

A brief report on autism awareness: A pervasive developmental brain disorder

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Autism or autism spectrum disorder is a lifelong developmental disorder that impairs the ability of individuals to communicate and interact with the world around them. Autism impacts the nervous system and is considered as a syndrome with multiple non-genetic and genetic causes.^[1] Autism affects the wide spectrum of developmental disorders characterized majorly by impairments in three behavioral domains such as lack of social interaction; impairment in language, communication, or creative play; and lack of interest in a range of personal and educational activities.^[2,3] The range and severity of symptoms associated with autism varies from individual to individual depending on the severity of disorder. The most common symptoms are repetitive or ritualistic behavior, hand flapping, spinning or running in circles, excessive fears, self-injury such as head banging or biting, aggression, insensitivity to pain, temper tantrums, and sleeping and eating disturbances.^[4,5] In addition, individuals with autism often have abnormal responses to sounds, touch, or other sensory stimulation.^[4,5] Early recognition of autism behavior and parenting educational programs for autism management are the keys to reduce symptoms and to support development and learning of patients with autism.^[6,7]

Autism is one of the most common neurological developmental disabilities that generally manifests by the age of three and continues throughout life.^[8,9] The nation with the highest rate of diagnosed autism in all over the globe is Qatar, and the nation with the lowest rate is France.^[10] In Australia, autism was recently estimated in 1% of all Australians, which is similar to the rest of the world.^[10-12] In 2018, 205,200 Australians were reported with autism and this number was 25.1% more as was reported in 2015.^[11,12] Importantly, the prevalence of autism was reported to be 4 times more in males as compared with females,^[10] but the reason(s) associated with this prevalence is still largely unexplored. It has now been suggested that autism is a genetic disorder and poor parenting plays a fundamental role in its onset.^[13-15] In support of this, recent studies investigated that several individuals from the same family have genetic predisposition to autism.^[16-18] It has now been established that the genetic level of diagnosable autism such as cytogenetic abnormalities, single-gene defects such as tuberous sclerosis complex, fragile X syndrome, and

other rare diseases all together account only less than 10% of autism cases.^[19] Therefore, studies at genetic level are still immature and need to be further explored. Studies also point out that several regions have been affected due to the autism onset, particularly at the stage of the early fetal brain development.^[20,21] In addition, several epidemiologic studies indicate that environmental factors such as toxic exposures, teratogens, perinatal insults, and prenatal infections have also been associated with this neurological disorder.^[22] Moreover, people from all over the globe believed that the immunization with the measles-mumps-rubella vaccine has been associated with autism onset, but studies at molecular levels failed to prove this assumption.^[23] Now, it has been well established that autism has been associated by multiple factors; therefore, it is suggested that it needs to be treated during a childhood as untreated autism cases are difficult to treat at their later stages of life; therefore, the best treatment begins early during the preschool years. Although a variety of drugs are available for the treatment of autism based on the specific symptoms, parent education about the behavioral therapies plays a fundamental therapeutic role in treating their children with autism. Multiple studies suggested that poor parenting results in epilepsy in about one-third of autistic children.^[24,25] Therefore, intensive educational therapeutic programs for parents are extremely important for the treatment of patients with autism at childhood level so that every autistic child should get the best opportunity to develop the skills that are needed to live the best life.

Conflicts of Interest

The author declares no competing financial interests.

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