

Autism Spectrum Disorders

Autism Spectrum Disorders (ASD) are cognitive and neurobehavioural disorders, having three core features: deficits in socialization, deficits in verbal & nonverbal communication and restricted and repetitive patterns of behaviours¹. These disorders manifest in early childhood and are likely to last the life time of the person. In 1943, Dr. Leo Kanner of the Jhon Hopkins Hospital, was the first to describe the syndrome of autistic disturbances.¹ However, over the period it is recognized as a spectrum of disorder that includes: Childhood autism, Asperger's syndrome, childhood disintegrative disorder, Rett's syndrome and pervasive developmental disorders - not otherwise specified¹.

Until recently, autism was thought to be rare. Earlier, prevalence was considered to be 2 to 4 cases per 10,000 children¹. Currently, it is estimated that the prevalence is as high as 1 in 150 individuals in USA². Extrapolated on the basis of above figure, in Bangladesh nearly 10.5 lakhs individuals may have autism. However, there is no national epidemiological study on autism in Bangladesh. In the centre for Child Development and Autism at Bangabandhu Sheikh Mujib Medical University only 12 children attended with autism in the year 2001, which increased to 105 children in 2009 suggesting probable prevalence, awareness amongst parents and probably increased capability of the paediatricians to diagnose the problem.

It is felt that there may be a definite increase in the incidence of Autism spectrum disorders all over the world. It has no racial, ethnic or social boundaries. Better diagnostic facilities and greater awareness increase the yield of diagnosis of ASD. Environmental and perinatal factors along with genetic predispositions are the main etiologic determinants³. However, there is a clear agreement that the disorder may be associated with structural and functional abnormalities in several areas of the brain, suggesting that a disruption in fetal brain development contributes to the disorder⁴. The "growth dysregulation hypothesis" holds that the anatomical

abnormalities seen in autism are caused by genetic defects in brain growth factors⁵. The previous observation that MMR vaccine may be associated with autism has been proved untrue⁴. Lack of breast feeding have been found to be a risk factor in autism⁶. There is no effect of family income, life style and education on prevalence of autism. ASD is also not related to parenting style.

Investigations are not always indicated. Electroencephalography and a neurology referral are indicated in children with suspected seizures or those who have symptoms of regression. Lead screening, DNA analysis, high-resolution chromosome analysis, and referral to a geneticist may be considered in specific situation.^{1,4}

Though there is a myth that there is no cure for autism, one can improve the quality of life of autistic children by various methods like sensory integration therapy, applied behaviour analysis and auditory integration therapy^{1,4}. Approximately 10% of the autistic individuals have savant abilities. People with ASD have emotional feelings and are able to love & feel loved. They care deeply but lack the ability to spontaneously develop empathic behavior. They do not prefer self isolate rather they want to interact socially; but lack the ability to spontaneously develop effective social interaction skills. They can learn social skills if they receive specialized training. With appropriate treatment, almost 50% of individuals with autism will become indistinguishable from the mainstream population. Many others will develop independent living skills and can live successfully and can contribute and small numbers will require support throughout their lives.

They may need medical management for associated conditions like epilepsy, hyperactivity, gastrointestinal problems, sleep disturbances, anxiety and depression, when indicated¹. Management of ASD also depends on educating and empowering clinicians to recognize the wide spectrum of symptoms that ASD now comprises

and use standardized developmental and ASD- specific screening and diagnostic tools. Well-child visit during toddler and preschool years is needed to exclude ASD¹. The earlier ASD is diagnosed & treated, the better is outcome. It is neither to be hidden and nor to “wait and see” and neglect.

But for this one need to educate and empower parents, develop facilities for early diagnosis and management/ training of patient and parents, and lastly motivate the society to become caring and attentive to the need of these children.

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Professor Md Mizanur Rahman

Professor Paediatric Neurology, Bangabandhu Sheikh Mujib Medical University, Shahbag, Dhaka-1000.

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