The International Journal of Indian Psychology
ISSN 2348-5396 (Online) | ISSN: 2349-3429 (Print)
Volume 13, Issue 2, April- June, 2025
DIP: 18.01.407.20251302, DOI: 10.25215/1302.407
https://www.ijip.in

Research Paper

Effect of Therapeutic Approaches in Treatment of ADHD

Ms. Ridhi Kedia[1]*

ABSTRACT

The purpose of this case is to explore how effective is psychotherapeutic approach in treatment of ADHD. The case revolves around Mater A and his diagnosis with ADHD at early age (age of 3) and various assessments and suggested treatment. The treatment is supported by relevant researches along with effectiveness of these approaches in treatment of ADHD.

Keywords: *Attention, Hyperactivity, Deficit, Inattention, Treatment, Occupational Therapy, Task, Disorder*

Attention Deficit hyperactivity disorder (ADHD) is a developmental disorder defined by presentient, age-inappropriate inattention and hyperactivity affecting their social and academic life along with stress among caregivers (Biederman, 2006). ADHD is not just a childhood disorder; it often presents itself in adulthood. Individuals with ADHD often struggles with time management, organizing, focusing on the given task. It is comorbid with disorders like anxiety, depression (Antshel et al., 2011). The stigma around the disorder often leads to ignoring the symptoms which can affect the individual's self-concept and development of feelings like shame and inadequacy (Baron et al., 2011).

The causes of Attention Deficit Hyperactivity Disorder (ADHD), a complicated, multifaceted disorder, have been thoroughly studied in recent decades. Despite a great deal of public debate, ADHD is now generally accepted as a valid clinical condition, with a mix of genetic, environmental, and psychological variables contributing to its etiology (Thapar et al., 2012). ADHD tends to result from the interaction of several risk factors that operate cumulatively or interactively, rather than from any one component alone.

High heritability values ranging from 71% to 90% have been found in family and twin studies, indicating a strong genetic component (Faraone et al., 2005; Nikolas & Burt, 2010; Thapar et al., 1999). A substantial genetic liability is shown by the two to eight times higher likelihood of being impacted among first-degree relatives of those with ADHD (Faraone et al., 2005). Although these genetic indicators alone have little predictive power, molecular genetic research has also shown both uncommon large-effect copy number variations (CNVs) and common small-effect variants linked to ADHD (Williams et al., 2010; Stergiakouli et al., 2012).

[1]Student, Clinical psychology, Amity Institute of Psychology and Allied Sciences, Amity University, Noida, Uttar Pradesh, India
*Corresponding Author

Received: May 7, 2025; Revision Received: June 26, 2025; Accepted: June 30, 2025

Environmental factors have also been linked, especially those that take place during the prenatal and perinatal periods. Though recent genetically informed studies indicate that some of these associations may be confounded by inherited factors rather than being strictly causal, maternal smoking during pregnancy, maternal stress, low birth weight, and prematurity are commonly mentioned as potential risks (Thapar & Rutter, 2009; D'Onofrio et al., 2010; Rice et al., 2009). A biologically plausible connection between exposure to neurotoxins and attentional deficits has been supported by the more consistent connections that environmental toxins, such as lead and some pesticides, have shown with ADHD symptoms (Bouchard et al., 2010; Braun et al., 2006).

It has also been investigated how psychosocial hardship, such as family strife and extreme early deprivation, may increase the chance of ADHD. The contribution of more typical family adversities is less clear and may reflect reverse causation or gene–environment correlation rather than a straightforward causal effect (Lifford, Harold, & Thapar, 2009), despite evidence that extreme early adversity, such as institutional rearing, can causally lead to ADHD-like symptoms (Rutter et al., 2007).

In the end, the current knowledge of the etiology of ADHD rejects any oversimplified division between "nature" and "nurture" and instead highlights the complex interplay between genetic vulnerabilities and environmental exposures (Rutter, 2006). ADHD requires integrated models for both research and therapeutic practice because it results from the intricate interweaving of life experiences and genetic susceptibilities rather than from single causes.

Case conceptualization

Master A, is a 11 year old male, who came into the clinic at the age of 6 years old, after he was referred by his school counsellor for inattention and hyperactivity problems. The school counsellor reported difficulty sitting at one place and always roaming from one place to another. He also faced difficulty focusing his attention on one particular task and at times deviate to whole another thing in the class. He came into the clinic with his parents and his elder sister. The family also reported signs of hyperactivity where they mentioned about not being able to sit and always being energetic. These symptoms were noticed by parents at at age of 2 but they considered it as a part of growing up and not something serious. It was when the school counsellor made suggestion regarding seeking professional help then parents came to clinic.

Before visiting the clinic, the parents got an assessment done at the age of 3 years 8 months old as per suggestion of the counselors from MAX hospital. Psychological assessments revealed the presence of ADHD, below level social adaptive functioning and mild delay in developmental functioning.

