

The child behind Attention-Deficit/Hyperactivity Disorder: an illustrated account

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Abstract

Attention-Deficit/Hyperactivity Disorder (ADHD) is a common neurodevelopmental condition if identified early can ensure less morbidity and better prognosis. It is important to help the child behind the problem and not to look at child as the problem. A holistic approach involving parents as active agents of change will serve the best interests of the child. Therefore, psychoeducation of family members is essential as it helps to improve parental understanding of the condition and reduce punitive responses toward the child. Parents also need to be empowered with behavioural management techniques to manage the problem behaviours stemming from the underlying condition. In this article, we present an illustrated model using a fictional character for psychoeducation of families about ADHD and give an overview of major psychosocial interventions with a focus on environmental modification.

Keywords: ADHD, internal working model, behavioural management

INTRODUCTION

Attention-Deficit/Hyperactivity Disorder (ADHD) is a common neurodevelopmental disorder characterized by age-inappropriate levels of inattention, and or impulsivity and hyperactivity. Meta-analyses have estimated the prevalence of ADHD in children and adolescents as 5.29%¹ ADHD diagnosis in preschoolers, recently estimated to be 2.1%,² is lower than that of school-age children and adolescents and ADHD in adults aged 19-45 years at 2.5%.³ It is more common in males than in females with a ratio of approximately 2:1 in children and 1.6:1 in adults, in the general population,⁴ and and between 5:1 to 9:1 in clinical samples.^{5,6} The presentation is less overt in female population,⁷ with fewer hyperactive/impulsive symptoms and more inattentive symptoms when compared with males with ADHD.^{5,8}

Symptoms of ADHD were first described around mid-nineteenth century by German psychiatrist Heinrich Hoffman. Interestingly, he had depicted the symptomatology using illustrations in the colourful description of

"Fidgety Philip".^{9,10} As they say, "a picture speaks a thousand words". Therefore, using illustrations for psychoeducation can have a better impact in terms of improving one's understanding about the condition. Although various highly effective treatments have been developed, psychosocial interventions continue to play an important role in the management of individuals with ADHD. One-third of the children who were enrolled into the intensive 10-week behavioural therapy phase of the Preschool ADHD Treatment Study (PATS) had significant reduction of ADHD symptoms and did not need to advance to the medication phase.¹¹ Controlled studies reveal positive benefits of parent management and collaboration with school teachers, which require substantial amount of time and energy on the part of the individuals delivering prompts and reinforcement.^{12,13}

Psychoeducation of family members is essential as it helps to improve parental understanding of the condition and reduce punitive responses toward the child. Parents must also be empowered with behavioural management

techniques to manage problem behaviours stemming from the underlying condition. In this article, we present an illustrated model using a fictional character for psychoeducation of families about ADHD and give an overview of major psychosocial interventions with a focus on environmental modification.

IDENTIFYING THE SYMPTOMS OF ADHD

ADHD is essentially a set of behaviors grouped into inattention and or impulsivity and hyperactivity leading to impairment in functioning. There is no biological test for ADHD yet. It is first diagnosed, typically, in the middle primary school years. It coincides with the period when the demands of school environment are starting to really make an impression on the child. For some children, it can be so severe that it actually can be diagnosed early by pre-school age. Pervasiveness is an essential feature to make a diagnosis. Therefore, symptoms must be present in two or more settings such as school, home, social (friends or relatives), work (in case of adults) or in other activities.⁴

School context: Children from their elementary school onwards spend about one-third of their day at school. Therefore, it becomes an important setting where the symptoms manifest. Children with ADHD are likely to face issues such as inability to pay attention in classes, being easily distracted as well as distracting others, causing disturbance in the class, inability to follow instructions, forgetfulness, losing things like books and stationery, poor academic performance and so on. Figure 1 and 2 depict a child without and with ADHD in classroom context (while the teacher is teaching) respectively. It is important to pay attention to the feedback that the child receives about his/her behaviour from the teacher in both the scenarios.



