# Communication Assessment and Treatment in Down Syndrome

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## Outline

- Communication development in Down Syndrome
- Communication assessment
- Communication treatment



## Communication development

- Spoken communication develops later in children with Down Syndrome
  - First words are often spoken after 2 years of age
  - Grammar develops more slowly than vocabulary
    - Many learn a lot of content words (for example, names of people and objects)
    - Sentences are often based on content words without grammatical forms
- There is a large range of communication in people with Down Syndrome
  - Some use very few spoken words and may communicate with technology and/or signs and gestures
  - Some may learn to speak in sentences and in multiple languages



#### **Communication Development**

- Communication development is impacted by anatomical differences and hearing loss
  - People with Down syndrome have a larger tongue in their mouth and difficulty with muscle coordination
  - They are also at higher risk for ear infections and hearing loss
    - Many people with Down syndrome will need hearing aids



#### **Communication Assessment**

- At any age, assess how they communicate
  - Speech sounds produced and syllable shapes of sound productions
  - Gesture and sign use
  - Spoken words or word attempts
  - Word combinations or sentences
  - Use of eye gaze, facial expression, and tone to communicate
- We know people with Down Syndrome have difficulty learning to use spoken language so formal or standardized assessment may not be necessary.
  - Important to describe how they communicate and consider what might help them communicate more clearly.



#### **Communication Assessment**

- Also important to assess what spoken language they understand
  - Do they recognize names of familiar people in their life?
  - Do they recognize names of familiar objects such as body parts, clothing, toys, household objects, animals?
  - Do they understand familiar action words? Location words? Descriptive words?
  - Do they follow routine instructions?
  - Do they follow one step instructions? Two step?
  - Do they point to familiar pictures when named?



## Communication Assessment

- As children get older, also consider literacy
  - Do they recognize any letters?
  - Familiar signs or symbols?
  - Their own name?
  - Words?



- Total communication approach
  - Gestures, signs, sounds, spoken words
  - Possibly also pictures or technology



- If child is not producing many sounds, then focus will be on expanding sound production
  - Sound effects, animal sounds, babbling
- If child is producing sounds but words are not understood, focus on core vocabulary
  - Practice important words and phrases many times to help their mouth learn to make the sounds in the words more clearly
  - Mouth exercises are not recommended for spoken language. It is more important to focus on the production of speech sounds and the production speech sounds in words



- If child is producing some spoken words, study their vocabulary to determine what category of words they are producing
  - Many children produce a lot of object names so consider teaching other categories of words
    - Location words, descriptive words, action words
    - Words that can be combined with words in their vocabulary
      - For example, more, no, big,



- If child is combining words, practice longer sentences
  - Consider adding 1-2 more words to their sentences
  - Practice familiar phrases that could be used throughout the day
    - For example *I want more X.*
- If child is producing sentences, work on connecting sentences into stories and explanations (how to play a game or make something)



- For all children, motivation can be an issue
- Focus on topics/toys of interest to motivate them
- Play activities are a great way to teach communication, especially pretending familiar routines like cooking, eating, shopping, cleaning.
- Books, songs, and familiar stories are another great teaching tool.
  - Repeating the same story/song/book helps children learn spoken language

