

Autism: Clinical Profile and Methods of Intervention

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Summary: Autism is a serious developmental-communicative disorder that lasts throughout the person's life. Its treatment and treatment is a lifelong education of the individual in all life skills. It manifests itself with different symptoms both in the person himself and among other people. It appears before the completion of the first three years of the child's life, but it can be confirmed psychotechnically after the completion of three years. The incidence of autism is estimated at 3-4 children with autism per 10,000 of the child population. As for its etiology, it is considered to be biologically determined. However, the specific cause of the biological pathways remains unknown. Because autism is present from infancy, its causes are prenatally biological and thus cannot be linked to the parents or to the emotional and developmental world of the child. Autism features three main deficits: communication, sociability and creative imagination. The autism spectrum can be interpreted at three different levels: behavioral, biological, and cognitive. Regarding the intervention program to follow in a child with autism, a key step is to make an early assessment and diagnosis to begin early intervention and design an individualized intervention program. There is no specific treatment for autism, but more emphasis is placed on creating an appropriate environment and daily schedule that will be able to reduce difficulties. There are many therapeutic interventions and educational approaches aimed at enhancing functioning and learning social and communication skills for children with pervasive developmental disorders, such as the TEACCH program, Applied Behavior Analysis, social adjustment stories, and nutrition. which could have the character of a therapeutic approach. In addition to the person-child himself who is a shareholder of the whole process, participants are also the family, the school, teachers of either general education or special education, who must have the required knowledge to be able to have in their classroom a student with autism, as well as, of course, doctors as well as specialties such as psychologists, speech therapists, occupational therapists. Children with autism are withdrawn individuals, closed to themselves in a silence that screams deep down. The point is to hear their voice and respond to them.

Introduction

Autism is a serious developmental-communicative disorder. It manifests itself with different symptoms both in the individual himself, depending on the stage of development in which he is, and among other individuals (Papageorgiou, 2002). For this reason, it is mainly attributed with the term "Pervasive or universal developmental disorder", as it affects many aspects of the person's life (Happé, 2003).

The concept of spectrum in autism was introduced by Wing in 1988, wanting to emphasize the variation with which a deficit is presented in this particular disorder. Pervasive Developmental Disorders, according to DSM-IV, include the following disorders: Autistic Disorder (Autism), Asperger's Disorder, Childhood Disorganized Disorder and Pervasive Developmental Disorder Not Otherwise Specified.

It appears in the child before the completion of the first three years of life, but it can be confirmed psychotechnically by the completion of three years (Happé, 2003). Of course, it has been argued that early intervention leads to better outcomes (Corsello, 2005). The developmental areas affected by the autism spectrum disorder are the cognitive, emotional and social functioning of the child who presents it, as these areas develop a peculiar dynamic between them. The result of this is the manifestation of serious difficulties in communication as well as in assimilative ability (Happé, 2003).

The incidence of autism is estimated at 3-4 children with autism per 10,000 of the child population. It occurs more in boys than in girls with a ratio of 3-4:1 (3-4 boys to 1 girl with autism). As for its etiology, it is considered to be biologically determined. However, the specific cause of the biological pathways seen in autism remains unknown (Stasinou, 2013).

Because autism appears from infancy (infantile autism), its causes are prenatally biological and thus cannot be linked to the parents or to the emotional and developmental world of the child. Also, the characteristics of autism in the three main deficits (communication, sociability, creative imagination) are the same in all children with autism regardless of country. That is, a child from Japan with autism exhibits the same characteristics as a child with autism from Europe. Therefore, there is no way that autism is due to psychological, social or cultural factors (Stasinou, 2013).

Various unfortunate events during the prenatal and perinatal period may also contribute to the existence of autism. For example, an infection or damage to the body of the expectant mother, such as rubella, herpes, medication, rhesus incompatibility, etc. In general, then, it becomes clear that there is no clear picture of the etiology of autism. Autism spectrum disorder is more of an "umbrella term", which includes biological

conditions with common behavioral characteristics, in essence it includes deficits in communication, socialization and creative imagination (Stasinis, 2013).

The autism spectrum can be interpreted at three different levels: behavioral, biological, and cognitive. Each level performs a different interpretative task and for this reason they should not be confused with each other. According to autism at the biological level, autism is the result of a brain damage or malfunction. As an indication of this, there is often a comorbidity of autism with epilepsy and mental retardation. In autism on a cognitive level, the theory of mind, which concerns the ability of the individual to read the mind, occupies a dominant position. People with autism lack the ability to think about ideas and thus cannot interpret or predict behaviors (Happé, 2003).

