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Review Article

# Diagnosis and Management of Attention Deficit Hyperactivity Disorder (ADHD) in Paediatric Patients

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# **Abstract**

**Purpose:** The neurodevelopmental disorder Attention-Deficit/Hyperactivity Disorder (ADHD) is prevalent in children all over the world. With an emphasis on clinical assessment, differential diagnosis, and comorbidities connected to the disorder, this review article offers an overview of the diagnosis and therapy of ADHD in kids. It investigates the difficulties of overdiagnosis and underdiagnosis, stigma and societal effects, healthcare access, and long-term results for people with ADHD.

**Design/Methodology/Approach:** This study is review-based. In this review, the researcher makes an effort to provide a brief, pragmatic suggestion by using the comprehensive literature. Throughout the review, the researcher makes extensive use of deductive logic reasoning. The scientific assessment would employ techniques like extensive archive investigation followed by a thorough evaluation

**Findings/Result:** One of the most prevalent neurobehavioral disorders in children and young adults is ADHD. This review presents a summary of recent research on issues related to the signs and treatments of ADHD. There are methods for individualized neurofeedback and pharmaceutical therapy presented. The study's primary objective is to conduct a complete analysis of the array of research now available about ADHD and to provide medical practitioners with knowledge about its diagnosis, evaluation, and therapy. **Paper Type:** Review Paper.

Keywords: Attention Deficit; Hyperactive; Diagnosis; Symptoms; Treatment

# Introduction

Attention Deficit-Hyperactivity Disorder (ADHD) is a mental illness that has long been known to affect children's ability to function. These illnesses are distinguished by patterns of inattentiveness, hyperactivity, or impulsivity at levels that are not acceptable for their developmental contexts. Young children frequently show signs of inattention, lack of focus, disorganization, difficulties finishing tasks, forgetfulness, and losing things. For someone to be diagnosed with "ADHD," three of these symptoms must appear before the age of 12, last for six months, and interfere with daily activities. A spike in risky behaviour, job losses, and challenges in the classroom are just a few examples of the broad-reaching effects that may result [1].

The exact cause of ADHD has not yet been identified. A number of frequent, small-effect genetic variants, such as those in the genes of the dopaminergic, noradrenergic, serotoninergic, and other systems, may contribute to the etiology of ADHD, according to recent research [2].

It may be more challenging to identify the underlying cause of the condition given the incredible variability in many aspects of ADHD and the complexity of the pathways leading to the issue [3].

Additionally, it puts people at risk for a range of negative outcomes, such as conduct issues in the future, antisocial behaviour, anxiety and mood disorders, substance misuse, as well as physical

injuries, car accidents, premature births, and STDs, among other things. Oppositional defiant disorder, anxiety disorders, and learning difficulties are only a few of these effects.

#### **Objectives**

The goal of the review article is to compile information from numerous studies and sources in order to summarise and represent the current state of knowledge on the subject. A thorough description of ADHD, including its definition, diagnostic standards, prevalence, and subtypes, is provided in the article. Specifically the main objective is to review the diagnosis and treatment of attention-deficit hyperactivity disorder (ADHD) and to assess the effects of ADHD medication.

#### Methods

This study is review-based. In this review, the researcher makes an effort to provide a brief, pragmatic suggestion by using the comprehensive literature. Throughout the review, the researcher makes extensive use of deductive logic reasoning. The scientific assessment would employ techniques like extensive archive investigation followed by a thorough evaluation.

# **Types of ADHD**

Prior to the identification of attention deficit hyperactivity disorder, ADD and ADHD were used to diagnose the condition. Historically, "ADD" was used to identify inattentive symptoms such as difficulty paying attention or managing time, whereas "ADHD" was used to diagnose hyperactive and impulsive symptoms. As a result of revisions to the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), the illness is now simply known as ADHD, and patients are diagnosed with one of three presentations [5]:

- Primarily Hyperactive and Impulsive ADHD
- Primarily Inattentive ADHD (formerly called ADD)
- Combined Type ADHD

## Hyperactive and impulsive type ADHD

The need for constant activity is a symptom of hyperactive ADHD. They frequently move around, wriggle, and have a hard time staying still. Children frequently behave as though "driven by a motor" and move about a lot. All ages may exhibit a lack of self-control, a constant need to talk over other people, interruptions, and stutering. Children and men are more likely to have this type of ADHD, which is easier to diagnose [6].

