



Forensic Psychology and the Connection with Autism Spectrum Disorders

Chryssa Kaltsoni*

Department of Applied Forensic Psychology, University of Crete, Rethymno, Greece

ABSTRACT

Hippocrates in his work "Aphorisms" described melancholy as a "disease with mental and physical symptoms". Several studies over the years have shown that a person suffering from a mental disorder can exhibit mild or extreme forms of delinquent behavior. The forms of mental disorders vary and depending on the age of the individual and the person's family background history, it can either manifest in a minor form or have flare-ups in the future. For example, if in the past the individual has experienced an intense mental disorder in their behavior, either as a result of violence or from some other delinquent behavior such as robbery and/or substance abuse, drugs and alcohol, there is a high likelihood that they will manifest some form of disorder in the future. The family history of the person also plays an important role in the development of a mental disorder. Delinquent behavior and the development of criminal behavior are very strongly associated with various categories of autism syndromes, like Down's syndrome, Prader Willi syndrome, Lesch Nyhan syndrome, Rett syndrome, Fragile X syndrome. Asperger's syndrome, Raynaud's syndrome, Tourette's syndrome. Autistic disorder is a severe developmental disorder that is characterized by considerable difficulties in mutual social interactions and communication skills, as well as limited or repetitive patterns of interests and behaviors. Its clinical presentation ranges from milder to more severe forms. That is, if there is a family history of schizophrenia and violence, then the person is very likely to develop a mental disorder in the future. Certainly, the family and social environment plays an important role. Granted, DNA covers a wide range for the manifestation of a disorder, but external stimuli that a person receives are equally important. If there is violence in the family, such as verbal, sexual or physical aggression between the parents or correspondingly child abuse, then the rate of developing mental illness in the future increases. On the other hand, if the person grows up in a decent environment, with proper standards and appropriate education, there is a high probability that he or she will not develop some kind of delinquent behavior in the future.

Key words: Forensic psychology; Syndromes; Autistic disorder; Delinquent behavior

INTRODUCTION

Autism was first used in 1911 by psychiatrist Eugen Bleuler to describe the communication difficulties of these individuals with their social environment. Autism spectrum disorders. According to the DSM V and ICD 10, the worldwide classification systems for mental disorders, autism is characterized by difficulties in social interaction and communication, i.e. problems in social interaction, but also by repeated behaviors and monotonous

interests or activities. These difficulties typically appear in early childhood, up to 3 years of age, although functional problems arising from these disorders may be identified later. Many people with a developmental disorder experience symptoms from even younger ages, depending on the seriousness of the pattern, even from birth. For this reason, these neurodevelopmental disorders are called autism spectrum disorders, because they span a wide range of functioning and communicative difficulties, which are different for every child [1-5]. Nevertheless, research studies have

Correspondence to: Chryssa Kaltsoni, Department of Applied Forensic Psychology, University of Crete, Rethymno, Greece; E-mail: chr.kaltsoni@gmail.com

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been carried out from time to time to try to highlight the connection between the various autism syndromes and the occurrence of violence and criminal behavior. It is a fact that DNA and the social environment make a significant contribution to the treatment and avoidance of future behavioral problems. A major characteristic that individuals with autistic behavior possess is impulsivity and impatience. These two characteristics, if not addressed with the appropriate therapeutic method and techniques, there is a high rate of increase and therefore manifestation of violent behavior.

