



Autism Spectrum Disorder (ASD): An Overview

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Abstract

Autism Spectrum Disorder (ASD) has always been a topic of considerable importance, with its occurrence increasing globally, including India. With its increasing prevalence in society, it's important to understand ASD beyond common labels or stereotypes. It should be recognized as a spectrum of neurological differences in the individual and not to be perceived as a disease per se. This article throws light on characteristics, myths, causes, diagnosis and explores practical strategies to assist children with ASD in various aspects of life, fostering their independence, well-being, and inclusion in society.

Keywords: Autism Spectrum Disorder (ASD); Social Interaction; Communication Skills; Repetitive Behaviour; Sensory Issues; Myth; Intervention

Abbreviations: ASD: Autism Spectrum Disorder; DSM: Diagnostic and Statistical Manual; ACC: Augmentative and Alternative Communication;

Introduction

Autism Spectrum Disorder (ASD) is a complex neuro-developmental condition that affects individuals differently, impacting their social interaction, communication skills and behaviour, affecting their all-round development.

What is Autism Spectrum Disorder?

Autism spectrum disorder (ASD) is a neurological and developmental disorder that affects how people interact with others, communicate, learn, and behave. Although autism can be diagnosed at any age, it is described as a "developmental disorder" because symptoms generally appear in the first 2 years of life. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), a guide created by the American Psychiatric Association that health care providers use to diagnose mental disorders, people with ASD often have:

- Difficulty with communication and interaction with other people

- Restricted interests and repetitive behaviours
- Symptoms that affect their ability to function in school, work, and other areas of life

Autism is known as a "spectrum" disorder because there is wide variation in the type and severity of symptoms people experience.

Occurrence

As per WHO, it is estimated that worldwide about 1 in 100 children has autism [1]. This estimate represents an average figure, and reported prevalence varies substantially across studies. Some well-controlled studies have, however, reported figures that are substantially higher. According to the latest estimates from the Centres for Disease Control and Prevention in the USA, nearly one in 36 children meet criteria for an Autism spectrum disorder (ASD) diagnosis [2]. This is in sharp contrast to less than two decades ago, when the prevalence of autism was considered to be around one in 100 children [3]. While debates rage on about factors that underlie such large increases in the American prevalence estimates, it is worth reflecting on a few key differences in the ground realities for autism in India. The prevalence of autism in many low- and middle-income countries is unknown.

Despite increased awareness in recent years, there are still many misconceptions surrounding ASD. This article aims to shed light on the realities of ASD, expose myths, and provide insight into how to support children with ASD.

Common Characteristics of ASD

Difficulties in Social Interaction

Children with ASD may struggle with understanding social cues, making little or inconsistent eye contact, appearing not to look at or listen to people who are talking, infrequently sharing interest, emotion, or enjoyment of objects or activities (including infrequent pointing at or showing things to others). Not responding or being slow to respond to one's name or to other verbal bids for attention.

Problems with Communication

Speech delays, difficulty understanding and using language, and a preference for nonverbal communication are common traits. Delay and difficulty in receptive and expressive language. Displaying facial expressions, movements, and gestures that do not match what is being said, Becoming upset by slight changes in a routine and having difficulty with transitions, etc.

Repetitive Behaviour Issues

This may include repetitive movements (e.g., hand flapping, clapping etc), insistence on routines, and intense interests in specific topics. Repeating certain behaviours or having unusual behaviours, such as repeating words or phrases (a behaviour called echolalia).

Sensory Issues

Individuals with ASD may be hypersensitive or hyposensitive to sensory stimuli, such as lights, sounds, textures, or smells. They may show specific inhibitions to any of them. Thus, ASD encompasses a diverse range of traits, behaviours, and abilities. People with ASD may also experience sleep problems, restlessness and irritability. Although it is widely accepted that each individual with ASD is unique, with their own strengths, challenges and perspectives. Yet, societal understanding often falls short, perpetuating misconceptions and hindering acceptance of such children.

