have increased. (Handbook for School Nurses).

ADHD An Informational and Action Handbook for School Nurses states the importance of not placing blame on the parents. Many of the causes listed are factors uncontrollable in many senses by parents. ADHD is not the result of "bad" parenting. However, a child with ADHD can be better handled when the parents know what to do in the given situations. Good parenting will help control and ease the daily challenges that the child may encounter. Parents who are consistent in their discipline help to reinforce the child's next behavior. Providing a controlled, consistent, and calm surroundings will aide the child to be focused and conscientious (Handbook for School Nurses, 2002).

A misconception about the cause of ADHD is related to dietary factors. Some people believed that sugar intake results in many of the symptoms present in children with ADHD. However, it was found that after reduced sugar or sugarless diets, there

were no related benefits. Some people also believe that certain allergy diets are an advantage to children with ADHD. These types of diets may help with the symptoms of ADHD but do not show any support to one of the causes of ADHD (Handbook for School Nurses) Dr. Christopher Green and Dr. Kit Chee, who wrote *Understanding ADHD*, agree that these two factors, diet and poor parenting, are certainly past ideas (Green and Chee, 1998).

Because of current progress in medical science, causes have been found to be biological. Overall, total brain structures in the prefrontal cortex are smaller than normal and brain activity is lower in people with ADHD. In children with ADHD, “decreased blood flow in the prefrontal area of the brain appears to be an important cause of ADHD” (Handbook for School Nurses, 2002, p. 7). Although there are many unanswered questions on the cause of ADHD, there are a significant number of research findings leading to what their cause could be.

Behaviors in children with ADHD...

“Having ADHD is like playing tennis with a whole bucket of balls thrown at you at once – you can’t decide which one to hit first.”

- Tony, age 17

Rebecca Kajander – *Living with ADHD: A Practical Guide to Coping with ADHD*

The behaviors that children with ADHD can be first examined through are the three areas of impulsivity, inattention, and hyperactivity. Along with these three main areas are other linked behaviors. These are all possible characteristics and symptoms of ADHD. Diagnosis of this disorder will be discussed in a later section of this guide, but as a reference to these following characteristics, these behaviors are usually present in long-term situations (more than six months). Diagnosis of this disorder is very specific. Most children, especially, can show these types of behaviors from time to time. The person with ADHD will show extreme problems with focusing as compared to children without ADHD. They will have difficulty in more than one environment, whether it is at home, school, or social gatherings, etc (CHADD, 2002).

The three main areas are presented in David Paltin’s The Parent’s Hyperactivity Handbook. For an overview of this section of the guide, Paltin characterizes ADHD children “with lower impulse control, difficulty with attention, and excessive activity and movement” (Paltin, 1993, p. 13). The first main area of behavior that is present in children with ADHD is inattentiveness. The following list provided by CHADD gives an excellent overview of the behaviors that are present in the inattentive type.

ADHD primary inattentive type:

- Fails to give close attention to details or makes careless mistakes
- Has difficulty sustaining attention
- Does not appear to listen
- Struggles to follow through on instructions
- Has difficulty with organization
- Avoids or dislikes tasks requiring sustained mental effort
- Is easily distracted
- Is forgetful in daily activities (CHADD, 2002, p. 1)

Overall, children with this type of behavior are not able to keep on task and focus attention. Their thoughts are quite often distracted from other things such as movements, sounds, or other such distractions (Kajander, 1995). Many children are affected in some way by attention problems, but ADHD children are affected by these problems almost continuously (Paltin, 1993). In the classroom, children are not focused on presentations or materials. They often lose sight of the main points and big picture because they are not able to focus their attention (Kajander, 1995). They may be unable to complete games and problems that involve a lot of attention and time (Paltin, 1993). These children often get off track with finishing a task and will often move to the next one (Kajander, 1995). Children with ADHD tend to lack the ability to screen out distracting things around them while they are trying to concentrate on something they are doing (Navigating the Landscape, 2002).

Concentration is a major part of this area. Parents and teachers often become aggravated because of their children's unwillingness to concentrate in school and at home. Even daily tasks are troublesome areas for parents and their children. Below is a story to illustrate this point.

Doug, who is four years old and not yet diagnosed with ADHD, and his older brother and younger sister are told that they can put their shoes and jackets on for playing outside. Doug is still sitting with his shoe in hand when the other two children are headed out the door. Unknowingly,

the parent might approach Doug with a frustrated disposition as to why it takes him so long to get ready. As the conversation escalates, Doug ends up crying, possibly throwing the shoe, and yelling at Mom. Mom reacts by telling Doug that he needs to stay inside. Doug goes crying and screaming to his room and Mom is left feeling drained once again from the battle (Pachel, 2002, p. 6).

Along with concentration, the child also has troubles with directions. The child may not be able to perform simple tasks that others at his or her age would be able to do. This can be seen in a child trying to pick up his or her toys. The child may not know where to begin picking up the toys. This task may seem very easy for other children of the same age. These children can organize and separate toys into their proper place. Children with ADHD may not have the attention and concentration to start and finish the task of cleaning up the toys (Pachel, 2002).

An overview of the next two main areas of behaviors present in children with ADHD is listed below. These two areas are impulsiveness and hyperactivity. This behavior type:

- Fidgets with hands or feet or squirms in chair
- Has difficulty remaining seated
- Runs around or climbs excessively
- Has difficulty engaging in activities quietly
- Acts as driven by a motor
- Talks excessively
- Blurts out answers before questions have been completed
- Has difficulty waiting or taking turns
- Interrupts or intrudes on others (CHADD, 2002, p. 1)

Children with excessive impulsivity have trouble thinking about consequences that are the result of their actions. The child will seem to act on impulse and will not be able to explain his or her intent for action. Parents and teachers will often get upset by the response of “I don’t know.” These children may be correct in their answer because

they didn't think about what could have happened because of their actions. Many times the child knows the rules which he or she broke, but may not know why they did. An example of this explanation can be seen in the following story provided by Pachel (2002).

Matt, aged nine, hears a fire siren and sees the truck go by and is curious to know where they are going. Without thinking first that he needs to ask permission to leave the yard and cross the street and that there could be the possibility of danger, he just thinks about the sirens and goes. His impulsive behavior of not thinking through the consequences of his actions could put him in danger. When confronted by the parent and asked why he left the yard without permission or in regard to his safety, he could clearly respond with "I don't know." Frustrating as it can be to hear it, it can be a true statement. He may not be able to explain why he acted without thinking it though (Pachel, 2002, p. 8).

