

Case Study

Longitudinal Case Study: Evaluating the Progress of a Client with Autism Spectrum Disorder Through Years of Conventional Therapeutic Interventions

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ABSTRACT

This paper focuses on exploring the effectiveness of conventional therapies in treating symptoms of autism spectrum disorders. The paper consists of an observed case of a four-year-old boy who was diagnosed with autism at the age of two. The case shows the effectiveness of early intervention via conventional therapies to help with emotional and some social issues faced by autistic patients. Here we notice in this case how effective these therapies namely- speech therapy, occupational therapy, social skill training, and group therapy, are in improving symptomology in the matter of two years.

Keywords: *Autism spectrum disorders, ASD, therapy, treatment, speech therapy, occupational therapy, social skill training, group therapy, conventional therapy, longitudinal study*

Autism Spectrum Disorder's prevalence has seen a rise in the last few decades, the studies and census show 1 out of 36 children in the United States of America have been diagnosed with it. (Maenner et al., 2023). This rise in diagnosis also creates a demand from professionals to help with managing the symptomology.

Autism Spectrum Disorder (ASD) refers to a complicated neurodevelopmental disorder which is characterized by having constant deficits in areas such as social settings, communication, repetitive behaviours as well as restricted interests (American Psychiatric Association, 2013). There are various challenges, faced by children with autism spectrum disorders. They often face difficulty in social situations, emotional regulation, and communication all of which significantly affect the ability to have a sustainable daily life functioning. Over the years, a variety of conventional therapies have been developed to address the challenges faced by individuals with autism spectrum disorder. Some types of therapies include Applied Behavior Analysis, speech and language therapy, social skill training therapy, and occupational training. These are the focus of this paper.

Each of these therapies targets different aspects of the disorder, and research has shown their effectiveness in improving various skills in individuals with ASD (Howlin et al., 2009).

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Research supports applied behavior analysis's ability in helping the development of language and reducing maladaptive behaviors, particularly when implemented at an early age (Vismara & Rogers, 2010). Speech and language therapy is another widely used and important traditional intervention for individuals with autism spectrum disorders. Children with autism often struggle with verbal and non-verbal communication, making speech therapy an essential component of early intervention (Paul, 2008).

Occupational therapy focuses on the processing of sensation issues and helps in development of gross and fine motor skills. Children with autism spectrum disorders also frequently experience sensitivity to sensations that impact on the ability to interact with the environment. Occupational therapy is effective in improving daily living skills, social participation, and sensory processing in children with autism spectrum disorder (Case-Smith and Arbesman, 2008). Group therapy has been an important intervention tool to help autistic children develop social queues and to function in social environments successfully. Group-based social skills interventions can lead to improvements in peer relationships and emotional understanding (White et al., 2007). The traditional therapies mentioned above have been widely researched and implemented with undeniable success. While each therapy addresses different challenges of autism spectrum disorder, they often work best when combined with creating a comprehensive treatment plan. The effectiveness of these therapies depends on early diagnosis and consistent, individualized application.

This paper explores the role of conventional therapeutic early interventions in the developmental progress of a child with an autism spectrum disorder that can make a significant impact in short period as two years when done right and effectively.

CASE CONCEPTUALIZATION

The present case is an evaluation treatment and progress of a 4 year old boy here on after referred to as Arnav (name anonymized for confidentiality). He was diagnosed with autism spectrum disorder at age two. He was born during COVID-19 pandemic, Arnav's environment was shaped by increased screen time as both parents worked full-time. He spent much of his early years with his grandparents, leading to a lack of consistent parental interaction. His speech was heavily influenced by English-language YouTube videos, with phrases like "Hi friends" becoming part of his vocabulary, though he showed little understanding of conversational language, particularly in Hindi, which was spoken at home. He was referred to by his pediatrician after the parents expressed their concern about delays in meeting developmental milestones especially in areas such as speech motor skills as well as social interaction.

Early development, history and diagnosis

Arnav was a full-term child born with no significant difficulty there was no report of prenatal neglect or perinatal complications. At the time of birth Arnav weighed about 2 kilograms, via uncomplicated C-section.

The parents began to worry when Arnav as a newborn would not smile or maintain eye contact with them. After nine months they started noticing the lack of facial expressions and babbling which caused their worry to increase and led them to consult the pediatrician for the same. Initially the pediatrician thought these were not cause for alarm yet, as the child was too young. However, by the time he was one year old he lacked response to his name,

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showing no baby talks, lack in making any type of gestures such as pointing, showing no interest in others even at games like peekaboo.

At this time Arnav's pediatrician decided to conduct a routine developmental screening and noticed that his social communication abilities were significantly delayed compared to others in his age group. The pediatrician then recommended the child for further assessment which led to the diagnosis of Autism spectrum disorder by age two.

The psychiatrist diagnosed Aarav using the autism diagnostic observational schedule (ADOS) and the revised diagnosis interview- revised (ADI-R) names scores were in moderate to severe range for autism spectrum disorders.

Key features add diagnosis included

- Nonverbal communication: no pointing or having a response to gestures
- Speech delay: no use of a single word by age 2
- Repetitive behaviors: hand flapping was done multiple times
- Social interaction: no form of social engagements such as smiling; barely a response to his name and lack of interest with others.

Conventional Therapeutic Interventions

Upon diagnosis, Aarav was enrolled in several conventional therapies designed to focus on his communication, social, and motor skill problems. The therapies consisted of mainly speech therapy, group-based social skills training and occupational therapy. The interventions were tailored to meet his specific needs, and his progress was closely monitored over the course of two years.