Fig 1: School context (child without ADHD)

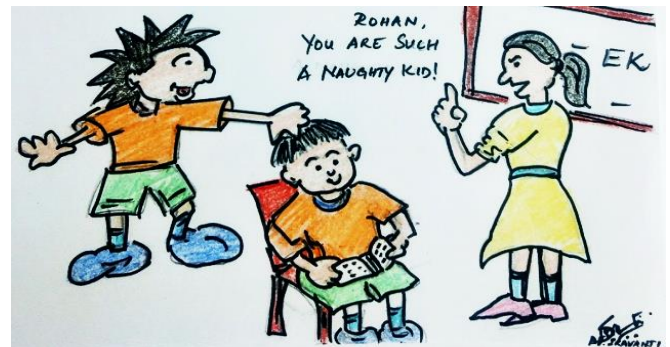


Fig 2: School context (child with ADHD)

Home or other (with friends) context: Home and peer relationships are the other major contexts in which the symptoms are expected to manifest. A typically developing child tends to follow instructions, can focus attention while doing homework assignments, maintain cordial relationships with peers and so on. However, a child with ADHD tends to act out of turn, may be restless, intrusive and often gets into fights with other children. In addition, the child may have poor emotion regulation skills. Figures 3 and 4 depict behaviour of a child without and with ADHD respectively in both home and social contexts.



Fig 3: Home and social contexts (child without ADHD)



Fig 4: Home and social contexts (child with ADHD)

Internal working model: As can be observed in the above illustrations, family, friends and teachers give a constant feedback, the nature of which depends on child's behaviour. The child starts to internalize these comments and eventually his/her self-image and self-esteem may be determined by the feedback received. Figure 5 and 6 depict a child with positive and negative self-image respectively.

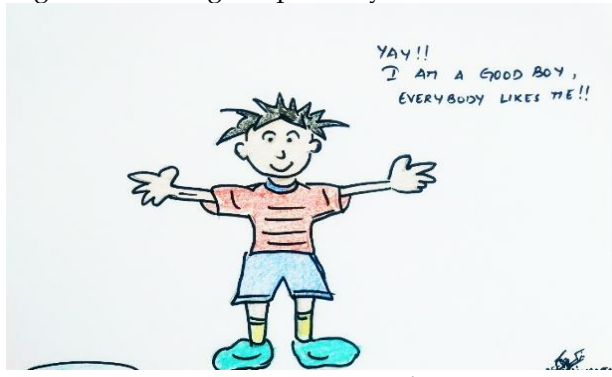


Fig 5: Internal working model (child without ADHD)



Fig 6: Internal working model (child with ADHD)

MANAGEMENT OF CHILD'S PROBLEMS

ADHD is the only neurodevelopmental condition in which pharmacotherapy has a major role. Acceptance of medication has increased and stigma reduced. However, misconceptions in public and among health professionals are common because their views are often ill-informed and inaccurate based on poor reporting by the lay media. Stimulant medications have been used to treat symptoms of ADHD for over 80 years, longer than the use of antibiotics to treat an infection.¹⁴ NICE (National Institute for health and Care Excellence) 2019 recommends focused group parent-training program of children under 5 years with ADHD as first-line treatment and medications for children above 5 years only after poor response to behaviour therapy.¹⁵ Evidence based psychosocial interventions for children with ADHD include Behavioural Parent Training (BPT), New Forest Parenting Program (NFPP), Incredible years parent training and child training (IYPTCT), Triple P Positive Parenting Program, Parent -child interaction therapy (PCIT) and Multicomponent Intervention (MCI).¹⁶

A management plan must include an assessment of the nature of problem and needs of a given child. Since it is a neurodevelopmental disorder, it is wise to do a developmental assessment and rule out other disorders that are frequently comorbid with it, such as - autism spectrum disorder, specific learning disorder, intellectual developmental disorder and communication disorders. After structured evaluations using standardized instruments depending on the level of severity, a decision on pharmacological treatment needs to be taken. Irrespective of which, a comprehensive management plan should include psychosocial interventions. These interventions when implemented properly may result in improvement in symptoms and overall functioning of the child. They comprise of environmental modifications, parent training interventions and cognitive behavior therapy (CBT).¹⁷ An overview of psychosocial interventions is given below.