Children with impulsiveness tend to move from one activity to the next without a need to finish a task. They often speak out of turn in class and have troubles with taking turns. Hyperactivity behavior can show a strong correlation to impulsiveness. Children with hyperactivity are not able to remain calm, focus actions, and produce outcomes. They are known as the type who are "bouncing off the walls, wiggly, squirmy, tireless, chatterboxes, and always into everything" (Kajander, 1995, p.5).

Thus, leading into the third area of ADHD, hyperactivity -- also known as overactivity -- can be directly associated with the term ADHD (Green and Chee, 1998). Overall combinations of these behavioral characteristics increase parents' stress and will have an effect on how the parent and child get along (Greene, 2002). This can be seen in the classroom or in situations when the child needs to remain seated for an extended period of time. The child has trouble keeping himself or herself still, and they also have extreme uses of their emotions. One minute the child will seem happy and joyful and

then the next minute, the child will become angry and demanding. The child's emotions will change from one extreme to another and he or she will make sure everyone knows how he or she is feeling (Navigating the Landscape, 2002).

Inattentiveness, impulsiveness, and hyperactivity are the core behaviors related to ADHD. A child who displays these behaviors may not have ADHD. Specific diagnosis and a combination of extreme cases of these behaviors are present (Green and Chee, 1998). These three areas are looked at during the process of diagnosis in the amount that the behaviors occur and the time between each occurrence (Paltin, 1993). However, not all of these behaviors may be present. The child will show these behaviors excessively as compared to children who are the same age group. These core behaviors may also be directly linked to these other findings that may be frequently seen. "Insatiability, social clumsiness, poor coordination, disorganization, variability with emotions, and specific learning disabilities" are all examples of other behaviors that can be present with the core behaviors of ADHD (Green and Chee, 1998, p. 42).

If a child is diagnosed with ADHD, many parents often wonder if they will have these behaviors throughout their whole lives. "Studies indicate that about 50 to 60 percent of ADHD kids will outgrow most of the symptoms by the time they are in their 20s" (ADHD Information Library, 2002, p. 6). However, people don't just outgrow ADHD all together. As people grow older they will also learn ways to better control their behavior and organize their thoughts and responsibilities. There are many techniques that can help with organization, concentration, and overall skills for manageability that will be discussed in a later section (Kajander, 1995).

Diagnosis of ADHD

The diagnosis of ADHD is seen to have taken place more frequently in the past decade, but how are these children being diagnosed? Rebecca Kajander (1995) states that this diagnosis can be very complicated on many grounds. This becomes very complicated because of the differences among children, the different situations, and the differences of their age levels. All other possible conditions must be evaluated first because they can also occur. One example that Kajander (1995) presents is that “some children may have both ADHD and a learning disability” (p. 5).

The evaluation in a school setting could take place within grounds of the school nurse, principal, teacher, school psychologist, and a social worker or school counselor. These people all contribute to the possible evaluation of a child who may have ADHD. Other people outside of school grounds may also be involved with the evaluation process. These people may include a child psychiatrist, a mental health professional, or a local child psychologist. These people can all help to identify different problem areas and help determine what kinds of issues they are dealing with. School systems need to help children who are having difficulties within the school environment. “If the child’s school performance is significantly affected by behavior or learning problems, the school system is required by the Individuals with Disabilities Education Act (IDEA, a federal law, to provide a free evaluation for ADHD” (Handbook for School Nurses, 2002, p. 11).

Dr. Christopher Green and Dr. Kit Chee provide four steps in the process of diagnosis of ADHD for parents and educators. These four steps provide an outlook towards the following discussion on the diagnosis of ADHD.

1. Look for alarm signals
2. Exclude ADHD look-alikes.
3. Use some objective pointers toward diagnosis.
4. Take a detailed history tuned to the subtleties of ADHD

(Green and Chee, 1998, p. 71)

According to the ADHD Information and Action Handbook for School Nurses, the American Academy of Pediatrics (AAP) developed a set of standard recommendations. Therefore, for more information on these standards, guidelines may be looked at in the AAP's Clinical Practice Guidelines: Diagnosis and Evaluation of the Child with Attention-Deficit/Hyperactivity Disorder, May 2000. These guidelines involve 6 different areas that are recommended for evaluation.

If a child within the ages of 6 to 12 years of age, displays behaviors that show inattention, impulsivity, hyperactivity, academic underachievement, or persistent problems, evaluation of ADHD may be appropriate. Therefore, local health care physicians should perform general questionnaires about how their patients are doing in the academic setting (Handbook for School Nurses, 2002). Because the child may already have a connection to a family doctor, this may be the first step (Pachel, 2002).

In order for a child to be diagnosed with ADHD, criteria must be met from the DSM-IV. DSM-IV stands for the Diagnostic and Statistical Manual, which is available from the American Psychiatric Association. This manual provides information for diagnosis of mental disorders. In 2000, a new manual was available, DSM-IV-TR which identifies three different categories of ADHD (Handbook for School Nurses, 2002).

The Diagnostic and Statistical Manual of Mental Disorders is the resource available to medical personnel and educators about ADHD diagnosis. The actual diagnostic evaluation criteria will not be displayed in this guide (Kajander, 1995). I believe that for an overview of the effects of ADHD within schools, educators should know about the different types of diagnosis, but further information from the DSM-IV can be found within the manual or with a professional health care physician or psychologist. The three subtypes of ADHD will be described in general below.

- ADHD/I: Inattentive type, children fall under this type of diagnosis if six out of the nine behaviors listed in the diagnostic criteria for ADHD are met for six months at least. “About 20% to 30% of those with ADHD have the inattentive subtype (Handbook for School Nurses, 2002, p. 14).
- ADHD/HI: Hyperactive-impulsive type, the same criteria is met for this type also, children who fall under this criteria will have met six out of the nine behaviors that would have been present for six months at least. “Less than 15% of those with ADHD have the hyperactive-impulsive subtype (Handbook for School Nurses, 2002, p. 14).
- ADHD/C: Combined type, these children met the criteria of at least six out of the nine required behaviors on each of the lists under the three main area behaviors. “The combined subtype of ADHD is the most common group, accounting for 50% to 75% of all cases (Handbook for School Nurse, 2002, p. 14).

There are diagnostic limitations though. One example of this limitation would be a situation in which a child is seen in the classroom as quiet, reserved, and well behaved. This can be especially seen in accordance to the inattentive type of ADHD and especially when this child is female. An undiagnosed case may persist until later in the child’s life.

