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Young ADHD child: strategies and techniques for parents and teachers

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THE YOUNG ADHD CHILD: STRATEGIES AND TECHNIQUES FOR PARENTS AND TEACHERS

by

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CHAPTER I

INTRODUCTION

Attention Deficit Hyperactive Disorder (ADHD) is probably the most frequently misunderstood and improperly diagnosed condition encountered by those working in schools. ADHD is a term used to describe a collection of symptoms many children experience. A developmental disorder; ADHD has an early onset and pervades all areas of the ADHD child's life. Such children are frustrating for teachers and parents because they do not respond in the same way as other children and are often disruptive. The children themselves are at risk for major academic and social failure unless they are managed appropriately. The core symptoms of ADHD includes attention span deficits, impulse control deficits, high activity levels and rule-following behavior deficits.

With the tremendous amount of literature written on this subject, this author strongly agrees that the number of ADHD children in our school systems has increased. Currently it is believed that 3 to 5 % of boys and 1 to 3 % of girls show symptoms of ADHD (Reeve, 1990). The term ADHD was first used in 1987 by the Diagnostic and Statistical Manual of Mental

Disorders Third Edition Revised (DSM-III-R). However, the condition itself has been recognized as an entity for at least the last half century. The essential features defined by the DSM-III-R are developmental inappropriateness, degrees of inattention, impulsiveness and hyperactivity in normal or disorganized environments. There are 14 diagnostic criteria specified in DSM-III-R. In order to be considered as having ADHD a child must exhibit 8 or more of these behaviors at considerably greater frequency than observed for most other children of the same mental age. Further, the disturbance must have been ongoing for at least 6 months and have begun prior to age 7. ADHD can refer to two types of disorder. Type A is with hyperactivity. Type B is with little or no hyperactivity. In this form inattentiveness is the most significant characteristic.

Children with ADHD present multiple challenges to their parents and teachers. Daily management is difficult due to their distractibility, temper outbursts, low self-esteem and impulsivity. The children often give the impression that they are not listening or have not heard what they have been told.

Hyperactivity is manifested by gross motor activity such as excessive running or climbing. The child often has difficulty sitting well. This overactivity tends to be haphazard and not goal directed.

Several management forms and strategies are available to educators and parents that prove effective in the management of ADHD children. Through the years various techniques that have proven to be effective in treating ADHD were, drug therapy, diet restrictions and modifications, behavior management techniques, parent training and psychotherapy counseling.

Purpose of Study

This author undertook the topic of the young ADHD child to increase her own knowledge for use in the classroom and to share with parents. The purpose of this study sought also to answer the following questions regarding young ADHD children.

1. What effective classroom techniques and strategies are available to a teacher of young ADHD children?
2. How could parents of a young ADHD child provide effective learning in the home environment?
3. What insight could the reader obtain after reading

this paper regarding techniques and strategies for working with the young ADHD child?

4. What practical applications can be provided for ADHD children at home and at school?

The answers to these key questions intend to provide valuable resource information and management techniques for educators and parents of young ADHD children.

Scope and Limitations

This paper was limited to research done after 1981, however some data may go back further. The strategies and techniques covered related to the young ADHD child (3 to 8 years of age), with hyperactivity. Topics on classroom techniques, home management and parental techniques were discussed.

Definitions

For ease of understanding, the following definitions were included:

ADHD--Attention Deficit Hyperactive Disorder. A term used as of 1987 by the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R).

Assessment--A term used for psychological testing or evaluation.

Attention Control--The ability or inability to control one's attention for sustained periods of time.

Attention Span--Refers to the length of time that a child responds to a stimulus.

Cognitive Behavior Modification--A procedure to make children more consciously aware of their own thinking processes and to give them responsibility for their own behavior.

Cylert--A central nervous system stimulant medication; brand name for Pemoline.

Dexedrine--A central nervous system stimulant medication; brand name for D-amphetamine.

Diagnosis--The act of finding what problem or symptoms a person has.

Distractibility--The inability to direct or sustain one's attention to the appropriate stimuli (activity) in a particular setting.

Drug Therapy--The use of medications to treat moderate to severe ADHD children.

Feingold Diet--A diet that eliminates artificial flavorings, colorings, some preservatives and salicylates (related to aspirin) that are naturally found in some fruits and vegetables. The diet is based

on the idea that food additives may have caused ADHD.

Food Additives--A substance added to food items to improve flavor, color, texture or preserving qualities.

Hyperactivity--A pattern of behavior characterized by a short attention span, high degree of mobility, restlessness, distractibility and socially inappropriate behavior.

Imipramine--A tranquilizer used in the treatment of ADHD; generic name for Tofranil.

Impulsivity--A tendency to react quickly and inappropriately to a situation versus taking the time to consider careful alternatives.

Isolation--A behavior management technique (a time-out). If the child is engaged in an inappropriate behavior, he or she is then timed-out. The child is removed from the activity or group he or she was engaged in for a short period of time.

Ritalin--A central nervous system stimulant; brand mane for Methylphenidate.

Stimulant Medications--Central nervous system stimulant medications used in treating ADHD children.

Stimulus Reduction--An eliminating of distractions from the environment.

Thioridazine--A generic name for the tranquilizer Mellaril used in treating ADHD.

Tricyclics--Antidepressant medications used in treating ADHD children.

Summary

ADHD has become a complex, frequently misunderstood condition. It involves all parts of the affected child's life. The characteristics of ADHD include impulsivity, hyperactivity, distractibility, a short attention span and poor on task behavior. ADHD can be with or without hyperactivity. The purpose of this study was to provide a practical guide book of techniques and strategies to assist educators and parents who work and live with ADHD children. This study was not intended to discuss causes of ADHD. Educators as well as the child's parents need to develop these comprehensive techniques and strategies to meet the ADHD child's individual needs. Working with these children is often difficult. Various treatments, management programs and strategies were presented to aid educators and parents of ADHD children. This paper was limited to research after 1981 and focused on the young ADHD child (3 to 8 years

of age) with hyperactivity. Definitions were provided for clarification of terms used in this paper.

CHAPTER II

REVIEW OF THE LITERATURE

Behavior Management Techniques in the Classroom.

Children with ADHD were frequently difficult to teach and manage in school and in their homes. In order for ADHD children to succeed in their environment, it was necessary to use some type of behavior management program. However, treatment of an ADHD child required a multi-modal approach. This involved parents, teachers, physicians and behavioral health professionals. The most effective treatment required full cooperation, in a coordinated effort to ensure success in the lives of ADHD children.

Another important aspect in developing a multi-modal behavior program within the classroom was for researchers to use a wide variety of behavioral strategies for the ADHD child. Treatment for the child began with a series of consultation sessions with the classroom teacher to enlist his assistance in devising the individualized plan. The teacher could praise and pay attention to appropriate behavior, ignore minor disruptive behavior, and use mild punishment (brief time-out) for disruption, which could not be ignored.

The teacher then would develop a list of target behaviors to work on, that were relevant for the particular child and that could be incorporated into a school (Loney, 1987).

Other researchers advocated a six step process to plan for the specific interventions needed before starting a behavior program. In the first step, the parents and the teacher selected and defined one or two particular target behaviors as the focus of the interventions. It was better to choose a behavior that was less serious in nature for the initial intervention. This method allowed teachers and parents to experience initial success with the child. Parents were then involved in defining this behavior further. For instance, it was better to design an initial treatment to teach the child to follow the command "pick up your toys" than it would have been to begin a program aimed at all non-compliance to all teacher commands. The second step in the behavioral intervention was to observe and record how often the behavior occurred. Records were kept as to the time of day that it typically occurred, what factors that seemed to precipitate the misbehavior and what consequences the

teachers and parents typically provided for the misbehavior. The social interactions of the child with peers was also important in the record keeping. The third step involved the teacher and parents in reviewing the records of the child. They analyzed how often the child's misbehavior occurred and the consequences that the teacher and parents provided for it. The fourth step was to alter the controlling cues for the behavior, the consequences for the behavior, and the timing with which these consequences were delivered. The teacher then evaluated the changes made in the child's behaviors. The continued assessment of the child's behavior was the fifth step. The last step was when the teacher revised the treatment program on the basis of the success or failure of these initial alterations in the child's environment (Barkley, 1981).