Discrediting Myths about ASD

- A misconception about ASD is that all children with ASD have exceptional skills. However, the fact is that while some children with ASD may possess special talents, such as in mathematics or music, but not necessarily everyone exhibits extraordinary abilities.
- Another misbelief is that Autism is caused by vaccines of rubella or measles etc, whereas numerous scientific

studies have rejected linking vaccines to autism. Thus, it is found that ASD has a strong genetic and environmental component and vaccines do not cause ASD.

- Another common misbelief is that people with ASD lack empathy. It's also not true as the children with ASD may express empathy differently but they are capable of experiencing and understanding emotions, social interaction and communication. While some children with ASD may face difficulties in these areas, they are not devoid of empathy or social skills. Rather, they may express themselves differently or require alternative modes of communication. Children may be able to feel all emotions, though, may not be able to reciprocate or express similar emotions.
- One more prevalent misbelief is that ASD is a "one-size-fits-all" condition, where every individual fits precisely into a predefined set of characteristics. It is never the case with ASD and each individual is unique in his/her own spectrum. However, this oversimplification ignores the complexity and variability within the spectrum. While some children may excel in certain areas, others may face significant challenges. Understanding and accommodating this diversity is crucial for fostering inclusivity. Each child on the spectrum is unique with his own strength and weaknesses hence need customised intervention.

Causes of ASD in Children

Available scientific evidence suggests that there are probably many factors that make a child more likely to have autism, including environmental and genetic factors. The exact cause of ASD is, although, not known yet. Further, every child who is diagnosed with ASD falls somewhere on the said spectrum and no two children are same, hence, prognosis differ for every child and so as the intervention strategies. Extensive research using a variety of different methods and conducted over many years has demonstrated that the measles, mumps and rubella vaccine does not cause autism. Studies that were interpreted as indicating any such link were flawed, and some of the authors had undeclared biases that influenced what they reported about their research [4-6]. Diagnosis of ASD in children: ASD can usually be reliably diagnosed by age 2. It is important to seek an evaluation and intervention as soon as possible. The earlier ASD is diagnosed; the sooner treatments and services can begin. It is important to be observant of the child's behaviour and developmental milestones. Any delay or lag shall not be taken lightly; rather, efforts should be made for screening/ assessment and early intervention.

Diagnosis in children generally involves two stages:

- First step is observing deviation in the child's behaviour which begins with identifying delays in the developmental

milestones and/or any distortion in behaviour of the child such as repetitive behaviour, throwing things, not responding to the name, not following simple one step commands, not eating age-appropriate food, not able to do daily chores, very strong reflexes and similar observations. As it has already been discussed that ASD includes a spectrum of behaviours, degree may vary from child to child [7].

- Once the identification is done, the second important step is of general screening, specific and diagnostic assessments done by developmental psychologist or therapist or a specialised doctor/ paediatrician. Once it has been identified, the screening and assessment is must to understand the ASD and its grade. The child can fall anywhere on the spectrum, from mild to moderate to severe, depending on various factors. A team of health care providers who have experience diagnosing ASD are generally involved in conducting the diagnostic evaluation may include child neurologists, developmental paediatricians, speech-language pathologists, child psychologists and psychiatrists, educational specialists, and occupational therapists [8].

Practical Strategies to Assist Children with ASD

ASD presents unique challenges for children and their families, but with the right support and understanding, children with ASD can excel in the society. This article explores practical strategies to assist children with ASD in various aspects of life, fostering their independence, well-being, and inclusion in society:

Early Intervention

Early intervention is key to maximizing the potential of children with ASD. Identifying early and accepting ASD in child is crucial on the part of the parents to start an early intervention. It is important to accurately detect and diagnose children with ASD as early as possible, as this will shed light on their unique strengths and challenges. Early detection also can help parents/guardians determine which services, educational programs and behavioural therapies are most likely to be helpful for their child. Early intervention programs often focus on speech and language therapy, social skills development, cognitive and behavioural interventions tailored to the child's needs. It is relevant to mention that the critical age for brain and over-all development of a child is up to 5 years, hence, the early the intervention, the better the prospects for recovery.