Regarding autism at the behavioral level, the behavior of the person with autism should be observed and treated immediately. It is necessary, therefore, to know the nature of the behavior of autism. The same deficit can appear in a different way. Some people with autism, for example, avoid social interaction, while others are very social, but in a peculiar way. In general, the clinical picture of autism varies between individuals and within the individual, in relation to their mental capacity and chronological age. The triad of socialization, communication and creative imagination deficits also belongs to the behavioral level (Happé, 2003).

It is important to mention the fact that on May 9, 1996, the European Parliament, in which Greek MEPs also participated, signed the Declaration of the Rights of Persons with Autism, where it emphasizes that persons with autism should have the same rights as all citizens of the states of the European Union.

This study addresses the following research questions:

- a) What is the clinical profile of the child with autism?
- b) What can be the ways of intervention for the child?

Clinical Profile: Deficits in Communication, Socialization, and Creative Imagination

As mentioned above, the child with autism shows deficits in three areas: communication, socialization and creative imagination. When it comes to communication, most people with autism have difficulties with both verbal and non-verbal communication. It is estimated that 50% of people with autism never acquire functional speech, while in a large percentage their speech is echolalic and stereotypical. In the case, of course, that their speech is developed, these individuals cannot use it depending on the occasion (Papageorgiou, 2001).

Even if they do not have verbal communication, they do not use non-verbal communication, such as eye contact, gestures, tone of voice and facial expressions [Quill, 1995 (as cited in Papageorgiou 2002)]. In general, they cannot talk to other people, as the art of conversation is an unknown field for them. In the event that they learn a phrase, they will reproduce it only in the context in which they learned it, as if it had been memorized along with the context. It is difficult, that is, to generalize in the use of words and phrases (Papageorgiou, 2002).

Disturbance in the development of sociability is the main characteristic of autism. The individual does not simply face a difficulty in being social, but much more, the biological programming which is crucial to the development of the capacity for social interaction is absent. Through this, the individual learns to be a member of social groups such as the family, the school, the wider society (Papageorgiou, 2002). The child, therefore, faces serious difficulties in the spontaneous perception of social stimuli and in understanding the communication of others. He is thus led to apply his own anti-social rules, such as stereotypes and repetitive behaviors, trying in this way to understand the world around him (Papageorgiou, 2001).

The fact that the person with autism relies only on the literal understanding of things and cannot understand metaphorical concepts also contributes to the difficulty of developing communication with those around them. Furthermore, it cannot receive information from multiple sensory channels. Thus, if, for example, he finds himself in a conversation where many people are talking and receives a lot of information from the auditory and visual channel, then he is at risk of "sensory overload" (Yiannopoulos, 2006).

Adults as well as older children can make judgments about the thoughts of others, understand and interpret them. Children with autism, however, show a developmental deficiency in theory of mind. They cannot understand the world of others, which affects their behavior in everyday life. Since the child with autism presents a deficit in theory of mind, then he also presents a deficit in communication and socialization, as he lives in a world outside the mental sphere of others (Stasinis, 2013).

According to Baron-Cohen & Howlin (1993), as cited in Stasinis (2013), the main problems that arise due to the inadequacies of theory of mind are the following: insensitivity to other people's feelings, lack of ability to think about what others know, deficit in the ability to read the intentions of others and the interests a listener has in a speech deficit in the ability to perceive what others think of one's actions deficit in the ability to perceive people's common misconceptions deficit in the ability to deceive others as and understand the motivations behind people's actions.

Disorder in creative imagination is associated with rigid thinking and stereotyped behaviors and interests. The child with autism cannot perceive the whole and focus his attention on its parts. He considers that "a situation, an event, an act, a sentence, is not considered complete if it does not consist of the exact same elements that were present the first time the child encountered it" (Papageorgiou, 2002, p.21).

The person with autism cannot make sense of what they perceive. The development of the imagination is neglected and the symbolic function is limited. His behavior becomes mostly a-symbolic. They also repeat behaviors in an attempt to provoke the same reaction from the environment, in order to predict it. This, however, results in further isolation and the minimization of opportunities for social interaction (Papageorgiou, 2002).

