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Stuttering: A Multidimensional Speech Disorder

Stuttering is a complex communication disorder that can best be described by:

- The *specific speech behaviors* that are most characteristic as well as, the non-observable speech behaviors that consist of ...
- The *reactions, thoughts and feelings that the speaker develops* over the course of time while attempting to deal with the speech behaviors themselves.

Characteristics/Stuttering Behaviors (Speech):

- **Repetition of sounds** (e.g., a a a about), **syllables** (e.g., mo-mo-mommy), whole words, **and phrases** (which are typically produced in rapid fashion, multiple times).
- **Prolongation**, or stretching, of sounds or syllables (e.g., r-----abbit)
- **Blocks/Tense pauses**, non-volitional hesitations or stoppages (no sound between words or when initiating speech)

Characteristics/Stuttering Behaviors (Non-speech):

- **Reactions/Related behaviors:** reactions that accompany stuttering such as further increases in tension in lip/tongue/vocal cord muscles; tremor of the lips, jaw, and/or tongue during attempts to speak; foot tapping, eye blinks, eye aversion, head turns (most of which are considered escape behaviors – an attempt to cope with the moment of stuttering as quickly as possible). There are many additional related behaviors that can occur and vary from person to person.
- **A feeling of loss of control:** a person who stutters may experience sound and word fears, situational fears, anticipation of stuttering, embarrassment, and a sense of shame. Certain sounds or words may be avoided. One word may be substituted for another that is thought to be harder to say. Or, certain speaking situations may be avoided altogether. For example, a person who stutters may always wait for someone else to answer the phone. Or, he or she may walk around a store for an hour rather than ask sales staff where an item can be found. These reactions to stuttering typically occur in more advanced stages.

Additional Characteristics:

- **Variability in stuttering behavior:** depending on the speaking situation, the communication partner(s), and the speaking task. A person who stutters may experience more fluency in the speech-language pathologist's office than in a

classroom or workplace. There may be no difficulty making a special dinner request at home, but extreme difficulty ordering a meal in a restaurant. Conversation with a spouse may be easier, and more fluent, than that with a boss. A person may be completely fluent when singing, but experience significant stuttering when talking on the telephone.

- Repetitions and prolongations are considered the core features of stuttering and typically distinguish stutter behavior from “normal developmental disfluent” speech. The presence of the other listed behaviors varies from person to person and is not present in the speech of normal non-fluent speakers or developmentally disfluent children.

Normal Disfluencies

Every one is disfluent at times and may, under certain circumstances, demonstrate repetitions and/or prolongations while speaking. However, the disfluencies of people who do not stutter are not as frequent as those who do, and are not associated with any degree of negative feeling or thinking about speech or communication in general. The kind of disfluencies are also generally different as well, although children who **do not develop** stuttering may also evidence stutter behaviors in their speech for a period of time during their development.

Normal disfluencies tend to be repetitions of whole words, phrases, or the interjection of syllables like um and er. Repetitions are typically not longer than 1 iteration and are not associated with any degree of tension or rate change.

Disfluencies in Children

Most children go through a stage of disfluency in early speech development, usually between the ages of 2 ½ and 5. Speech is produced easily in spite of the disfluencies. Then as children mature and sharpen their communication skills these disfluencies typically disappear. In some children normal disfluencies may be present alone, while in others, these kinds of disfluencies may co-occur along with stutter behavior. While it is difficult to determine which children who demonstrate early stutter behavior will ultimately recover, there are some definite guidelines that are considered important when making decisions regarding interventions.

Identifying children who are at risk vs. normal disfluencies.

The child at risk for stuttering:

- May have a family history of stuttering.
- May have other speech and language deficits along with the speech breakdown.
- Began demonstrating stutter behavior after 3 years of age.
- Repeats parts of words, either sounds or syllables ("t-t-table", "ta-ta-ta-table"); prolongs a sound ("sssun"); or breaks up words ("cow - boy" or has difficulty

initiating - opens the mouth to speak but no sound comes out or turns off the voice between sound repetitions)

- Often repeats part of the word multiple times ("ta-ta-ta-table) although some reports indicate that these children may repeat only 1 or 2 times
- During repetitions, substitutes an "uh" vowel for the intended vowel in the word ("tuh-tuh-tuh-table" rather than "ta-ta-ta-table").
- May use a broken rhythm during repetitions ("b b& & b boy")
- Has 10 or more total disfluencies every 100 words of which more than 3 are considered stutter-like behavior.

The child with normal disfluency:

- Will repeat whole words or phrases ("I-I-I want to - want to go out and play.")
- Typically repeats parts of the word no more than 1 or 2 times ("ta-table")
- During repetitions, uses the vowel sound normally found in the word ("ta-table")
- Has rhythmic repetitions ("b ..b ..boy")
- Has 9 or less total disfluencies every 100 words
- Starts speech easily; keeps speech going even though may repeat a phrase or word later in the sentence

Stuttering and developmental disfluent behavior usually emerges during the same time period and are less likely to begin after age 5. On occasion stutter behavior may appear for the first time in a school-age child and, far more rarely, in an adult. As a parent, seek the advice of an ASHA-certified speech-language pathologist if:

- You or your child are concerned about his or her speech
- Disfluencies begin to occur more regularly
- Occurs with greater frequency over time
- Disfluencies begin to sound effortful or forced.
- Airflow for speech is started before any other muscle movement is observable.