#### **Inattentive type ADHD**

Due to their difficulties paying attention over time, adhering to specific directions, and planning tasks and activities, people with inattentive ADHD frequently make unintentional errors. They frequently misplace items, have poor working memories, and are quickly distracted by outside stimuli. This type of ADHD, which was once known as ADD, is more frequently diagnosed in adults and females [7].

# **Combined type ADHD**

People with combined-type ADHD demonstrate six or more symptoms of inattention; and six or more symptoms of hyperactivity and impulsivity [8].

#### Impact of ADHD on children's functioning

ADHD is a neurodevelopmental condition that frequently manifests in childhood and is characterised by persistent, developmentally inappropriate levels of hyperactivity, impulsivity, and/or inattention. Children with ADHD have more challenges in school and are more likely to get expelled from school, drop out, or perform poorly academically. They may experience social difficulties in their peer and family connections and are more likely to experience bullying themselves.

Children with ADHD are more likely to exhibit antisocial behaviours, such as fighting, early drug use, and poor driving results, as well as higher rates of oppositional defiant disorder (ODD) and conduct disorder (CDD). ADHD can have a negative impact on a child's mental health in a number of ways, including anxiety, low self-esteem, poor psychosocial health, and a generally decreased quality of life [9].

#### Diagnostic criteria

### Diagnostic and statistical manual of mental disorders (DSM-5)

The only difference between DSM-IV and ICD-10 is in terms of how symptoms are operationalized to arrive at diagnoses. Unlike ICD-10, it combines impulsivity and hyperactivity (boxes B and C) and requires six symptoms from each of these in addition to the six symptoms from box A (attentional issues). Any of these two strands must be present in order to make a diagnosis [10]. Three diagnoses are now possible as a result of this.

#### Inattention

Six or more symptoms of inattention for children up to age 16 years, or five or more for adolescents age 17 years and older and adults; symptoms of inattention have been present for at least 6 months, and they are inappropriate for developmental level [11]:

- Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or with other activities.
- has trouble holding attention to tasks or play activities.
- Does not seem to listen when spoken to directly.
- Does not follow through on instructions.
- Often has trouble organizing tasks and activities.
- Often avoids, dislikes, or is reluctant to do tasks that require mental effort over a long period of time (such as schoolwork or homework).
- · Easily distracted
- Forgetful of daily activities.

#### Hyperactivity and impulsivity

Six or more symptoms of hyperactivity-impulsivity for children up to age 16 years, or five or more for adolescents age 17 years and older and adults; symptoms of hyperactivity-impulsivity have been present for at least 6 months to an extent that is disruptive and inappropriate for the person's developmental level [12]:

- Often fidgets with or taps hands or feet, or squirms in seat.
- Leaves seat in situations when remaining seated is expected.
- Unable to play or take part in leisure activities quietly.
- Often talks excessively.
- They have trouble waiting their turn.
- Often interrupts or intrudes on others.

### Diagnosing and managing ADHD

The diagnosis and treatment of children with attention deficit hyperactivity disorder (ADHD) typically include a multimodal approach that involves a thorough diagnostic, behavioural treatments, and, in some cases, medication [13]. An overview of the identification and treatment of childhood ADHD is provided here:

- First assessment: The first stage is to carry out a thorough evaluation to determine the child's symptoms, medical background, and general functioning. In order to examine the symptoms of inattention, hyperactivity, and impulsivity, this examination often entails interviewing parents, teachers, and other carers. It may also require employing standardized assessment tools [14].
- Diagnostic standards: The American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-5) specifies particular standards that must be met in