Characteristics of Autism According to Kanner

The characteristics presented by a child with autism, according to Kanner (1943), are the following: severe social isolation, these individuals show a deficit in their response to environmental stimuli, they are considered children with complete "deafness". They are lonely and do not show emotional behaviors and do not have attachment to their parents. They do not make eye contact with people from their social environment and are usually locked in their own world, quietly occupied with some object.

Another characteristic of them is informal language, 50% of children with autism do not actually use language. They do not converse intelligibly with others, while they have difficulties in the correct use of pronouns. Usually, sounds are imitated out of time, "echolalia". In general, they cannot communicate even through body language (facial grimaces, hand movements, etc.) and only 20% can notice an improvement in language and social behavior.

Also, children with autism have an obsession with maintaining sameness. They do not want changes in their environment and react violently to any disturbance of their routine. They also engage in stereotypical body movements such as shaking the body and head, flapping the hands in the air, waving the head, etc. These stereotypes result in a lack of imagination, creativity and humor. They are unable to take roles in play and have no creative imagination. In general, spontaneity in play and a sense of humor are absent from the child's behavior.

They also exhibit severe behavioral outbursts, reacting with severe outbursts of anger to situations of frustration such as disruption of their routine. Most people with autism, 75%-80%, also have mental retardation. There is, therefore, a comorbidity of autism with mental retardation, since $\frac{3}{4}$ of people with autism also have mental retardation (Happé, 2003).

Some other characteristics that children with autism can exhibit are aggression, hyperactivity, self-destructive behavior, attention deficit, etc. but also behavioral problems such as persistent and strange food choices, phobias and screaming. In rare cases, some children with autism show some ability in individual areas such as remembering phone numbers from a page of a phone book, doing rare arithmetic calculations, excelling in music, drawing, etc.

Asperger Syndrome

According to Valamoutopoulou and Kouteleko (2010), Asperger's syndrome is a subgroup of the developmental disorders of the autism spectrum. A key characteristic is difficulties in social and emotional interaction, communication and stereotypes. People with Asperger's do, of course, have autistic disorders, but they are high-functioning with borderline to normal IQs and developed language skills. This is also a difference with autism, as people with Asperger's do not have a delay in the development of speech.

Asperger's disorder is caused by genetic factors. Appears or is diagnosed at a relatively older age than autistic disorder. There is a preponderance of appearance in boys over girls 9:1 (9 boys to 1 girl). The incidence of Asperger's is not clear, but in general there has been an increase in the incidence of autism in recent years.

Intervention

Regarding the intervention program to be followed in a child with autism, the basic and primary step is to make the assessment and diagnosis as early as possible to start the early intervention. Then follows the design of an individualized intervention program whose goal is the best development in the child's progress (Valamoutopoulou, Koutelekos, 2010).

There is no specific treatment for autism, but more emphasis is placed on creating an appropriate environment and daily schedule that will be able to reduce the difficulties. However, in order for the intervention program (therapeutic process, education, teaching) to be effective, they should also calculate how the deficits in communication, socialization and creative imagination affect the learning of the specific child (Papageorgiou, 2001).

Taking into account the above, a therapeutic and educational program of special education is designed, where the teacher determines the teaching goals for the specific child and the areas of functionality, which are

the goal. The education of the child requires flexibility from the teacher, when he has to decide when to exploit the child's potential and when to face his difficulties (Papageorgiou, 2001).

There are many therapeutic interventions and educational approaches aimed at enhancing functioning and learning social and communication skills for children with pervasive developmental disorders. One such intervention is the TEACCH (Treatment and Education of Autistic Communication Handicapped Children) program.

According to Golena (2006), this is a state program implemented in the USA, specifically in North Carolina. It is a well-designed pedagogical and therapeutic approach and has a balancing character. In other words, children with autism are taught basic skills and useful things necessary for their everyday life. Emphasizes structured teaching in a way that there are natural boundaries for children, which are clear, predetermined and appropriately structured (eg tidy furniture, laid carpet).

This program aims to improve the child's basic skills and, by extension, his behavior. The program is personalized and helps the child to understand what he has to do each time, to get organized and thus reduce his anxiety and stress. The TEACCH program's core instructional areas are: one-to-one instruction, independent work, free play, structured play, eating, group work, and the transition area.

