Gifted Children in Pediatric Practice

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Abstract

This article gives an insight into the developmental patterns and various problems of gifted children. The treating pediatrician should avoid missing such children when brought for behavioural disorders and learning disabilities.

Discussion

The term “gifted children” was first used in 1869 by Francis Galton. Lewis Terman defined them as children with IQ of 140 or more. Terman had conducted a longitudinal study for a period of 35 years on children with a mean IQ of 150 to identify characteristics in this sample[1]. In 1926, Leta Hollingword published, “Gifted Children, Their Nature and Nurture”, and the term “gifted” has been used ever since to refer to children of high potential.

The standardised Intelligence Quotient Test was developed in the early 1900’s by Alfred Binet and Theophile Simon to measure the relative intelligence in French school children. The threshold of 130(Wechsler Intelligence Scale) is most commonly considered for describing the child as gifted. Any child with a score between 130-144 is moderately gifted, 145-159 highly gifted, 160-179 exceptionally gifted and those above 180 profoundly gifted [2].

Sternberg developed a triangular theory (“triachic mind”) of intelligence for “gifted” children. According to him Analytical intelligence along with practical intelligence and creative intelligence are to be taken into account when labelling a child “gifted”[3]. Gardner developed the “multiple intelligences” theory which included seven types of intelligence like-linguistic, logicomathematical, visuospatial, musical, somatokinetic, interpersonal and introspective. He also introduced the concept of “Emotional Quotient”. EQ measures integrate the emotional and affective experience of the individual by using specific tests[4].

Brain growth from birth is an important factor in the development of higher potentialities and vice versa. Studies have shown that children with higher “potential” have higher alertness and attentional focus including increased duration of calm wakefulness even during newborn infancy period. Shapiro et al demonstrated that gifted children had a statistically significant edge for age of walking and age of speaking two word sentences. But this significance diminished if the child was not put in a proper stimulating environment[5]. Vaivre-Douret demonstrated that gifted children learn language earlier with fluent use of syntax and grammar. These children reach the threshold of sensory motor intelligence on an average 2 months earlier than normal children. They also perform well in perceptive visuospatial activities like matching a colour, nested box etc. They have enhanced information processing abilities with analytical abilities and sharp memories[6].

As these children enter their school going age they demonstrate an exceptional talent in some field (eg music), are high achievers, intrinsically motivated and can be emotionally and physically oversensitive. The child might externalise his distress or hurt through psychosomatic or behavioural disorders. ADHD is frequently noticed in such children. It has been shown that gifted children with ADHD suffer from learning disabilities. Many gifted children have enhanced right-hemisphere development, language-related difficulties, and autoimmune disorders[7].

They tend to withdraw onto themselves indulging in their favourite activities and are usually considered introverts. The child can take refuge in intellectualisation and are branded “geeks” by their peers. They learn to develop a defence mechanism, internalise hurt and become relatively apathetic. These children are at high risk of developing Depression, phobias and Obsessive Compulsive Disorders. Few gifted children go on to become adult creators because the skills and personality factors required to be a creator are very different from those typical of even the most highly gifted children.

References

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