- order for a kid to be diagnosed with ADHD. These requirements include levels of hyperactivity, impulsivity, and inattentiveness that are chronic and developmentally inappropriate and have a negative effect on the child's functioning in a variety of contexts [15].
- Differential diagnosis: It's important to rule out other ailments or causes, like learning difficulties, anxiety disorders, or sensory processing problems, that could be responsible for the symptoms of ADHD. A thorough evaluation assists in determining the primary diagnosis and any concomitant illnesses [16].
- Behavioural therapies: The initial line of treatment for ADHD is frequently non-pharmacological interventions.
   These therapies seek to enhance the child's functioning in general as well as behaviour and academic performance. Examples of behavioural interventions include parent training, behavioural therapy, classroom accommodations, and creating structured routines. Individualized plans are developed based on the child's specific needs and strengths [17,18].
- Medication: Medication may occasionally be advised, usually after behavioural therapies have been tried and proved to be ineffective. Methylphenidate (Ritalin, for example) and amphetamines (Adderall, for example) are stimulant drugs that are frequently recommended because they have been found to be successful in easing the symptoms of ADHD. If stimulants are not appropriate or well-tolerated, non-stimulant drugs like guanfacine (Intuniv) and atomoxetine (Strattera) may be administered [19].
- Ongoing monitoring and modifications: After a treatment plan is created, routine follow-up sessions are required to evaluate the child's development, track side effects (if any), and make any necessary modifications to the treatment strategy. The treatment strategy should be adaptable and unique because the child's reaction to interventions and medications may differ [20].
- **Extra assistance**: Children with ADHD frequently benefit from extra assistance at school, such as Individualised Education Plans (IEPs) or 504 plans, which specify accommodations and resources to enhance their academic success. Additionally helpful resources for parents and families can be found in counseling and parent support groups [21].

It's crucial to remember that the diagnosis and treatment of ADHD call for a multidisciplinary approach, involving the cooperation of parents, medical experts, educators, and mental health specialists. The best symptom management for each child requires an individualized treatment strategy that is continually monitored and adjusted to meet their changing needs.

#### ADHD in children diagnosis

A thorough diagnostic method is required to diagnose Attention-Deficit/Hyperactivity Disorder (ADHD) in children. This evaluation takes into account the child's behaviour, symptoms, developmental history, and functional impairment. The following measures are commonly taken after an ADHD diagnosis:

- Information Gathering: The diagnostic procedure starts
  with gathering data from a variety of sources, including the
  kid, the parents, and the teachers. Interviews, questionnaires,
  and behavioural rating scales can all be used to accomplish
  this. Assessing the consistency and pervasiveness of symptoms across diverse contexts requires gathering data from numerous situations [22].
- Clinical Assessment: To analyze the child's developmental
  history, medical history, and any potential underlying medical
  issues or psychological variables that may be contributing to
  the symptoms, a thorough clinical assessment is done. Parents
  and the kid may be interviewed as part of the assessment,
  which may also include a physical exam.
- **DSM-5 Diagnostic Criteria:** The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) contains the diagnostic standards for ADHD. The DSM-5 offers recommendations for measuring the severity and duration of symptoms as well as specific criteria for inattention, hyperactivity, and impulsive problems. Symptoms must appear before the age of 12, appear in numerous contexts, and significantly affect everyday functioning in order to be diagnosed [23].
- Rule Out Other Conditions: It's important to rule out any additional medical, psychological, or developmental issues that might resemble or coexist with ADHD. Among these include neurodevelopmental problems such as autism spectrum disorder, learning difficulties, mood disorders, anxiety disorders, and others. For a precise diagnosis and effective treatment planning, it's essential to distinguish ADHD from other illnesses [14].
- Assessment instruments: A variety of rating scales and assessment instruments may be utilized to support the diagnostic procedure. These instruments include behaviour rating scales that parents and teachers have completed, such as the Conners' Rating Scales and the ADHD Rating Scale-5 (ADHD-RS-5). The existence and severity of ADHD symptoms are quantified and evaluated using these metrics [24].

The DSM-5 criteria are met, and other potential explanations of symptoms have been ruled out before the diagnosis of ADHD is made in a kid. It is significant to remember that ADHD is a clinical diagnosis, and there isn't yet a conclusive medical test or biological marker for the condition. An accurate clinical evaluation, taking into account a variety of data sources, and expert judgment are all important components of the diagnosis process. A proper diagnosis is essential for designing effective treatment plans, developing effective intervention tactics, and providing support for the child and their family.

#### Clinical assessment and evaluation

Clinical assessment and evaluation play a vital role in the diagnosis of Attention-Deficit/Hyperactivity Disorder (ADHD) in children. A comprehensive assessment aims to gather information from multiple sources and evaluate various domains of the child's functioning. Here are the key components of clinical assessment and evaluation for ADHD:

- Clinical Interviews: These are conducted with parents, other
  family members, and the kid to learn more about the child's
  developmental history, current symptoms, and how they affect day-to-day functioning. The physician may inquire about
  the symptoms' origin and duration, their intensity, and how
  they affect various situations [22].
- Medical and Developmental History: The child's medical history, developmental milestones, and family history are all carefully examined. This assists in determining any underlying medical issues, genetic predispositions, or environmental influences that might contribute to the symptoms or influence available treatment options [5].
- Behaviour Rating Scales: These helpful instruments are used to evaluate the signs of ADHD and are completed by parents, teachers, and occasionally the child as well. Rating instruments including the Vanderbilt Assessment Scale, Conners' Rating Scale, and ADHD Rating Scale-5 (ADHD-RS-5) offer standardized measurements of ADHD symptoms and their effects on many domains of functioning. These scales aid in quantifying symptom severity and offer extra data from other angles [18].