The relationship between behavior and its consequence was referred to as a contingency or as being characterized by a contingent relationship. A contingency could be thought of as an if-then relationship. If the child behaved in a particular manner, then his or her behavior led to a particular end. A consequence that increased behavior was referred to as

a reinforcing consequence. A consequence which decreased behavior was referred to as a punishing consequence. Reinforcing consequences could be used to develop and maintain desired behavior in preschool. To do this the teacher followed three steps. First, he identified in specific terms the behavior to be changed. Second, he identified the consequences that were reinforcing to the child. Third, he set up a consistent contingent relationship between the desired behavior and a consequence desired by the child (Thurman & Widerstrom, 1985).

Another form of behavior management recommended by researchers, was the use of positive reinforcing consequences. This involved giving the child social attention and praise when he or she displayed the desired behaviors. Other social reinforcers besides praise and attention were physical contact, affection, facial expressions, and other nonverbal gestures of approval. Food and other consumable products could also be used for reinforcement. However this would not be used until other types of reinforcers had proven ineffective for use with a particular child. Another group of reinforcers used was that of intrinsically

rewarding or high-rated activities as well as a virtually limitless number of recreational pursuits. One type of reinforcer that was convenient to use and was frequently successful, was the system of reinforcers such as tokens, points, or symbols. These could be exchanged for already established reinforcers. Parents and teachers made sure to be consistent and immediate when employing reinforcers. Also, teachers were specific about the behavior that they had decided on. They made sure that the reinforcements selected were of value to the child. Finally they didn't give up on using the reinforcer after a short period of time (Barkley, 1981).

Using a response cost procedure was also of potential importance in a classroom behavioral program. Each inappropriate behavior resulted in the loss of one minute of play time. Rewards were given for days in which the child lost three or fewer points. This system combined positive reinforcement and response cost in which points were earned for performance of positive target behaviors and points were lost for inappropriate behaviors.

The use of social skills training was also

important as early peer problems predicted later maladjustments. During peer play groups, communication, participation, and cooperation were addressed using instructions, modeling and role-playing techniques. Children practiced these newly acquired skills while playing age-appropriate games. ADHD children would need to be involved in structured social skills groups over a long period of time (Loney, 1987).

Using feedback to improve behavior was another method. Positive feedback was extremely important. Feedback would be delivered immediately after a behavior occurred, dispensed frequently, and given for small steps toward improvement. Positive feedback conveyed much more information to the child and was more effective and efficient than negative feedback. When the rate of teacher approval increased, even children who were not the direct recipients of praise tended to show improvement in their behavior. When it was necessary to correct a child, negative feedback would be delivered as quietly and as unobtrusively as possible. Negative feedback couldn't be eliminated entirely nor would it be, since the best behavior resulted when ADHD children received a combination of

positive consequences for appropriate behavior and mild negative consequences for inappropriate behavior. An appropriate way to do this was to use the "response cost" procedure. The child earned a certain amount of free time by working hard on his or her assigned tasks (Ingersoll,1988).

Shaping was a term used to develop new behaviors in the child. It involved positive reinforcement of behaviors in a child's repertoire that had even a slight amount of similarity to the target behavior desired. The child was taught to perform the desired behavior through the application of positive reinforcement to successively closer approximations of it. For example, ADHD children could be trained to play independently of their teachers without interrupting them by successive reinforcement. By increasing the span of time spent away from the teacher the child was eventually reinforced for longer and longer periods of impulse control. This continued until the child was showing normal behavior. Sometimes physical guidance was used to move the child's arms, legs or other body parts through the desired motion in order to demonstrate a desired behavior response (Barkley,

1981).

Structure also played an important role in behavior management. Because hyperactive children could not organize themselves or their world, others had to assume this responsibility for them. Organization was the lifeline, the safeguard, the medicine, and the key to learning for the child (Ingersoll, 1988). By establishing a time and a place for everything in the classroom, the teacher provided the structure the ADHD child so desperately needed. Some examples for providing this structure were the use of a behavior management system in which the child earned points for appropriate behavior. A list of specific behavior for which points were earned and lost was posted in the classroom. In the child's work area, there was a designated place for every item the child used in the classroom. In the classroom all instructions were absolutely clear and quite precise. Directions needed to be stated clearly and simply, one at a time. The teacher made sure to have the child's full attention while directions were being given. It helped to stand directly in front of the child, perhaps touching his or her shoulder to help maintain eye

contact and attention. When a child became too frustrated to cope with a task the teacher transferred him or her to another meaningful but less taxing activity. The child could experience success with the activity and then return to the original task with renewed confidence. The teacher gave the child permission to throw a tantrum. Giving children this permission with the stipulation that they could not harm themselves or others, could be useful when children persistently denied that they were upset even though their actions clearly showed that they were. Often children saw no appeal in drawing that kind of attention to themselves and would choose to discuss the problem instead (Ingersoll, 1988).

Researchers also advocated the use of punishing consequences. This involved the withdrawing of attention from children upon the occurrence of misbehavior. Instead of paying attention to the child for disruptive behavior the teacher chose to ignore the child when misbehavior occurred (Reeve, 1990).

Another form of a punishment procedure was called "time-out from reinforcement" (Barkley, 1981). It consisted of isolating the child upon the occurrence of

misbehavior. Several factors had been considered in using time-out. First the time interval used must have been appropriate to the child's age and the severity of the misbehavior. Second, the location of the time-out was extremely important. Some highly disruptive children would need to be physically restrained in their time-out chair to prevent their leaving the time-out situation without permission. Having a child sit on a chair in a relatively dull area such as a hallway or in a corner was quite sufficient in most cases (Barkley, 1981).

It would rarely be necessary to use a time out room with preschool children. Time out could be accomplished by adults through halting their interaction with the child for a 30 to 60 second period of time. Another effective means for implementing time out with young children was the traditional practice of standing or sitting in the corner. The teacher would arrange an area of the room where the child could sit or stand with his or her face to the wall and where the child was reasonably isolated from the ongoing activities. Children who refused to take a time out would be guided firmly to the corner without fuss or

fanfare. The teacher would monitor these children to prevent them from leaving the corner prematurely. The child would be helped to understand the contingency and told specifically why he or she was being sent to time out. This enabled the child to begin to distinguish appropriate behavior from inappropriate behavior and to begin to internalize the control of his or her own behavior (Ingersoll, 1988).

Initially, the use of time out would involve just withdrawing attention from the child. By actively attending to and praising classmates who were behaving appropriately, the teacher delivered a clear message about the kinds of behavior to which he or she would respond. As a second step, materials and equipment would be taken away from the child and his or her activity interrupted. When materials were removed, the child would often attempt to gain the teacher's attention with a temper tantrum or a verbal outburst. Fines would be imposed for this behavior. When the child had waited quietly and the designated time was up, materials could be returned. Physical removal of the child from the group for the remaining period was the third step. Because the child could only sit and

watch during time out, he or she temporarily lost the reinforcement of being in the group and interacting with the others.

Finally, physical isolation in a secluded, unstimulating environment may have been required. A partitioned corner, an empty closet or a large appliance box could serve as an effective isolation area. The teacher removed any articles that might prove hazardous to the child. The child was sent immediately to the time out area when an infraction occurred. The teacher did not engage in discussion. If the teacher argued with the child, he was giving the child attention for unacceptable behavior. The message of time out was, "Right now, your behavior is so unacceptable that no one wants to be with you. When you can express your feelings with words rather than actions, and when you are ready to work in the group, you may return" (Ingersoll, 1988). A period of five consecutive minutes of quiet behavior was enough in most cases.

The use of time out was used not just to isolate the child but to give the child a needed opportunity to clam down. Its value lay in the withdrawal of attention

and other positive consequences following misbehavior. When a child consistently violated limits, in spite of fines and other forms of negative feedback, a time out procedure was used. Time out was also an appropriate consequence for temper tantrums and aggressive behavior. Time out did not always require an extended period of time, but in order to be effective there could be absolutely no interaction with the child while he or she was in time out. This meant that neither the teacher nor peers would converse with the child nor respond to any bids for attention. In addition, all objects which were hazards or potential hazards were removed from the area so that the child could not harm him or her self or use the threat of self-harm to gain attention.

In the classroom, time out could be implemented in a variety of ways and did not necessarily involve physical removal or isolation. The least restrictive methods would be used first, with the more restrictive methods reserved for unsuccessful interventions and for physically aggressive behavior (Ingersoll, 1988).

