

Review on Speech Production of autistic patients

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1.Introduction

Speech production, also known as articulation or phonation, is the process of creating, producing, and delivering sounds to form spoken language. It involves the coordinated movements of various speech organs such as the lips, tongue, jaw, and vocal cords to produce a wide range of sounds and intonations. This process starts with the brain's formulation of a concept or an idea in the form of language, which then sends signals to the muscles involved in speech production to initiate the production of specific sounds.

2.review

2.1 speech production pathology in autistic patients

Speech production pathology can be observed in some autistic patients. There is a wide spectrum of severity of speech and language deficits, but generally, autistic individuals may present with the following speech production pathologies:

1. Delayed language development: Some children with autism may have delayed speech and language development, and may not begin speaking until later than typically developing children.
2. Impaired verbal communication: Many individuals with autism have difficulty using speech to communicate their wants and needs, as they may struggle with producing language or expressing their thoughts clearly.
3. Echolalia: Some autistic individuals may repeat the words or phrases they hear, either immediately or after a delay, without fully understanding their meaning. This is known as echolalia, and it can be a symptom of both receptive and expressive language difficulties.
4. Prosodic abnormalities: Autistic individuals may exhibit abnormalities in their intonation, pitch, and tone, and may speak in a monotone voice.
5. Articulation difficulties: Some autistic individuals may struggle with producing certain speech sounds, and may omit or substitute sounds in their speech.

2.2 features of speech production of autistic patients

The features of speech production in autistic patients can vary widely, depending on the severity of the disorder and the individual. However, some common features of speech production in autistic patients include:

1. Peculiar intonation and prosody: Autistic individuals may have abnormal patterns of speaking, such as a flat or monotone voice, or an exaggerated or stilted speech.
2. Odd usage of words: The use of unusual or complex words, difficulty using pronouns, and trouble understanding idioms or figures of speech are some features of a person with autism.
3. Stereotyped or Repetitive speech: This behavior involves repeating phrases or words (like echolalia), but also talking about the same topics, unrelated to the current situation.
4. Difficulty initiating or sustaining conversation: People may have trouble starting a conversation, introducing topics, or keeping the conversation going during social interactions.

2.3 current means for rehabilitation about autistic patients

The current means for rehabilitation of autistic individuals focuses on promoting their communication, social skills, behavioural skills, and enhancing their quality of life in the following ways:

1. Applied Behaviour Analysis (ABA): ABA is a therapeutic approach that involves breaking down skills into small steps and using positive reinforcement techniques to encourage and reinforce positive behaviours. It's widely used to help individuals with autism learn new skills and cope with challenging behaviours.
2. Speech and Language Therapy: Speech and language therapy can help individuals with autism improve their communication skills, including understanding language, using language to communicate and express their needs, and building their social communication skills.
3. Occupational Therapy (OT): OT aims to help individuals with autism improve their daily living skills, such as dressing, feeding themselves, and personal self-care skills. It also helps to develop fine motor skills and to reduce sensory defensiveness.
4. Social Skills training: Social skills training programs aim to help autistic individuals develop social skills and interact with others in a more natural way. These programs may include role-playing, modeling, and other interactive activities.
5. Cognitive Behavioural Therapy (CBT): CBT aims to help individuals with autism build coping skills and manage their emotions, thoughts, and behaviours more effectively.
6. Sensory Integration Therapy: Sensory Integration Therapy aims to help individuals with autism process sensory information by providing them with sensory-rich environments

that can help minimize sensory overloads.

7. Medication: Some medications are often used to address some of the behavioural and emotional symptoms associated with autism such as anxiety, hyperactivity and repetitious behaviour.

It's essential to note that each autistic individual is unique, and they may require different interventions based on their specific needs and challenges. Therefore, an individualized program based on a person's specific needs is most effective. A team of specialized speech therapists, occupational therapists and behavioural professionals can design an Individualized Education Program (IEP) meeting the needs of each autistic individual.

