

INDIVIDUALS WITH ATTENTION DEFICIENCY HYPERACTIVITY DISORDER

"A Guide for Families"



Özel Eğitim ve
Rehberlik Hizmetleri
Genel Müdürlüğü

**INDIVIDUALS WITH ATTENTION DEFICIT AND
HYPERACTIVITY DISORDERS
“GUIDEBOOK FOR FAMILIES”**

EXECUTIVE DIRECTOR

MEHMET NEZİR GÜL

EDITORIAL DIRECTOR

AHMET KAYA

EDITOR

PROF. DR. İBRAHİM H. DİKEN

DR. MURAT AĞAR

WRITERS

DOÇ. DR. ŞAZİYE SENEM BAŞGÜL

NAZLI DENİZ SARI

REVISED BY

M. ÖMER ARVAS

ERDOĞAN MURATOĞLU

PROJECT TEAM

MURAT TANRIKOLOĞLU

ARZU ÇOŞKUN USLU

GRAPHIC DESIGN / TRANSLATION

AFS MEDYA

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INTRODUCTION

Hello dear parents - dear students,

Life becomes even more meaningful for us as we get to know virtuous, talented and conscious students like you and their parents. However, we are making an intense effort with all our friends in order to contribute to you and your parents. Contributing to education for you and your parents and collecting the fruits of these contributions is a source of joy for us.

In this respect, we have prepared a series of educational support book in order to serve as a guide for our esteemed parents, whose intense efforts we have always witnessed. Our aim is to enable the parents of our beloved students who need special education to support our students more consciously, to enable our students to recognize their inadequacies more closely, to know the characteristics of the situations they live in, and to learn the possible problems and solutions they may experience with the help of guidebooks containing basic information.

First of all, I would like to thank UNICEF for their support to the Strengthening the Capacity of Guidance and Research Centers to Provide Inclusive Education Services (RAMKEG), our esteemed academicians and valuable teachers who contributed to the preparation of the books in the light of scientific knowledge. I would also like to thank our parents and other student relatives who will support our students by using these guidebooks.

I hope that these guidebooks, prepared according to the types of disability of our students who need special education, will contribute to our students and you, our valuable parents, in providing a more qualified education life.

We are honored to be with our special students and their families at anytime, anywhere and in any situation.

Stay in good health and well-being.

Mehmet Nezir GÜL

Director General of

Special Education and Guidance Services

Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is one of the major well-defined psychiatric problems of childhood. ADHD is a neurodevelopmental disorder that consists of three basic symptom clusters: hyperactivity, attention deficit and impulsivity. As a result of numerous scientific studies conducted in the last 30 years, it has been shown that ADHD is a biological and inherited structural disorder. Although ADHD symptoms usually begin to be observed between the ages of 4-5, in most children the symptoms become more obvious with the school term.

ADHD is diagnosed as a result of psychiatric interview with the child and family, mental state examination, taking the developmental and medical history of the child, evaluation of scales and tests information which is obtained from other environments where the child is present and applied when needed by the physician as a whole and meeting the ADHD diagnostic criteria in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) [1].

When ADHD is left untreated, its consequences primarily affect the child and also his/her whole environment. The symptoms and consequences of ADHD, which is diagnosed by a Child and Adolescent Psychiatrist and requires medical treatment, constitute a clinical picture that everyone comments about it. From this point of view, it would not be wrong to say that ADHD is a public health problem. The results of early diagnosis and treatment are very promising. For this reason, ADHD is the disorder that should be known by health and education professionals, all experts dealing with the child and families.

In this booklet, the definition of ADHD, its causes, clinical features of children and adolescents with this diagnosis, possible difficulties that children and parents may experience and what can be done in these situations, and information about the legal rights of children with ADHD are included.



DEFINITION AND CLASSIFICATION

ADHD is a neurodevelopmental disorder consisting of three basic symptom clusters named as hyperactivity, attention deficit and impulsivity. It is one of the well-defined and most important psychiatric problems of childhood. All health-related authorities, especially the World Health Organization and the American Psychiatric Association, have recognized this disorder as a disease.

Contrary to popular belief, ADHD is not a modern disease. In 1844, Heinrich Hoffmann published a story book whose protagonist was ADHD and described it as “Fidgeting Phill” [2]. ADHD was scientifically defined for the first time 100 years ago. In 1902, in *The Lancet*, a pediatrician named George Frederic Still reported that some children were more dynamic; they had academic difficulties even though they did not have mental disabilities, and they had difficulty learning the moral rules [3]. Today, these three symptoms define the criteria required for the diagnosis of ADHD. This disorder, which was called by different names in scientific classification systems in later years, was named as “Attention Deficit Hyperactivity Disorder” in 1987. ADHD is one of the most researched disorders and has the highest diagnostic validity.



Picture 1: “Fidgety Phill”, Heinrich Hoffmann. [2].

ADHD symptoms are described by parents and teachers as “laziness”, “mischief” or “brattiness”. Many parents think that an impulsive child can control her/his behavior if she/she wants to, and therefore punish the child heavily. On the other hand, some symptoms of ADHD are defined as laziness, moodiness, jealousy and irresponsibility, and the negative effects of the disease on the child’s life quality are ignored. Another incorrect definition is that ADHD is a moral issue. All these approaches cause the skip of diagnosis for children with ADHD, and serious loss of function and self-confidence in the process. Clinical evaluation is the most important determinant in ADHD diagnosis.

ATTENTION: ADHD is not an intentional behavioral problem of the child, but it is a medical diagnosis.

For ADHD diagnosis in DSM 5, Diagnostic and Statistical Manual of Mental Disorders, total of 18 symptoms were identified, 9 in the attention domain and 9 in the mobility and impulsivity (Table 1) [1].

Table 1: DSM 5 Diagnostic Criteria of ADHD

Attention Deficit (Lack of Attention)

1.	Most of the time, he/she is unable to pay attention to details or carelessly makes mistakes in school assignments, work or other activities
2.	Most of the time, he/she gets distracted by the tasks he/she takes or the activities he/she does.
3.	When speaking directly to his/her, he/she often seems not to listen.
4.	Most of the time, he/she is unable to follow instructions and complete school assignments, trivial jobs, or workplace assignments (it does not depend on understanding what is asked of him/her).
5.	Most of the time, he/she has difficulties in organizing and planning the tasks and activities he/she undertakes.
6.	Most of the time, he/she avoids, dislikes or unwilling to take part in tasks that require constant headwork.
7.	Most of the time, he/she loses what is needed for the tasks or activities he/she takes on (example, toys, school assignments, pens, books or tools).
8.	Most of the time, he/she is easily distracted by external stimuli.
9.	Most of the time, he/she is forgetful in daily activities.

Hyperactivity / Impulsivity

10.	Most of the time, his/her hands and feet are wiggling or wiggling in his/her seat.
11.	Most of the time, he/she gets up and walks around in the classroom or other situations where he/she is expected to sit.
12.	Most of the time, he/she rushes or climbs in unsuitable situations. (Adolescents may not have feelings of uneasiness perceived only by them.)
13.	Most of the time, there is difficulty in quiet leisure or playing a game.
14.	Most of the time, he/she is on the move or pretends to be driven by a motor.
15.	Most of the time, he/she talks so much.
16.	Most of the time, he/she hits the answer before the question asking is completed.
17.	Most of the time, he/she has difficulty to wait his/her turn.
18.	Most of the time, he/she interrupts others or gets in the way of what they do (for example, he/she pokes at other people's games or speech).

ADHD is a disorder that includes three symptom clusters with different clinical presentations under a single name. Not all ADHD symptoms need to be seen for diagnosis. The number and frequency of these symptoms are important. It is necessary to have 6 of the 9 symptoms in the attention or hyperactivity section for diagnosis. Combined type ADHD is mentioned when there are 6 symptoms in both areas. In addition, two different types are also defined, in which hyperactivity and impulsivity are at the forefront, and attention deficit is at the forefront in terms of clinical appearance and features of symptoms (Table 2). It is important for the diagnosis that the symptoms start before the age of 12, having been present for at least 6 months and observed in more than one environmental setting. Having symptoms only at school or only at home is not sufficient for diagnosis [1]; [4].