Another type of punishment involved the use of disapproval or reprimands when a child misbehaved

(Barkley, 1981). These could take the form of a sharply spoken word like "NO" or "STOP" or a statement like "I don't like it when you hit children." Another approach to verbal reprimands was to combine a sharp word with an explanation of what the undesired behavior was, for example "STOP HITTING!"(Ingersoll, 1988). This could only be effective by making other forms of punishment contingent upon failure to heed the reprimand. When reprimands were used, they were most effective if direct eye contact was made with the child, if the voice of the adult was loud and conveyed a firm statement of consequences and if a particular child rather than a group of children was addressed (Barkley, 1981).

Overcorrection was also used, involving the presentation of aversive events. With this method, the punishment for displaying inappropriate behavior required the child in question to perform some work in the situation, or display the appropriate alternative behavior to an extreme or frequent degree. This form of punishment could lead to physical punishment and injury to the child and was not highly recommended (Barkley, 1981).

Punishing consequences would be employed only when effective behavior could not be brought about using positive reinforcing consequences or when a decrease of a particular behavior was necessary for the welfare of the child or others in the setting. Punishing consequences often lead to emotional reactions on the part of both the child being punished and the person doing the punishing. These emotional reactions interfered with the ongoing activities of the setting and lessened the opportunity for the child to learn an appropriate pattern of behavior. When punishment was necessary to bring about behavior change in young children, it was preferable to impose the mildest form of punishment which was effective, since these somewhat reduced the undesired side effects (Ingersoll, 1988).

Another type of punishment was the use of response cost. These were fines. A particular behavior resulted in the loss of some portion of a desired resource or activity. In the preschool classroom, response cost could consist of withholding lunch time dessert, a portion of free play, or the opportunity to engage in a favorite activity or to play with a desired toy. The child paid the cost of emitting an undesired behavior

by giving up something he or she desired. As with time out, it was important that the child understand the contingency and the exact reason for the response cost. Generally, contingent consequences were more effective if they were immediate. To get around this problem, response cost procedures were sometimes used in conjunction with token systems in which children received tokens for desired behavior and gave up tokens for undesired behavior. Tokens were then used to gain access to desired events, items, or activities (Ingersoll, 1988).

There were certain general techniques useful in managing the ADHD child. First, no one really appreciated criticism and ADHD children were no exception to the rule. Criticism was not helpful to the ADHD child; the negative feelings that were aroused, did little good. Researchers stated that constructive criticism was more beneficial. For example, "Teacher does not like to look at a messy work table, it upsets her. Please go and clean it up." "When criticism was necessary, the teacher should criticize the objectional behavior and be a specific as possible" (Wender, 1987, p. 98). In addition, praise would be specific. Affec-

tionate attention, provided when the child behaved desirably, was important. "I am glad you held your temper and did not hit Billy when he broke your toy," was an example of specific praise. It was not helpful to use nebulous phrases like: "You are a good boy." Furthermore, nebulous phrases would strike the child as phony. If the child felt the comments were not sincerely meant, they caused more harm than good. Also, the teacher implementing phony praise risked turning off the child. "Children recognize and appreciate honesty" (Wender, 1987, p. 99).

Finally, children had feelings; this was important for adults to note. Also , it was imperative for adults to acknowledge the child's feelings. ADHD children had special problems but like everyone else they had "normal" problems too. Difficulties and misunderstandings between teacher and child could cause trouble for anyone. ADHD children as well as "normal" children benefited from understanding and the correct handling that behavior management was able to do so well (Ackerman, M. 1987, page 30).

The startle technique was also used with ADHD children. It worked as follows: As a child was about

to reach for an electrical outlet the teacher loudly and firmly stated "NO." This startled and stopped the child for a few seconds. When the child stopped reaching for the outlet, the teacher gave immediate praise. "The child learns to associate the startle with being near the outlet and also learns that it is rewarding to stop reaching" (Ackerman, 1987, p. 30).

Extinction was another type of behavior management. The teacher stopped the child from doing an inappropriate behavior by simply ignoring the behavior. When a behavior was ignored, the attention that served as a reward was no longer received. Thus, tantrums, whining or acting out behaviors, if ignored, would eventually stop. It was found that "extinction is only as effective as the teacher is consistent and persistent in implementation of the intervention" (Walker & Shea, 1986, p. 102)

General Recommendations from Researchers.

If a child in your classroom was on medication, your observations were important. The child's physician may have needed these observations to decide on the dosage or frequency of medication. ADHD children usually responded best to structure and clear-

ly defined expectations and limits. A behavioral system, group therapy and social skills learning could be used (Silver, 1989).

ADHD did not just affect the child in school; it affected all aspects of his or her life. The teacher needed to know all aspects of the child's disabilities. Only with this knowledge could he help. The teacher would be assertive. He or she got information and help needed from the other professionals in their school system. They asked questions. They worked with the parents to get the needed help. They worked closely with his or her physician and other professionals. No one wanted any child to have ADHD, but some children did have it. It was a disability; but it did not have to be a disaster. With help from the family, other professionals, and the teacher, the child had more than a good chance to grow up to be a healthy, happy, productive individual (Blackman et al., 1991).

The teacher did not expect to "cure" the child. To date, all intervention approaches represented ways of coping with the disorder, not curing it. Behaviors acquired through treatment of any kind were unlikely to generalize to other contexts. The teacher who under-

stood this would not abandon an effective program just because it did not work in all places or at all times. Ideally, a behavior management program was gradually faded until the new behaviors were consistent and could be maintained without a special program. It may not have been possible to fade the program for the child with ADHD.

The teacher walked awhile in the child's shoes. Adults typically were frustrated by the inconsistency of the child's behavior. Comments such as "but I know he can do it, he did it yesterday" were common. Teachers began to perceive misbehavior as deliberate when they believed that the child knew better. It was helpful for adults to remember how difficult it was to change their own behavior. Behavioral change was hard! The more teachers remembered that, the more empathy they had for all their students (Blackman et al., 1991).

You had to forgive the child, the parents, and yourself. It was hard to be a child with ADHD, it was hard to parent one, and it was hard to teach one. Even the best-designed program would not work all the time. The child would misbehave, the parent would forget to

follow through on the home component, the teacher would lose his or her temper, and so forth. Every one had to be willing to forgive and start over. It was especially important for the child to see adults making mistakes, admitting them, and continuing to work toward the goal (Blackman et al., 1991).

Specific Classroom Recommendations.

Recommendations for the Proper Learning Environment.

1. The teacher seated the child near the teacher's desk, but the child was still included as part of the regular class seating.
2. The child was placed up front with his or her back to the rest of the class.
3. The ADHD child was surrounded with "good role models". This encouraged peer tutoring and cooperative collaborative learning.
4. The teacher avoided distracting stimuli such as doors, windows, heaters and high traffic areas when working with the child.
5. ADHD children did not handle change well, and needed as much structure and routine as possible. The teacher avoided when possible too many: transitions, changes in schedule, disruptions, and

physical relocation (child was monitored closely on field trips). When transitions or unusual events were to occur, the teacher prepared the child by explaining the situation and describing appropriate behaviors in advance (Reeve, 1990).

6. The teacher produced a "stimuli-reduced work area". He let all children have access to this area so the ADHD child would not feel different (CHADD, 1991).

7. Simple charts and graphs were used to record progress. This provided a visual record to remind the child of the goal and help him or her to recognize progress. It also facilitated data collection for the teacher. This was important because smaller increments of behavioral change could go unnoticed if records were not being kept. Even very young children could learn the importance of the line on a graph going up or down (Blackman et al., 1991).

8. When the teacher saw the child getting restless he found a reason to let him or her walk around; anything to give the child a break. This could include alternate activities at their desk,

standing, or moving around throughout the day.

9. The teacher had a number of hands-on materials available. Puzzles, games, collections, cubes or any other high interest items worked. Learning aids such as computers, tape recorders and graphs seemed to structure learning and help maintain interest.

10. When needed, a carrel or divider helped the child have space. These were labeled and made special so the child viewed them as positive rather than punishing (Anonymous, 1991).

11. The teacher provided a classroom atmosphere of acceptance, encouragement and trust.

12. An ounce of prevention was worth a pound of cure. Teacher proximity prevented many interactions from escalating into conflict. It was more efficient for the teacher to spend his or her time anticipating and preventing problems than reacting to them. It was considered important to place some materials out of reach, rearranging the furniture and separating certain children (Blackman et al., 1991).

