

Early Intervention Methods of Autism

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Early Intervention Methods in Autism

Early Intervention methods in Autism refers to specialized therapies and support services for young children ranging from birth to the age of 3 who have or are at risk for developmental delays. These services aim to target key developmental skills while the brain is still in a neuroplastic stage which means that it is very adaptable. Research has shown that earlier treatment and diagnosis for autism are much more likely to have major positive effects on symptoms and skills later in life for a long term period. This paper will go over how early intervention helps children with ASD(Autism Spectrum Disorder) by improving communication, social, and daily living skills. It will also go over briefly on why early treatment is important while describing popular methods like the Applied Behavior Analysis, Naturalistic Developmental Behavioral Interventions, and then summarize how effective these approaches are with children.

Importance of Early Diagnosis and Brain Development

Early diagnosis of autism is important because it can help a lot with timely intervention and improved long-term outcomes. The symptoms of ASD can vary with each child with avoidance of contact, fear, and even a lack of interaction with people especially kids of their age. If there is early identification of these symptoms by parents and/or healthcare providers, it increases the need for diagnosis and the appropriate measures to be taken. Benefits of early diagnosis will include the need for early intervention which has been shown to enhance the developmental rate of kids with ASD and also improve their adaptive skills. It also gives them

the specific needs from a young age which targets social communication, language, and behavioral issues. Early diagnosis also allows families to have access to the appropriate support services for their kids, educational resources, and community programs which will reduce parental stress and increase adult independence in the long term.

Applied Behavior Analysis

What is Applied Behavior Analysis? This is a widely used early intervention method for children with autism which focuses on improving specific behaviors through reinforcement. It is based on the science of learning and behavior. Behavior analysis helps us understand how behavior works, how it is affected by the environment, and how learning takes place. We take this understanding and apply it to real situations with the goal in mind to increase behaviors that are helpful with positive reinforcement and also to decrease behaviors that are harmful. So how does ABA therapy even work? ABA therapy works by involving various techniques of understanding and changing behavior since it is flexible. Since ABA therapy is a flexible treatment, it can be tailored to meet the needs of each person with different symptoms, teach necessary skills for everyday life, and even involve one-to-one teaching for better treatment. There are three steps which help us teach and understand behavior. This is called the “A-B-Cs”. The A stands for antecedent which is what occurs before the target behavior. It is usually verbal such as a command or request but it can also be physical with something like a toy, light, sound, or something else in the environment. An antecedent can be internal like a feeling or thought. The B stands for behavior which could be the person’s response or also the lack of response to the antecedent. The responses vary by person but it is most times an action, verbal response, or

something else. The C stands for consequence which comes directly after the behavior. This is where positive reinforcement comes into play or no reaction for incorrect/inappropriate responses. It is important to note that a board-certified behavior analyst provides ABA therapy services. To earn this, you have to earn a masters degree or PhD in psychology or behavior analysis, pass a national certification exam, and also acquire a state license to practice ABA in some states.

Naturalistic Developmental Behavioral Interventions

Naturalistic Developmental Behavioral Interventions are an early intervention approach that combines behavioral techniques with play-based, everyday interactions. The features of NDBI include the teaching of functional skills for increasing the quality of life for kids with ASD. It also has a focus on increasing motivation and engagement in treatment along with the addition of active opportunities for teaching in the natural environment. The child's interests are also considered when selecting teaching materials and activities to do. NDBI combines the effective teaching methods of ABA with developmental methods that are known to enhance motivation, engagement and learning.

Speech Therapy

Speech therapy is a language therapy which addresses the challenges with language development. It aims to help people with ASD to improve their verbal, nonverbal, and social communication. The goal is to help people communicate in ways that they can meet their needs and goals. Since symptoms vary with each individual, it is the same with speech-related

challenges. Some people love to talk but will have difficulty holding a conversation or understanding body language. They can develop stress or even a feeling that they don't fit in with society just because they have challenges. Speech Therapy targets skills like strengthening the muscles in the mouth, making clearer speech sounds, matching emotions with the correct facial expression, understanding body language, and controlling the tone of voice. For some people, using pictures or technology is more effective than speaking. This is known as Alternative Augmentative Communication. Some examples of this include Sign language, iPads, and speech output devices like Dynavox. When Speech Therapy is used at a young age, it can help children with ASD to build on their communication skills which is essential so that they don't have major problems later in life. They are also able to express their needs, understand others, and build stronger social connections with the people around them which can lower the feeling of not being socially accepted.