Table 2: ADHD subtypes

Combined Type ADHD:
There are all three symptoms of attention deficit, hyperactivity, and impulsivity. Classically, this type is understood when ADHD is mentioned. It is the most common ADHD subtype.
ADHD with Hyperactivity and Impulsivity:
It is the type in which symptoms of hyperactivity and impulsivity are observed more frequently and intensely than symptoms of attention deficit. More adaptation and behavioral problems are observed than academic problems. It is the rarest type.
ADHD with Attention Deficit:
These children generally have low academic achievement or are below their capacity. However, adaptation problems and mobility are almost non-existent. Their failures can be described by teachers and families as laziness or a problem of capacity. For this reason, they are usually diagnosed late and are brought late for the treatment. When treatment is started late, the possibility of getting results from the treatment decreases.

ATTENTION: For ADHD diagnosis, symptoms should be observed from an early age and should be in more than one environmental setting.

ATTENTION: ADHD is a disorder with 3 different clinical presentations under a single diagnosis heading.

BOOK SUGGESTION: Öztürk M., Başgül, Ş.S. (2020). Impulsivity in Children. "Diagnosis and Treatment of Attention Deficit and Hyperactivity Disorder". Istanbul: Kite Publications

Inattention, mobility or impulsivity can be seen from time to time in most of us. However, these symptoms are much more frequent and severe in people diagnosed with ADHD. Therefore, their lives are negatively affected. In addition to difficulties due to attention problems, mobility and impulsivity, the lives of these people may be adversely affected due to secondary problems accompanying ADHD and other psychiatric disorders (Table 3).

ATTENTION: Children with ADHD are more likely to experience other mental illnesses and their symptoms may be more severe in these situations.

Table 3: Other psychiatric disorders that frequently accompany with ADHD

• Oppositional defiant disorder
• Conduct disorder
• Specific learning disorder
• Depression and bipolar disorder
• Anxiety disorders
• Tic disorders

ADHD can be confused with many medical conditions. It is important that the differential diagnosis of these situations from ADHD is made by the Child and Adolescent Psychiatrist who follows it (Table 4). However, this does not mean that tests will be asked in every child. After the clinical examination and evaluation, the child and adolescent psychiatrist may request some tests for differential diagnosis and evaluation from other specialists, if necessary [5].

ATTENTION: Since ADHD symptoms can be confused with other medical conditions, it is important that possible causes are evaluated in detail by a physician when it is required.

Table 4: Diseases and disorders that can often be confused with ADHD

Thyroid gland diseases
Some structural disorders in the brain
Side effects of some medications
Some neurological disorders
Anemia
Fragile-X syndrome
Lead poisoning
Sleep apnea



CAUSES

Scientific studies have shown that ADHD is a neurodevelopmental disorder that occurs with the contribution of various environmental factors on the basis of genetic predisposition [6].

Genetically, ADHD is a complex genetic disorder. In molecular genetic studies, it has become clear that DRD4 (D4) and DAT1 genes, especially related to the dopamine system, are responsible. In addition, there are studies showing that norepinephrine-related genes are affected too. As a result of twin studies, comorbidity for ADHD was reported to be 50-84% in identical twins and 30-40% in fraternal twins. The ADHD risk is 60% in children whose parents have ADHD. In our country, Ercan et al. (2013) reported the prevalence of ADHD as 12% in a study with a large sample. All data show that genetic inheritance is important in ADHD [7]; [8]. It has been reported to occur at a rate of 5-7% under the age of 18 and 0.6-7% in adults. In our country, this rate has been reported as 12-13% [6]; [9]; [10]; [11th].

In brain imaging studies, it has been observed that children with ADHD have low blood flow and sugar use in the frontal region, which is located in the front of the brain and regulates attention. In neuroanatomical studies, structural differences are reported in the brains of these children, such as the absence of the normal asymmetry and the small volume of some brain structures.



In recent publications, it is mentioned that there is not only frontal region dysfunction, but a common network problem in the connections between cortical and sub-cortex areas. These studies are aimed at understanding the cause of ADHD. The presence or absence of these findings is not determinative for treatment. Therefore, it is important for families to know that no imaging method is used, especially for diagnostic purposes [12].

In addition, it has been reported that children with ADHD have lower levels of dopamine and noradrenaline in the cerebrospinal fluid (CSF), blood and urine. However, there is no need for diagnostic CSF fluid, blood and urine analysis [13]; [5].

Negative environmental factors can also facilitate the development of ADHD. Birth traumas such as premature and difficult birth, multiple pregnancies, infections, and the mother's use of substances such as smoking, alcohol and drugs during her pregnancy may cause the development of ADHD in her children. It has been reported that ADHD can also be seen after head trauma. It has been shown that breast milk may be protective for ADHD [5].

The pathologies of children with ADHD, which are described above and involving the brain may also cause EEG disorders in these children. But, EEG is not required for diagnosis. However, if a seizure-like finding is observed in a child followed up with a diagnosis of ADHD, an EEG may be asked as a result of the physician's evaluation, if deemed necessary [14].

There are also psychosocial factors that cause ADHD. Reasons such as emotional deprivation, compelling life events, disorders in parent-child relationships and family functioning, family history of mental illness are considered to be factors that predispose and facilitate ADHD rather than causing ADHD. ADHD never occurs as a result of family inconsistent attitudes or limit (border) problems. However, the problems described above regarding the families of children with ADHD can be considered as negative factors in ADHD treatment. At this point, it is very important that families are informed about ADHD [5].

ATTENTION: There is no need for any imaging method and blood analysis to diagnose ADHD. These examinations are only requested by the physician who follows them, if he deems it necessary.



For detailed information about ADHD neurobiology, you can watch the video in English on the relevant link. <https://adhd-institute.com/burden-of-adhd/aetiology/neurobiology/>
(Access Date: 28.06.2020)



CHARACTERISTICS

ADHD is a neurodevelopmental disease and its symptoms may differ according to age and developmental period [4]. The first symptoms of ADHD can be noticed even in the womb. Mothers mention that their babies are very active in the abdomen during pregnancy. Some babies with ADHD may show symptoms of extreme restlessness, insomnia, constant crying, and refusing to eat in the first two years. When they are taken to pediatricians with these complaints, generally no reason can be found or they are diagnosed with “baby with gas”.

In preschool age, hyperactivity and accompanying motor disability are the most prominent symptoms in some children. These children generally do not walk, run and love to climb, and jump. They are incompatible and combative in games with their peers. On the other hand, they may engage in risky actions that may harm their bodies, such as hanging from a window, playing with fire, jumping from a high place. They may have problems with academic skills such as using pencil, drawing, and cutting. During this period, boys draw attention with their mobility and girls with learning problems due to attention deficit.

By school age, all three symptoms of ADHD become a problem. They have adaptation problems both at home and at school. Not being able to sit during the class, walking around in the classroom, and running around during breaks immediately attract the attention of the teacher and the school administration. Not being able to follow the lesson, not doing homework and low academic achievement are important symptoms due to attention deficit. Behavioral problems related to impulsivity cause intense problems in relationships with friends and in the relationship of the child with teachers and parents.



By the time of adolescence, ADHD symptoms continue to change shape in most cases. In adolescence, we can observe ADHD in two different ways. First, behavioral problems caused by impulsivity continue in more serious dimensions, causing further deterioration in the adolescent's relationships with his/her family and school. In addition, academic success decreases even more. Second, some children's impulsivity and hyperactivity gradually decrease during adolescence, but symptoms of attention deficit continue to be a problem.



You can watch the video in English on the definition of ADHD, its causes and difficulties in school. <https://www.youtube.com/watch?v=suEjXwnxaYY>
(Access Date: 28.06.2020)

Although these adolescents do not experience behavioral problems, they often conflict with their families due to academic failure due to attention deficit, social communication problems, and difficulty in taking responsibility. The hyperactivity of some adolescents gradually becomes hypo-activity [15]; [5] (Table 5).