13. Multiple modalities of instruction generally were

more effective in maintaining attention and increasing learning. Thus, a combination of visual, tactile, and verbal approaches would be preferable to verbal instruction alone (Reeve, 1990).

Recommendations for Giving Instructions to Students.

1. The teacher maintained eye contact with the ADHD child during verbal instruction.
2. The teacher made directions clear and concise. He was consistent with daily instructions.
3. The teacher simplified complex directions and avoided multiple commands.
4. He made sure the ADHD child comprehended the directions before beginning the task.
5. The teacher repeated directions in a calm, positive manner, He said "I want everybody's eyes up here." Then he checked the child to see if he or she got the directions. The child then repeated the direction. The teacher gave the directions through visual and auditory means if needed.
6. The teacher helped the ADHD child to feel comfortable with seeking assistance.

7. ADHD children required more help for a longer period of time. The teacher gradually reduced this assistance.
8. The teacher had daily communication with parents through phone calls and/or notebooks (CHADD, 1991).
9. The teacher used nonverbal cues rather than telling the child to be quiet, raise his or her hands or settle down (M. Rospenda, personal communication, May 9,1991).
10. The teacher slowed down. He didn't pace or move around too much when teaching. He had a "listening spot" to remain in when giving directions.

Recommendations for Students Performing Assignments.

1. The teacher gave out only one task at a time.
2. He monitored assignments frequently and used a supportive attitude.
3. The teacher modified assignments as needed.
4. He gave the child extra time to work on assignments without criticism or fanfare (Reeve, 1990). The ADHD child worked more slowly. The teacher provided extra help for the child. He had the

child work with the teacher's aide or a volunteer when possible.

5. The teacher made a daily written contract with the child, promptly rewarded completed work with a brief free period and followed a daily cyclical routine: work, free period, work, free period, giving flexible assignments (WI of Hyperactive children, 1986).
6. ADHD children were easily frustrated. Stress, pressure and fatigue could break down the child's self-control and lead to poor behavior (CHADD, 1991).
7. The teacher helped the child to organize his or her things. The child was shown where to sit, put papers, personal items, etc (M. Rospenda, personal communication, May 9, 1991).
8. The teacher had the child verbalize to him as to what the task was and how he or she was to approach it. He then checked back periodically to see if the child was still on track.
9. The teacher adapted work sheets so that less material was on each page.
10. Assignments were broken into smaller chunks. The

teacher did not expect the child to be able to work independently for long periods of time.

Recommendations for Providing Encouragement.

1. The teacher rewarded more than he punished in order to build self-esteem. He rewarded effort and improvement not just achievement, rewarded classmates for ignoring the child's disruptive antics and rewarded classmates for efforts at befriending the child (Wi Assoc of ADHD, 1986). The teacher would catch the child being good and reward the absence of disturbing behavior (M. Rospenda, personal communication, May 9, 1991).
2. The teacher praised immediately any and all good behavior and performance. The teacher reinforced the positive. Children with ADHD lived in a world of reprimands. They needed to hear what they were doing right. Appropriate behavior may have been rare, but it was important for the teacher to attend to it (Blackman et al., 1991).
3. The teacher changed rewards when they were not effective in motivating behavioral change. The teacher stayed one step ahead of the child. Some children satiated rapidly to reinforcers. Teachers

needed to be alert for indications that the child was getting tired of the reward or losing interest in the chart. Minor changes in the program may have been sufficient to recapture his or her interest, if the teacher initiated the changes in time (Blackman et al., 1991).

4. The teacher found ways to encourage the child.
5. The teacher taught the child to reward him or herself by encouraging positive self-talk. This helped the child to think positively about him or herself.
6. The teacher hugged the child when he or she needed it. This physical contact was used as a tactile reinforcement tool (CHADD, 1988). He also made frequent contact with the child by speaking the child's name. The teacher made sure that he had the child's attention before speaking (Reeve, 1990).
7. Whenever possible, the teacher helped the child compensate for or work on his or her weaknesses while building on the strengths. By knowing a child's strengths vs. weaknesses and by helping them learn how to choose activities that built on

strengths, it would diffuse the weaknesses (Silver, 1989).

Recommendations for Behavior Modification and Self-Esteem.

1. The teacher provided supervision and discipline.
    a. He remained calm, stated the infraction of the rule, and didn't debate or argue with the child.
    b. The teacher had pre-established consequences for misbehavior.
    c. These consequences were administered immediately and proper behavior was monitored frequently.
    d. Rules of the classroom were reinforced consistently.
    e. Discipline would be appropriate to "fit the crime", without harshness.
    f. The teacher avoided ridicule and criticism and remembered that ADHD children had difficulty staying in control (CHADD, 1991).
2. Teachers were careful when picking their battles. It would not be possible to make the child with ADHD behave like everyone else. Teachers could

focus on eliminating disruptive and aggressive behavior, tolerating a higher activity level and a shorter attention span, than they considered to be desirable. To do otherwise would involve the teacher in constant, ineffective nagging, which was likely to increase the child's behavior problems (Blackman et al., 1991).

3. The teacher applied immediate consequences for behaviors that could not be ignored. It was important for the adult to remain calm, to minimize the chances of turning such an incident into a power struggle. Counting to 10 or taking several deep breaths helped the teacher to respond calmly. Although time out periods of a minute per year of age was recommended, even shorter periods could be used for minor infractions. It was far better for a child to sit with his or her head down on the table for a minute or two several times an hour, than to miss a 15-minute play period in the afternoon for a misbehavior that occurred in the morning (Blackman et al., 1991).
4. The teacher did not ask or encourage the child to promise to behave. Children with ADHD typically

broke the rules because they had poor impulse control, not because they had not learned the rules. Adding promise-breaking to the list of sins served no purpose (Blackman et al., 1991).

5. The teacher kept order quietly. He reprimanded the child quietly and privately to avoid ridicule and embarrassment. The teacher did not shout.
6. The teacher provided as much physical activity as possible, and gave projects to the child to work on with his or her hands. The child needed chances to stretch, get up, and walk around. The teacher gave the child frequent errands to run, help water plants, go to the office for paper etc. Providing a good physical education program with at least 20-30 minutes of vigorous exercise was important. The teacher needed to tolerate normal rough housing as long as no one was hurt.
7. The teacher used simple humanity and showed interest and affection. He listened to the child's troubles and looked for the child's talents and ways that he or she was likeable. The teacher also talked honestly with classmates (when child is out of room), asking them to help their peer.

He rewarded the whole class when the ADHD child was good and never punished the whole class when the child was bad (WI of Hyperactive Children, 1986).

8. If the child was getting revved up, the teacher went to him or her and discussed things privately (M. Rospenda, personal communication, May, 1991).

Dietary Management.

Another consideration in the behavior control of ADHD children involved the use of dietary management. There has been a tremendous amount of controversy surrounding the theory that food additives such as dyes and preservatives were responsible for hyperactive symptoms in many children. Dr. Benjamin Feingold (1975) published a book in the mid seventies called Why Your Child is Hyperactive. He reported that significant proportions, up to 50 percent , of hyperactive children displayed dramatic improvement when certain food additives and food products were removed from their diets. His theory had commonsense appeal, and it appeared at a time of increasing public concern about toxic substance and pollutants in the environment. It received widespread media coverage.

However when these claims of improvement were subjected to close scientific scrutiny, the results fell far short of expectations (Ingersoll, 1988). Researchers could detect diet-related improvements in only a small proportion of the children. Even in these children, improvement was not consistently reported by parents, teachers and other overseers. A research panel concluded that "Defined diets should not be universally used in the treatment of childhood hyperactivity at this time. A defined diet should not be initiated until thorough and appropriate evaluation of the children and their family and full consideration of all traditional therapeutic options have taken place" (Ingersoll, 1987, p. 88).

Dr. Feingold suggested ADHD children be placed on the K-P Diet. Two groups of food were eliminated by the diet: Group I was made up of a number of fruits and two vegetables (tomato and cucumber). This group of foods contained natural salicylates. Group II was made up of all foods that contained a synthetic (artificial) color or flavor. There were no tests available to determine whether a child would display an unfavorable behavioral response to any food item in

either Group I or II. The allergy skin tests for foods were not applicable to this problem. With the absence of tests it was necessary to start the diet by eliminating every food that might disturb the child, from Groups I and II. The guardians or parents of patients on the diet were encouraged to keep a diary. The purpose of the diary was to record the success or failure of the diet, behavior and academic progress. In the diary, everything the child ate was recorded. In order to experience success, 100 percent adherence to the diet was necessary. It was important to remember that often a single bite or a single drink could cause an undesirable response. In some children, the favorable response was noted as early as the first week, but sometimes changes were not noted until after seven weeks.