Education and Skill Development

It is important to provide the children with inclusive education environments that accommodate the diverse

learning styles and needs of students with ASD are essentially addressed. Teachers can implement visual aids, structured routines and sensory-friendly classrooms to support learning. Customised and tailor-made education plan based on the need of the child is most effective and many schools have started implementing it in pre-primary level.

Support in Communication Skills

Communication difficulties are common among children with ASD, but there are various strategies to support effective communication. Augmentative and alternative communication (AAC) devices, picture communication systems, parallel talks and social stories can help children with ASD to express themselves and understand social cues in a much better way. Moreover, better the interaction with child at home better will be the development of his/her communication skills. Parallel talk is the key in developing and enhancing the communication skills of the child and should be practiced by each family member while interacting with the child. Since, the child may be less responsive and less expressive, it may appear as he does not understand anything, but the fact is he is imbibing all and same will be reflected in this communication skills sooner or later.

Training in Social Skills

Social skills training programs can provide children with ASD with the tools and strategies needed to navigate social interactions successfully. Role-playing, group activities, and peer mentoring can help children develop social skills, such as initiating conversations, understanding nonverbal cues, and interpreting social norms. Thus, play dates, attending social functions, get-togethers, birthday parties and celebrating festivals can significantly aid child's social skills.

Sensory Support

Sensory sensitivities are a critical feature of ASD and creating sensory-friendly and stimulating environments can significantly improve the well-being of children with ASD. This may involve minimizing sensory overload by reducing noise, providing calming spaces and offering sensory tools like weighted blankets or fidget toys, vibrators, jackets, sand play and texture play etc.

Family Support

Families of children with ASD play a crucial role in providing support, advocating for their needs and fostering their independence. Support groups, parent training programs can help families navigate the challenges of raising a child with ASD while promoting their well-being and resilience. The most important aspect is acceptance from parents and family and their support in child's journey of development.

Furthermore, the notion that ASD is a shortfall to be “fixed” or “cured” is damaging. Instead, focus should be on providing support and creating environments that accommodate the unique needs of children with ASD. Early intervention programs, tailored educational approaches and accessible healthcare services play pivotal roles in empowering children with ASD to flourish. The most crucial element in the intervention programs is the customised approach, objective and regular screenings and assessments, it has been seen that it is fruitful in many cases in reducing ASD to a minimum level and lead a healthy life in the society.

Conclusion

Autism Spectrum Disorder is a complex condition that requires in-depth understanding and empathetic support. By dismissing myths, promoting acceptance and providing appropriate resources and services, children with ASD can prosper and reach their optimal potential and become a respected member of the society. Views on Autism Spectrum Disorder (ASD) vary widely depending on personal experiences, cultural backgrounds and levels of understanding. In some countries, basic development therapies are forming part of the early school curriculum and aids every kid for optimal development irrespective of any diagnosis. In nutshell, supporting children with ASD requires a multi-faceted approach that addresses their unique strengths, challenges and needs across various domains of life. By implementing these strategies along with the early intervention, children can be empowered to lead fulfilling and meaningful lives as valued members of society.

References

1. Zeidan J, Fombonne E, Scolah J, Ibrahim A, Durkin MS, et al. (2022) Global Prevalence of Autism: A Systematic Review Update. *Autism Res* 15(5): 778-790.
2. Maenner MJ, Warren Z, Williams AR, Amoakohene E, Bakian AV, et al. (2023) Prevalence and Characteristics of Autism Spectrum Disorder among Children aged 8 years -Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2020. *MMWR Surveill Summ* 72: 1-14.
3. Centers for Disease Control and Prevention (2023) Autism Data Visualization Tool.
4. Maisonneuve H, Floret D (2012) Wakefield's Affair: 12 years of Uncertainty whereas No Link between Autism and MMR Vaccine has been Proved. *Presse Med* 41(9 Pt 1): 827-834.
5. Dyer C (2010) Lancet Retracts Wakefield's MMR Paper. *BMJ* 340: c696.
6. Kmietowicz Z (2010) Wakefield is Struck Off for the "Serious and Wide-Ranging Findings against Him" *BMJ* 340: c2803.
7. World Health Organisation (2023) Autism Spectrum Disorders.
8. National Institute of Mental Health (2024) Autism Spectrum Disorders.