

Attention Deficit Hyperactivity Disorder (ADHD)

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Abstract

ADHD is a neuro-behavioural disorder which includes attention difficulty, hyperactivity and impulsiveness. It is a chronic brain condition that causes executive dysfunction, hence, it disrupts a person's motor skills, and intellectual, speech, emotional, social and sexual development. It impacts a child's life starting from home, in schools and even in social situations. This paper highlights various symptoms, stages of early detection along with the causes of ADHD. The overall organisational and management skills also become challenged. The teachers can detect and also help parents cater to this disorder by understanding the ways to communicate and act upon these symptoms through the right kind of socialisation and professional help which can make the child's life much easier.

ADHD is a disorder that is widely prevalent in society, but difficult to diagnose. It is either overdiagnosed or underdiagnosed, and frequently receives insufficient treatment or gets neglected altogether. However, it is easily identifiable given the clear symptoms of impulsiveness, restlessness and inattentiveness. In fact, a significant percentage of referrals to children's general care and mental health clinics are for ADHD evaluations (Brown et al., 2001; DuPaul, Rutherford & Hasterman, 2008; Barkley, Murphy & Fischer, 2008).

By nature children are highly inquisitive and very enthusiastic, and their inherent curiosity keeps them intrinsically motivated to know about everything around them. Their activities are primarily focused on satisfying this curiosity as the urge to know keeps them active. As studied and recorded by scientists, 90 per cent of the development of the brain happens before the age of five. During initial ages of development, a child's ability to learn about self and surroundings is immense. This development is characterised by dynamic interactions among the biological, psychological

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and social domains. A well-built cooperation of 'nature' and 'nurture' plays an important role in the growth and development of a child. From birth through childhood and adolescence, normal development takes place through the interaction of innate potential and external support, such as assistance from parents and teachers. Such development could be categorised into the domains as listed below:

1. *Motor development:* It is an overall control over gross and fine body movements. Gross motor development is about holding things in the hands, catching, throwing, walking, running, jumping, skipping, etc. Fine motor development includes completing certain tasks by holding smaller objects, especially between the fingers like eating food, drawing, colouring, writing, sorting, beading, etc. Handedness is another development which includes fixation in using a particular hand for doing any task.
2. *Intellectual development:* Also called cognitive processing, this involves different areas, such as attention, observation, perception, analysis, memory, problem-solving, synthesis, giving meanings, abstraction, etc.
3. *Speech development:* This has to do with learning languages, understanding meanings, proper pronunciation, building vocabulary, communication and so on.
4. *Emotional development:* This follows

a predictable pattern, though the rate of emotional development, could vary. Children's emotions differ from those of adults in terms of their intensity, frequency and behavioural symptoms. Some common pleasant emotions experienced are affection, curiosity and joy. The common unpleasant emotions are fear, worry, anxiety, etc.

5. *Social development:* Imitation, dependency, acceptance of authority, rivalry, attention-seeking behaviour, social cooperation, resistance, etc., are seen as the major behavioural patterns under this domain.
6. *Moral/Spiritual development:* The foundational age's concepts of good and bad, respecting elders, and faith in certain concepts (such as maintaining discipline, following rules, being consistent, understanding reward and punishment, etc.) fall under this broad domain.
7. *Sexual development:* The foundational stage includes learning about their own body parts as well as the roles they are supposed to play in the family and society. These would be learnt through make-believe plays with friends, among other methods.

DEVIATIONS IN DEVELOPMENTAL PATTERNS

Given the standard pattern of development in children, any deviation

could be considered a problem for the child. If the pattern of deviation is observed for a longer duration, or too frequently, and is intensely affecting the child, it needs serious attention and professional intervention.

Every deviation has a cluster of symptoms giving some clues about the disorder. These clues could be used to refer the child to the relevant expert and help the child in the primary stages. A teacher is not necessarily professionally trained or equipped to diagnose a disorder and plan the intervention. For long-term intervention (which is essential to handle psychological disorder), proper assessment and diagnosis are required, as that will be of immense help.

Early Detection

Most deviations from the standard childhood behavioural patterns are observed right from an early age. By the time the child is ready for school, a few aspects could be observed in the day-to-day interaction with the child. For example, how the child responds to his or her name being called out—say, the response is in the form of an eye contact by the child; general motor developments, such as holding up the neck, crawling, standing and/or walking; whether the child is following the prescribed developmental pattern or there is a delay in mastering the developmental skill; whether the child sits at the prescribed place for a few minutes or needs repeated reminders; communication of the child with family and others; is toilet training done by

the age of four years; and if the child can avoid simple physical hazards.