Feingold experienced success with the K-P Diet. "I have found that approximately 50 percent will respond to the K-P Diet without any special attention paid to the allergy" (Feingold, 1975, p.69). The current studies available significantly contradicted Feingold's results. Researchers studied this diet extensively and found the results ambiguous. To

maintain the K-P Diet, most parents needed to revolutionize the entire family's lifestyle. This caused problems for some parents. One problem was compliance with the dietary restrictions; it was easy for tired parents to lapse in strict adherence to the diet. Also, it was even easier for a child to obtain edible contraband from a friend. These diets were complicated, time-consuming to use and difficult to enforce, especially if the child was away for many hours every day. "You may do your child a real disservice if you focus on diet to the exclusion of more effective treatment methods" (Ingersoll, 1988, p. 89).

Sugar-Free Diets.

Many parents were certain that their child's behavior worsened when he or she ate food high in sugar. Researchers studied the removal of sugar from the ADHD child's diet with little success. "There is absolutely no suggestion that sugar adversely affects the performance of hyperactive children" (Ingersoll, 1988, p. 89). Parents often saw a worsening of behavior around holidays when many sweets were served. However due to the parties, visiting friends and

relatives, changes in routine, bustle and excitement, the ADHD child was likely to become over-simulated and lose control of his or her behavior. Thus, while sugar may have seemed to be the culprit, other factors may actually have been responsible for a worsening in the child's behavior. When a child was placed on a restrictive diet, his or her life became more structured and routinized. Also, it was likely that the child spent more time with his or her family. These positive changes may have aided in changing the child's behavior. This made it difficult to pinpoint what caused the changes in the child's behavior. The changes may have been attributed to the diet or a change in the family's view of the child and possibly a change within the family's routine and structure. For these reasons, diet alone was not the only approach to follow (Ingersoll, 1988).

General Nutrition.

General nutrition did play a role in the child's behavior. Research was quite clear in showing that a good breakfast was particularly important for children. Children who missed breakfast performed poorly on a variety of intellect tests when these tests were given

in the morning. "For the ADHD child , who needs every advantage we can give him, a good breakfast is a very good idea" (Ingersoll, 1988, p. 90). Caffeine was found in some of the foods that children commonly consumed such as tea, chocolate and cola beverages. Because caffeine increased alertness and attention, there was some interest in its effects on the behavior of ADHD children. Research failed to find any beneficial effects of caffeine on ADHD behavior. This was not considered an effective approach to alleviating the symptoms of ADHD. It was shown that some children did react negatively to such food substances as refined white sugar, refined white wheat products, milk, certain fruit, caffeine, chemical additives an dyes. When a child was at the severe level of ADHD, serious consideration to controlling their diet was important. It was then important for "Parents to search their communities for a pediatrician who recognizes this problem, and is prepared to work with family in diet control techniques" (Jordan, 1988, p. 51).

Drug Therapy.

Medication was clearly the most widely used and most controversial procedure for management of ADHD.

As early as the 1930's it was noted that stimulants improved the functioning of hyperactive children, appearing to calm them down (Reeve, 1990). Careful studies used control groups, placebos, and "double blind" procedures so that there was no way the child, the parents or the teachers knew when the child was on or off the drugs. The results strongly indicated positive effects in 60% to 80% of diagnosed ADHD children (Reeve, 1990).

The effects included lowered quantity and intensity of motor activity, better attention, improved compliance to adults' requests, more appropriate peer interaction, higher efficiency of problem solving, and increased academic productivity. Ritalin was by far the most commonly prescribed drug for ADHD children. It came in varying doses with the initial dosage based on the size of the child. The effects occurred very quickly. Typically Ritalin began to take effect within 30 minutes, reaching its peak levels within 2 to 3 hours.

Two other stimulants, Dexedrine and Cylert were also frequently prescribed for ADHD children. The antidepressant Imipramine, sometimes was used as well

(Reeve,1990). Imipramine apparently had much the same effect as Ritalin, though it was absorbed at about half the rate, necessitating that the initial dose be taken somewhat earlier in the morning. Cylert was a newer drug. Research seemed to indicate that improvement rates for Cylert were similar to those for Ritalin. One disadvantage to Cylert is that the drug built up in the body for several days before its full effects were seen; and once stopped, it was not fully eliminated from the body for several more days.

Loss of appetite and difficulty sleeping were two of the most common side effects of stimulant medications. Sometimes involuntary movements (i.e., tics) occurred and some repeats of depression had been noted. Stimulants could exacerbate the symptoms of other disorders, including such serious problems as schizophrenia and Tourette's Syndrome. However, there were no indications that the drugs caused these serious disorders. Usually the side effects could be managed by altering the dosage level or by switching to another drug.

An important fact not commonly known, was that the optimal dosage level for cognitive effects, such as

attention and memory, were substantially lower then the dosage required for changes in motoric activity level. Thus, if the drug's effects were assessed by how much the activity level had decreased, there was a good possibility that the dosage level was too high to achieve positive effects on school performance. "Drug holidays;" periods such as weekends and summers when the child was not given the medication, were recommended by many physicians. The purpose was to maximize the effect of the drug when it was given and to minimize any possible growth retardation or other side effects.

There could be no doubt about the positive effects of stimulant medications in increasing attention for the majority of ADHD children. However, this intervention was far from being a panacea. When effective, the drugs merely made it possible for children to behave and to learn more normally. The drugs did not cure poor social skills or other negative behavior patterns learned in the past. Children would not suddenly be able to do complicated problems they previously did not understand because they could not pay sufficiently good attention when the concept was

taught a year or two earlier. Medical intervention was never sufficient by itself. A comprehensive treatment program that involved school and home was critical (Reeve, 1990).

The period of medication depended on each particular child. Most took medication during school hours, not on weekends or evenings. Some children responded to anti-depressants, which were effective but did not give the robust response found with Ritalin. Summertime always was better for ADHD children. They could go without medication, as there was no school and no complex tasks or long periods of concentration. A combination of medication and behavior management was more effective than either individually (Anonymous, 1991). The use of medication alone in the treatment of ADHD was not recommended (CHADD, 1988).

While not all children having ADHD were prescribed medication, in certain cases the proper use of medication could play an important and necessary part in the child's overall treatment. In the past several years, antidepressant medications such as Tofranil and Norpramine had also proved successful in treating the disorder. All these medications were believed to

effect the body's neurotransmitter chemical deficiencies, which may have been the cause of ADHD. Improvements in such characteristics as attention span, impulse control and hyperactivity were noted in approximately 75% of children who took psychostimulant medication (CHADD, 1988).

Studies of stimulant use in preschoolers (Rosenberg, 1987), indicated great variability of response, difficulty in documenting subjective evidence of response, and a greater incidence of behavioral or cognitive side effects than was seen among school-aged children. These results may have been partly due to the greater heterogeneity of presenting problems among preschool-aged children with hyperactivity and difficulty finding the appropriate dose of medication for small children (Blackman et al., 1991).

In view of the diagnostic difficulties in pre-school aged children and the lack of sufficient clinical studies to guide management, an individualized, cautious approach to the use of stimulant medication in young children seemed warranted (Davy & Rodgers, 1989). Medication would never be used as the sole treatment, but could always be tried in the

context of a multimodal management plan. Stimulant medication may have been considered in preschoolers with severe hyperactivity and inattention, especially when there was evidence of a constitutional component of their behavior disorder (Blackman et al., 1991).

When a child's behavior was considered severe enough for drug therapy, treatment would begin with an open trial using a small dosage. This was gradually increased until therapeutic effects or side effects were observed. Either Ritalin or Dexedrine could be tried. Dexedrine had the advantage of availability in liquid form. Beneficial effects and side effects would be closely monitored by parents and teachers using a rating scale. If a therapeutic effect was observed, then a blinded trial would follow in order to rule out placebo effect. Drug holidays (i.e., no medication given on weekends or during school vacation) would be considered on an individual basis and the continued use of medication reviewed annually.

While drugs were helpful in the day-to-day management of hyperactivity, they produced few, if any, enduring positive changes after their cessation. Academic achievement and productivity were not

appreciably improved by the drugs, despite the positive effects on classroom conduct (Barkley, 1981).