There is also the possibility of the child having a coexisting condition such as: “oppositional defiant disorder (ODD), conduct disorder, anxiety disorder, depressive disorder, and/or learning disabilities” “As many as one-third of children with ADHD have one or more coexisting conditions” (Handbook for School Nurses, 2002, p. 16). Overall, there have been cases of misdiagnosis. Because of the severity of some behaviors and difficulty with other disorder and disabilities, children are sometimes placed in special classes when they really shouldn’t be and sometimes children should be in a class with more attention but do not qualify for services (Friedman and Doyal, 1992).

Paltin (1993) presents information on the diagnosis of ADHD taking place with the use of observation. “ADHD is diagnosed by carefully evaluating a child’s medical, developmental, behavioral, social/emotional, and academic histories” (Kajander, 1995, p. 5). ADHD cannot be diagnosed with the use of mental tests or brain scans (Paltin, 1993). However, exams on physical and neurological aspects are performed to exclude nervous and physiological systems dilemmas (Kajander, 1995).

Educators are very helpful in the evaluation process of the diagnosis of a child. During the evaluation process, it is very beneficial for teachers to provide written information regarding the child. This is important because the diagnosis must meet the required criteria, symptoms of the three areas need to be represented in setting other than just at home or at school; these behaviors need to be found in at least two settings (Handbook for School Nurses, 2002).

It is important for teachers to be aware of the symptoms of ADHD so that teachers can observe the behaviors to use as a reference. Sometimes, these behaviors may be triggered from an unstructured classroom. Educators should be aware of four

requirements for observation: “classroom behavior, learning patterns, classroom interventions, and the degree of functional impairment” (p. 20). An example of this observation would be while a child is trying to accomplish a task. Teachers should be asking him or her questions and seeing what he or she doesn’t understand. They should be aware of the child’s trouble areas. Teachers should work as a team to provide as much information for the child as possible (Handbook for School Nurses, 2002).

Parents are also a very important part of the observational part of the diagnosis. Parents will need to be aware of the “child’s age at onset of symptoms, duration of symptoms, degree of functional impairment, and behaviors observed in multiple settings” (Handbook for School Nurses, 2002, p. 19). The parent should observe when and where problems occur. The parents should also be aware of what the child does in those situations in which problems occur. It is also very important for families to discuss issues related to their home situations. Some parents may feel very uncomfortable discussing these types of issues. However, discussing home life is a very important part of evaluation because difficulties of the family may be an onset to the child’s problems (Handbook for School Nurses, 2002).

The child’s views are also very valuable towards the diagnosis of ADHD. Observation of the child’s behaviors is necessary, but how the child is actually feeling and thinking is also worthy. Asking how the child feels when problems arise can be beneficial to know why the child reacts the way that he or she does. The ADHD Information and Action Handbook for School Nurses (2002) provides some sample questions that may be asked:

- Who are your teachers?

- What subjects do you like?
- Do you have any problems in class?
- What do you do when that problem arises?
- Do you think you have trouble paying attention in school or at home?
- Do you think other children like you?
- What would you like to change at home or at school? (p. 21)

In conclusion to the diagnosis of ADHD, there is a degree to which the assessment of the child is taken. Depending on the parents' resources, school system, and the time and money the parents have towards the diagnosis, there are different depths of assessment parents can choose. The first degree is the **basic** steps of being aware of behaviors at home and at school, looking at home situations and disabilities, discussing issues with the child's teacher or other team school members, meeting with local health care physicians or psychologists, and receiving feedback (Green and Chee, 1998).

The second degree is the more **objective** approach, which would include being aware of behaviors at home and at school, looking at home situations and disabilities, discussing issues with the child's teacher and other team school members, filling out questionnaires and formal reports for documentation, working with an educational psychologist to observe and perform tests, meeting with a psychologist or psychiatrist, and receiving feedback and doing questionnaires again (1998).

Lastly, the third degree is the more **comprehensive** approach, which would include issues and documentation in the objective approach but would vary in that specialized testing by a psychologist, educationalist, and pediatrician-psychologist would be done. Examples of these specialized tests would include Paired Associate Learning

Test, Continuous Performance Type Test, QEEG, and tests that would include basic abilities. A trial of the different treatments from the diagnosis would receive feedback (1998).

What are some of the treatments available for children with ADHD?

There are many types of treatments available for children with ADHD. There are **medication and non-medication** treatments. Different types of treatments can be individualized towards the child. For success in the child's treatment and for best results, it is wise to have a combination of "behavioral (psychological) therapy, educational efforts, and medications" (Handbook for School Nurse, 2002, p. 25). A concern of many parents is whether or not medication is the best thing for their child. There can be a burden placed upon the parents from school professionals, friends, and family. Sometimes parents feel bad about having their child take medication because they feel that it reflects bad parenting (Pachel, 2002).

However, there are other parents who can see the difference in the behavior and attitude of their child because they can see that the child is better able to concentrate and finish tasks while using medication. In both of these situations, most of the time it is the parents' and child's choice of what treatment should be followed. **Treatment of ADHD** is controversial and the result of any treatment should be what is best for the child (Pachel, 2002). "The primary goal of treatment should be to maximize the child's functioning" (Handbook for School Nurses, 2002, p. 26).

Medication:

**"The pills didn't make me do my schoolwork,
But when I decided to do it,
the pills helped me concentrate."**

- Marcus, age 11
(Kajander, 1995, p. 9)

There are many different kinds of medications available that help control behaviors associated with ADHD. All medications should be prescribed by a physician, and should not be taken without their evaluation of the child's behavior, history, and lifestyle. Even though some people believe that medication is "dangerous and unhelpful," there are many years of research and benefits behind many of the medications available today (Green and Chee, 1998, p. 142). The medication serves as a way to activate that part of the brain so that the child can concentrate and continue with their seatwork during school (Kajander, 1995). Also, these medications are becoming more and more user friendly. There are medications available that can be taken once in the morning and that lasts all day, which allows children to be able to concentrate on their seatwork and their teacher.

Adderall (Robin, 2002), Ritalin (Kajander, 1995), Concerta (Concerta, 2002), Dexedrine, and Cylert (Green and Chee, 1998) are just a few of the available types of medications that help ADHD children and adolescents. ADHD medications come in two classes: stimulants and antidepressants (About Medications, 1997). Each of these medications helps children ease the levels of sudden and interrupted disturbances. However, it is important to stress that these medications should be used in combination with other strategies and manageability techniques to ensure a better possibility towards success (Kajander, 1995). "The treatment plan usually combines several methods. Medication is never the only treatment" (About Medications, 1997, p. 5).