LITERATURE REVIEW

Delinquent behavior and autism syndromes

Autism is a major and widespread developmental disorder. The term extensive is used to refer to the complex nature of the disorder, as it affects three domains of development: Social interaction, communication and imagination. The symptoms vary according to age and growth stage, the severity, the co-existence of other health conditions, the individual's temperament and external factors. Most autistic children present concurrently with some degree of cognitive impairment and many experiences epileptic seizures. The aim of medical, lab tests is to investigate possible neurological, genetic, metabolic diseases or infections; it is considered the most severe of all pervasive developmental disorders since it is characterized by a primary impairment in the person's ability to relate to other people, in addition to deficits in language and cognitive development. Autism spectrum disorders complexity in symptomatology and the specific character of the core impairments makes the identification, diagnosis, treatment and quality of life promotion of the individual and the family complex. It is worth mentioning that evidence from post-mortem pathophysiological studies, neuroimaging studies and animal studies indicate abnormalities in the overall development of the brain and in the structure and function of the cortical lobe, amygdala and frontal lobe. In addition, necropsy studies of the brains of people with autism have shown abnormalities in size, spatial density as well as in dendritic arborization in neurons of the brain limbic system. Although there has been no precise clarification of the causes of brain regions that differ in size, the increase in brain volume is one of the most well-documented neuroimaging findings. The first magnetic resonance imaging studies reported cerebellar worm hypoplasia. This finding, however, was not confirmed in later and more methodologically rigorous studies, which controlled for factors primarily related to IQ, gender as well as total brain volume. In addition to this, a decrease has been observed in the posterior part of the medulla, the area where the neurons from the occipital and parietal regions cross the midline of the brain. At this point it is important to mention that children with autism have a positive family history of cognitive or social functioning disorders, whereas, on the contrary, people who are diagnosed with schizophrenia have a family history of mental disorders.

Sex crimes and autism

Although there is no direct link between autism and the occurrence of sex crimes, the characteristics of autism may also predispose an autistic person to sex crimes. Research has shown that individuals diagnosed with autism have a tendency to show less desire for sexual intercourse and a tendency for more antisocial behavior. Autistic individuals may also have difficulty distinguishing boundaries [6-10]. For instance, a person with Asperger's syndrome might view child pornography but have no awareness of the damage it causes. Possible explanations for this misconception include that autistic individuals might perceive themselves as younger than they are, may lack understanding of social perceptions, or may simply lack the capacity for empathy. Furthermore, it has been found that the 'line' between child pornography and legal pornography can be blurred for autistic individuals, who may completely ignore that they have crossed a moral and legal line.

An individual with autism can use the reason for autism in order to deny the *actus reus*, *i.e.*, the act itself or a crime, thereby proving that there is another explanation for the criminal act. On the other hand, evidence of an autistic disorder can also be used to negate *mens rea*, *i.e.*, the mental state of the person at the time of committing a crime.

DISCUSSION

Down's syndrome

Down's syndrome was first reported in 1866 by the British physician Langton Down. It is a chromosomal abnormality in humans. It is a disorder, called trisomy 21, which is associated with delayed physical and mental development. So, individuals with trisomy 21 have 47 chromosomes with an extra 21. The symptoms of this syndrome may include epilepsy, thyroid disorder and mental disorders. On a mental level, they are impulsive, inattentive, hyperactive, restless and in addition they have difficulties sleeping, such as insomnia, drowsiness and fatigue. For the most part, the IQ of people with Down syndrome ranges from 20 to 35 indexes. Growing up, in early adulthood they show symptoms of depression and anxiety, displaying obsessive-compulsive behavior. OCD is characterized by generalized fear and obsessions. The elderly adults are very likely to experience dementia, depression, anti-sociality and regression with reduced cognitive and social skills. Regarding the occurrence of schizophrenia, people with intellectual disability reach 3% to 6% manifestation of schizophrenia, out of a general population that reaches 0.5% to 0.8%, although to date there is no clear data on the rate of schizophrenia occurrence in people with Down's syndrome [11].