Occupational Therapy and Daily Living Skills

Occupational Therapy is a treatment approach which helps people work on cognitive, physical, social, and motor skills. This is used to improve everyday skills which then allows people with ASD to become more independent in the world and participate in various activities which they wouldn't have before. This process begins when an occupational therapist evaluates the person's current level of ability. In the evaluation, it will include how the person learns, plays, cares for themselves, and interacts with their environment. After the evaluation ends, the therapist will develop strategies that allow the person to work on key skills like dressing themselves, eating, using the bathroom, and also fine motor skills like writing, coloring, and

cutting. Who provides occupational therapy? A licensed Occupational Therapist will provide OT services. They will usually have a master's degree and have passed a national certification exam. They must also acquire a license in their state.

Parent Involvement in Early Intervention

Parental involvement is a key part of early intervention for children with ASD because parents can reinforce skills outside of therapy sessions. Research has shown that increased parental involvement is positively correlated with higher development of children with autism. Parents are often trained to use strategies like Applied Behavior Analysis or Naturalistic Developmental Behavioral Interventions during everyday routines like playing, eating, or even talking. When done consistently, children are able to learn easier and apply new skills more effectively. When parents are involved, it creates a supportive environment which encourages long-term development and encourages progress.

Effectiveness of Early Intervention

How effective is Early Intervention? In a controlled study by Autism Speaks, it was found that early intervention in toddlers as young as 18 months old, had significant improvements in IQ, language ability, and social interaction. Programs like the Early Start Denver Model which combines ABA with developmental approaches were highly praised since it focused on building a relationship with the child. Since infant brains are very adaptive/malleable, they are using various therapies to maximize the potential of learning that an infant brain offers in order to limit the harmful effects of autism. The study was held over 5 years at the University of Washington in

Seattle. There were 48 children ranging from 18 to 30 months old with autism and no other health problems. The children were separated into two groups. One group received 20 hours of intervention per week. They also received 5 hours a week of parent-delivered therapy. Children in the second group were placed in community-based programs for therapy. At the beginning of the study, there wasn't a significant difference in functioning between the two groups. At the end of the study, however, the IQ's of the children in the intervention group increased significantly by an average of 18 points. They had a nearly 18 point improvement in receptive language(listening and understanding) compared to 10 points in the comparison group. Seven of the children had such an improvement in skills that their diagnosis changed from autism to a milder condition known as pervasive developmental disorder. Overall, early intervention methods worked like a charm when focusing on the needs of the children which had significant results on language/speech development, behavioral patterns, and more.

Limits and Challenges

While early diagnosis of autism has significant results in the development of children with ASD, it also has its risks. One concern is the potential of stigmatization which can impact the child's self-esteem and the way they act in social interactions. There is also a risk of overdiagnosis which can lead to unnecessary interventions and treatments. The diagnostic process can be long and complex which can emotionally impact families. Autism is a disorder with diverse symptoms. Because of this, it is very challenging to develop a uniform diagnostic test that can be used on everyone. ASD can also occur with other medical conditions that make it difficult to know what is causing the different things in a child. Some autism symptoms may not

appear until later in childhood which can affect the early diagnosis of ASD due to gradual patterns of the disorder's symptoms. In short, diagnosing autism at a very young age may not account for the normal fluctuations and differences in developmental rates among children.

Conclusion

In conclusion, early intervention plays a crucial role in supporting children with ASD by helping them develop communication, social, and life skills at a very young age which will be useful later in life. Methods like the Applied Behavior Analysis, Naturalistic Developmental Behavioral Interventions, and speech therapy have been proven to be effective, especially when combined with strong parental involvement. Even though results can vary, research has shown consistently that early intervention leads to better developmental outcomes. Overall, early intervention gives children with autism the best opportunity to grow and learn to their fullest potential.

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