Table 5: Common characteristics of adolescents with ADHD

Lack of Interest in Lessons and Less Success in Lessons Compared to the

Past: Especially children with good mental abilities can achieve average or even above average academic success even if they do not study regularly until adolescence. However, academic performance may drop rapidly after adolescence due to the increase in the number of lessons and the difficulty level of the lessons. This decreasing further increases adolescent's reluctance to class. The adolescent is completely disconnected from lessons. He cannot keep up with a certain tempo while preparing for important exams. Exam success is lower than expected.



Indifference in Fulfilling its Responsibilities: Difficulty in taking responsibility, not being able to maintain a regular job, not being organized are important symptoms of attention deficit. Adolescents with ADHD experience significant problems with simple daily responsibilities (such as room organization, cleaning, body care, domestic responsibilities). This situation causes intense conflict within the family.

Increase in Conflict with Family and Authority Figure: Developmentally, it is expected that adolescents have conflicts with their parents and authority figures. Impulsive adolescents, on the other hand, experience much more intense conflict with their parents and the authority figure due to their difficulty in obeying the rules. These conflicts cause serious problems in the family, ranging from time to time to violence actions. This situation, which leaves parents desperate, is the reason why many families seek treatment even if they are late.

Not Obeying the Rules at School, Skipping the School: Adolescents with ADHD can be either indifferent or rebellious against the rules at school. Conflicts with teachers, discussions, and behaviors that weaken teachers' authority are particularly common symptoms. On the other hand, not going to school without family's knowledge and making it a habit is one of the important problems.

Sudden Irritability, Inability to Control Anger: Sudden and quick irritability may be a normal symptom of the developmental period in adolescence. However, extreme temper tantrums, inability to control anger, very quick irritability, and difficult calming is among the general characteristics of adolescents with impulsivity.

Doing Harmful Behaviors to Himself-Herself and Property When Angry: Adolescents with ADHD who get angry quickly can exhibit harmful behaviors to themselves and their environment when they cannot calm down their anger. Behaviors such as punching, throwing, and breaking against walls and glass are common.

Making Inappropriate Friends: Adolescence is a period when friendships come to the forefront. Adolescent with ADHD easily get in touch with peer groups with bad habits and risky behaviors and act together with them. Parents' warnings about inappropriate friends are often ineffective.

Interest in Risky Actions: Impulsive adolescents take more risky actions compared to childhood, as their self-confidence increases. These risky actions can sometimes cause serious in-jury and accidents. For example, the high risk of traffic accidents due to fast and uncontrolled driving (motorbike-car).

Internet and Game Addiction: Adolescents with ADHD are much more risky in terms of internet and computer games addiction than other adolescents. Because of their difficulties in controlling themselves, they somehow cannot finish the games; they constantly try to jump to another “level”. They are more attracted to games with violent elements. If it comes to making money in games, there is a risk of developing a habit and addictions similar to gambling.

Uncontrolled Sexual Behavior: The act of acting without thinking about the end also manifests itself in sexual acts. There may be important consequences such as early sexual experiences, sexual intercourse that puts health at risk and pregnancy at an early age.

Increased Risk of Alcohol, Smoking and Substance Use: The most important risk activity of adolescents with ADHD is their early curiosity about alcohol, cigarette and substance use. These adolescents with excessive curiosity cannot refuse offers from their surroundings under the influence of “I wonder what will happen?” ponder. Ponder of “nothing will happen to me”, which is existed because of their extreme courage facilitates such substance use. Untreated adolescents are at greater risk in this respect.

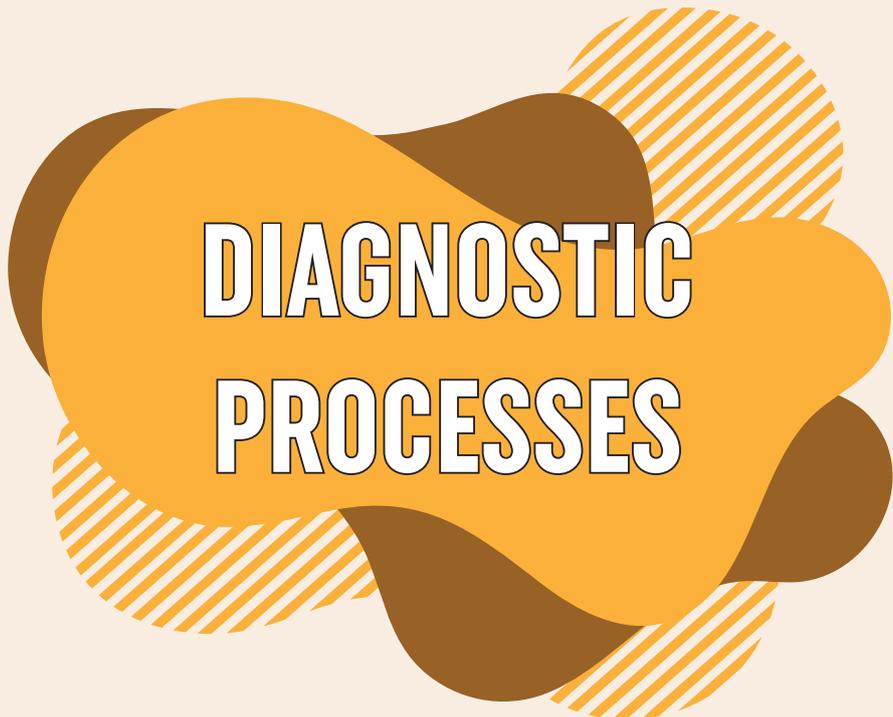


Sleep Problems: Children and adolescents with ADHD generally do not like sleep. More precisely, they do not want to fall asleep even if they are asleep, they want to live the night. Especially in adolescents who attend school, the disturbance of sleep patterns causes excessive difficulty in getting up in the morning and related crises within the family. The attention of the adolescent in the school who cannot sleep is disturbed more and his/her learning difficulties increase. Daytime sleepiness can be observed in adolescents with intense attention deficit. Especially in jobs that require mental effort, they easily feel sleepy and want to sleep.

Problems with Peer Relationships: Impulsive adolescents easily use physical force in conflict, and therefore quickly get involved in fights. Their leadership traits are prominent, and sometimes they can even bully. Because of their impulsiveness and courage, they can be harmed in fights. They intervene in problems that do not concern them, with the logic of “distributing justice” and find themselves in the middle of the problem. Because of this behavior, they can get a “bully” label. On the other hand, they are encouraged by their friends to take risky behaviors that may not be encouraged by other children due to their impulsiveness, courage and friendliness, thus they may become guilty. At this point, they actually become “victims”.

ATTENTION: ADHD symptoms can often be accompanied by additional difficulties such as behavioral problems, problems with friendships, sleep problems, addictions, and anger problems.

It is observed that adults diagnosed with ADHD have less success than their capacities, are more risky for mental illnesses such as anxiety disorders, generally do not complete their education, their job success is low, their friendship and marital relationships are problematic, and their self-confidence and social skills are low [16]; [17].



DIAGNOSTIC PROCESSES

Diagnostic processes of ADHD include medical, psychosocial and educational evaluations. In these evaluations, children's mental, physical, psychological, social development characteristics and academic skills, educational performances and needs are taken into consideration. Medical diagnosis is made by Child and Adolescent Psychiatrists. Guidance and research centers (GRC) are authorized in determining educational diagnosis and training needs.

Medical Diagnosis

ADHD is a medical disorder that, if left untreated, can affect the child's entire life. For this reason, diagnosis of ADHD is definitely performed through clinical evaluation made by a Child and Adolescent Psychiatrist. For diagnosis, the symptoms that start and continue in the developmental process of the child should be seen in more than one environmental setting as similar symptoms. For these reasons, it is very important to cooperate with his family and teachers in both the diagnosis and follow-up of ADHD. Information should be obtained from many sources and the behavior of the child in more than one environmental setting should be evaluated in detail.