Another method of intervention is Applied Behavior Analysis (ABA), which is based on the principles of behaviorism. Emphasizes changing behavior through motivation. The target behavior is determined and the characteristics of the existing behavior that needs to be changed are recorded. At the beginning the instruction-command is given to the child, then his response follows and then we have the consequence (in case of a negative response) and the positive reinforcement (in case of a positive response). This method leads to the reduction or increase of a behavior (www.autismdikepsy.gr/el/page/intervation/aba).

Even social adaptation stories are considered a therapeutic tool for autism. According to this method, the teaching strategy of social stories is structured in three areas: "learning to take care of myself", which concerns activities such as washing hands, "at home", which concerns the explanation of some situations at home that they can be stressful for the child, such as the barking of the dog and "going to different places", which refers to activities that take place outside the home, for the child to understand the world around him (Valamoutopoulou, Koutelekos, 2010).

Nutrition also plays an important role in autism, which could have the character of a therapeutic approach. It is therefore possible, according to Chalkea (2008), to follow a nutritional intervention for autism. Following such a diet, the child could eat daily one to two equivalents of protein such as meat, egg, beans, avoid sugars and empty calories (chips, soft drinks), fried and fatty foods. Also, avoid foods with preservatives and artificial colorings, the skin of fruits and organic foods that contain germicides.

The benefits of such a diet are many. Fruits and vegetables provide minerals, vitamins and fiber that are important for maintaining mental and physical health. Reducing sugar reduces blood glucose fluctuations and, by extension, the irritability and difficulty paying attention that comes with it. Finally, artificial colors can cause behavioral problems in some people. This specific interventional and therapeutic program is safe, and even if it does not have a therapeutic effect on autism, it benefits the health of the person with autism.

In addition, occupational therapy and dance therapy could be used in a child with autism to acquire better motor skills. In case there is some percentage of communication and speech, speech therapy could also be used to improve it.

Conclusions

From what has been formulated throughout the length of this study, it becomes clear that pervasive developmental disorders, which include the spectrum of autism, is a developmental disorder that lasts throughout the person's life. In recent years, and due to the more frequent occurrence of autism, great progress has been made on the one hand in terms of the etiology of this disorder and on the other hand in terms of its treatment. The treatment and treatment of autism is now a lifelong education of the individual in all life skills (Valamoutopoulou, X., Koutelekos, I. 2010).

It is necessary to evaluate and diagnose autism in the child as early as possible in order to have the most timely early intervention possible, even from the preschool years. There are many intervention programs and there is no evidence that one particular program is more effective than another (Corsello, 2005).

In addition to the person-child himself who is a shareholder of the whole process, participants are also the family, the school, the teachers of either general education or special education as well as, of course, doctors as well as specialties such as psychologists, speech therapists, occupational therapists etc.

The school, therefore, must be open and adapted in this direction. In the context of comprehensive education, every student has the right to attend his neighborhood school. Therefore, the school should be ready for such a situation. That is, teachers should have the required knowledge to be able to have a student with autism in their classroom and be able to implement individualized and interventional programs. In this, the

special education teacher also plays an important role, who must be present in the school and cooperate with the classroom teacher for the best results of the child (Stasinos, 2013).

In addition, there should be other scientific specialties in the school, such as the psychologist and the speech therapist, which are useful and necessary for the child's education. More generally, the school should be accessible for the child, in the sense that he can participate in all the activities that take place in the school. For this reason, the role of the principal is decisive, as a "leader" who should lead the school in the direction of inclusion (Stasinos, 2013).

The family of the child with autism must support him as much and better as possible. Clearly, the whole psychology of the family is affected. Siblings of children with autism present more behavioral problems than children who live in a family that does not face such developmental disorders (Valamoutopoulou, X., Koutelekos, I. 2010).

Autism, therefore, does not only affect the child's psychology, but also the whole family. This is why psychologists, health workers, teachers and other specialties of special education must focus on dealing with the challenges that concern parents, who are the core of the family (Patistea, E. – Patistea-Tavoralea, N. 2009).

In conclusion, children with autism, in addition to the learning problems they face as well as problems in many areas of their daily lives, also experience feelings of anxiety and frustration. They are withdrawn people, closed to themselves in a silence that screams deep down. The point is to listen to their voice and answer them (Velenza, O., Pappa, A. 2012).

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