Prader-Willi syndrome

Prader-Willi syndrome is a complicated genetic condition that affects many parts of the body. It is due to a small mutation on chromosome 15. Typically, individuals inherit one copy of this chromosome from each parent. 25% of people with this syndrome are very likely to have two copies of chromosome 15 on the mother's side and one on the father's side. This is called

monozygotic disomic. Prader-Willi syndrome is most often associated with compulsive eating behaviors such as overeating, obesity or the development of type 2 diabetes. Individuals with Prader-Willi syndrome have cognitive impairment and experience learning difficulties. A characteristic feature of this syndrome is that some patients have unusually light skin and light hair, like albinism. They have almond-shaped eyes and a triangular mouth. In terms of body type, on a general level, they have short stature, small arms and legs. A large proportion of these individuals are unable to start a family [12]. Also, as far as their mental world is concerned, their personality is disturbed as they easily lose their temper, displaying outbursts and compulsive behavior. They tend to be manipulative towards other people and have a tendency to be controlling. In many cases, symptoms such as paranoia, depression and hallucinations have also been observed. Moreover, their sleep is disturbed.

Lesch Nyhan syndrome

Lesch Nyhan syndrome is a unique inherited disorder that occurs almost exclusively in men. Deficiency of a hypoxanthine-guanine enzyme produced by mutations in the HPRT gene located on the X chromosome. This means that in men one altered copy of the gene in each cell is sufficient to cause this condition [13]. Neurological and behavioral abnormalities and the overproduction of uric acid are characteristic of the condition. Its incidence is estimated to be about 1 in 380,000 people. Individuals with this syndrome have abnormal involuntary muscle movements, such as sudden arm and leg shaking. They are unable to walk and need help moving around. Those men with this syndrome have atrophy of the testicles. Another characteristic of this syndrome is self-injury, which starts from the age of 3 years. The individual bites his lips and tongue. As the disorder progresses growing up, he bites his finger and bangs his head, causing this too acrostomy. Furthermore, he has an aggressive attitude towards people, he will reject the kindness of others with coldness, often reaching out in anger and will often spit and may even vomit. He will also swear to an extreme degree coprolalia. This implies that some abrupt movements of the head or limbs are accompanied by profanity, which is stereotypically repetitive in intensity and rhythm [14].

Rett syndrome

Rett syndrome is a very rare brain disorder that is less hereditary in nature than it is triggered by a mutation in the X chromosome and occurs in the majority of women. It appears from an early age, specifically at the age of 2 years. In other words, whereas in the first few months of birth development is normal, the first symptom appear at the age of 6 months and 18 months, and at the age of 2 years and over, the development begins to slow down. The symptoms include difficulty in movement, a loss in the functional use of the hands, followed by compulsive movements and difficulty in feeding [15]. Individuals with this syndrome in the early stage show autistic characteristics. During childhood when the child is unable to speak, he/she will have extreme social anxiety and indifference

to the people around him/her. Also breathing will be uncoordinated and accompanied by spasms.

Fragile X syndrome

This particular syndrome is closely linked to the onset of autism. It is an intellectual disability which is predominantly seen in males. The physical diagnosis of this syndrome is large ears, large testicles, flat feet, large forehead, prominent jaw and abrupt movements with the hands. In comparison to women, men, on an intellectual level, have difficulties in learning. Both genders have low IQ in fragile X syndrome; men have lower IQ than women. Women reach the limits. Typical symptoms of individuals are stuttering, difficulty in learning, developmental delays, i.e., at an early age they are slow to speak and understand things compared to other children, they are hyperactive and have difficulty sleeping [16].

Nevertheless, there are cases of individuals who are characterized by a high degree of hyperactivity, lack of management of their emotions. Their mood changes from one moment to the next. Furthermore, in these cases, anti-sociality and isolation are very much in evidence. These people are characterized by some special categories such as Asperger's syndrome, Raynaud's syndrome and Tourette's syndrome.