After first session with family, case history was taken and it was noted that the child was a premature baby born in the 7th month and soon after the delivery he was kept under the observation for 2 months. The clinician asked for standardized test to be conducted for measuring ADHD and intelligence test. As per the findings the overall cognitive abilities were within the average level. As per parents rating and examiner observation, he was diagnosed with ADHD. Academic evaluations revealed that he was not performing at grade level in most of the academic skills. He was at risk of developing specific learning disability in many areas.

METHODOLOGY

The assessment was done in following process,

1. Parent Interview
2. Informal observation of the child under the structured as well as unstructured activities
3. Psychological tests including
   - Weschler Intelligence scale of children
   - Wide range Achievement test
   - NHIMHANS Index of specific learning disability
   - Conner's 3

RESULTS

WISC Profile table

Scale	Skills Measured	Composite Score	Percentile Rank	95% Confidence Interval	Qualitative Range
Full Scale Score (FSS)	The score represents intellectual/cognitive functioning derived from all indexes.	83	13	76 - 94	Borderline to Average
Verbal Comprehension (VCI)	Formation, verbal reasoning, knowledge acquired from environment.	91	27	86 - 95	Low Average to Average
Perceptual Reasoning (PRI)	It assesses visual-motor integration, perceptual reasoning.	89	23	83 - 96	Dull Average to Average
Working Memory (WMI)	It assesses mental concentration, reasoning, short-term memory.	92	30	85 - 100	Dull Average to Average
Processing Speed (PSI)	Measures visual-motor coordination, attention, speed of processing simple visual info.	45	0.1	30 - 83	Borderline

ADHD Evaluation- Conners - 3

Scale	T-score	Guideline	Common Characteristics of High Scorers
Inattention	78	Very Elevated (Many more concerns than are typically reported)	Poor concentration and attention, keeping his mind on work, makes careless mistakes, easily distracted.
Hyperactivity/ Impulsivity	>90	Very Elevated (Many more concerns than are typically reported)	Moves around a lot, fidgets, restless, impulsive.
Learning Problems	77	Very Elevated (Many more concerns than are typically reported)	Problems with learning and/or understanding academic material that involves reading, spelling, math skills.
Executive Functioning	77	Very Elevated (Many more concerns than are typically reported)	Poor organization, forgets things, difficulty getting started on projects.
Aggression	>90	Very Elevated (Many more concerns than are typically reported)	Physically and/or verbally aggressive; bullying behavior; poor control of anger/aggression.
Peer Relations	>90	Very Elevated (Many more concerns than are typically reported)	Difficulty with friendships, poor social connections, seems to be unaccepted by peer group.

Suggested treatment for Master A by the clinician:

Occupational therapy helps in improving both fine and gross motor skills through number of exercises. For fine motor skill activities like pixels, or putting beads into a string, squeezing toys, etc. this improves muscle strength. Occupational therapy also involves working on upper body movements, balance, visual perception improvement and self-care. Sensory integration can is also included which help in improving individual's ability to receive signals, interpreting them and responding in response to them. This is done through number of ways like electrical sensation through massagers, brushes, playing with dough, making them feel different textures.

Task duration should accommodate child's short attention span. Academic assignments should be brief and feedback regarding accuracy should be immediate. Longer projects should be broken into manageable parts.

New or innovative, interesting material improves attention. Increasing the novelty and interest level of tasks through use of increased stimulation (e.g., color, shape, texture) reduces activity level, enhances attention and improves overall performance.

When possible, it is helpful to allow students with attention deficit to set their own pace for task completion. The intensity of problematic behaviors is less when work is self paced, as compared to situations where work is paced by others.

Children with attention deficit have difficulty following multi-step directions, it is important for instruction to be short, specific, and direct. Further, to ensure understanding, it is helpful if these students are asked to rephrase directions in their own words. Additionally, caregivers must be prepared to repeat directions frequently, and recognize that students often may not have paid attention to what was said.

Although it is not recommended to remove all irrelevant stimuli from the environment, attractive distractions such as mobiles, video games should not be placed within the child's visual field.

Structure the task so that it is possible to proceed in a step-by-step manner.

Specific recommendations for increasing the child's attention span and manage related behavior:

Shortlist preferred activities: doing puzzles, coloring, imaginary play, reading out stories
Engage in the activity without distraction or interruption. Put away gadgets and distractions. No phone should be used.

Just allowing child to change his way of sitting or standing while he completes a written assignment is good enough to produce a burst of mental energy. While sitting, parallel activities such as doodling, rolling a piece of clay or performing some other manual task may help enhance their attention as well.

Start below the frustration level of the child: if your child can focus for 5 minutes, start by focusing for 5 minutes only. This way you can make the interaction time pleasurable; increasing the time gradually when the child is able to engage in doing the activity with you. Slowly get the child to focus for 10 minutes and then 15 minutes.