Despite their lack of effects on achievement or long-term outcome, the stimulant drugs were useful in managing the behavior of hyperactive children. The difficulties these children presented to others who lived with, worked with, or attended school with hyperactive children could not be overlooked. If drugs could remove these difficulties, while reducing the level of censure, and punishment that ADHD children received, then they were worthwhile in the treatment of these children (Barkley, 1981).

The drugs were not a panacea for ADHD and should generally not be the sole treatment for ADHD children. Other therapies focusing on the myriad of social, psychological, educational, and physical problems these children often displayed would be needed. Drugs taught nothing; they merely altered the likelihood of occurrence of behaviors already in the children's repertoire. Families still needed child management training and other forms of counseling. Each professional had to be knowledgeable about the resources within the community that would be needed to treat the "total

child" with ADHD (Barkley, 1981).

The effectiveness of these medications had led to their widespread use with ADHD children (Barkley & Mash, 1989). Researchers firmly believed that stimulant medication for children with ADHD was an important part of the total treatment. Without this medication many of these children would not be able to perform at their optimal level in school, at home, or in the community. The consequences could be so serious that a trial of stimulants could be indicated for any child who was properly diagnosed with ADHD (Baren, 1989). The results of using stimulant medications was quite effective for the management of ADHD symptoms in most children older than 5 years (Barkley & Mash, 1989).

Although age was not a factor in the efficacy of drug treatment it was cautioned that children less than 4 years of age possibly would not respond in a positive fashion. Between 4 and 5 years of age, the response rate was probably much less, and under 3 years of age, the drugs were not recommended for use (Barkley & Mash, 1989). Taken together the limited number of studies investigating the use of stimulant medication with

young ADHD children did not justify the widespread use of medications. Current data contained a greater number of nonsignificant results and deleterious side effects than positive outcomes. Furthermore, the positive effects with young children tended to be considerably more variable and unpredictable than those obtained with older school-aged children. If the practice of stimulant drug treatment was to continue with young children, it was critical that parents, physicians, professional educators, and clinicians coordinated their efforts and systematically documented how the medication affected the developing child in a variety of settings. Whenever the safety and or efficacy of prescribed drugs were in question, adequate monitoring procedures were judicious, and would be a major component of the actual treatment plan (Rosenberg, 1987). A greater amount of short-term and long-term data needed to be compiled in order to assess whether early drug intervention resulted in improved family interaction, increased social adaptability, and success in the school environment. Until then, the available data clearly indicated that a treatment intervention other than medication should be employed

with young ADHD children (Rosenberg, 1987).

General Family/Parent Strategies and Techniques.

The idea of training parents to help manage their child's disruptive and disordered behaviors was well supported from research. Detailed and thorough programs improved parent understanding and management of behavior problems, applicable to the preschool child with hyperactivity. Barkley and Mash (1989), advocated a parent training program for children, ages 2 to 11 years with ADHD. The program used ten steps, with 1 to 2 hour weekly training sessions, provided either to individual families or groups.

Step 1. The review of information on ADHD was discussed. In this session the therapist provided a clear overview of the nature, developmental course, prognosis and origins of ADHD. This session was essential in the training to dispel a number of misconceptions parents often had about ADHD in children.

Step 2. The causes of oppositional/defiant behavior were discussed. The parents were provided with an in-depth discussion of those factors identified in past research as contributing to the development

of defiant behavior in children. Parents were taught that when problems existed in the character of the child and/or parent and there were stressful family events, this increased the probability of the children displaying signs of defiant behavior. This content covered the potential misconceptions that parents had about defiance in that it was primarily attention-getting in nature.

Step 3. The development and enhancement of parental attention was discussed. Parents were trained in more effective ways of dealing with child behavior and how to enhance the benefit of their attention to the child. The technique consisted of verbal narration and occasional positive statements to the child, with the attention being placed on the times when appropriate behaviors were displayed by the child. Parents were taught to ignore inappropriate behaviors, and to greatly increase their attention to ongoing prosocial and compliant child behaviors.

Step 4. The attendance to child compliance was discussed. This session extended the techniques developed in session 3, when parents used direct

commands to children. Parents were trained in methods of giving effective commands. They were encouraged to use a more effective commanding style and to pay immediate positive attention when compliance was started by the child. Parents were asked to increase the frequency with which they gave a brief command to the child that week and to reinforce each command obeyed. Research suggested that these brief commands were more likely to be obeyed, thereby providing excellent training opportunities for attending to compliance.

Step 5. A home token system was established. ADHD children required more frequent, immediate and concrete consequences for appropriate behavior and compliance in order to maintain it. A home token system provided a way of dealing with the child's difficulties, which brought more concrete consequences to bear on child compliance. The parent listed the child's home responsibilities and privileges and then assigned values of points or chips to each. They were encouraged to have at least 12 to 15 reinforcers on the list to maintain the motivating properties of the program. Plastic

chips were used with children 8 years or younger. During the first week, the parents were not to fine the child or remove points for misconduct. The program was for rewarding good behavior only. Parents were asked to be liberal in awarding chips to the child for even minor instances of appropriate conduct. Parents were also encouraged to give bonus chips for good attitude or emotional control in the child. Families were to establish and maintain such a program for at least 6-8 weeks.

Step 6. Implementation of time out for noncompliance was discussed. Parents were trained to use response cost (removal of chips) contingent on noncompliance. In addition, they were trained in an effective technique for time out, to be used when two serious forms of defiance continued to be a problem. The time out was implemented shortly after noncompliance by a child began. Parents delivered a command, waited 5 seconds, issued a warning, waited another 5 seconds and then took the child to time out immediately, should compliance not begin after these commands or

warnings. Children were not given control over the amount of time spent in time out. Parents told the child not to leave the time out chair until permission to do so. Three conditions had to be met before the child could leave time out. First, the child had to serve a minimum period in time out, usually 1 to 2 minutes for each year of his or her age. Second, the child must have been quiet for a brief period. Third, The child had to agree to obey the command. Failure of the child to remain in time out until all three conditions were met resulted in additional punishment. This consequence could consist of a fine within the home token system, extension of the time out interval or placement of the child in his or her bedroom. In that case, toys or other entertaining activities were previously removed from the bedroom.

Step 7. Extension of time out to additional noncompliant behaviors was discussed. Any problems with initiating time out were reviewed and corrected.

Step 8. Management of noncompliance in public places was discussed. Parents were taught to use their

home management methods to difficult public places, such as stores, churches and restaurants. Parents used a "think aloud-think ahead" statement. They would stop just before entering a public place, review two or three rules with the child that had been previously defied, and then explain to the child what reinforcers were available for obedience and what punishment would occur for disobedience. Parents then entered the place and immediately began attending to and reinforcing ongoing child compliance. Time out was used immediately for disobedience. Time out in public required modifications from its use at home. Parents taught the child to stand against the wall farthest from the central aisle of a store. If this was inconvenient, they took the child to a rest room or had him or her face the side of a display cabinet. If these were not possible, they took the child outside the building to face the front wall or returned to the car for time out. When none of these locations seemed appropriate, parents would be trained to use a delayed-punishment contingency. The parent

carried a small notebook to the public place and recorded in the book what violation the child would have to serve a time out for. Parents were encouraged to keep a picture of their child sitting in time out at home with this notebook, and to show it to the child before entering the public building. It served as a reminder to the child of what may be in store should rules be violated. Half of the usual time out interval was sufficient for public misbehavior, since the richly reinforcing activities in public places helped the child to gain more control.

Step 9. Management of future misconduct was discussed. Parents by now had acquired an effective repertoire of child management techniques. They had to think about how these techniques could be implemented in the future, if some other forms of noncompliance developed.

Step 10. A one-month review/booster session took place. In the final session, the concepts taught in earlier sessions were reviewed. Other sessions could be added to deal with additional issues that persisted.

The goals of this program were not to cure, but to lessen the child's behavior problems, by helping parents to create a social environment that maximized the child's potential to behave appropriately. Sensitizing parents in how their own temperament and reactions to stress escalated behavior problems, provided another avenue to improving the "fit" between child and family. Research supported this program's effectiveness, and studies documented the beneficial effect of parent training as much as 4 to 5 years after treatment. "Parents learned a complement of skills that resulted in improved compliance in their children" (Pisterman et al., 1989).

Specific Recommendations for Parents.

Recommendations for the Proper Home Learning Environment.