Various developmental disorders can be observed with the help of the points given above. Three parameters given by the experts to diagnose the disorder are deviation from normal behaviour, frequency of the deviated behaviour pattern, intensity of the deviation (whether it is creating disorders in normal functioning of the child or his close relatives) and duration of the deviated behaviour pattern. If the deviation is observed for more than six months, then the child needs professional help. One of the deviations is Pervasive Developmental Disorder, which includes Attention Deficit Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD).

Identification of Aggressive Behaviour

Children in different environmental conditions show aggressive behaviour for various reasons. Although aggression is seen more frequently in males than females, it is commonly seen in almost all children at some point in their developmental stage.

There are different theories in psychology explaining aggression. Psychoanalysis states that aggression is an instinctual drive. It links frustration to aggression. Learning theory links it to reward and punishment; absence of reward or the effect of punishment leads to aggression. Cantwell and Baker (1987) have commented with the help of data that many children with hyperactive syndrome develop anti-

social tendencies in later life, depending on the environment and predisposition factors, which need to be studied.

DIFFERENTIATING BETWEEN OVERACTIVITY AND ADHD

Overactivity

This is usually caused by certain situations or events around the child. All children at different times exhibit restlessness, are fidgety, keep chattering or disturbing others around them with a lot of questions. It cannot be inferred that every such child is afflicted with ADHD. However, this could be termed overactivity. This behaviour though changes depending on the situation. It usually does not affect the normal behaviour pattern at home, in school or in social situations. Proper discipline, clear instructions and demonstration of expected behaviour pattern help the child overcome the difficulty of overactivity.

Hyperactivity (ADHD)

It is a neurodevelopmental disorder, which a child has had from birth. It continues lifelong and manifests in different ways. It is broadly divided into two types based on the symptoms: inattention and hyperkinesia. Diagnosis could help classify the disorder as mild, moderate or severe. But no matter the spectrum, it still impacts the child at home, in school and even in social situations. Medication, therapy or special attention, or a combination of these would be required to control hyperactive

behaviour pattern, inattentiveness and the combined symptoms.

Symptoms of Hyperactivity

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR), if the child exhibits any six or more out of the nine symptoms given below, he/she can be considered as having hyperkinesia or hyperactivity:

1. Is leaving his/her assigned seat frequently, although expected to remain seated, with the tendency continuing for more than six months at home, in school or in a social situation.
2. Keeps fidgeting with her/his hands or tapping the hands/feet, or squirming in the seat.
3. In a classroom, at home or in social situations when a specific behaviour pattern is expected, the child keeps running or climbing, which is seen as inappropriate for the situation.
4. It's very difficult to make the child sit quietly, as he/she is often 'on the go' as if 'driven by a motor'.
5. Talks excessively in comparison to other children of her/his age.
6. Begins to answer a question even before it has been completely asked.
7. Finds it difficult to wait for his/her turn in a queue.
8. In social situations or in the company of other children with hyperactivity symptoms, he/she often interrupts or intrudes on others.

9. Faces difficulty in engaging in leisurely activities.

Symptoms of Inattention

Under this also, DSM-5-TR lists out nine symptoms, which if any six or more are observed in a child frequently, intensely and for a long duration (more than six months), then he/she can be considered as having inattention type of ADHD. These symptoms are:

1. Having difficulty in paying close attention to details and makes careless mistakes.
2. Having difficulty sustaining attention in any given task or even in the play activities.
3. When spoken to directly, the child with inattention symptoms does not seem to listen. He/she needs repeated calling out of his/her name, or repeated instructions to listen or pay attention.
4. His/her organising and management skills often seem challenged. Their things are always scattered and messy.
5. Avoids tasks that require sustained mental effort and attention, like reading, writing, solving mathematical disorders, etc. Usually, they have language or numerical difficulties.
6. With a lot of motivation and encouragement, or sometimes due to attraction by the novelty of the task, they could be persuaded to start the work, but they lose focus sooner than their peers.
7. Their inattentiveness results in losing the things that are

necessary for carrying out the needed tasks or activities. Often they forget or miss out on the instructions given.

8. They get easily distracted by the slightest of auditory or visual distraction.
9. As a result of their inattentiveness, the cognitive processing also gets disturbed and results in forgetfulness in daily activities.

Causes of ADHD

Any psychological or mental disorder does have its causes or aetiology. According to some studies, heredity is a prominent cause of ADHD. Another cause is a disorder in the prefrontal cortex area of the brain. Chemical or functional issues in prefrontal cortex can lead to ADHD in children.

Environmental factors like consanguinity or marriage in close relations can cause some psychological developmental disorders in the offspring. Exposure to environmental toxins such as lead during pregnancy can result in some physiological or psychological disorders.