Introduce variety: ADHD children get bored quickly, introducing variety helps them stick to your "attention building" time. Gradually decrease the amount of external stimulation to which the child responds. You may have to respond to everything your child says, but don't be overenthusiastic or entertaining. Save teaching skills for another time. If you distract your child with conversation, he won't be able to maintain attention. Don't allow interruptions, either by yourself or by the child.

Minimize the time your child spends watching TV or using the computer/using the smartphone. Though the child seems to be focusing well, the skill doesn't help in any situation as the visuals keep changing at a fast pace and are not more than two- to three-milliseconds segments.

Structure the day – Develop routines for homework, bedtime, mealtimes, chores, and play time. Remove distractions such as television and phone when the child is doing homework. While scheduling activities, remember that ADHD children often suffer from sensory overload. Introducing too many activities in a day can overwhelm them. Give the child sometime to relax. Increase physical activity – Channelize the endless energy of your child into physical games and formal exercises.

Spending 60 minutes a day doing medium to intensive exercises, helps children to concentrate. Gymnastics, dance, and other forms of activity that help the children to focus on body movements are good. Joining team based activities is also a good idea, since they help the child experience social learning and learn to obey the rules of the game.

The positive home atmosphere and support of the family members should be maintained and strengthened. His positive involvement in the home and helping in household tasks should be encouraged.

Vary instructional strategy – Since it is not possible to change the activity after every five minutes (most ADHD children would love that), it is wise instead to introduce a variety in instructional strategies. Such as engaging in a classroom lecture for about 15 minutes, followed by 15-20 minutes of a group activity it is better to have more production than continuing a single activity for 30-35 minutes. At home, alternate between an oral instruction with a written task, followed by a timed task can be highly productive.

Build prompts for tasks that require following directions. Start out by helping your child if necessary, but then take the buoy toy apart and do it again together until the child no longer needs help.

Research evidence on effectiveness of therapeutic strategies on treatment of ADHD.

1. Behavioral Parent Training (BPT)

Behavioral Parent Training teaches parents strategies like positive reinforcement, consistent discipline, and clear communication to manage their child's behavior. Sessions are typically conducted weekly for 2–2.5 hours over 8–12 weeks. Modifications like single-session, phone-based interventions, and father-specific programs (e.g., COACHES) have also been developed to improve accessibility (Evans, Owens, & Bunford, 2014)

2. Behavioral Classroom Management (BCM)

Behavioral Classroom Management involves strategies like daily report cards (DRC) and structured reinforcement systems implemented by teachers. Research showed that DRC

combined with teacher consultation improved classroom behavior, academic productivity, and reduced rule violations in children with ADHD (Fabiano et al., 2010; Mikami et al., 2012)

3. Behavioral Peer Interventions (BPI)
Behavioral Peer Interventions focus on improving peer relationships by training adults (teachers, parents) to positively reinforce appropriate peer interactions. Studies like Parent Friendship Coaching (PFC) showed that training parents to coach children during playdates enhanced children's peer acceptance and social skills (Mikami et al., 2010)

4. Cognitive Training
Cognitive training (e.g., Cogmed) targets working memory and executive functioning through computerized exercises. While parent ratings indicated symptom improvement, teacher ratings showed little to no effect, leading cognitive training to be classified as an experimental treatment (Beck et al., 2010; van der Oord et al., in press)

5. Neurofeedback Training
Neurofeedback training helps children learn to regulate their brainwave patterns to reduce ADHD symptoms. A large study (Gevensleben et al., 2009) showed that children receiving neurofeedback had lower ADHD symptoms reported by both parents and teachers, though broader functioning outcomes (e.g., academics, family relationships) were not significantly improved. Therefore, it is considered a possibly efficacious treatment (Level 3) (Evans, Owens, & Bunford, 2014)

6. Organization Skills Training
Organization skills training programs like OST (Organization Skills Training) and HOPS (Homework, Organization, and Planning Skills) teach children how to manage school materials, track assignments, and plan their tasks. These programs showed significant improvements in organization and academic functioning, with consistent gains reported by both parents and teachers (Abikoff et al., 2013; Langberg et al., 2012)

DISCUSSION

Master A, an 11-year-old male, first presented to the clinic at the age of 6 following a referral from his school counselor for persistent inattention and hyperactivity. The initial concerns noted both by the school and family included excessive movement, difficulty maintaining focus on tasks, and frequent task-switching. These behaviors had been observed as early as age 2, but were initially dismissed by the parents as normal developmental traits. However, a comprehensive psychological assessment at age 3 years and 8 months at MAX Hospital confirmed the presence of **attention deficit hyperactivity disorder (ADHD)**, along with below-average social adaptive functioning and mild developmental delays.