1. Parents let their child know what was expected of him or her in order to do well. They set high, but also realistic goals.
2. Parents considered beginning a mandatory time of study for the little bit older child.
3. Parents provided a regular time and place where the child was to do his or her work.

4. Parents helped the child organize homework into manageable tasks.
5. Parents were interested in the work their child brought home. They gave praise for good work or attempts at good work.
6. Parents were calm when talking about homework. Being patient when giving help was needed. They didn't give too much help.
7. Parents were willing to spend time with their child. They listened to what the child had to say and let him or her know they were interested.
8. Parents had regular contact with the teacher. They didn't wait for the teacher to come to them. It was important to let the teacher know they were interested.
9. Parents needed to be firm, consistent, and loving in their discipline.
10. It was important to make sure that homework time came to an end at an appropriate time. Children also needed time for fun and relaxation (Canter, 1988).

Recommendations for Positive Parent/Child Relationships.

To help the ADHD child adjust successfully at home, a variety of techniques were discussed by many researchers. These strategies are listed below.

1. Parents accepted their children for who they were. They let them know they were individuals of worth.
2. Parents made life predictable each day. They structured or planned, so that their child could make predictions for him or herself. They set up specific time periods for waking, bedtime, chores, homework, playtime, T.V. time, dinner, etc. Changes in schedule were disturbing to some ADHD children. Explaining any changes in routine ahead of time helped the child understand and anticipate the changes.
3. Parents were consistent with discipline, demands and daily routines. They praised and rewarded immediately any and all good behavior and performance. Parents were firm on setting limits, but gave plenty of love and affection too. Being clear and concise when setting up the rules for the entire family was important. Rules, as well as consequences for breaking them, and rewards for appropriate behavior could be written down and

posted in a prominent place.

4. Parents did not let their child manipulate the entire environment of the home. Rewards were changed if they were not effective in motivating behavioral change.
5. Parents removed pressures to achieve. There was a difference between pressure and support. Parents could be supportive without pressuring.
6. Parents did not make long-range threats. Punishment needed to be immediate to the act.
7. Parents presented a united front to the child; father and mother, as well as relatives and siblings, when possible.
8. Parents did not bug their child about school. If he or she had a good day, they would soon know it; if not, he or she wouldn't want to talk about it anyway.
9. Parents did not compare children within their home with other children. Each child had the right to be him or herself.
10. Parents gave genuine praise for jobs well done. They assumed the child wanted to do well, assisted where needs arose, then stepped aside and let the

child try for independence (Murphy & Della Corte, 1987).

11. Parents helped their children learn to succeed. "Make a habit of succeeding" (Anonymous, 1991).
12. Parents did not take for granted that their child knew very simple concepts like up, down, front, behind etc.
13. Parents would approach each situation with a positive attitude.
14. Parents allowed their child to play with younger children if that was where they "fit in". Many ADHD children had more in common with younger children. The child could still develop valuable social skills from interaction with younger children (CHADD, 1991).
15. Parents provided their child with his or her own "special" quiet spot in the home. This place was without distractions in which to do academic or quiet work. The parents could face a desk toward a blank wall, minimize clutter, and avoid bright, distracting colors or patterns in decor. Parents had to remember that their child could have difficulty filtering out unnecessary stimulation

(CHADD, 1991).

16. Parents gave instructions as simply and clearly as possible, demonstrating if necessary. They asked their child to repeat the directions back, then praised the child when he or she responded correctly. They did not give more than one or two instructions at one time. If a task was difficult, it needed to be broken into smaller parts and each part taught separately (Anonymous, 1991).

17. Parents kept their child's stimulation level as low as possible. They had their child play with one peer at a time, involved him or her in one activity at a time, removed needless background noises such as the radio or T.V., and put unused toys, games, etc. out of sight (Murphy & Della Corte, 1987).

18. Parents kept a diary of foods eaten and effects, if any, on behavior. Although rare, allergies could sometimes produce reactions similar to hyperactivity. Some common food culprits were chocolate, tomato products, wheat, sugar, milk products and peanuts. They also noted any strong

reactions (i.e. headaches) to fumes from perfumes, inks, detergents or cleaning products, or other distinctive smelling items (Anonymous, 1991).

19. Parents repeated messages, directions and requests. This was often an area that caused inefficient disciplinary techniques and created a variety of unpleasant behaviors in the family. To stop this ineffective process, They did the following: " say what you need to say, but say it once--briefly--clearly--completely--firmly--calmly" (Anonymous, 1991). They followed through with a logical consequence or restructuring technique.
20. Parents provided supervision, by being physically near their child. They provided supervised recreational experiences. A swim group, play group or short walk together were alternative ways of providing organization for the child (Murphy & Della Corte, 1987).
21. Parents encouraged their ADHD child to engage in activities that would burn off excess energy, such as jogging, track, swimming or other endurance sports that did not require hand-eye coordination

(Murphy & Della Corte, 1987).

22. Parents allowed their child choices within the limits they had set. They helped the child develop self-esteem. Children were encouraged to participate in an activity he or she enjoyed and could receive recognition in (Murphy & Della Corte, 1987). These choices helped to develop initiative, self-control and gave a sense of personal influence.
23. Parents helped ADHD children find avenues of self-expression, to help them express their wants in a acceptable, useful manner. Children sometimes used misbehavior to communicate. Teaching appropriate verbal communication skills were needed. They had to ask themselves "What did my child want to have happen as a result of this behavior?" This helped him or her search for other ways to gain it (Murphy & Della Corte, 1987).
24. Using a timer with small chores helped give their child a sense of passing time.
25. The ADHD child's behavior could often be very irritating. However, if parents became excessively angry (anger was normal, but could be

controlled), the effectiveness with their child would be greatly reduced. Parents needed to keep their voice quiet and slow when managing an ADHD child (Anonymous, 1991).

26. Parents separated behavior which they did not like from the child's behavior that they did like, e.g. "I like you. I don't like you to track mud through the house."
27. Parents were aware that ADHD children were frequently insensitive to pain. They could sustain cuts and bruises with little discomfort. However, overreaction to minor hurts was an attention getting device (Murphy & Della Corte, 1987).
28. Above all else, the ADHD child needed compassionate understanding. Parents and teachers did not pity, tease, be frightened by, or overindulged their child. They understood that the condition was real; it involved deficits; that they did not cause the condition; and much could be done to help the ADHD child at home.

Researchers had also recommended specific management techniques for parenting very young children. These techniques were separated into four levels that

were differentiated by age.

The first level dealt with six to nine month olds. Praise was the important ingredient for parents to remember. They needed to show genuine love, to be consistent and to divert the child's attention away from any difficulties.

The second level dealt with nine to fifteen month olds. Setting limits was the key to this age group. Children loved rules and structure at this age. They felt loved. Limits needed to be fair and appropriate for the age of the child. The hardest thing to do but, the most important, was to be consistent and follow through for time outs. Parents gave the same cues to the child, avoided idle threats or placed authority on another person; "Wait until you father gets home and hears what you did". Limits were very important at this age. They helped the child to function in his or her world and taught trust and love. This discipline and structure helped the child actually gain freedom in his or her world. If the parents respected their children, in turn the children respected the parents. Discipline was viewed as "lovingly teaching in a positive way". A child testing the limits was very

normal.

The third level dealt with fifteen to eighteen month olds. Time outs implied to the child that "I'm ignoring you, I need to get away from you". The first time out would be without lecture to the child and eye contact. This would allow the child to cool off. Then the parent would lecture the child about the undesired behavior. The parent was brief with the explanation given the child, as to why he or she was in time out and the amount of time the child stayed in time out. Generally, one minute per year of age was sufficient. At that point, eye contact would be important. The parent would hug their child and say "I love you and feel bad that you hit your brother, but you can not do this." The parents were always positive in their statements. The child was put in a place with minimum distractions for a safe time out.

The fourth level dealt with eighteen to twenty four month olds. Temper tantrums presented the biggest challenge at this age. Parents needed to ignore these when possible. When a child did tantrum, the parents did not talk or touch the child. They stayed in control, without yelling or slapping, otherwise the

child would gain control. Besides, hitting and screaming would lead to a vicious circle of violence. No idle threats were made either. The parents gave the child choices and were consistent. They respected the choice that the child made. Positive rewards were very important. These could be M&M's, stickers, pennies, hugs, stars on a calendar, loops to cut off to gain a reward or marbles to put in a jar to gain a reward when the jar was full. The parents stayed with tangible rewards for the very young child. They never took away a reward once it was earned. Finally, children needed to see parents caring and loving each other, along with loving their children (Dr. J. Kreiger, personal communication, April 11, 1991).