Many of the major medications given to children with ADHD are stimulants. Even though the child may be hyperactive, a stimulant or psychostimulant, is used to help replace dopamine and noradrenaline, neurotransmitters in parts of the brain. "These

medications are not sedatives; they are stimulants that enhance and normalize the slight chemical imbalance of ADHD” (Green and Chee, 1998, p. 143-144).

Stimulant medications have been used since 1937, but were commonly used more in the late 1950’s because of the introduction of Ritalin (methylphenidate). It is important for parents to realize that media has played a part in the representation of medications as “unsafe and controversial” (p. 144). It is important again to recognize the benefits and influences these medications can have on a child.

Ritalin (methylphenidate) and dextroamphetamine are two of the most effective stimulant medications for ADHD. These two medications are alike in many ways, but sometimes one may be used instead of the other because of slight difference in the reaction of different children. In comparison to each other, Ritalin is believed to be less long-lasting as dextroamphetamine. “One 10 mg tablet of Ritalin is said to equal one 5 mg tablet of dextroamphetamine” (p. 144). Dr. Christopher Green and Dr. Kit Chee believe that in order for the “best levels of learning and behavior, a mix of long and short or more frequent doses of short-acting preparation” should be used (p. 144). Within thirty minutes after taking these stimulants, they should be starting to work. After three to five hours, the main effects will have taken place. In the morning a dose will be given and then smaller ones throughout the day. The proper dosage and medication should be discussed with your health care provider (1998).

There is also the question about how long do children usually get treated with medications. The amount of recommended treatment time really varied from individual to individual. Some individuals have different symptoms of ADHD that may vary in how serious the case is. In general, “one-third of children benefit from medication until

puberty, one-third take medication through college, and one-third use medications as adults (Kajander, 1995, p. 13). In order to ensure the best possible treatment for the child, a period without medication usually is tried every year. Monitoring the child's behavior in this non-medication period is essential to measure with the child's behavior while on medication (1995).

There are also second-line stimulants that are used to help children with ADHD. Examples of these are "Catapres (clonidine), Tofranil (imipramine), Nonpranun (desipramine), Cylert (pemoline), and Adderall. Each of these has its own benefits and specific target areas (1998). Adderall is an amphetamine, which is made into a mixture of salts. This medication is like the other in that it can be taken 2 to 3 times a day but may have effects that last longer than other stimulants (About Medications, 1997).

Adderall XR, a longer-lasting dose of Adderall, was approved by the FDA in 2001. It provides control from one dose in the morning until the child is through after-school activities and homework. This prevents embarrassment from having to take medications during school. It also frees physicians from having to authorize school nurses to administer medications during school hours (Handbook for School Nurses, 2002). However, there are disadvantages towards taking this one dose medication. Because of "the extended levels of amphetamines, the duration of side effects may be extended" (Elliott, 2002, p. 110).

Another alternative to Adderall is Concerta. The makers of Concerta provide information about their product and present it against their competitor Adderall. Adderall can be taken once in the morning and is suppose to last all through the school day and give the children a long enough time to focus on their schoolwork and possible

homework. Concerta presents the issue that it “is not affected by food like that of Adderall.” The makers of Concerta put forth that “Concerta provides reliable delivery of medication for up to 12 hours regardless of meals, allowing patients to perform to their full potential” (Concerta, 2002, n.p.).

These medications provide children with the necessary connections within the brain that aid in:

- More self-control
- Paying attention longer and completing tasks
- Getting along better in social settings (About Medications, 1997, p. 7)
- Increased ability to deal with frustration
- Greater ability to follow directions
- Higher self-esteem because of improvements of behavior
- Positive Attitudes
- Fewer mood swings (Kajander, 1995, p. 11).

However just like any prescribed medication, these medications may cause side effects such as:

- Loss of appetite
- Trouble falling asleep
- Mild headaches
- Stomachaches (About Medications, 1997, p. 7)
- Irritability (Kajander, 1995, p. 11)
- Fast heartbeat
- Uncontrolled muscle movements (rare)

Possible side effects tend to decrease as time goes by while using the medication or by changing the dosage amount (About Medications, 1997, p. 7). Parents and physicians also need to proceed with caution with children who have a family history of Tourette's syndrome or tics, involuntary movements. They may become worse during treatment and should be discussed with the child's physician (Handbook for School Nurses, 2002).

It is also important to note that after many years of research there is still not evidence leading towards addiction from these medications. Dr. Nora Volkow, chair of the medical department of Brookhaven National Laboratories, determined that these medications like Ritalin "are absorbed by the brain more slowly than highly addictive drugs" (Haber, 2000, p.112). People who are using these medications correctly are effectively improving their minds and lives for clearer thinking in their environments around them (Green and Chee, 1998). The major cause of abuse of these stimulants is failing to remember to take the medication (Navigating the Landscape, 2002).

Antidepressants are another class of medication for children with ADHD. This type of medication can be used with or as a substitute of stimulants. Some antidepressants are not recommended for children and other forms may be given. Some examples of antidepressants are "Tricyclic Antidepressants, Wellbutrin (Bupropion), and Selective Serotonin-Reuptake Inhibitors (SSRI's such as Prozac)" (About Medications, 1997, p. 8). People take these types of medications when an individual may have depression or anxiety or when stimulants do not work for the individual or it may not be good for their health (1997). Along with stimulants, antidepressants also have possible side effects, which include: "headache, dry mouth, dizziness, constipation, and stomachaches" (About Medications, 1997, p. 9).

Here are some guidelines for using medication for ADHD.

- Be aware of prescribed dosage by physician. Do not try to alter or change the child's dosage without consent of the child's health care physician. As with any medications, there is always a possibility of overdose. "Symptoms of overdose may include: vomiting, agitation, tremors, convulsions, and/or hallucinations." Be sure to discontinue use of medication if any of the above occur and consult the child's physician (Kajander, 1995, p. 12).
- Discuss issues with people in the school system such as a school nurse, counselor, or teachers. If there is an Individualized Education Program (IEP) in place for the child or not, the parents and child should work together with all teachers and caregivers to figure out what is in the best interest of the child. Work with them on strategies for managing children with ADHD and what works best with the child settings other than school. Ask teachers to keep a file on the behaviors and observations during school.
- Keep records on the behaviors of the child in response to medications. Make sure to make note of side effects and changes in emotions or behaviors of the child and then discuss them with the child's doctor (Kajander, 1995, p. 12).
- Communicate with the child. Be sure to discuss any questions or concerns that they may have. Talk with them about how they are feeling. If they are on medications, discuss with them the advantages of taking the medications and what it is there for. Talk to them about making good choices and about the expectations at school. Discuss with them issues related with their doctor and

taking the medication. Develop a system that is easy for the child to remember for taking his or her medication (About Medications, 1997, p. 10).