From a developmental and neuropsychological standpoint, Master A's developmental vulnerabilities were probably exacerbated by his premature birth at seven months and the two-month observation period that followed. One established risk factor for attentional and executive functioning deficiencies, which are central impairments in ADHD, is premature delivery. He performed below grade level on academic tests and had a high risk of having a specific learning disability (SLD), according to the cognitive evaluation done during his clinical evaluation, which indicated average intellectual functioning. This emphasizes the necessity of both behavioral therapy and early, tailored academic interventions.

In order to treat both inattention and hyperactivity, the clinical care plan included a multimodal strategy that included behavioral interventions, classroom changes, occupational therapy, and scheduled routines. Occupational therapy focused on deficiencies in visual-motor coordination, fine and gross motor abilities, and sensory integration—areas that are frequently impacted in kids with ADHD. The goal of sensory integration exercises like dough manipulation, massagers, and tactile play is to control arousal and enhance self-control.

Behavioral strategies recommended were developmentally appropriate and evidence-informed. These included:

- Breaking down academic tasks into smaller, manageable parts,
- Providing immediate and consistent feedback,
- Allowing flexibility in movement during tasks (e.g., changing postures, parallel activities like doodling),
- Creating distraction-free environments,
- Developing structured daily routines, and
- Using novelty and variety in instruction to sustain attention.

Moreover, recommendations such as gradually increasing task duration, engaging in structured physical activity, and minimizing screen time are aligned with best practices for ADHD management. Activities such as gymnastics, dance, and team-based games not only channel hyperactivity but also promote self-regulation and social skills.

CONCLUSION

Master A's case highlights the significance of early identification and a comprehensive, multimodal approach in managing ADHD. With a combination of occupational therapy, structured routines, academic accommodations, and evidence-based behavioral strategies, meaningful improvements can be achieved in attention, behavior, and academic performance. Ongoing support from both family and school, along with periodic evaluations, is essential to ensure sustained progress and overall well-being.

REFERENCES

Antshel, K. M., Hargrave, T. M., Simonescu, M., Kaul, P., Hendricks, K., & Faraone, S. V. (2011). Advances in understanding and treating ADHD. *BMC Medicine*. https://doi.org/10.1186/1741-7015-9-72

Arnold, L. Hodkings, P et al (2015). Long-term outcomes of ADHD: academic achievement and performance. *Journal of attention disorders,* 1-13. DOI: 10.1177/1087054714566076

Baron, D. A., Pato, M. T., & Cyr, R. L. (2011). Treatment of adults with attention-deficit/hyperactivity disorder. *Journal of Osteopathic Medicine*, *111*(11), 610-614.

Bussing, R. Porter, P. et al (2012). Academic outcome trajectories of students with ADHD: does exceptional education status matter. *Journal of emotional and behavioral disorder,* 1-13. DOI: 10.1177/1063426610388180

Evans, S. W., Owens, J. S., & Bunford, N. (2014). Evidence-based psychosocial treatments for children and adolescents with attention-deficit/hyperactivity disorder. *Journal of clinical child & adolescent psychology*, *43*(4), 527-551.

Martin, A. Burns, E. et al (2016). ADHD, personal and interpersonal agency, and achievement: exploring links from a sociology theory perspective. *Contemporary*

educational psychology, 13-22. DOI: htpps:11d09.org110.1016/j. cedpsych.2016.120 01

Rogers, M. Hwang, H. et al (2011). Inattention, working memory, and academic achievement in adolescent referred for attention deficit/hyperactivity (ADHD). *Child neuropsychology,*1-15. DOI:10.1080/09297049.2010.544648.

Sjöwall, D. Bohlin, G. et al (2017). Neurological deficits in preschools predictors of ADHD symptoms and academic achievement in late adolescents. *Child neuropsychology,* 23(1), 111-128. DOI: 10.1080109297049.2015.1063595

Thapar, A., Cooper, M., Eyre, O., & Langley, K. (2013). Practitioner review: what have we learnt about the causes of ADHD?. *Journal of Child Psychology and Psychiatry*, *54*(1), 3-16.

Westerlund, J. Holmberg, K. et al (2010). Academic performance of adolescents with ADHD and other behavioral and learning problems- a population based longitudinal study. *ACTA paediatrica.* DOI: 10.1111/j.165/-2227.2010.02048.x

Zendarski, N. Sciberras, E et al (2016). A longitudinal study of risk and protective factors associated with successful transition to secondary school in youth with ADHD: prospective cohort study protocol. *BMC pediatrics.* DOI: 10.1186/s12887-D16-0555-4

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Kedia, R. (2025). Effect of Therapeutic Approaches in Treatment of ADHD. *International Journal of Indian Psychology*, *13*(2)*,* 4606-4613. DIP:18.01.407.2025 1302, DOI:10.25215/1302.407