The Use of Aided Language in AAC in Childhood Apraxia of Speech

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Abstract

Individuals with complex communication needs cannot communicate functionally through spoken language (Beck et. al, 2009). The ultimate goal for communication is to build relationships and connections (Walker & Chung, 2021) Augmentative and alternative communication, or AAC, allows these children and adults with speech or language impairments to effectively communicate their wants and needs.

This session will provide an overview of the definition and specific treatment methods for aided language with augmentative and alternative communication (AAC) intervention for children with childhood apraxia of speech (CAS), as well as a brief overview of the definition and symptoms of CAS.

Definitions

- **Augmentative and Alternative Communication**: an area of clinical practice that supplements or compensates for impairments in speech or language production. AAC is a type of assistive technology and can be unaided or aided. Aided and unaided communication systems have unique advantages and disadvantages (Sigafoos & Drasgow, 2001), so it is important to determine what is best for the communicator.

- **Childhood Apraxia of Speech**: a neurological speech sound disorder in which the precision and consistency of movements underlying speech are impaired in the absence of neuromuscular deficits (ASHA). Symptoms of CAS include:

1. Inconsistent errors on consonants and vowels in repeated productions of syllables or words
2. Lengthened and disrupted coarticulatory transitions between sounds and syllables
3. Inappropriate prosody, especially in the realization of lexical or phrasal stress

Aided AAC (Low and High Tech)	Unaided AAC
Pictures/Photographs	Facial Expressions
Writing	Body Posture
Communication Boards/Books	Gestures
Speech Generating Devices	Sign Language
Single Message Devices and Digitized Devices	Vocalizations
AAC software that enables dynamic symbol/language representation and that is used with an electronic device	Verbalizations

Childhood Apraxia of Speech (CAS) and AAC

- Children with CAS exhibit compromised intelligibility as well as subsequent communication frustrations, challenging behaviors, learned passivity, delayed language, and compromised social interactions (Binger, 2007).
- These children require ongoing, intensive speech therapy to improve both speech as language skills, and many of these children may benefit from AAC to address their immediate and long-term functional skills (ASHA, 2007; Binger, 2007).
- The role of AAC does not act as speech replacement for COS. Instead, it may act more as speech supplementation. Research has stressed that it is necessary for children with CAS to use a multimodal approach to communicate (Binger, 2007).

Case Study

- An 8-year-old child with diagnosed CAS began using her AAC device earlier this year. Speech therapy sessions focused on working with the AAC device, and push-in to the classroom occurred in order to assist the student in using her device outside of therapy. Throughout the course of the semester, the student learned how to unlock her device and was able to find colors, animals, and places. She used the device to communicate with peers as well as teachers. She continued to communicate verbally, and while her errors remained inconsistent, peers and teachers were able to better understand her speech.

Conclusion

Aided AAC often utilize visual representations that support both receptive and expressive language, which are both areas that children with CAS struggle with (Thistle & Wilkinson, 2021). Aided AAC tools can support children with CAS in areas such as small talk, communication repairs, topic initiation, narrative discourse, message complexity, and message length (Binger, 2007). Using pre-programmed phrases on aided, high-tech AAC devices to assist with small talk with peers may benefit children with CAS by supporting social interactions, alleviating communication frustrations, and decreasing challenging behaviors (Cumley & Swanson, 1999; Waller et al., 2001).

References