

The Pervasiveness of Autism Spectrum Disorder and the Calibrated Interventions

Autism spectrum disorder (ASD) is an umbrella term comprising a group of neurological conditions marked by severe difficulties with social interaction and communication. According to the World Health Organization,^[1] in 100 children worldwide suffer from ASD, and 1 in 500 Indian children receive an autistic diagnosis. With four men diagnosed for every female, boys are more likely than females to be impacted by autism. Compared to Down syndrome, which affects one in 800 newborns, autism occurs more often. Children may exhibit a spectrum of symptoms, varying in intensity, from recurring patterns of limited interests and unusual behaviors to challenges in transitioning between activities or events, as well as unexpected reactions to sensory cues in their surroundings. While a cure for autism is not currently evident, interventions play a crucial role in assisting children to effectively manage their symptoms. By tailoring treatment plans to individual needs, these interventions contribute to an improved quality of life.

Autism symptoms significantly affect a person's ability to communicate, comprehend relationships, and connect with others, which is why they are typically identified in their first 3 years of life. People with autism are often associated with strange or stereotypical activities and may have a higher or lower sensitivity to sensory stimulation. ASD is a neurological disorder that affects a person's lifetime cognitive development and cannot be healed. People with autism frequently appreciate routines, and when these patterns are disturbed, they may get frustrated or anxious. Individuals with ASD are resistant to change and insist on maintaining rigidity in daily schedules in different settings (school, home, work). According to epidemiological statistics supported by the Centres for Disease Control and Prevention,^[2] autism being a multifaceted and diversified disorder, several people may be affected by distinct factors: genetic basis like Fragile X Syndrome or tuberculosis, prenatal difficulties, having a sibling with ASD, abnormalities in the brain and being born to elderly parents with advanced maternal age.

All autistic people experience some of the same challenges since autism is a spectrum disorder, but being autistic will have different effects on each individual. Some autistic people experience learning challenges, mental health problems, or other disorders, necessitating varying degrees of help. Understanding the underlying causes and creating efficient interventions that are provided through early diagnosis and holistic treatment plans to provide required levels of support for persons with ASD. Personalized treatments, therapies, and prescribed medications

could potentially be recommended to meet the specific requirements of each individual with ASD. When tackling the complex issues related to autism and its comorbidities, a multidisciplinary approach comprising health-care providers, medical professionals, therapists, and educators can often be helpful.

ASD traits include difficulties with social engagement and communication, such as avoiding eye contact, refusing to participate in interactive play, making no facial motions or expressions, refusing to recognize when people are wounded, and displaying very little interest in talks. During childhood, children with autism may not develop as well as their neurotypical peers in the areas of interpersonal relationships, social skills, cognitive abilities, and processing of sensory input. Dysfunctional behaviors may also begin to emerge as hyper/hypoactivity, attention and sleep deficits, poor facial expressions and insensitivity to pain, self-harming behaviors (e.g. hand-biting, head-bashing), and self-stimulatory conduct (e.g. repetitive, nongoal-directed actions like rocking, hand flapping).

Most people's actions and learning are governed by the brain processing and hierarchical development of their fundamental senses. Sensory integration and development are often erratic in children with ASD. Due to issues with touch, children with autism face delays in their social development. These youngsters resist "touch" on various areas of their bodies, struggle with it, and parents eventually stop allowing it. Delays in early self-regulation and lack of typical reactions to touch are directly and linearly associated, according to research from the Qigong Sensory Training Institute.^[3] Because the early self-regulation milestones, which build the framework for the rest of development, are missed by the autistic kid, the 1st-year self-regulation milestones are generally behind schedule in autistic children.

A multidisciplinary team consisting of a pediatrician, psychiatrist or psychologist, occupational therapist, special educators, and speech pathologist may conduct a thorough evaluation and provide an accurate diagnosis of ASD by the time a child is 2–3 years old. Teams supported by the government work in hospitals and with private practitioners to examine and diagnose kids with ASD. Children with diagnoses should receive a variety of psychosocial therapies and educational interventions that are relevant to the growing needs and preferences of the people. After diagnosis, the child's carers (parent, siblings) should be given pertinent information about treatment, therapy

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services, prompt access to early intervention, behavioral support in a variety of settings (home, shop, and school), and participation in treatment decisions by understanding the child's ASD symptoms. Individuals with autism can benefit from a variety of therapies, including speech, occupational, and behavioral therapy, as they can help them manage their behaviors, enhance their quality of life, and develop abilities to communicate and interact with others.

To properly manage the disease, it is also crucial to include family carers in peer support groups for people with autism and other community services. Regularly doing parent education sessions is a good way to influence your kids' social and communication abilities for the better. These sessions may be conducted one-on-one or in a group setting, and providing them with education manuals would also be beneficial for helping them control the issue behavior effectively. It would be advantageous to employ reinforcement theory while teaching about parent management tactics, social skills training, and child behavior management approaches.

For the various forms of assistance that people with ASD need for their health, rehabilitation, and care, treatment plans for the condition are complicated and necessitate collaboration with several experts. Interventions that are inclusive, accessible, and help people with ASD live better lives by lowering symptoms and behavior that interfere with everyday functioning. To ensure that treatment goals and progress are in line with the particular difficulties faced by people with ASD, communication between stakeholders and carers is essential. The Centre for Disease Control and Prevention^[4] divides the various approaches used in the comprehensive treatment plans for ASD into "Complementary/traditional" to promote health, education, employment, and social care. These approaches include behavioral, developmental, educational, sociorelational, psychological, and alternative treatments.

At special or inclusive schools, learning experiences for students with ASD can be changed, and Individualized Education Plans are created to maximize student engagement by giving them opportunities to practice social skills, increase communication motivation, develop their physical skills, and boost their self-confidence. Jameson (Jewel Autism Centre, 2023)^[5] explains in her article that by promoting social engagement and reciprocity, responsiveness, flexibility, and overall standard of training at both school and home, children with ASD receive extensive assistance from an interdisciplinary team in schools that consists of the student, special education teachers, social service providers, occupational therapy professionals, physical therapists, applied behavior analysis therapists or behavior clinicians, speech therapists, and the parent. Each individual with autism is different to respond interventions, and there exists no universal approach to

treating the condition. Play can be combined with social, instructive, therapeutic, behavioral, and medical strategies to improve functional learning, expressive communication, self-help abilities, joint attention, adaptability, social interaction, and controls of disruptive or maladaptive behaviors.

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Jemima Wilson, Pallerla Srikanth¹

Department of Special Education, APL Global International School, Chennai, Tamil Nadu, ¹Department of Psychiatric Social Work, NIMHANS, Bengaluru, Karnataka, India

Address for correspondence:

*Mr. Pallerla Srikanth,
Dr. Bharathi Rao's Advanced Comprehensive Rehabilitation
Centre, Deshmukh, Hyderabad - 508 284, Telangana, India.
E-mail: sripharma55@gmail.com*

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Orcid

Pallerla Srikanth
{ORCID: 0000-0001-7513-8264}
Jemima Wilson
{ORCID: 0000-0001-7513-}

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