EEG, X-ray, MRI and SPECT and blood tests are not required to make a diagnosis. If the child has an additional medical problem and the physician deems appropriate, they may request these tests. ADHD diagnosis cannot be made with intelligence and attention tests and other psychometric tests. These tests provide information to the physician about cognitive functions and attention by supporting the clinical diagnosis of the child. The physician may request these tests whenever he deems necessary.





Brain development continues rapidly in early childhood. For this reason, it is very important to distinguish ADHD symptoms observed in children under 6 years of age from normal developmental characteristics. This does not mean that ADHD cannot be diagnosed under the age of 6. By carefully evaluating child's developmental level, ADHD diagnosis can be mentioned if the mobility is too much unsuitable for his/her developmental level and in the same vein if the attention span is less than his/her same development level. For example, while a secondary school student's getting up and wandering around the classroom is not appropriate for his or her age and developmental level, it is considered normal for a 4-year-old child to display this behavior [5].

The behavioral, cognitive, social and emotional difficulties of children with ADHD may cause loss of function in many areas that determine the child's quality of life. In addition to ADHD symptoms, loss of function because of ADHD is also important for diagnosis. Dysfunction in children with ADHD should be evaluated in three areas as home, school and personal [1]; [4] (Table 6).

ATTENTION: Cooperation among physicians, families and teachers is very important and necessary in ADHD diagnosis and treatment.

Table 6: Loss of function in children with ADHD

At Home: Because of their inability to fulfill their responsibilities, their difficulties in following daily routines and making their organization, conflict areas constantly occur in the home.

At School: They experience problems because of their inability to follow lessons adequately, deficiencies in their homework, and their regular study habits.

In the Personal Field: Their friendship relations deteriorate because of having trouble obeying the rules of their games, not being able to wait their turn, and always stick to what they say.

It is important for the diagnosis that a few of symptoms start before the age of 12; they have been present for at least 6 months and observed in more than one environmental setting. The most important determinant in diagnosis is clinical evaluation. If the child does not show signs of ADHD during the clinical interview, it does not mean that the child does not have ADHD. Because of this, it is very important to take the child's story in detail.

ATTENTION: ADHD diagnosis is determined by the Child and Adolescent Psychiatrist as a whole and meeting the necessary criteria for diagnosis through psychological examination of the child, interview with the family and taking the developmental and medical history of the child, information obtained from child's other environmental settings, and applied scales and tests which are deemed necessary.

After the medical diagnosis made by the physician, if the physician concludes that the child's academic difficulties cause significant loss of function or if the child's teachers think that the child has such a need, educational measures should be taken for the child. In this case, within the knowledge and approval of the family, they are either directed to Guidance and Research Centers (GRC) directly with the decision of the teacher and the school administration, or GRC application can be made with the "single physician report" of the follow-up physician. Following to the guidance, the family should first make an appointment from the GRC where the school the child attends. When going to this appointment, they should have the forms prepared by the school administration and a single physician report if received.

Educational Evaluation and Diagnostic Process

Educational evaluation and diagnosis are carried out in Guidance and Research Centers (GRC) affiliated to the Ministry of National Education. In order to ensure for those children who are diagnosed with ADHD by the Child and Adolescent Psychiatrist to obtain their educational rights, their ADHD needs should be determined as a result of the educational evaluation made in GRC. For this purpose, firstly, the health report obtained from the follow-up physician and the forms that include the academic evaluation of the child and the results of the observations made by the administration of the school should be taken. Following to this, families can make an online appointment from the GRC where child's school is affiliated, or the schools can officially request an appointment from the GRC. On the day of appointment, they go to GRC together with the child and related reports.



The child is taken into individual educational evaluation by the experts working in GRC and tests that measure the cognitive field can be applied. In the end, it is diagnosed educationally and the educational need is determined and shared with the family and school. As a result of these evaluations, children with ADHD who do not need additional educational measures in terms of intelligence are included in educational practices through inclusive/integration programs. After a meeting organized by the Individualized Education Program (IEP) Board established in schools and attended by parents and teachers, the child's IEP is prepared and implemented. IEP is special for every child.

ATTENTION: In addition, the school can direct the child to GRC directly with the cooperation of the family, or the family can apply to the GRC directly with the forms taken from the school for the first diagnosis. If it is deemed by GRC, it is necessary to apply to the Child and Adolescent Psychiatrist for medical diagnosis of the child in both cases.

Children with ADHD, for whom educational measures are taken, receive education with the same curriculum as their peers in formal education, but their gains are evaluated specifically for their existed problems. For this purpose, current situation and needs of the child are determined by the joint decision of the school guidance service, the school principal, teachers and the family. As a result of the individualized education program (IEP), which is special and different for each child with ADHD, the child's right to education is protected. In case of need, the child can benefit from the support education room in schools. IEP is restructured when deemed necessary according to the follow-up of the child. IEP should be prepared and applied for every child with ADHD who has an educational measurement. The family should follow the implementation of IEP by the school.

Before exams with central system, children with ADHD also have right to take the exam in a separate place and additional time in case of taking exam measures by the GRC.



You can visit <https://orgm.meb.gov.tr/www/kaynastirmabutunlestirme-uygulamalari-ile-ilgili-yayinlar/icerik/433> for detailed information about Inclusion / Integration education.

(Access Date: 28.06.2020)

ATTENTION: When it is determined that the child with ADHD needs, educational measurements must be taken to protect his/her education rights.

Families of children with ADHD worry about special education support and educational measurements, and they remain somewhat abstaining. They think that the reports will be on their children's records and this may come up against them negatively in the future.

When it comes to reporting issue, some parents may perceive this issue as a handicap. However, when they do not protect their children's educational rights, they prevent them from being successful in proportion to their capacities. The situation to be worried about them is the loss of child's rights. Because compared to their peers, if they are not supported it will be very difficult for them to achieve the success they can achieve with their current intelligence, healthy friendships and sufficient self-confidence level.

ACADEMIC AND SOCIAL RESULTS OF ADHD

ADHD is a medical diagnosis, but its consequences can cause many problems that concern itself as well as its entire environment. These problems should be dealt with separately in terms of social and individual education and training.



Academic Challenges

Children with ADHD may have difficulties and fail in the academic field because of attention problems and many different difficulties in learning. There can be many reasons for failure in children. The reasons for failure must be found and each child should be supported to be successful in his or her capacity. Because being successful is so important for the human spirit. The child, who feels successful within his /her ability, will provide enough spiritual satisfaction, increase mental endurance and complete the development process healthily.

ATTENTION: Every child deserves to be successful. If a child fails, the cause must be investigated.

If we consider failure within the scope of psychopathology; the differential diagnosis of the child with ADHD should be made in terms of specific learning disability (SLD) and mental disability, and treatment should be planned accordingly.

Regardless of intelligence, ADHD becomes a problem due to lack of attention in child's learning. The child with attention problems does not fully understand the instructions and cannot follow the lesson because he cannot pay attention. Again, since the child cannot pay attention, he/she cannot send the information he/she has memorized in a short-term to the long-term memory, and as a result, the learned subjects cannot be recorded adequately and properly. Information that cannot be recorded in long-term memory is also forgotten. These children become forgetful and distracted. They can be lost in thought so easily in the classroom. Following to their being lost in thoughts, they cannot concentrate and fail to focus on lesson. They sit for hours to do their homework, but before they complete it, they leave the table without doing it. They often lose their teaching equipment and cannot use their belongings properly. They cannot plan properly about their homework, responsibilities and have difficulty in determining priorities. Those who are active and impulsive, on the other hand, do not have attention problems, but they may not be able to follow the lesson because of having difficulty sitting in their seats and need constant movement throughout the class. By talking too much, they can often interrupt the lesson and distract both themselves and their peers from the class. They are impatient and cannot delay their desires. In these respects, the achievement of children with ADHD can be compared to "a bucket with a hole". Even if water is constantly filled from above, it will disappear from the bottom and the bucket is not filled enough.

Another reason for failure is specific learning disability (SLD) is child's difficulty in learning in certain areas regardless of intelligence. These children have distinct difficulties in putting the information they have memorized in the long-term and properly integrating newly learned information with previous information.