#### **Comorbidities and Differential Diagnoses for ADHD**

In order to correctly diagnose Attention-Deficit/Hyperactivity Disorder (ADHD), it is important to rule out other illnesses that

can present with similar symptoms. The following conditions may imitate or coexist with the symptoms of ADHD:

- Learning Disabilities: Learning disorders such as specific learning disorders (SLD) can cause issues with organization, focus, and academic performance. Comprehensive academic evaluations can be used to spot learning impairments and distinguish them from ADHD [25].
- Mood Disorders: Mood disorders, such as depression and bipolar disorder, can occasionally show signs of attention deficit hyperactivity disorder (ADHD), such as irritability, inattention, and restlessness. For a precise diagnosis, it's crucial to consider the presence of mood symptoms, variations in sleeping habits, and affective disorders [26].
- Anxiety disorder: Conditions including social anxiety disorder and generalized anxiety disorder can cause irritability, restlessness, and difficulties focusing. Anxiety disorders and ADHD can be distinguished from one another by evaluating the presence of anxiety symptoms and excessive worry [27].
- Autism Spectrum Disorder (ASD): Some ASD patients may
  have characteristics that are similar to those of ADHD, such as
  attention problems, hyperactivity, and impulsivity. Differentiating between ADHD and ASD can be made easier by evaluating social communication abilities, restricted and repetitive
  behaviour, and social interaction patterns [28].

#### Comorbidities

- Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD): These behavioural disorders are characterized by antisocial, violent, and defiant behaviour. They and ADHD frequently co-occur [29].
- Learning Disabilities: It's common for ADHD and particular learning impairments to coexist. To give the child complete support, it is essential to recognize and treat both disorders [26].
- Tourette Syndrome: Tourette syndrome is a neurological illness characterized by tics, and it is frequently linked to ADHD.
   Tics can occasionally be misinterpreted for impulsive or hyperactive activity [30].
- The existence of comorbid illnesses might affect treatment planning and outcomes; hence it is crucial to undertake a complete evaluation to identify them. For comprehensive care to be provided and the general well-being of ADHD patients to be maximized, comorbidities must be accurately identified

and managed. Comprehensive examination and treatment may need a multidisciplinary approach involving medical practitioners from different specializations.

#### **ADHD** management

Children with Attention-Deficit/Hyperactivity Disorder (ADHD) are frequently treated with a multimodal strategy that addresses behavioural, educational, and psychological elements of the disorder as well as other functional areas. The management techniques are intended to lessen symptoms, enhance functioning, boost academic performance, and advance general wellbeing. The following are essential elements of managing ADHD in kids:

- The need of educating parents, carers, and teachers on ADHD cannot be overstated. Increased knowledge and comprehension of the condition, its signs and symptoms, and its effects on the child's daily life are made possible by psychoeducation. Additionally, it encourages the use of good communication techniques and empathy towards the youngster [16].
- Parent Training and Support: Parent training programmes, such as the incredible years programme and Parent-Child Interaction Therapy (PCIT), give parents tools to manage their child's ADHD symptoms and enhance parent-child interactions. With the assistance of these programmes, parents can improve their capacity to manage difficult behaviours and promote their child's growth by learning consistency, structure, and effective disciplining strategies [31].
- School-Based Interventions: Working together with instructors and the school is essential for enhancing the student's academic progress and addressing ADHD-related difficulties in the classroom. The youngster can achieve academic success with the use of accommodations and changes, such as preferred sitting, task division, and organizational tools. IEPs (individualized education programmes) or 504 Plans can be used to guarantee the right kind of educational support [32].
- **Drugs:** In some situations, doctors may recommend drugs to treat the symptoms of ADHD. It has been established that stimulant drugs, including amphetamines (Adderall) and methylphenidate (Ritalin), are useful in lowering symptoms. Alternatives to or in conjunction with stimulant medications may include non-stimulant drugs like guanfacine (Intuniv) and atomoxetine (Strattera) [33].
- **Regular Follow-Up and Monitoring:** It's critical to regularly check on the child's development, the efficacy of the treat-

ment, and any potential pharmaceutical adverse effects. To modify the treatment plan as necessary, cooperation between parents, educators, and healthcare experts is crucial.