Use of drugs, consumption of alcohol, or smoking during pregnancy could cause developmental or psychological issues in the baby. Certain unfavourable conditions during pregnancy like the age of the mother—either too young (below 15 years) or too old (40+), stress, trauma, BP fluctuations, diabetes, etc., too can cause certain health issues in the unborn child. Even after birth, if the child has disorders like epilepsy

or brain injury, that can also result in ADHD.

Checklists Used for Diagnosis in Clinical Settings

To diagnose ADHD and help the child and the parents, some tests are conducted in a clinical setting. Information about the medical history of the child, his/her behaviour patterns in different situations, etc., are essential for proper diagnosis, as it helps in planning the treatment. Such information is obtained from the parents through suitably designed questionnaires. Some of the questionnaire types are listed below:

1. *Conners Abbreviated Symptom Questionnaire*: It is a brief and highly accurate diagnostic tool for ADHD for children ages 6–18yrs.
2. *CBCL-AP*: It is a more comprehensive assessment tool for ADHD for children of ages 6–18 years.
3. *Vanderbilt ADHD Rating Scales*: This is an initial assessment tool for children aged 6–12 years.
4. *SNAP-IV R Rating Scale*: It is for children aged 6–18 years.

Managing Children with ADHD at Home and in School

Parents and teachers face certain disorders in dealing with and managing children with ADHD. Depending on the severity of the disorder, different ways are recommended to handle these disorders. There are simple measures that can be adopted both at home and in school. Medication and therapy by

professionals are also required in most cases.

To help the child remain calm and attentive, some challenging activities can be planned. For example, storytelling, going for a stroll under adult supervision, keeping him/her engaged in simple conversation and basic physical exercises.

Punishment is most certainly avoidable. An adult working with or closely related to the child can show or express non-acceptance of certain behaviours in a stern and firm manner. Also, what is considered unacceptable behaviour must be patiently and clearly explained to him/her. Ascertain that the child has understood and promised to behave accordingly. Giving multiple instructions at a time must be avoided. The child must be made to feel comfortable by reassuring him/her that an adult will be available to help him/her in difficult or challenging situations. Good behaviour should be rewarded with praise or by giving a star on a chart displayed conspicuously.

A file should be maintained of the child's achievements. This file must be shown to the child before assigning him/her any challenging tasks. The child must be motivated by praising him/her for any earlier achievements. If the child is having difficulty in completing the given task even after due motivation and encouragement, efforts should be made to reduce the complexity, or number of activities or

tasks assigned. The child should be assisted, if required.

To achieve a certain goal concerning behaviour or attention span, the activities must be planned in accordance with the goal. The expectations from the child must be specific. Efforts must be made not to change the activities frequently or compromise on the set goals.

In the weekly routine, stipulated time must be allocated for physical activity or sports. It must be ensured that the child sticks to a schedule, when going outdoors for physical activity such as exercising or sports. When any adult is planning such a routine, the child must be involved in planning and discussions. Ascertain that he/she has understood the planned activities. This helps in the child's self-motivated involvement in the routine. All efforts must be made not to break or compromise the established routine.

The child with ADHD suffers a lot as well. Although the child is unable to control the intrinsic impulses, after a certain period, he/she realises that it is causing trouble to others and feels sorry about it. Often due to wrong company or being with people who are not aware of the condition, the child gets scolded or berated by others. After such instances, it is important for us to listen to the child's feelings and thoughts. In fact, this must be done on a regular basis as a routine.

One must avoid taking the child to crowded places or move away from

such places when supervising the child becomes difficult. The child must be praised for good behaviour. To the extent possible, such outings must be planned beforehand and the child must be instructed accordingly. This will help both the child and the adult supervising him/her to handle the situations better.

Professional Help

Professional help is available to plan behaviour therapy and occupational therapy, remedial education, and speech therapy to help the child perform better and cope with the day-to-day difficulties. Medication is given in certain cases to facilitate academic learning, acquiring certain skills taught in therapy sessions, and to protect the child from knowingly or unknowingly hurting himself or herself during an impulsive outburst. As a family member, teacher, professional therapist or as an adult with a proper understanding of the child's disorder, one will be able to help the child live a better life.

CONCLUSION

Being a neural-behavioural disorder, ADHD must be detected through proper assessment. It requires an understanding of the condition, along with patience in dealing with it. Observing behaviour patterns is an effective way to detect it. According to severity, medication therapy, special attention or professional help can be taken to help the child live a better and smooth life ahead. There needs

to be a blend of good parenting and right kind of socialisation to tackle the disorders faced by the child, which would include creating a supportive environment for a child suffering from ADHD.

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