3.Conclusion

In summary, autism is a spectrum condition, and individuals with autism can have a diverse range of features, including speech production deficits. Some speech production features commonly seen in autistic individuals include echolalia, peculiar intonation and prosody, difficulty initiating and sustaining a conversation, and repetitive speech. The current means of rehabilitation for autistic individuals aim to promote communication, social skills, behavioural skills, and enhance their quality of life. These interventions include Applied Behaviour Analysis (ABA), speech and language therapy, occupational therapy, social skills training, cognitive-behavioural therapy (CBT), and pharmacological treatments. It's important to note that each autistic individual is unique and may require different interventions based on their specific needs and challenges. Therefore, an individualized program is essential, and a team of specialized professionals can design an Individualized Education Program (IEP) that meets the needs of each individual.

4.reference

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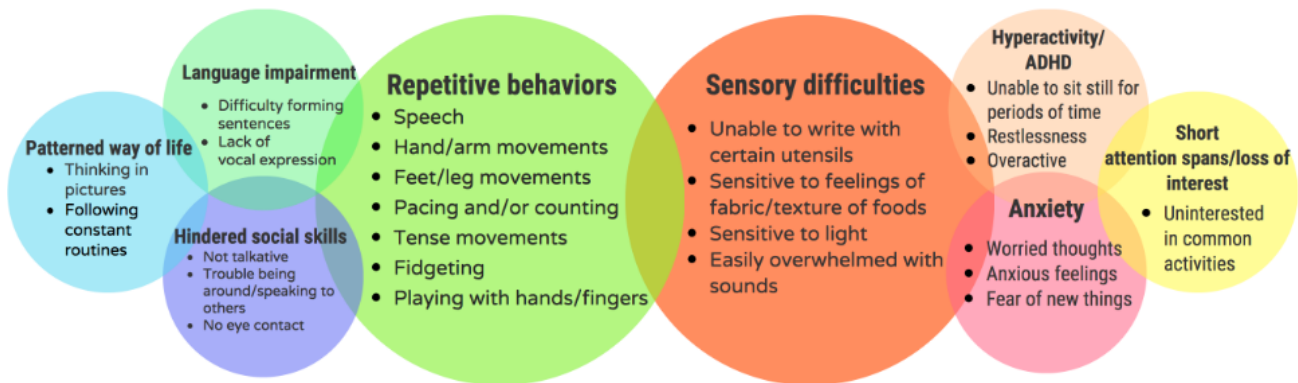


Fig.1 features of speech production of autistic patients

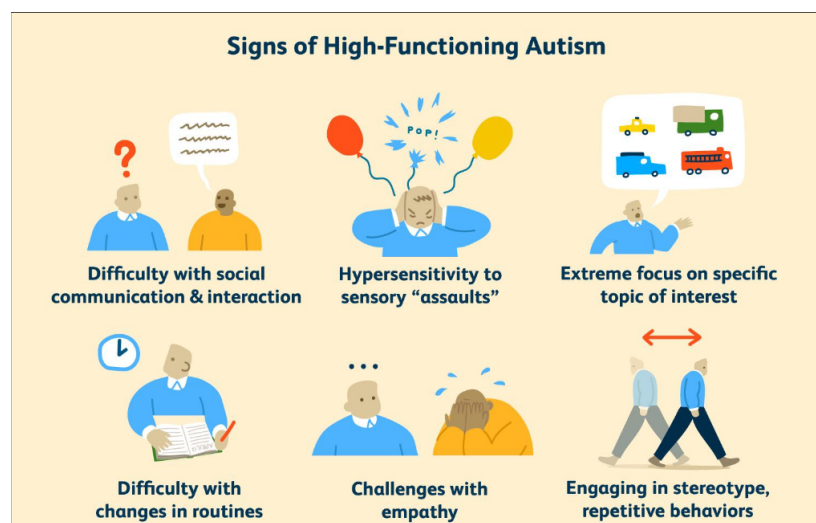


Fig.2 signs of high-functioning Autism



Fig.3 Occupational Therapy for Autism