Because of their awareness, their self-confidence will be very low. These children's right brains responsible for artistic activities are much more active than their left brains responsible for academic skills. When asked to use their right brain, they have the opportunity to display their achievements. Ishaan, the leading actor of the movie "Stars in the Ground", which is a beautiful production to understand SLD, proved his competence by taking first place in the painting contest, while he was a very unsuccessful child when he focused on his difficulty in learning letters and numbers.

Mental deficiency is a major cause of failure. The child has learning problems in all areas. Academically, they are behind their peers in terms of social skills and personal care. They score below the average in intelligence tests. Children with mild intellectual disability can learn how to read and write earlier than children with SLD by doing many repetitions if they do not have ADHD and SLD additionally.

The reasons and treatments of the three clinical diagnoses mentioned above are different. For this reason, the differential diagnosis of these defined medical reasons of failure should be made by a Child and Adolescent Psychiatrist, and each child should be helped to be successful in proportion to their capacity with the most possible appropriate approach.

In Figure 1, the transition of inputs into sensory memory to working memory, which is a part of short-term memory, is schematized. Following to this, the effects of attention, learning and repetition, and intelligence are depicted while transferring them to long-term memory and failure causes are schematized in the same figure too [5].



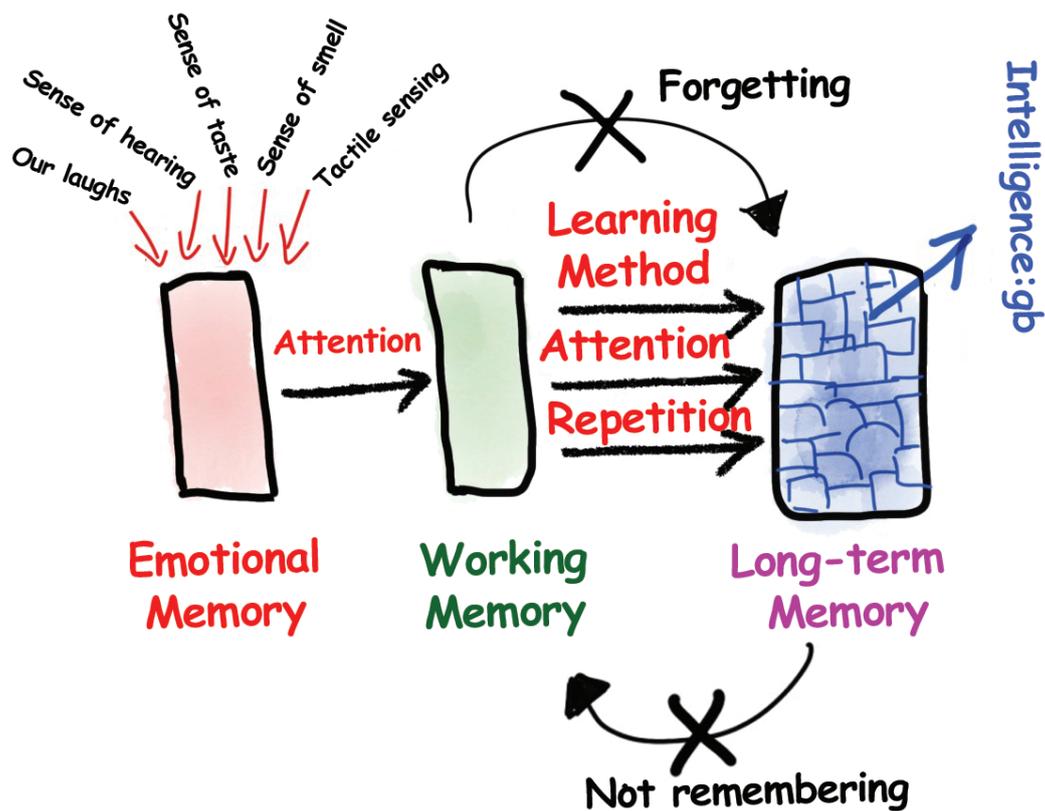


Figure 1: Relationship between memory, attention and learning

ATTENTION: The main reasons for academic failure are; ADHD, SLD and mental disability. It is very important to make a differential diagnosis of these conditions and to support the child as early as possible.

Social Challenges

The consequences of ADHD that affect the child socially outside the academic field are also very important. These children, who are distracted from an early age, have low academic success and mobile are subject to a lot of criticism. They are constantly warned by adults and ostracized by their friends. They may not be allowed to play because of their not being able to wait their turn and frequent attention mistakes. They can be blamed for what they didn't do. They are also vulnerable to abuse by peers. It is common for children with ADHD to be punished after other calm and timid children's making them do socially unacceptable but fun behavior by taking advantage of their impulsive characteristics. If teachers or adults do not evaluate the events in detail, these children will become victims. For these reasons, they may have low self-confidence, be angry, anxious and unhappy. They may experience job failures in the future. They are risky in terms of addictions such as cigarette, alcohol and substance. Again, behavioral addictions can be seen more frequently in children, adolescents and adults with ADHD [5].

In terms of the social-common consequences of ADHD, while the academic failure of children with ADHD, low self-esteem, anxiety disorders developing during the process and their unhappiness are problems for them, their behaviors also have many negative consequences in their family and in the classroom. These children may get into trouble with the law when they grow up. Because of their attention problems, they can cause many accidents, especially traffic accidents. They may experience problems with friends and spouse relationships. They are in the risk group in terms of addiction. The clinical results of undiagnosed and untreated ADHD are summarized in Table 7 [5]

Table 7: Lifetime consequences of untreated ADHD

Education
<ul style="list-style-type: none"> • Inability to achieve academic success as expected and in proportion to their capacity • Decrease in high school graduation rate • Decrease in the rate of graduation from university • Increase in the rate of suspension or expulsion from school
Interpersonal Relationships
<ul style="list-style-type: none"> • Difficulty having and maintaining healthy friendships • Making bad friends and adapting to them quickly • Having frequent conflicts with family and peers • Difficulty maintaining relationships because of emotional ups and downs • Higher marital problems, high rate of divorce • Stressful parent-child, child-sibling relationships • Quick irritation • Difficulty coping with frustration • Decreased self-confidence and self-esteem • Verbal abuse and harassment risk • Perceived as immature person emotionally and behaviorally • Lack of appreciation and empathy for others' needs
Behavioral Issues
<ul style="list-style-type: none"> • Frequency of motor vehicle accidents and injuries • Participating in risky actions • Early sexual experience, adolescent pregnancies • Addictions • Having financial problems • Ignoring social rules • Inappropriate behaviors of moral values • Having legal problems • Inability to work consistently in a job and frequent job changes

Health

- Eating disorder, eating too much or too little
- Sleep problems, sleeping too little or too much
- Higher smoking, alcohol and substance use
- Increasing use of non-medical drugs
- Risk of pregnancy and sexually transmitted diseases at an early age