It is essential to remember that ADHD management is individualized, and interventions should be catered to the unique requirements of each kid. In controlling ADHD symptoms and encouraging positive outcomes for children with ADHD, a comprehensive strategy that includes several approaches is frequently most helpful.

# Pharmacological interventions: Stimulant and non-stimulant drugs

To assist in managing the primary symptoms of Attention-Deficit/Hyperactivity Disorder (ADHD), pharmacological therapies are frequently employed in treatment. Stimulant and non-stimulant medicines are the two primary types of drugs used to treat ADHD.

#### Stimulant drugs

The most frequently recommended treatments for ADHD are stimulant drugs, which have been proven to be successful in easing ADHD symptoms in many kids [34]. The two main categories of stimulant medicines used to treat ADHD are:

- Methylphenidate; Common stimulant drugs include Ritalin, Concerta, and Focalin, which are all methylphenidate-based. They function by raising the concentrations of specific neurotransmitters in the brain, such as dopamine and norepinephrine, which aids in enhancing attention and lowering hyperactivity and impulsivity. Flexible dosage options are provided by the availability of methylphenidate in immediate-release and extended-release forms [35].
- Amphetamines; Adderall, Vyvanse, and Dexedrine are examples of amphetamine-based drugs that are frequently used for ADHD. Amphetamines, including methylphenidate, raise dopamine and norepinephrine levels in the brain, which improves concentration and lessens symptoms of ADHD. Both immediate-release and extended-release versions of amphetamines are available [35].

In general, low doses of stimulant drugs are first administered, and then the dose is gradually increased based on the child's response and tolerance. To ensure adequate dose and control any potential adverse effects, frequent monitoring and follow-up with a healthcare expert are necessary. Reduced appetite, trouble sleeping, impatience, and elevated heart rate and blood pressure are typical side effects of stimulant drugs [19].

## Non-stimulant drugs

**Non-stimulant drugs may be used** as an alternative to stimulant drugs or in conjunction with them, especially for people who do not tolerate or react well to stimulants [33]. The most common non-stimulant treatment for ADHD is.

#### **Atomoxetine**

A selective norepinephrine reuptake inhibitor (SNRI), atomoxetine (marketed under the name Strattera), raises norepinephrine levels in the brain. It aids in enhancing focus, lowering hyperactivity, and reining in impulsivity. When stimulant drugs are not appropriate or if a comorbid problem, such as anxiety or tics, may be made worse by the use of stimulants, atomoxetine is frequently recommended. The recommended dosage of atomoxetine is one pill per day [36].

The decision on the type of a medicine, whether stimulant or non-stimulant, is based on a number of variables, including the child's age, the severity of their symptoms, how they responded to previous medications, whether they have any coexisting diseases, and personal preferences. The choice to use medicine should be made in consultation with a medical expert who can evaluate the child's unique needs, keep track of the treatment's effectiveness, and handle any potential negative effects.

#### Psychoeducation and cognitive-behavioural therapy (CBT)

Psychoeducation and Cognitive-Behavioural Therapy (CBT) are two crucial non-pharmacological therapies used to treat childhood Attention-Deficit/Hyperactivity Disorder (ADHD). They can be utilised both independently of other therapies and in conjunction with them to improve the overall management of ADHD symptoms [37].

CBT is a structured style of therapy that focuses on recognising and changing thought, emotion, and behaviour patterns that contribute to the difficulties and challenges linked to ADHD.

Individual therapy sessions or programmes in a group setting are frequently used to deliver CBT and psychoeducation. They can be given by mental health specialists with experience in treating ADHD, such psychologists or therapists. When CBT and psychoeducation are combined to treat ADHD, children gain useful skills, increase their self-awareness, and function better overall [38].

#### Complementary and alternative medicine

Approaches used in addition to or in place of conventional medical treatments for Attention-Deficit/Hyperactivity Disorder (ADHD) are referred to as complementary and alternative therapies. It's crucial to remember that while some of these treatments may have anecdotal support or positive preliminary studies, there is frequently little scientific evidence to support their utility in treating ADHD.