- Under advisement of the physician, it is possible to take “holidays” from the medication. This may be possible during a vacation from school such as summer vacation or on weekends. This could help ease possibilities of side effects (p. 10).
- Remember that medication is NOT a cure. It helps to reduce the symptoms associated with ADHD. Every individual is affected differently by medication. Also, treatment of ADHD is not solely based on medication for best results for the child (p. 10).

Other forms of treatment:

Other forms of treatment for ADHD involve the use of non-medicated approaches and therapies. However, in research studies, the combination of medication and other therapies have shown the best results. On the other side, some parents find medication and drugs very controversial. The parents in the following story, which appeared in the October issue of *Redbook*, are an example of how parents may feel about having their child on medication (Engeler, 2001).

- Michael and Jill Carroll have a son named Kyle, who was six years old at the time of this article. Kyle had been diagnosed with ADHD at the age of five. He was evaluated by request of the school system because of his difficult behavior in school. He was recommended by a specialist to take Ritalin. Michael Carroll, Kyle’s father, was not

very fond of putting his son on medication. But after taking the medication for half a year, his progress in school was promising.

However, then some time when by and they saw his personality changing. Kyle also had problems with sleeping at night. He would also be too tired at the end of the day to do anything at home. He had pains in his legs, and he didn't have much of an appetite during the weekdays. On the weekend, when he wasn't on Ritalin, he often ate like he hadn't ever eaten before. Therefore, the Carroll's relayed what they had been seeing in their son to their son's doctor. They talked about the side effects and that they tend to decrease as time goes by. The doctor recommended that Kyle continue taking the medication but work towards a better dosage.

When the final report card came before the beginning of the summer, Michael and Jill decided that Ritalin was not the best thing for their child. For the rest of the summer, Kyle was "himself" again. But when second grade came in the fall, Kyle stayed off the medication. They just wanted to try school medication free for a couple of weeks, but within two days, the nurse was wondering where Kyle's medication was.

Michael and Jill did not discuss this with Kyle's doctor. In conclusion, the school system and social workers told the Carrolls' that they were "endangering Kyle's ability to function at school," and they could face "educational neglect." The Carrolls' didn't see another alternative, so they put Kyle back on Ritalin (Engeler, 2001).

The Carroll family was in a situation that involved their feeling about their son taking medication over what the school system wanted them to do. Overall, the point of the story was about this family not liking the choices of medication. They should have consulted with Kyle's specialist and discussed what may have been best for Kyle. There are other ways to help manage and treat children with ADHD.

One of the first things parents try for ADHD treatment is diet restriction. It is often the easiest and cheapest form of treatment. Many of the items that are reduced or restricted foods or drinks containing caffeine, wheat, sugar, food dyes, and preservatives. However, "diet restriction is very difficult to maintain over time and is seldom successful" (Weathers, 2002, p. 1). Another change in diet is to add in supplements of megavitamins. (Haber, 2000).

Biofeedback is an interesting way for technology to become part of a child's treatment. Biofeedback was introduced by a psychologist by the name of Joel Lubar. The child is treated by an electroencephalograph, "which is a machine that measures brain waves" (p. 127). The computer then takes a reading of the child's brain activity. A biofeedback therapist looks at the child's data and "determines if there is a decrease in the child's beta waves (alertness) and an increase in his [or her] theta waves component (inattentiveness) during various tasks" (p. 127). The child is then trained to learn how to increase beta wave activity to help increase concentration. This type of treatment is good for parents who do not want their children taking medications or for children who are not responding towards the medication, however biofeedback is an expensive therapy. Also, this treatment shows positive results for only a few children (2000).

Herbal therapies are another form of treatment that parents sometimes turn to. The ones that are most commonly used by individuals with ADHD are ginkgo biloba, kava-kava, and St. Johnswort. Although some parents believe that herbs are a “natural” substance and do not produce side effects, “herbs have components that are drugs” (p. 128). There is a difference between drugs and herbs though. Herbs are materials that originate from plants. Herbal therapies are used to help people who are sick and to aid in overall well-being. Herbs that are bought are not as strong as drugs that are provided over-the-counter. However, because herbs are plant-derived, there are different parts of the plants that aid in the body. There is also inconsistency in the forms because they can vary from package to package that are available in stores. For the treatment of ADHD, the dosage recommendation of herbs is still unspecified (2000).

Cognitive behavior therapy encourages the child to discuss issues that are happening to them and has them respond towards how they can deal with the situations. The effectiveness of this therapy is to help the child learn cognitively about how to deal with situations. Nevertheless, this type of training has not shown significant effects due to children with ADHD not being able to wait long enough to think things through. This type of therapy has better effects in children as they grow older and more inclined to use rational thinking (Green and Chee, 1998).

Children with ADHD may also have problems being around people. They do not always understand that their actions can hurt other people. All children have this type of training when they are taught how to work effectively together in group work during school lessons. Children with ADHD in social-skills training will learn how their behaviors affect others. They are reinforced for good behaviors to others and reflect on

feelings of others when they do something badly. Research has showed that in therapy actions towards others are good, but when children are out on their own, behaviors are not modeled (Green and Chee, 1998).

Therapists have also found that children with ADHD can use visualization and guided imagery to help ease stress and improve concentration and focus. Children may also use different types of breathing techniques for relaxation and to relieve stress. Yoga, martial arts, or other movement exercise may be something that would interest a child, especially one with ADHD. These types of exercises can help children learn to control their body movements and actions. They also focus on concentration and self-discipline, which may be something positive for the child to learn. Children should be encouraged to join organized activities or extracurricular activities, which helps build social skills and increases confidence and self-esteem (Handbook for School Nurses, 2002).

Overall, there are numerous ways of treatments for children with ADHD. They range from therapy, medication, to even chiropractic procedures and diet control. It is often a difficult struggle for parents to find resources to diagnose and treat ADHD. One should also be certain that they discuss any treatments or therapies with their physicians because many therapies are still questionable and research studies are unknown. They will be able to help parents decide what types of treatments would be best for the child (2000).

ADHD MYTHS

The following statements are NOT true!