ADHD Treatment

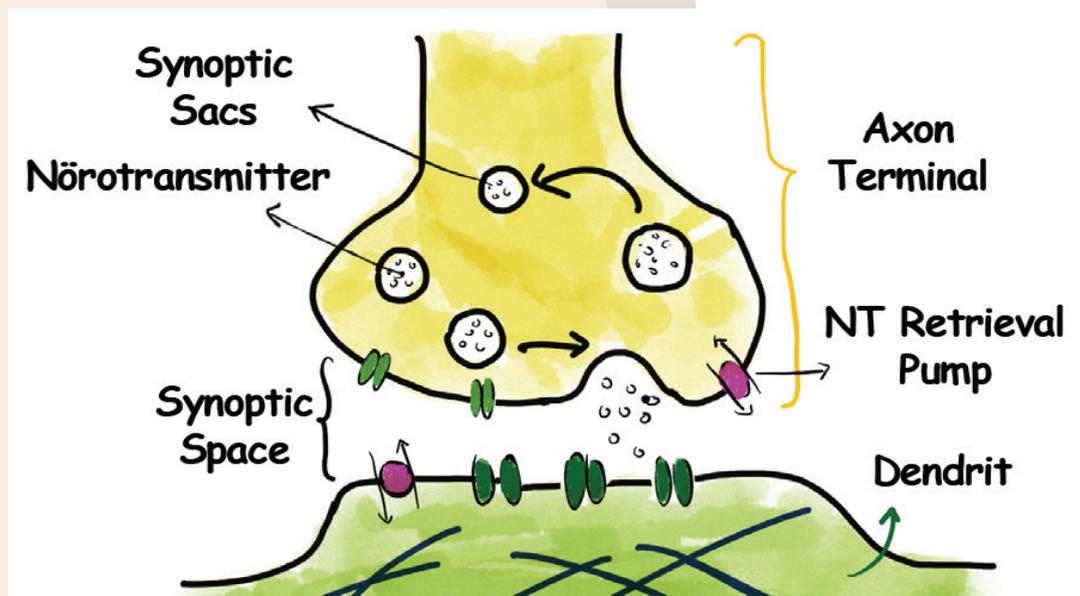
After diagnosis, ADHD should be treated at the earliest phase possible age because of the risk of causing negative consequences as described above. ADHD is a structural problem. It is a problem related to the biochemical structure of our brain. It is a disorder that happens because of the attention and auto control center's not working well. Therefore, ADHD is primarily treated with medication [18]. In 1955, the American Food and Drug Administration proposed the stimulant group drugs that we still use today in the treatment of ADHD. This proves us that there is at least 65 years of scientific experience and knowledge in ADHD treatment ([19]; [20]; [18]).



You can watch the video in English from the link for detailed information about the drug treatment of children. <https://www.youtube.com/watch?v=CniuZOsQPeA>
(Access Date: 28.06.2020)

The transmission of all kinds of information takes place in the “snaps” space between neurons in our brain, through carrier substances called “neurotransmitters”. Drug therapy acts through these transporters, dopamine and noradrenaline. The effects and side effects of drugs have been demonstrated in very detailed and long-lasting scientific studies (Figure 2). MRI follow-up studies have shown that drug therapy positively affects brain development in a developmental disorder such as ADHD [21]; [5].

Drug therapies have been used for many years in children with ADHD to improve their ability to control behavior and to increase the duration and quality of attention. The results obtained from drug treatment are affected by factors such as child's age, intelligence level, family's compliance with the treatment and persistence.



Medication may not be used immediately in every ADHD case. The Child Adolescent Psychiatrist decides whether medication is required or not. If we will detail the necessity of drug use according to ADHD symptoms:

- Hyperactivity and impulsivity; if it causes the child to harm himself/herself and other people, disrupts social harmony and friendship, causes disorder in the classroom and disturbs peers, and causes constant discomfort in the family, drug treatment is initiated.
- Lack of attention; if it negatively affects the learning capability of the child, significantly reduces the quality of learning and academic success, and disrupts children's relationship with their environmental setting medication can also be used.

Which drug will be used, how long drug treatment will take, and when it will end all depends on child's condition and his/her response to treatment. However, if the treatment is initiated in early stage, the rate of obtaining positive results is higher. After adolescence or lifelong drug use may be required in a very small proportion of people. The expected results of drugs in the treatment of ADHD are summarized in Table 8.

Table 8: Results of drug use in ADHD treatment:

They help to control behavior
They reduce impulsivity
They increase the ability to tolerate frustration
They help organize movements
They increase attention span and quality
They shorten the reaction time

They improve their relationship with the family
They fix friendship relations
They increase school compliance
They increase language development and verbal expression skills
They increase academic success
They increase self-confidence

ATTENTION: Some of the drugs used in the treatment of ADHD are subject to control in our country as well as all over the world. When these drugs are used under the supervision of a doctor, there is no risk of addiction. The reason they are sold with special prescriptions is to prevent these drugs from being used for other purposes rather than ADHD treatment.

ATTENTION: Drugs used in ADHD treatment do not increase the risk of substance abuse in children for the future. On the contrary, the risk of substance abuse in adolescence and adulthood of children with ADHD who receive medication is much lower than those without having any treatment.



You can watch the video in English on the relevant link about the necessity of drug treatment in children with ADHD. <https://adhd-institute.com/disease-management/pharmacological-therapy/mode-of-action> (Access Date: 28.06.2020)

BOOK SUGGESTION: For detailed information about ADHD treatment, you can read the related book. Öztürk M., Başgül, Ş.S. (2020). Impulsivity in Children: “Diagnosis and Treatment of Attention Deficit and Hyperactivity Disorder”. Istanbul: Kite Publications.

Misinformation about the use of psychiatric drugs in our country prevents children with ADHD from using medication when it is necessary. The refusal of drug use by families because of fearing its side effects delays treatment and may cause irreversible consequences. Because some parents do not fully understand and accept drug therapy, when they give their child the medication, they have the feeling that they are “hurting him/her”. However, the aim of treatment is to do no harm first. Based on what they have read about ADHD medications because of information pollution, parents may also approach like “I want drug-free treatment”. It is the physician who will implement the diagnosis and treatment decision based on evidence by considering the best benefits of the child. The family should first acknowledge the presence of ADHD in their child and should take this situation into consideration while directing their child’s behavior.



If the family has concerns at the point of treatment, it is a more appropriate approach to seek a second physician's opinion. Families should request information from their physician about the effects and side effects of drug therapy [22].

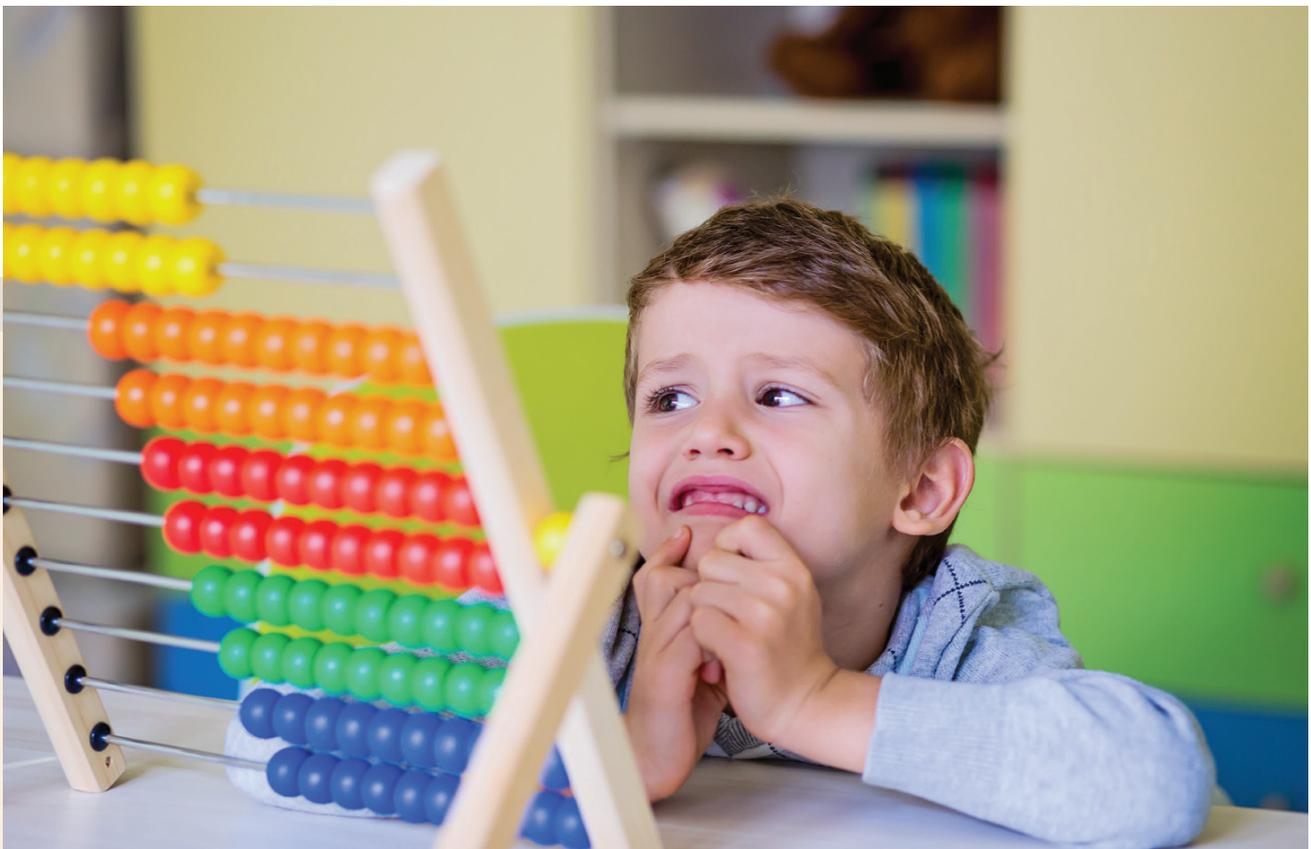
Before starting treatment, it is important that the child and his / her immediate environment and teachers have basic information about ADHD. Without this informative phase, it would not be meaningful to move on and implement other steps of treatment. In addition to medical treatment, informing families and teachers about ADHD, parents may need to receive counseling to solve the problems they experience with their children, support the child for additional psychopathologies such as anxiety disorders and depressive mood, and receive one-to-one training on academic deficiencies. In ADHD treatment, the benefit of regular sports has been scientifically demonstrated. In addition, they can also take omega 3 supplements if recommended by their physicians.