#### **Dietary interventions**

- Elimination diets: Some people think that particular foods or additives can make the symptoms of ADHD worse. Elimination diets entail cutting out particular foods or food groups from the diet to see if symptoms get better (for example, artificial colours, preservatives, or allergies). A healthcare practitioner should be consulted before beginning an exclusion diet because there isn't enough research to support its efficacy in treating ADHD [39].
- Omega-3 fatty acids, iron, zinc, and magnesium are a few nutritional supplements that have been mentioned as possibly being helpful for ADHD. However, there is conflicting evidence on the efficacy of these supplements, so using them should be reviewed with a healthcare provider [40].

#### Neurofeedback

Through real-time feedback from an EEG (electroencephalogram) machine, people can learn to self-regulate their brainwave activity through a process known as neurofeedback. The goal is to enhance cognitive performance, impulse control, and attention. The evidence supporting neurofeedback's potential benefits in treating ADHD is mixed, and more thorough research is required to confirm the technique's efficacy [41].

### Awareness and meditation

Mindfulness-based therapies, such as yoga and meditation, seek to enhance focus and self-control. According to preliminary study, mindfulness practises may help reduce some of the symptoms of ADHD. To assess their efficacy and the best way to use them for kids with ADHD, more research is required [42].

# Complications in ADHD diagnosis and management Concerns about overdiagnosis and underdiagnosis

Due to the subjective nature of the symptoms and the overlap with other disorders, diagnosing ADHD can be difficult. Overdiagnosis is the mistaken diagnosis of people who do not fully fit the criteria for ADHD, which can result in needless treatment and possible drug abuse. Underdiagnosis, on the other hand, is when people with ADHD symptoms are not identified and do not receive the right interventions, leading to untreated deficits. It's crucial to strike a balance between making an accurate diagnosis and avoiding making an incorrect diagnosis [43].

#### Stigma and societal repercussions

ADHD is frequently stigmatised, which results in misunder-standings and unfavourable opinions. Peer rejection, academic difficulty, and negative labelling are just a few of the obstacles that children with ADHD may experience. Parents who may feel blamed or criticised for their child's misbehaviour are also susceptible to stigma. An environment that is more accepting and supportive of those with ADHD can be achieved through addressing stigma and raising public understanding about the condition [44].

#### **Healthcare** access

Access to proper healthcare and ADHD therapies can be extremely difficult, especially for underserved populations. Care disparities for people with ADHD may be caused by things like socioeconomic class, location, cultural differences, and restricted access to healthcare resources [45].

#### Consequences and transition to adulthood

Because ADHD is a chronic disorder, people who have it may experience long-term repercussions as they age from infancy through adolescence to adulthood. Problems with mental health, relationships, career, and education might continue throughout adulthood. Successfully managing the transition to adulthood necessitates continual support, suitable healthcare services, and access to resources that cater to the unique requirements of people with ADHD throughout this crucial period of life [16].

#### Prognosis and long-term results

The long-term prognosis of people with ADHD can be greatly improved by early diagnosis and care. The evidence points to increased academic achievement, greater social skills, decreased risk-taking behaviours, and improved general functioning as a result of early identification and effective management during childhood. A combination of medication, behavioural therapy, edu-

cational support, and parent education may be used in early intervention. Each child with ADHD has unique needs, so it is crucial to create thorough treatment regimens that are also individualised for each child [46].

#### Conclusion

The complicated neurodevelopmental disease known as ADHD has a substantial negative influence on children's and adolescents' lives. A thorough strategy that considers a variety of aspects, such as clinical assessment, differential diagnosis, and consideration of comorbidities, is necessary for the diagnosis and management of ADHD. It's critical to strike a balance between a precise diagnosis and avoiding overdiagnosis or underdiagnosis, and initiatives should be taken to combat stigma and provide access to suitable healthcare services, particularly for marginalised communities. For people with ADHD, it's also crucial to concentrate on long-term results and ease their transition to adulthood in order to secure their success and wellbeing moving forward. To progress the field of ADHD diagnosis and management, it is crucial that healthcare professionals, educators, lawmakers, and families collaborate, raise awareness, and do ongoing research. We can enhance the lives of people with ADHD and assist them in achieving their full potential by addressing the issues, raising awareness, and guaranteeing access to suitable interventions.

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