

## Chapter 2

# A Case Study in Autism Spectrum Disorder

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### **ABSTRACT**

*Autism spectrum disorder is a common neurodevelopmental disorder with onset during early life but with life-long implications for the affected person. The term is now broader and all-inclusive and represents the whole spectrum of disorders previously classified under autism and related disorders such as Asperger syndrome. Incidence of autism spectrum disorder appears to be rising, related in part to increase in awareness and recognition by the parents and the healthcare providers. Autism spectrum disorder is most often diagnosed using DSM-V criteria. These diagnostic criteria include persistent deficits in social communication/social interaction and restricted, repetitive patterns of behaviour, interests, or activities. Treatment requires a multidisciplinary team incorporating pediatricians, therapists, social workers, special education teachers, etc. to optimize the outcomes. A case study is presented to highlight the diagnostic and therapeutic aspects of autism spectrum disorder.*

### **INTRODUCTION**

Autism spectrum disorder (ASD) is a common but serious neurodevelopmental disorder of communication and social deficits, and unusual repetitive sensory-motor behaviours. Previously known as autism, pervasive developmental disorder, the terminology of autism spectrum disorder has evolved. Autism spectrum disorder is an umbrella term used now to represent spectrum of heterogenous disorders with severity spectrum ranging from mild to severe and affecting several aspects of life of the individuals with this disorder (American Psychiatric Association, 2013). Subtypes previously classified as pervasive developmental disorder not specified otherwise and Asperger syndrome are now included in this new terminology of autism spectrum disorder.

First description of infantile autism in English literature is attributed to Leo Kanner (Kanner, 1943), who in 1943 described 11 children with impaired social interaction, atypical language development and abnormal repetitive behaviors such as hand flapping, or body rocking. Asperger syndrome, now consid-

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ered a part of autism spectrum disorder (DSM-V) was described in 1944 by Hans Asperger (Asperger, 1944). These children had good verbal skills but were otherwise quite similar to children with autism in social and other behaviors. It was not until 1980s that autism as a clinical entity started gaining adequate attention of the scientific community.

Onset of symptoms suggesting deficits in social and communication skills during early childhood, often during infancy. It is not infrequent for parents to report normal development in their child during first 12-15 months followed by loss of language and social skills, which may appear to be heralded (or at least that is what many parents think), by a common intercurrent childhood illness. Later in the course, children may remain stable, show worsening or may show some improvement.

Clinicians, researchers, parents and lay public have become increasingly concerned about the rise in prevalence of autism spectrum disorder over a period of time. Global prevalence of autism spectrum disorder has been estimated at about 1%, and 1.5% in developed countries (Lord, Elsasabbagh, Baird & Veenstra-Vanderweele, 2018; Lyall et al. 2017). Prevalence of autism spectrum disorder determined in the 2010 Autism and Developmental Disabilities (ADDM) cohort was 1 in 68, being a little more common in the white than the other racial groups (Hviid, Hansen, Frisch, & Melbye, 2019). Even in developing countries, the prevalence of autism spectrum disorder has risen in recent years, attributed at least partially to enhanced awareness among general public, teachers, and health care providers (Dalwai et al., 2017).

Despite its common occurrence, the diagnosis is often missed or delayed. The therapeutic interventions have largely remained empirical. Genetic factors are increasingly being implicated in causation, but role of environmental factors has not been entirely discounted (Lord et al., 2018; Howes, Rogdaki, Findon, Wichers, & Charman 2018). Although, autism spectrum disorder has onset during early life, the affected individuals continue to experience its consequences in social, academic and occupation settings throughout the life span. Various aspects of autism spectrum disorder will be highlighted through a case study followed by review of its relevant clinical, diagnostic and therapeutic aspects.

## **Case Study**

MM is a 2.5 year-old-boy whose parents are concerned that he has not developed age-appropriate language skills. He is accompanied by his mother, father and grandparents. He doesn't speak any meaningful words on his own though keeps on uttering non-meaningful words and phrases. He also repeats whatever is said to him. He does not use any words to communicate his needs for such as food or toileting. He does not point at objects of his interest, and instead will hold his mother's hand and point it (mother's hand) to the object. If he needs water, he will hold mother's hand and guide her to refrigerator and then give her the bottle of water to pour it in glass. He does not look at the objects pointed at by mothers or other family members. He does not make eye contact and appears shy. Parents say he does not respond to his name when called. In fact, deafness was suspected at some point of time, and formal testing revealed that he had normal hearing. He however, does come running to watch his favourite television programme whenever he hears that program is switched on the TV. He has liking for only certain TV program, and will watch only that program. Any attempt to change the program is met with resistance and tantrums like crying, rolling on floor with leg thrashing and even hitting his head against floor. He also likes only certain foods and resents when any other food is offered. He wants the same plate and spoon every time he has his meals. He also sits at the same chair placed at a particular side of the dining table. He seems to be always lost in himself, and world around him does not seem to exist. He will appear engaged in

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