The attitude of parents and teachers towards treatment is very important. Unscientific comments in the press and on the internet by people other than physicians, negative and false statements of the child's immediate environment, and misinformation by pharmacy technician may worry families. Only the Child and Adolescent Psychiatrist can make the decision on how to treat ADHD, which is a medical diagnosis.

The family should have a detailed interview with the physician who diagnoses and plans the treatment of the child about the treatment process, and should ask all questions in their mind. If the parents are not convinced enough, they can get a second doctor's opinion too. All over the world, ADHD treatment is applied based on evidence with a similar protocol and algorithm. Another important point is the necessity of close cooperation between the family, the school and the physician during the treatment period because of having many problems that may be experienced both at home and at school.

People around the child should not misinterpret ADHD symptoms in order to regulate their relationship with the child. Parents who describe their child's behavior or difficulty with lessons as mischief or laziness tend to punish constantly to the extent that they disrupt their relationship with their child. However, it is observed that these children do not understand much about punishment; on the contrary, problems increase even more within a short time. In treatment, ways to reestablish a healthy relationship with the child are investigated. The family's attitudes towards their child are reviewed and mistakes are tried to be eliminated [22]. It is valuable for parents and educators to read scientific literature on ADHD.

ADHD is a medical problem like diabetes. Attention deficit is not the child's fault, just as a disorder in the sugar metabolism of a child with diabetes is not the child's fault. It is a clinical picture that develops without the hand of his/her.



In this case, not treating the child is actually an injustice to his/her. In the long term, it is inevitable for a child, who is exposed to a treatment that he/she does not deserve to have a problem of self-confidence and negative consequences that may negatively affect the child's entire life.

Parents who have child with ADHD need to be very patient and understanding. Although the treatment is different in every child, the family has a great role in the resolution of this clinical picture, which takes a long time. The aim of treatment is to help the child, to improve his quality of life and not to impair his self-confidence [22].

Counseling and therapy may also be required for the difficulties ADHD causes in the life of child and his environment. Self-esteem problems, social skill difficulties, peer problems and ways of coping with conflicts with parents, and ability to control impulsivity can be studied individually. In addition, individual psychotherapy is also important in the depression and anxiety disorders observed in these children. They especially benefit from cognitive and behavioral methods. Group therapies and psychodrama techniques can be applied. However, treatment of ADHD with psychotherapy alone is not sufficient and possible.

Most children and adolescents with ADHD have balance and motor coordination problems. That's why physical activity is so important. Sports are also very important in terms of positively directing the energies of impulsive and hyperactive children. Sports can protect the child from many potentially risky negative behaviors in adolescence. It prevents the development of many bad habits such as computer addiction, making negative friendships, alcohol and substance use through providing discipline to the child, increasing their self-confidence, filling their time and taking their energy. It is scientifically recommended for children with ADHD to exercise regularly and continuously.

ATTENTION: There is no scientific evidence that alternative techniques such as acupuncture applications, herbal treatments, neuro-feedback and biofeedback methods are effective in ADHD treatment [5].



POSSIBLE PROBLEMS, WAYS TO COPE, DIRECTION

Academic problems are experienced in children with ADHD, especially in the attention deficit subtype. Teachers say that these children do not succeed in proportion to their capacities, they are distracted in the class, they are disorganized and they do not have much ownership of their teaching equipment. The support of their parents is very important in order to overcome their academic difficulties.

The education of the child should be followed closely from the first grade of primary school. If the child has difficulty in doing homework alone, he/she should be helped. Teachers want children to do their homework alone, but unfortunately this is not much possible for children with ADHD. Without help, it can take hours to do their homework. This situation prevents the child from having quality in learning. Parents' help with homework does not mean to push him/her into laziness as they do their homework instead of them. What needs to be done here is to support the planning of doing homework and study, and help with issues that he does not fully understand. While doing homework, just sitting next to the children helps to do their homework in a better quality and in a shorter time. Arrangements regarding homework should be planned in advance and after doing it. Parents can prepare an organizational map together with their child in order to be implemented by him (Table 9). As a result of this practice, an action that the child will enjoy or a favorite food reward can be used as a motivation tool.



Table 9: Organization chart preparation sample questions about homework planning

At what time can he/she do his/her homework?
What materials will he/she need?
How will you support him/her?
How much will you help her/him?
How long will he/she finish?
What will happen if he/she doesn't do his homework?



You can watch the video on the relevant link for suggestions about parental approaches.

<https://www.youtube.com/watch?v=VHznYB9Xtxs>

(Access Date: 28.06.2020)

These children are distracted in the classroom and may not be able to get enough benefit from the lessons. Therefore, they may need to learn by being supported one-on-one approach. If the parents cannot be patient while studying with the child and there is constant conflict, one-on-one private teacher support should be obtained. Although it varies according to the child’s capacity, the need for support of children with ADHD, especially in planning skills, continues throughout their education.

Children with ADHD have intense behavioral problems at home and at school. In order to support these children behaviorally, the guidance of parents is again needed first. These children are in constant conflict with their parents at home for many reasons such as not taking responsibility, not obeying rules, playing loudly, forgetting daily routines, disrupting personal care, not wanting to do their homework, and spending too much time with computer games. Routines like going to bed in the evening, getting up in the morning and getting ready for school can turn into conflict. They can easily quarrel with their siblings or visitors’ children. Children with ADHD really need the support and guidance of their parents in experiencing the consequences of behavior, learning the rules, organizing themselves and restoring their damaged self-esteem. Parents have great difficulty at this point. But no matter what it is, they need to be patient and communicate with them. An example of parental guidance is given in Table 10. Advice, criticism, and comparison with others will not work at all. On the contrary, it increases the existed problems. Instead, behavioral interventions can be used in cooperation with educators and experts who has competency in behavior management.

Table 10: Planning an action that will be done together with parents

Example, “To be ready at the door at a certain time in the morning”
What kinds of preparations are needed to be done for this?
In which point will we help him/her?
How much will he/she do?
What will be the sequence of things to do?
When will he/she be ready at the table and ready at the door?
What will happen if he/she fails to implement the plan?



It is very useful to simplify tasks that are assigned to children with ADHD and to make plans that include him. Separate planning should be made for his each target behavior and the result of the behavior should be discussed with the child beforehand. If he forgets what is spoken, the plan can be written and hung on the wall in his room and small reminders can be made. The arrangements that facilitate child's life can be applied in the room, bathroom and other areas of the house. He should also be helped to plan his time. In each organization, it will be very comfortable for him to sit down and make plan together about what he should do beforehand and remind him about timing.