- **ADHD is a myth. It's just a made-up diagnosis teachers and parents give to children whose behavior they can't control.**
- **Ritalin and other stimulant medications used to treat ADHD are dangerous, addictive drugs that can lead to substance abuse in later life.**
- **Stimulants permanently stunt children's growth.**
- **Children usually outgrow ADHD by the time they reach adolescence.**
- **ADHD causes nearly identical symptoms in all affected children.**
- **Inattention is the greatest problem experienced by most children with ADHD.**
- **ADHD is a learning disability.**
- **ADHD is caused primarily by faulty parenting.**
- **ADHD is common in America but doesn't occur in other countries.**
- **Sugar consumption is a major cause of ADHD.**
- **ADHD symptoms rarely appear in preschoolers.**
- **If a child doesn't exhibit ADHD symptoms during an office examination, the child doesn't have ADHD.**
- **There are accurate medical tests for ADHD.**
- **All children with ADHD qualify for special education services.**
- **Because ADHD is often inherited, behavior therapy is unlikely to help.**
- **ADHD rating scales aren't a good measure of children's progress during treatment.**
- **Children with ADHD often develop tolerance to stimulant medications so that, over time, the medications no longer work.**
- **Herbal medicines are the safest, most effective treatment of ADHD.**
- **Most children with ADHD require individual counseling or psychotherapy.**
- **Private schools are always better than public schools for children with ADHD.**

(ADHD: An Information and Action Handbook for School Nurses, 2002, p. 80)

A parent's view of her son's life with ADHD

On Wednesday, August 28th, 2002, an interview took place with a parent who has a child with ADHD. In order to keep the names of these individuals anonymous, the mother and the child will be given factitious names. The information provided within is important and interesting to learn about. The reader must remember that this is just one sample interview taken from the position of a mother who has had to deal with different situations throughout her son's life. The information that she gave me was from her experience throughout his life from when he was first diagnosed until the present. She provided opinions, experiences, feelings, and what she remembers throughout his education and home life.

Currently Tom is a sophomore in high school with two older siblings. He lives on a farm with his family of five. He likes four-wheeling, dirt-biking, animals, driving tractor, working with wood, and working with motors. He works best at things that are hands on. Tom wants to pursue a career as a mechanic. Besides his likes and goals, he has been dealing with the effects of ADHD most of his life. He was first diagnosed in third grade. He was diagnosed at the Park Nicollet Clinic on account of the schools request. Tamie, his mother, thought that this was the best place for him to go because his regular doctor was not the best answer for them. She felt they needed a specialist who would just not diagnose him right away.

Also, the same year Tom was switched from the parochial school to the public school because of some of the problems that had been created at the parochial school. Tamie felt that this was a good decision because of the public school system's education on ADHD and special help. Even after Tom's switch to the public school, problems still

persisted within the classroom. He had continual problems with sitting still and staying on task. Tom is known as the quiet type towards strangers, but once he gets to know you he won't be afraid to pick and joke. This brought in many of the problems he had with annoying people and trying to get their attention. He seems to always need to be doing something with his hands, something that is hands-on, like mechanics and shop class. During class, he would play with his pens, taking them apart and putting them back together. These behaviors made class-time hard and unmanageable for some of the teachers placing blame on him and his parents.

Therefore, Tom, his family, and his doctor mutually agreed that they were going to put him on medication. The school never made them put him on medication. They felt that under the care of their doctor and the behavior that was happening in school, they needed to intervene. Tom was first put on Ritalin, but this form of medication did not work as well as they had hoped for. For this type of medication, he would take the prescription medication in the morning and at noontime, but this caused him to feel uncomfortable and embarrassed for always having to go to the nurse's office during the middle of the day. As a result, with the help of their doctor, he now is prescribed Adderall. This medication is taken in the morning and lasts all day while he is in school, then wearing off after school. This was a better alternative because Tom only had to take it once and by the time he was done with his schoolwork after school, the medication was worn off.

Side effects are sometimes common with the use of ADHD medication. With the medication that Tom has been taking over the years, he has had problems with sleeping. Because he has trouble falling asleep, he takes a vitamin pill that helps him fall asleep.

He takes this pill about an hour before bedtime, and he says that it really helps him get to sleep at night. This was the only major side effect. Another common side effect is loss of appetite, but Tamie didn't seem to notice this at all. Tom's appetite was still very good. The only other thing that Tamie did notice was that Tom had tics, some involuntary muscular spasms. The doctor pointed them out because the medication can sometimes make them worse, but they never noticed a change in them.

Another diagnosis took place after Tom's first year in his new public school. He was also diagnosed with social anxiety. He had problems socializing with other peers. He wouldn't talk to most people, especially the teachers. He would have a couple of friends, but he still wouldn't talk to a lot of people. For more control over this, he was put on Zolaph for social anxiety. It seems to be a lot better since he was taking this medication.

As a parent, Tamie has many different feelings towards Tom's education and some of the situations that arise due to the problems involved in school. Tamie feels that it is challenging as parents because they know what their child is like. She knows how Tom can be, and she is trying to make the situations better for them and her son. She feels its tough on the parents because of routine meetings and phone calls from Tom's teachers. She sometimes feels that the teachers think she is ignoring them because of his behavior. But she wants the teachers to know that she is not ignoring them and that she is trying to help the situation the best she can.

Tamie gives these teachers very much credit for trying to help out. Tamie mentioned one of Tom's teachers is "like an extra mom." She helps a small group of kids that have ADHD who are on medication. She helps them finish assignments and helps

them get their assignments in on time. This is not part of special education because he actually tested out of that part. This is just an extra teacher who helps these children on medication.

All of Tom's teachers also evaluate his work and his behavior. All of these evaluations, his good and bad marks, all depend on the class and the teacher. If it was a teacher who he liked, he seemed to do much better in the class. If the class was something that he liked and/or hands-on, he also seemed to do much better in the class. Many of the classes though just do not suit him. One example that Tamie gave was that he doesn't like physical education because this class draws attention to Tom, and he doesn't like that. Tamie knows that some of the classes are just not going to be the best. This is a common situation for students. Either the student is going to like the class or he or she is not. Teachers can only try to make classes more interesting. Tamie made the comment about "that's the way he is, you just need to learn how to channel that energy." Tamie knows that this is really hard to do in school.

After working on his behavior and growth, Tom is going to try to take the situation into his own hands this year. He is going to be a sophomore at high school this year. He's not looking forward to this school year; he is taking agriculture and shop but he still has to take math and English. Because he is growing older and is in more control over his behavior, this school year he is going to try to go off the medication. He has gone off the medication before, but he had to go back on it. It lasted for only three weeks. Tamie made the comment that the school year is hard for him in the fall and then again in the spring. If he feels he needs to go back on it, he will. Tom knows that if he can control himself and behave in school then he won't have to go on the medication.