1. Speech Therapy

Aarav's primary area of concern was his inability to communicate. Speech therapy sessions were begun to tackle this, and focused on improving both his receptive and expressive language skills. At the age of two, Aarav exhibited minimal verbal responses and had to be repeatedly probed to give a response. The therapy incorporated play-based learning and visual aids to encourage Aarav to initiate simple verbal interactions. His speech therapist also worked on improving his understanding of instructions and facilitating two-way communication.

By age four, Aarav's verbal skills had improved notably. He began greeting others by saying "hello" without prompting and could initiate basic conversations. Although his speech was still limited to short phrases, he started using language more meaningfully in social situations, such as church gatherings, where he previously had avoided interaction.

2. Occupational Therapy (OT)

Aarav also showed delays in fine motor skills, which impacted on his ability to hold especially writing tools and participate in age-appropriate activities. Occupational therapy sessions were designed to help him develop better control of his hands and improve coordination. His therapy involved exercises like picking up small objects, scribbling with crayons, and using scissors to strengthen his hand muscles. His sensory processing difficulties, which contributed to his resistance to touch and new textures, were also addressed during therapy.

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Through this, Aarav made gradual progress. By the age of four, he could hold a pencil with more stability and participate in simple drawing activities. His therapists used sensory integration techniques to improve his tolerance to different textures, sounds, and visual stimuli, which helped him engage better with his environment.

3. Social Skills Training and Group Therapy

One of the key components of Aarav's intervention plan was group-based social skills training. When two-year-old, Aarav had a little to no interest in playing with other children. He preferred playing solo and would often retreat to corners during family events or religious gatherings at church. His therapists incorporated group therapy to help him develop the necessary skills for social interaction.

Group therapy sessions provided a structured environment where Aarav was encouraged to interact with his peers through games and collaborative tasks. These sessions helped him practice turn-taking, sharing, and communicating with other children. Over time, Aarav began to play more actively with his peers, and by the age of four, he could engage in cooperative play. His social interactions at church also improved, he started greeting other children and playing in small groups.

Progress Over Two Years

After two years of focused conventional therapeutic interventions which were based on his individual needs, Aarav showed substantial improvements in key developmental areas. His communication skills progressed from minimal verbal responses to meaningful verbal interaction, and he began using phrases to initiate conversations with both adults and children. His eye contact, which had been almost absent at the age of two, improved significantly during social interactions, particularly in group settings like church, where he had previously avoided interaction altogether.

Aarav's fine motor skills also saw marked improvement, allowing him to engage in age-appropriate activities such as drawing and writing. His ability to participate in group play and structured social activities reflected a growing comfort in social situations. While Aarav continues to face challenges, particularly in complex conversations and sensory sensitivities, his development has been encouraging

DISCUSSION

The case discussed in this paper provides a positive outlook on how a rigorously regulated treatment followed for even a short duration like two years can bring about significant changes in children with Autism Spectrum Disorder. Arnav, a four-year-old diagnosed with Autism Spectrum Disorder at the age of two, showed noticeable improvement through conventional therapeutic interventions such as speech therapy, occupational therapy, and social skills training. Over the course of two years, these therapies helped Arnav's communication, motor skills, and social interactions. This progression aligns with recent research on the efficacy of traditional therapies for treating core symptoms of Autism Spectrum Disorder.

One of the most notable improvements observed in Arnav was in his communication abilities, which were markedly delayed at the time of diagnosis. As the treatment was administered early on, his speech and expression significantly improved.

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Occupational therapy was equally critical role in addressing Arnav's motor skill delays and sensory processing challenges. Many children with Autism Spectrum Disorder, like Arnav, experience difficulties with fine motor coordination and are highly sensitive to sensory stimuli. Recent research confirms that occupational therapy, especially when focused on sensory integration, can help children regulate sensory input and improve motor skills (Pfeiffer et al., 2021).

One of the most common difficulties faced by autistic children is social situations, In Arnav's case initially, there was little interest in engaging with peers, preferring to play alone. However, through structured social skills training in group therapy, he developed essential social abilities.

This paper focused on only three main areas of Autism Spectrum Disorder symptomatology; and major success is noted in all three areas which provide us with conviction that early intervention for autistic children can help tremendously. Despite this it is important to note, Arnav continues to face challenges in more complex areas of communication and sensory sensitivity. Many new alternative therapies such as music therapy and art therapy can be beneficial in treating the symptoms seen in autistic children. Music therapy, in particular, can be very effective, as it consists of a rhythmic, predictable, and structured approach that helps autistic children thrive (Geretsegger, Holck, & Bieleninik, 2019).

CONCLUSION

This paper successfully demonstrates our early intervention can benefit a child with autism spectrum disorder. In this case conventional therapeutic interventions were used. The case of Arnav, a four-year-old boy, successfully sure that early and consistent application of therapies such as speech therapy, occupational therapy, and social skills training can lead to noticeable improvements in communication, motor skills, and social interactions in just two years. Several researchers corroborate that early interventions and individualized care can significantly help a child with autism lead a better life. While Arnav still faces challenges in certain areas, his progress is a indicator towards the efficacy of conventional therapies to help in bringing about meaningful growth in children with autism spectrum disorder. As the field of autism intervention continues to evolve, integrating emerging therapies like music and art therapy alongside conventional approaches may offer much needed additional help.

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Conflict of Interest

The author(s) declared no conflict of interest.

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