In order to solve the problems and develop positive behavior afterwards, if the parents are angry when there is a problem, it is very important for parents to stay away from the environment for a certain period of time and talk to their son after calming. Parents should not forget that children with ADHD do not keep their experiences; they always do the same mistake and regret about it, so frequent repetitions are necessary. Communication and problem-solving methods of parents with each other and with their children are also very important as they take their parents model for themselves. Children will follow similar paths as parents solve problems.

If their parents get very angry and hit the child in his wrong behavior, he will choose the hitting behavior as a solution when he has a problem with his friend. If his parent yells at him, he will fight with his friends by yelling.

ATTENTION: Problems can never be solved and things get worse if parents are not tolerant and unable to come up problems with rational solutions.



You can watch the video on the relevant link for proper parental attitude. <https://www.youtube.com/watch?v=FCcSuJ9uGRE>
(Access Date: 28.06.2020)

Children with attention problems can easily be distracted by various external stimuli. The visual, auditory and tactile attention of these children should be evaluated and appropriate solutions should be investigated (Tables 11-12).



Table 11: Measures that can be taken to increase the auditory attention of children with ADHD

Talk to him/her in simple manner and use understandable sentences. Make sure you understand or listen to him/her.
Repeat important orders or commands. However, do not bore children with repetitions if you are sure they understand it.
Do not speak out loudly.
When talking to him/her, leave the job you are doing and focus on his/her words.
Talk to him/her at the same voice level and try to make eye contact.
If you feel that he/she is not listening to you while speaking, tap his/her shoulder gently.
Reduce indoor noise as much as possible in his/her working environment.
If silence distracts children and they work better with music, give them this opportunity.
If possible, prepare a separate room for him/her to work.
If possible, do not invite crowded guests to his/her homes during his/her study hours.

Table 12: Measures that can be taken to increase the visual attention of children with ADHD

If possible, he/she should have a separate room.
The room should be furnished simply, relaxing and light colors should be preferred, walls should be as empty as possible and no distracting ornaments should be hung.
Toys and books should be classified in cabinets.
There should never be a television in his/her working environment.
There should be nothing other than studying materials on the study desk he/she will work on.
Before starting study, he should be encouraged to tidy up his study desk.

Some children with ADHD may also have tactile sensitivities and allergies. For example, those children with ADHD who do not want to bathe may have sensory sensitivity to water. As a precaution, parents can try to make them have a bath by pouring water with a bowl instead of a fountain. If children are uncomfortable with furry items, clothes and other items in the room can be arranged accordingly. They may be uncomfortable with wearing tight things, socks and washing tires. In such cases, necessary measures should be taken according to the needs of the child. It is important not to be persistent and not create new conflict areas. If these sensitivities are not taken seriously and a solution cannot be produced, the child will be stuck with what he is uncomfortable with all day long. He will not be able to take care of what he needs to deal with and become irritable. If they have allergies, they should be evaluated by a physician and receive appropriate treatment.

ADHD is a disorder that negatively affects the academic and social life of children and adolescents, and decreases their life quality. However, in addition to all its negative consequences, children, adolescents and adults with ADHD have some common positive characteristics. If the energy of people with ADHD can be converted into production, they can work harder and be more productive than most other people. They are tireless and can do several jobs in one time. Finishing work quickly, acting quickly and reaching the result as soon as possible, result-oriented thinking and acting are qualifications that increase productivity. Children with ADHD have a rich and somewhat extraordinary imagination. They can draw pictures differently than anyone else, make comments, and view events from very different angles in compare to other people. Despite this, many gifted children may not have the chance to display their abilities because of social and academic problems with ADHD. Individuals with ADHD can easily establish a dialogue with those around them and behave in a friendly manner. When they involve in a society, they do not have communication problems with other people. They are humorous and brave. When these positive qualifications are used in a good way and not overshadowed by negative attitudes, they can be converted into huge gains [5].



LEGAL RIGHTS

For individuals with special education needs, there are many national and international legal rights, especially United Nations Disability Rights Convention, the Constitution of Turkey and the Law on the Disabled. Legislative arrangements prepared by various institutions and organizations for individuals with special education needs are based on these basic legal rights.

Who Can Benefit From Legal Rights?

To benefit from these rights in our country; it is necessary to document that the individual is disabled with a rate of at least 40% with the report he received from the hospital authorized by the Ministry of Health to issue a disability health board report, or in accordance with the Regulation on Special Needs Assessment for Children (RSNAC) published on February 20, 2019, the report should include the phrase “there is a special need (TSN)” without including the rate of disability in the reports of children.

Education Rights

Education right of individuals with special education needs cannot be prevented on any grounds. The compulsory education age of individuals who are determined to have special education needs starts from 36 months. Considering the development and characteristics of the children, the education period can be extended in the pre-school period. Although it is essential for individuals with special education needs to continue their education through integration/inclusive of all types and levels throughout the compulsory education period, they can also benefit from special education schools or special education classes opened for these individuals. In addition;

- Early childhood education service for children with special education needs between 0-36 months
- Providing homeschooling service for students at the age of compulsory education who certify that they cannot benefit from formal education institutions for at least twelve weeks because of health problems or that they will pose a risk to their health if they do it,

- Providing education service in classrooms opened within hospitals for students who are in need of special education at the age of compulsory education and receive inpatient treatment in health institutions because of their health problems,
- In order to equip individuals with special education needs with professional knowledge and skills in technical, social or cultural fields, to bring them to life and to turn them into productive individuals, non-formal education services can be provided by public education centers.

Support Education Room

Provincial or sub-provincial departments of national education establish a support education room for students who continue their education through full-time inclusion/integration in schools that provide education at pre-school, primary and secondary education levels. These students can receive training in support education rooms up to 40% of the total weekly course hours with the decision of development unit of Individualized Education Program (IEP) established within the schools.

Examination Precaution Services

In the central system exams to be taken by individuals with special education needs, examination precaution services appropriate to their disabilities can be taken by guidance and research centers.

University Exam Application

In order to make arrangements such as providing additional time, reader, marker support suitable for students with disability in the university exam, students are required to submit their disabled medical board reports to ÖSYM registration offices at the application stage.

In addition to the educational rights of individuals with special education needs; they also have rights in areas such as public, health, tax exemption and deduction, employment, working life, social security, social assistance, employees with disabled children/relatives. You can use the web addresses and contact numbers below to get detailed information about the rights.

- <https://khgmcalisanhaklaridb.saglik.gov.tr/TR,54457/engelli-haklari-rehberi.html>
- <https://www.ailevecalisma.gov.tr/tr-tr/sss/engelli-ve-yasli-hizmetleri-genel-mudurlugu/>
- <https://ailevecalisma.gov.tr/media/19199/engelli-bilgilendirme.pdf>
- Social Services ALO 183
- Social Assistance ALO 144
- Ministry of National Education ALO MEBİM 444 0 632

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INDIVIDUALS WITH ATTENTION DEFICIENCY HYPERACTIVITY DISORDER

“A Guide for Families”

When Attention Deficit Hyperactivity Disorder, which is a neurodevelopmental disorder and consisting of three basic symptom clusters of hyperactivity, attention deficit, and impulsivity, is not diagnosed as early as possible and is not treated appropriately, both the child and the environment are negatively affected. Children with Attention Deficit Hyperactivity Disorder usually follow their own capacities academically behind and have difficulty in acquiring the knowledge and skills required by their age. Children who are hyperactive and impulsive can sometimes have accidents with severe consequences. Due to negative warnings from the environment and their self-awareness, these children's self-confidence is usually low.

Life quality of the child with Attention Deficit Hyperactivity Disorder and his / her family decreases due to the difficulties experienced. When these children reach adulthood, they cannot reach their real performance and may have difficulties in their relationships. For all these reasons, parents and adults who are responsible for all kinds of care of children should never stay away from the light of science, and should not make decisions with unproven methods and hearsay information when making decisions about Attention Deficit Hyperactivity Disorder diagnosis and treatment. Otherwise, children pay the biggest price. Parents should definitely consult a child and Adolescent Psychiatrist if they suspect that their child may have Attention Deficit Hyperactivity Disorder, or if the child's teacher gives feedback on it.



Özel Eğitim ve
Rehberlik Hizmetleri
Genel Müdürlüğü