Tamie says it's real easy for him to get back on the medication. If he has a really hard day and the teachers cannot take it, she can call the doctor and have him on the medication the next school day.

Because of teachers and students reactions, Tamie doesn't want the other teachers to know that Tom is off his medication. She doesn't want them all to know because she doesn't want them to use that as an excuse. The only faculty that she feels should know is his special help teacher. While he is off the medication, the doctor still wants the teachers to do an evaluation. This will give them some data to compare. She's noticed that the grades usually stayed the same, but it's the comments that changed.

Overall, Tamie has been trying to cope with these situations. She sometimes finds herself comparing Tom to other children and sometimes it's not fair that he is just labeled at school. She doesn't like the feeling of having her other two children saying that someone told them that "Your brother is out of control." Tamie feels it's hard on the whole family. Tom is labeled as "oh that's so and so, he can never sit still." Tamie knows that parents and other children label him like that. She just tries to deal with the situations as they come. She loves her son and would do anything to try to help him. It's something that he has to live with and deal with the best he can. One can't understand what is going on unless they were in the same shoes as someone with ADHD.

Techniques and Strategies for Teachers and Parents

**ADHD or ADD impacts about two
students in every classroom,
in every school, across America.
(ADDinSchool.com, 2002, p. 1)**

Strategies for managing children with ADHD are things teachers and parents can do to help these children cope with their every day situations. It is important for teachers to know some of these strategies so that they can provide the best learning environment for the child. Strategies will also help educators with behavioral problems that will occur due to the impulsivity, inattention, and hyperactivity that the child may have within the classroom. Teachers and parents can try different techniques and see which ones work best with their child. Not every situation may work with the child, but many of them are worth trying. Hopefully, with these strategies, teachers and parents will be able to help the child grow and become a successful individual.

Teaching children with ADHD can be very demanding, difficult, and often frustrating at times. However, there are many things that parents and teachers can do to make lives a little simpler for children with ADHD and possibly other children too. By simply knowing some little techniques, a teacher or parent may be able to help build students self-esteem in their ability to do wonderful work and have success. Some of these things are really simple like putting a morning routine list on the refrigerator for the child, and some of them deal with more of a behavioral approach towards helping children. Management techniques for children are an excellent way to help children with ADHD (Kajander, 1995).

Communication with children is essential. Children with ADHD should know about the general topics on ADHD so they can learn how to overcome and learn how to handle their behaviors and responsibilities. They know their body best, and learning ways to control what is going on inside of them will be very beneficial towards their actions. It is important for parents to discuss these issues with their child. Helping children understand what is going on inside of them is the first key for the child to deal with ADHD. The following list includes some of the topics that children should know.

Especially for KIDS: Living with ADHD

- ADHD is **not** a disease – it’s the way your brain works.
- When the attention control center in your brain is weak, it’s said that you have attention deficit disorder.
 - Attention** means “being able to listen and concentrate.”
 - Deficit** means “not enough of.”
 - Disorder** means “not working right.”
- When you have trouble sitting still and need to move around a lot, we say that you are **hyperactive**. Hyper means “too much.”
- You were born with ADHD, and you will probably always have some problems with it. But you can learn ways to improve your attention.
- Having ADHD doesn’t mean you’re dumb or stupid. It has nothing to do with how smart you are.
- Having ADHD doesn’t mean you’re bad or naughty. Sometimes, it’s just hard to stop and think long enough to make good choices – even though you want to.
- Some kids take medicine to help them control ADHD. The medicine goes to the attention control center in the brain and helps it work better.
- Taking medicine for ADHD is like wearing glasses: It helps focus your brain!
- Even though you have ADHD, there are many things that you’re good at. Enjoy the things you’re good at, and work hard on improving your weaknesses. **You can do it!**
 - **Kajander, 1995, p. 61**

When working with behavior, it is best to develop goals that are clear as a teacher or a parent. If the teacher or parent provides goals for themselves when dealing with these behaviors it is more likely that they will be use them when time comes to deal with a behavioral situation. Some goals that can be worked for are: “be firm/set limits, be kind, be adaptable, be focused, be fun, be a good listener, speak softly to children and avoid yelling, and be clear with what you expect from the child” (Faust, 2002, p. 2).

Children with ADHD need to have structure so that they can monitor and try to make their behaviors positive. In order to do this they need frequent reinforcements (Paltin, 1993). Structure and stability are essential for making behaviors routines (Faust, 2002). Children with ADHD also have difficulty with rules that can be applied in more than one situation. Things that the child learns that are not appropriate at home may not be realized as not appropriate when playing on the playground. They have problems bringing rules together that can apply to other situations. Strategies toward good behavior need to be presented consistently with low means of frustration. Children don’t try something that seems too frustrating for them in order to be successful (Paltin, 1993).

For an overview of the strategies that parents and educators can use to help children with ADHD, Rebecca Kajander provides five key ADHD managing strategies. The five key elements that are stressed are: “academic modifications, parent education, child understanding, individual/family counseling, and medication” (Kajander, 1995, p. 8). These are excellent examples of strategies that can help manage an ADHD child. Helping a child through school through adjusted classroom settings is a great way to help the child learn to his or her full potential. “Educating parents about ADHD” is also a wonderful way to help parents have the information and knowledge about what to do in

different situations. Working with a child about their manageability over this disorder, gives them a way to help the situation that they are in. Learning ways to control what is going on inside of them will be very beneficial. This can also be achieved with the use of counseling and working with a health care provider to provide medication (1995).

Strategies for Success

- Stay educated on the child's diagnosis and continue to learn information on ADHD.
- All children need someone to look to when they need help. Children with ADHD need support and guidance in all areas.
- Patience is important for both parents and teachers. Patience will help you through in the long run.
- Communication is needed between parents and teachers. This will be another big key to the child's stability and behavioral modification. Be sure to inform teachers of problems the child may have such as forgetting, not turning homework in, or not being able to focus. For an educator, be sure to discuss issues of concerns with parents and work with them, not against them.
- When a child does something right, make sure you notice it at least 10 times more than when you noticed what wasn't right.
- Be sure to emphasize when the child has "good behavior." Use encouragement, support, and praise! Be sure to include compliments. If everyone around the child uses polite words and gives compliments, child will start to follow along. A reward system can be a great way to encourage the child towards positive behavior.
- When a problem arises, think of way you can help the child overcome the problem by solving it, rather than just getting frustrated and angry because the child seems like they are "just trying to aggravate you."
- Present the child with choices that are "good" choices rather than just telling them what they are going to do.
- Support a child to make their own decisions based on what he or she feels is right and not on what others think they should do.
- Provide the child with positive expectations. If you have high or positive expectations for the child, they will try to live up to whatever expectation you put on them. If you don't expect them to do something, they won't!