Environmental modification

Structuring of routine: It helps the child to regulate his/her behaviors. It brings in predictability which guides one's actions. First

step to doing it is to identify child's interests and talents and then having these activities interspersed in the daily routine. While there needs to be a structure, it can be flexible within the structure. Gentle reminders to help child get back to planned tasks are often required.

Lists and reminders: Listing daily chores and displaying the same on room's door or notice board. Small reminder cards placed strategically, example - next to the bed (morning and bedtime rituals), on the refrigerator (meal-time instructions). These can be made colorful by having theme-based animated pictures suiting child's interests, example - cars, favourite animals, superhero or Disney princess.

Minimize distraction in the environment while studying: Make the child sit away from television, study table away from the windows and doors, parent should preferably sit with the child, presence of toys and other screen media around should be avoided.

Mini breaks: Provide break times in the middle of lengthy or boring tasks, e.g. 5-minute break after every 15-20 minute of being on a task or request the child to carry out a household chore such as assisting parent to fold clothes, arrange the dining table. Small activities like this could help channelize the excessive energy of the child.

Giving clear and not vague instructions: Some clearly spelt and "reasonable" Dos. While giving the "Don't" instructions it is important to tell the child what is the expected of him in that context and not to leave the child wonder what is expected of him/her. Effective communication includes specific, clear and short instructions, decreasing critical comments and maintaining consistency between what is said and what is done.

Explicitly listing out choices: It helps to list out choices than an open-ended question trying to ascertain child's choice.

General safety: It is essential to keep sharps away and childproof the house. Enough time should be set aside for expending energy by engaging the child in physically demanding play and adequately engaging to meet child's cognitive demands.

A brief overview of other psychosocial interventions

Parent training interventions: Parent training interventions are aimed at training parents in techniques to enable them to manage their children's problem behaviours. They have been shown to also reduce parental stress and enhance parental confidence.¹⁸ Praise, immediate reinforcements and rewards, use of delayed rewards contingent upon desirable behavior, response cost or withdrawal of privileges contingent upon undesirable behaviors, and limit setting with predictable consequences form the cornerstone of behavioural management. Enough emphasis cannot be laid on the need for consistency across time and between both parents and other family members.

Cognitive behaviour therapy: Cognitive-behaviour therapy in adolescents with ADHD is promising. It entails individual therapy or group CBT with a focus on psychoeducation, organization/planning, distractibility, adaptive thinking, and cognitive restructuring.¹⁹ Social skills and emotion regulation skills training are other components that have often been the focus of individual and group interventions. DBT-oriented group interventions have been tried in adults with ADHD.²⁰

Collaboration with school: Last but not the least - liaison with school and help with academics form critical components of psychosocial interventions. Classroom management may include changes to seating arrangement, lighting and noise; reducing distractions (for example, using headphones); study buddy (a peer who can help the child with ADHD focus and complete classroom assignments); optimising work or education to have shorter periods of focus with movement breaks (including the use of 'I need a break' cards); reinforcing verbal requests with written instructions; assisting in transitions (between periods/activities); and the appropriate use of teaching assistants at school. In the times of COVID-19 (Coronavirus Disease 2019) pandemic, telepsychiatry seems to be the way forward to meet the needs of children and parents in need of services. A pilot randomized controlled trial has shown that online BPT is associated with similar efficacious outcomes with face-to-face BPT, suggesting the need for further research to determine variables that predict greater acceptability for and adoption of this format.²¹

CONCLUSION:

Attention-Deficit/Hyperactivity Disorder (ADHD) is associated with marked impairments in functioning. It can lead to self-esteem issues and can be a cause of significant distress to family members. We have come a long way in terms of using evidence-based treatment strategies for this condition. Going forward, newer ways especially to adapt traditional treatment methods to current situation of delivering it by telepsychiatry need to be explored and established. This will help in providing services to the children and families who require help the most.

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