

Introduction

Attention-deficit Hyperactivity disorder (ADHD) also known as hyperkinetic disorder is the most common childhood disorder affecting school-aged children



DEFINITION

Attention-deficit Hyperactivity disorder is a childhood disorder characterized by persistent pattern of inattention and hyperactive and impulsive behavior.



Affected children commonly experience

- academic underachievement.
- problems with interpersonal relationships with family members and peers.
- low self-esteem.

ADHD often co-occurs with other emotional, behavioral, language, and learning disorders

EPIDEMIOLOGY

About 5% of children and about 2.5% of adults have ADHD.

Primary school children in India- 11.32%.

More prevalent in **boys**



RISK FACTORS

1.Genetics: siblings with ADHD, identical twins have greater chances to develop ADHD

2.Neurotransmitters: Low levels of dopamine (causes hyperactivity & impulsivity) and nor epinephrine (causes inattention)

RISK FACTORS

3. Perinatal factors:

- Maternal smoking and alcohol use during pregnancy.
- Prenatal or postnatal exposure to lead .
- Birth complications.
- Premature birth.

RISK FACTORS

3. Psycho-Social factors:

- Disorganized family pattern.
- Maternal mental disorder.
- Alcoholism in parents.
- Growing up in institutions (foster homes)

TYPES OF ADHD

- Inattentive type : symptoms of inattention
- Hyperactive/impulsive type : symptoms of hyperactive and impulsive behavior
- Combined type: both inattention and hyperactivity

CLINICAL FEATURES OF ATTENTION DEFICIT HYPERACTIVITY DISORDER



CLINICAL FEATURES

Poor attention span and distractibility:

- Inability to complete the task from start to finish.
- Easily distracted.
- Can't sustain attention.
- Careless mistakes.
- Lack of details in work.
- Have trouble organizing tasks.



CLINICAL FEATURES

Poor attention span and distractibility:

- Loses belongings frequently.
- Difficulty following instructions
- They underachieve in areas of life where they have a lot of potential and talent, such as in academics, in their profession, in athletics

CLINICAL FEATURES

Hyperactivity and Impulsivity

- Physical and/or verbal over activity.
- Appear to be in constant motion and **“on the go”** as if driven by a motor.
- Difficulty keeping their bodies still—moving about excessively, squirming, or fidgeting hands and feet’s

CLINICAL FEATURES










Hyperactivity and Impulsivity

- Restless behavior.
- Talk excessively , interrupt others, not letting others talk.
- Blurts out an answer.
- Can't remain seated at school or workplace
- Has difficulty waiting his or her turn, or while waiting in line.

Diagnosing ADHD: DSM-V

Inattention: (A1)

Persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities

-  Lacks attention to detail; makes careless mistakes.
-  has difficulty sustaining attention
-  doesn't seem to listen.
-  fails to follow through/fails to finish instructions or schoolwork.
-  has difficulty organizing tasks.
-  avoids tasks requiring mental effort.
-  often loses items necessary for completing a task.
-  easily distracted.
-  is forgetful in daily activities.

Diagnosing ADHD: DSM-V

Hyperactivity/ Impulsivity:(A2)

Persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities

- 🕒 Fidgets or squirms excessively
- 🕒 leaves seat when inappropriate
- 🕒 runs about/climbs extensively when inappropriate
- 🕒 has difficulty playing quietly
- 🕒 often “on the go” or “driven by a motor”
- 🕒 talks excessively
- 🕒 blurts out answers before question is finished
- 🕒 cannot await turn
- 🕒 interrupts or intrudes on others

Diagnosing ADHD: DSM-V

- B. Several inattentive or hyperactive-impulsive symptoms were present prior to age 12 years.
- C. Several inattentive or hyperactive-impulsive symptoms are present in two or more settings.
- D. There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning.
- E. Symptoms do not occur exclusively during the course of a pervasive developmental disorder, schizophrenia, or other psychotic disorder, and are not better accounted for by another mental disorder (e.g., mood disorder, anxiety disorder, dissociative disorder, personality disorder).

PHARMACOLOGICAL MANAGEMENT

- Stimulants to reduce hyperactivity and impulsivity and increase attention (Methylphenidate and Amphetamines)
- Non-stimulant medications: Atomoxetine and Bupropion

MANAGEMENT

1. Behavior therapy:

Teaching the child time management and organization of skills.

e.g. following structured routine

Can be given in the classroom or at home

2. Special education (if required)

3. Social skills training

MANAGEMENT

4.EFFECTIVE PARENTING

- Make clear schedules.
- Maintain routines.
- Make sure instructions are understood – use simple words and demonstrate.
- Focus on child when talking to him/her. Avoid multitasking.

MANAGEMENT

EFFECTIVE PARENTING

- Children with ADHD may require more supervision than their peers.
- Maintain communication with the child's teacher.
- Model calm behavior.
- Focus on effort and reward good behavior.



Thank you