Asperger's syndrome

Asperger's syndrome is described as a disorder which is not so much superficial as internal which is associated with autism. Asperger's syndrome people are very hyperactive, intelligent, as their brains are constantly generating new ideas, but they are unable to express them, hence why they are socially lagging behind in communication. Overall, they are not so good in their social interactions. That is because; they do not have control over their emotions and cannot express themselves in the right way, resulting, if not all the time, most of the time in violent behavior. They have difficulty expressing themselves verbally and often make gestures which can have a negative impact [17]. While they constantly seek movement, and environmental change, they are out of control and step out of boundaries, by misbehaving, i.e., failing to obey the norms or pushing those around them away because they don't have a way to approach them. According to studies in European child and adolescent psychiatry, 72% of children with a diagnosis of schizophrenia meet the diagnostic criteria for Asperger's syndrome, either before the signs of schizophrenia or after.

Raynaud's syndrome

Raynaud's syndrome is a disorder which, in situations of emotional stress and cold, reduces blood circulation, leading to a disorder of the connective tissue, causing physical disorders such as skin atrophy and even ulceration or ischemic gangrene. The specific syndrome is also linked to eating disorder, particularly anorexia nervosa. Among the psychological causes of anorexia nervosa are low self-esteem, depression, anxiety and lack of control. Those individuals characterized by anorexia nervosa are predominantly impulsive. Notably, a major event, such as the death of a loved one or conversely the birth of an

infant, can cause an eating disorder because they want to look good in the face of any occasion. In accordance with the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), eating disorder belongs to the types of schizophrenia. The individual is obsessed with the weight, believing that anything he or she eats will make him or her fat. Furthermore, he or she tends to constantly look in the mirror to confirm out of fear that he or she has not gained extra weight. He seeks reassurance from those around him that physically he is well and not fat. The word fat frightens him, which is why he weighs himself constantly, because he has the feeling that he is overweight. Regarding the behavior towards his social environment, the person with Raynaud's syndrome comes into interpersonal conflict [18]. Once someone talks to him about weight, he gets defensive. In addition, the person is characterized by irritability, gloom, anxiety, depression and a tendency to isolate himself or herself from friends and from all mental and physical activity. Besides this, the person has suicidal tendencies, a tendency to faint, fatigue and general physical and mental weakness, dry skin and an increased risk of heart failure.

Tourette's syndrome

Tourette's is a rarely inherited disorder of the nervous system which shows its first signs before the age of 18 and is about 3 times more common in boys than in girls in the form of tics. Whether motor or vocal. Kinesthetic tics include twitching of the mouth, fluttering of the eyelashes and jerking movements of the head and shoulder. By contrast, vocal tics are not pronounced and are not primarily produced by the vocal cords. Vocal tics include screaming, snorting, clearing the throat by coughing several times and abdominal and diaphragmatic contractions. Also, he tends to repeat things. Meaning, everything he hears he repeats. Yet, the tics occur many times during the day for more than a year. A proportion of people diagnosed with this syndrome have inappropriate behavior, going so far as to swear and speak in a very vulgar manner. Characteristic is the coprolalia which occurs in early adolescence and is seen in 1/3 average of all patients. Not necessarily that because of its heredity, there will be the same tic symptoms in the other members [19,20]. Also, these individuals are distinguished for their hyperactivity, attention deficit disorder, migraines, sleep disturbances and dysphoria. Besides, people with Tourette syndrome show obsessive compulsive disorders such as obsessive thoughts and also constant hand washing. Notably, in the case of monozygotic twins, Tourette syndrome is observed as it is genetically inherited.

CONCLUSION

The autism spectrum is a different way of being. Individuals with autism have their own code of communication and in many cases need special treatment. As stated at the beginning, a person with autism will not necessarily exhibit any kind of criminal behavior or delinquency, yet the rates of manifestation of these elements are many high due to some key characteristics such as impatience and in many cases impulsivity. Addressing autism is important as this makes it easier for the person to

understand the social world around them so that they can adapt to it. It could be argued that the treatment of autism consists of teaching self-knowledge, an educational connection with people with autism is a challenge but also an opportunity to understand oneself and others.

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