CHAPTER III

SUMMARY

Attention deficit hyperactive disorder (ADHD), is a syndrome which is characterized by serious and persistent difficulties in attention span, impulse control and sometimes hyperactivity. ADHD is a chronic disorder which can begin in infancy and extend through adulthood, while having negative effects on a child's life at home, school, and within his or her community. The number of children diagnosed with ADHD dramatically increases each year. Researchers have yielded a considerable amount of psychological and medical data, that is a rich source of information for the guidance on how to handle ADHD children.

This paper offered practical guidelines for use in managing ADHD children. Techniques and strategies were listed for classroom use and for parents of ADHD children. Various forms of treatment were discussed, along with guidelines to their effectiveness.

This paper was limited to research done after 1981, with the exception of material dealing with the Feingold Diet. Information pertained to young ADHD children from 3 to 8 years old. The most current terms

and definitions were used throughout the paper.

Conclusion

The life of a child with ADHD is not easy. Young, preschool children with ADHD display high levels of activity as well as carelessness, failure to complete tasks, or difficulties following directions. A child with ADHD has difficulty playing alone, is constantly on the go, destroys rather than plays with toys, and often lacks friends because of the aggression and lack of cooperation shown at playtime. Without proper treatment, an ADHD child also experiences school failure later on, continued poor social adjustment, poor self-esteem and family turmoil. However, research has provided numerous strategies and techniques to enhance and improve the lives of these children. Various forms of behavior management, the use of a controlled diet, general nutrition tips, and drug therapy are currently the popular forms of treatment being used with ADHD children.

Recommendations

Presently the most effective treatment for ADHD requires full cooperation of teachers, parents and other professionals working closely with the child.

This coordinated effort will ensure success in the lives of ADHD children.

When teaching the ADHD child, the classroom teacher should remember the MORES!

1. Do more reminding.
2. Be more organized with a predictable schedule and giving directions often.
3. Be more aware. Have a seating arrangement that would cut down on distractibility.
4. Be more simplistic. Simplify things in your classroom. For example, have one place for papers frequently used.
5. Have more repetition. Say and do things over and over again.
6. Provide more praise. Avoid punishment.
7. Provide more supervision of unstructured time and a program for these times.
8. Be more tolerant. Children will display excessive movement at times.
9. Have more communication between the parent and the teacher.
10. Have more checks for recording if homework or materials are returned.

11. Be more accepting and understanding of the disability.
12. Be more vocal. As a teacher, he is a part of the child's evaluation. Help in placing the child in the most optimum education placement possible (Schley, 1991).

Behavior modification also works on teaching the child self-control and social skills. Rules of conduct are clearly explained to the child. The child is then taught to repeat the rules and directions aloud before beginning any task, until the rules had become internalized. Consequences for breaking a rule and payoffs for following a rule are provided frequently, immediately and consistently. Many forms of positive reinforcement are available. Researchers feel the right approach for teachers is to provide the child with consistency, a structured environment, clearly defined expectations and limits, opportunities for physical activity and movement, and plenty of positive praise and love.

Researchers also advocate punishment consequences when needed. The general rules for responding to a child's behavior:

If the child is--NON-COMPLIANT:

First, ignore the refusal.

Second, lead child through the task or reschedule the activity.

Third, reinforce the child's compliance.

If the child is AGGRESSIVE:

First, provide immediate negative feedback specific to the behavior.

Second, remove the child from the area for a limited period of time (30 sec-5 minutes).

Third, reinforce appropriate behavior, etc., sharing, cooperative play.

If the child is SELF-INDULGENT:

First, ignore the behavior.

Second, remove other children if necessary.

Third, reinforce the child's appropriate behavior; requesting without whining, responding to class rules, appropriate participation in groups etc.

If the child is SELF-STIMULATORY:

First, interrupt the behavior.

Second, redirect the child to another activity.

Third, reinforce the child's appropriate behavior, i.e., hands quiet, appropriate play with toys

(Templeman, Fredicks, Udell, 1989).

Parents of ADHD children have many alternatives when dealing with their children. Researchers advocated a controlled diet, behavior management, parent training programs and drug therapy as the most effective forms of treatment. Parents should provide outlets for the release of excess energy for their ADHD child. Their child needs daily outside activities such as running, various sports or long walks. Home life should be kept organized. Household routines help the child to accept order. Parents should also avoid fatigue in their children. Often, self-control is broken down when a child gets tired. This will cause the hyperactivity to become worse. Parents need to maintain firm discipline. ADHD children are difficult to manage. They need more careful, planned discipline than the average child. Rules are enforced and aggressive and/or attention getting behaviors are not accepted, just as parents would not accept these behaviors in normal children. The family needs a few clear, consistent, important rules. Researchers believed that discipline should be enforced with non-physical punishment when possible. The family should

have a time-out place to use when their attempts to enforce rules do not work. Physical punishment is avoided to teach children to be less aggressive, rather than make aggression acceptable. Parents need to display control and calmness whenever possible.

Researchers have suggested that a controlled diet and general good nutrition are important to an ADHD child. However, evidence is mixed as to the effectiveness of the Feingold Diet. There is no scientific proof that refined sugar and artificial substances cause ADHD. Use of a quality behavior management program along with diet control should be considered as a first step when treating the ADHD child. There have been a few reports in medical journals of children who responded favorably to changes in diet. It is therefore this writer's opinion that diet control, along with behavior management should be tried first. Removal of sugar from a child's diet certainly could prove healthy from a nutrition standpoint. Parents would need to closely monitor their child and work with a physician knowledgeable in diet management for ADHD children.

The use of drug therapy is another possibility for

ADHD children. A combination of medication and behavior management is more effective than either individually. Working on behaviors forces teachers and parents to provide structure and to attend to the child's individual needs, without relying on drugs as a panacea for all the child's problems. While not all children having ADHD need drug therapy, in certain cases the proper use of medication can play an important and necessary part in the child's overall treatment. Ritalin is the most commonly used medication in treating ADHD. It has been prescribed for years with very favorable results and minimal side-effects. Other medications which are used to treat ADHD are Cylert and Dexedrine. Antidepressants of Tofranil and Norpramine have also proved successful in treating ADHD.

The most common medication side effects are appetite loss, sleep difficulties, and/or lethargy in the classroom. Dizziness, constipation and an increase in heart rate do occur, but rarely. These can often be controlled through medication dosage adjustments or changing to a different form of medication. However, children who have a family history of motor tics and

Tourette Syndrome are encouraged not to use Ritalin.

All drug usage should be closely monitored by parents and physicians. Teachers should be aware of the child's behavior while taking medication and keep written reports of changes in the child's behavior. This can be extremely helpful to the physician when determining overall effectiveness of taking a drug for ADHD. Summertime is always better for ADHD children. They can take a "drug holiday" and go without medication since there is no school and no complex tasks or long periods of concentration to be concerned about.

It is important to remember that the use of drug therapy helps to decrease the symptoms of ADHD but does not "cure" the problem. The use of medication allows the child to concentrate and become more receptive to learning. It can improve the child's behavior in their play, social conduct and compliance to commands and rules. These result in less need for supervision, reprimands, commands and punishment from parents and teachers.

Research has also indicated the use of caution when administering medication to preschool aged

children. There is a lack of sufficient clinical studies to encourage drug therapy for children 4 years old or younger. In selected cases, medication can be considered for preschoolers with severe attentional problems, behavioral problems or self-injurious behavior.

This writer sincerely hopes that this paper provided a practical guide for teachers and parents with young ADHD children. Continuous updating of current literature is a must since the research being done on ADHD is always expanding. In conclusion, "the ideal management of a preschooler with ADHD should include supportive training for parents and a tolerant but structured preschool experience. Implementation of family and preschool modalities is a preferred first step before consideration of medication, but the strengths and weaknesses of individual children and their families will guide the pattern of multimodal interventions that are selected" (Blackman, Westervelt, Stevenson & Welch, 1991).

R. Reeve, (1990), stated "If optimal functioning within the school and the family is to occur, professionals in and out of the school environment, as

well as the child's parents, must develop a comprehensive understanding of the disorder, ADHD, and work together to meet the child's individual needs."

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