- Remember that a child's self-esteem and self-confidence are important.
- Help children find areas that they can excel in and develop a sense of great confidence and accomplishment in their lives. Once they know they can succeed, it will rub off onto other areas.
- Let children get involved in physical activity that they can enjoy. This will not only help them stay active and physically fit, but it will also help them develop self-discipline and self-esteem.
- Within the classroom and at home, have the child boost their own self-esteem by using forms of self-talk such as "Since I am so good at building things out of clay, I am going to make my brother a dinosaur" or "I have control over my actions. I have control to make good choices."
- When giving the child directions or instructions, be sure to repeat them and clarify before having them begin the task. This will aid in their clarification and understanding of what they are suppose to be doing. It may seem useless sometimes, but it is necessary when dealing with children with ADHD.
- Remember to include games and lessons that involve hands-on and concrete lessons that will enable them to focus and learn better. Let them work on multisensory activities or group activities.
- Try to break everything down into small parts. Don't present something in one whole unit because they will lose interest and will not be able to focus on it. Develop tasks starting with one thing and building onto the next. When you ask the child to do something, ask it in a more achievable manner by asking a small task with reinforcement.
- Organization skills need to be practiced. Help the child learn how to be organized and help them get organized.
- Remind children to take time for relaxation! This is a great time to spend some extra down time with your child. Go on a walk, listen to music, stretch, read a quite book with them or let them take a nap.
- Within the classroom, when it fits in with your lessons, let the children explore in a given area things that correlate to the lesson. Small motor breaks such as drink breaks, running errands or stretching can reward these students from seatwork.
- Develop procedures that help students with behaviors that will eventually become routines in the classroom. This will help in behavior management. Guide students towards proper behavior within your classroom.

- Sometimes it's okay for children with ADHD to do things at the same time such as listening to music and doing their homework or watching TV and reading a magazine. Sometimes things need to be done at the same time in order for a child with ADHD to accomplish anything.
- Mood changes will come and go. Help the child talk them out when this happens. Be there for the child. Discuss with them why they are feeling like they are. Make a plan of action when different moods come on. For example, if the child realizes they are getting very angry at something or someone, have them take a breath in while tightening up their fists for one second and then release the fists and tension with a big exhale or sigh.
- It is common for children with ADHD to respond towards blaming, pouting, and tattling in situations. An effective strategy many times is to ignore the behavior and redirect their focus to what the situation is and they have responsibility over what they do.
- Because children with ADHD only think about things that are happening at the moment, be prepared to allow enough time for different tasks.
- When a child is on medication, be sure to observe behavior and report any behaviors to the child's physician. If you are a teacher, be sure to discuss issues with a parent. Sometimes, a different kind or a different dosage needs to be taken.
- Because television causes your brain to react to high stimulation, problems can occur in a later age. Be sure to limit the child's television and video games. Television and games are fun entertainment for children and they don't have to be disregarded altogether, but TOO much doesn't help anything.
- Communicate with the child about consequences of their actions. If you discuss issues before they arise, then if they do arise children can try and link the consequences to their actions.
- Schedules are very important for children with ADHD. It prepares them not only for what is to come, but also it helps them to stay on task. A calendar of events on the wall may be a great way to help them remember important due dates and events. A planner that is taken home every day is a great way for parents to check-in on what needs to be done for homework, and it also give the child a reference to look at what needs to be done. It also provides an extra means of communication between parents and teachers.
- Support the child in reviewing work he or she has done. Encourage them to look over and check their homework and papers.
- Children with ADHD do not learn the same as other children do. Find what works best for the child. Does it work best for the child to work on his or her homework at

the kitchen table, at a desk in their room, in a quiet or noisy place, or while listening to music? Can adjustments be made to suit the child's learning style in the classroom?

- If your child is scheduled to be set up for an IEP, schedule a meeting with the school faculty. Be sure to discuss a time for a follow-up meeting.
- Tutors or other faculty are always a possibility for extra help on homework that needs to be finished. Check with the school about having a tutor work with the child. Sometimes, it's a good idea to have a teacher or a "study buddy" remind them of materials that will be due. Handing in homework is something that after awhile of effective training, it will become something they do routinely.
- Children with ADHD may need or request more time to take tests or exams. An extra teacher or tutor could always be an extra hand to help read questions and provide extra time.
- Getting dressed in the morning may sometimes seem like a huge feat for the child. Helping the child become organized will enable them to do something for themselves. Organization of clothes in the drawers can sometimes be an easy thing to fix. Have you ever spent what seems like a morning looking for your favorite shirt? To a child with ADHD, this challenge could end up being a huge mess. A simple solution could be to roll your child's clothing so that when they open their drawers, all of their shirts are exposed and they can choose which one they want by looking at them all.
- Another strategy for getting ready in the morning is making a list of all the routines that the child needs to do when they get up. It will provide a checklist for the child to go step-by-step through the necessary items and things the child must do before they head off to school. It may also be a good idea to put a basket by the front door with necessary items in it for the day.
- During mealtime, develop a rule about leaving the table. Encourage the child to stay in their seats until they are finished. It may also be effective to eat meals without the TV on. It cuts back on disturbances while trying to eat. Letting the child take the dirty dishes to the sink before dessert is served, may give the child a chance to move around before sitting back down.
- Sensory needs are also important to remember. The environment around the child should be given careful thought. Things around the child can stir emotions and cause the brain to be highly stimulated. The child's bedroom is a good example of how their environment should be chosen wisely. Colors, sounds, lighting, and textures all have an influence on the behavior of a child with ADHD.
- Remember to respect and treat the child as an individual. Don't assume things just because of ADHD. And don't have lower expectations just because the child has ADHD.

- Reading is often a problem associated with ADHD. Many children that have ADHD also may have developmental reading disorder. Working explicitly with the child on phonetics, sight words, and comprehension will aid in their understanding. Often times, it helps to let the child pick a book of interest to read. It may be rewarding for the child to work with a strong reader.
- Pictures and visual cues may be an extra way to grab children's attention and allow them to focus.
- Remember that not all strategies are going to work. They can vary from child to child. Find strategies that work for your child or classroom and guide them into routines and procedures.

Strategies adapted from (Faust, 2002), (Pachel, 2002), (Green and Chee, 1998), (Taylor, 1998), (Kajander, 1995), (Handbook for School Nurses, 2002).

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