Stuttering/Disfluency

Definition:
Stuttering is a communication disorder characterized by disruptions in the production of speech sounds, also called “disfluencies.” It begins during childhood and, in some cases, lasts throughout life.

Description:
Stuttering affects an individual's fluency of speech. Most people produce brief disfluencies from time to time. For instance, some words are repeated and others are preceded by “um” or “uh”; however, producing more frequent (greater than 3%) or prolonged disfluencies, can impede an individual’s communication, resulting in interrupted and/or halted-sounding speech.

Characteristics:
Stuttering is characterized by an abnormally high number of disfluencies, abnormally long disfluencies, and physical tension that is often evident during speech. Stuttered speech often includes:

- **Repetitions of words or parts of words.** An example of a part-word repetition would be "W- W- Where are you going?" The person is having difficulty moving from the “w” in “where” to the remaining sounds in the word. On the fourth attempt, he successfully completes the word.

- **Prolongations of speech sounds.** For example, "SSSS ave me a seat." The person is having difficulty moving from the “s” in “save” to the remaining sounds in the word. He continues to say the “s” sound until he is able to complete the word.

Note: The above mentioned disfluencies occur more often in persons who stutter than they do in the general population.

Stuttered speech may also include:

- **Blocks/stops in the airflow of speech.** A block is when the mouth is positioned to say a sound, sometimes for several seconds, with little or no sound forthcoming. After some effort, the person may complete the word. Some people who stutter appear very tense or “out of breath” when talking.

- **Interjections** such as “um” or “like” can occur, as well, particularly when they contain repeated (“u- um- um”) or prolonged (“uuuum”) speech sounds or when they are used intentionally to delay the initiation of a word the speaker expects to “get stuck on.” An example of this is; "I'll meet you – um um you know like – around six o'clock." The person expects to have difficulty smoothly joining the word “you” with the word “around.” In response to the anticipated difficulty, he produces several interjections until he is able to say the word “around” smoothly.

Causes:
The exact cause of stuttering is unknown. Recent studies suggest that genetics plays a role in the disorder. It is thought that many, if not most, individuals who stutter inherit traits that put them at risk to develop stuttering. The exact nature of these traits is presently unclear. Whatever the traits are, they impair the individual's ability to string together the various muscle movements that are necessary to produce sentences fluently.

Not everyone who is predisposed to stutter will develop the disorder. For many, certain life events are thought to “trigger” fluency difficulty. One of the triggers for developmental stuttering may be the development of grammar skills. Between the ages of 2 and 5 years, children learn many of the grammatical rules of language. These rules allow children to change immature messages ("Mommy
candy”) into longer sentences that require coordination to produce fluently (“Mommy put the candy in my backpack”). A child who is predisposed to stutter may have no difficulty speaking fluently when sentences are only one or two words long. However, when the child starts trying to produce longer, more complex sentences, he or she may find himself or herself not quite up to the challenge—and disfluent speech results.

After stuttering has started, other factors may cause more disfluency. For example, a child who is easily frustrated may be more likely to tighten or tense speech muscles when disfluencies occur. Such tension may increase how long a disfluency lasts. Listeners’ responses to stuttering (e.g., teasing) can aggravate fluency difficulties as well. People who stutter vary widely in how they react to the disfluencies in their speech. Some appear to be minimally concerned. Others—especially those who have encountered unfavorable reactions from listeners—may develop emotional responses to stuttering that hinder speech production further. Examples of these emotions include shame, embarrassment, and anxiety.

**Implications for speech and language:**
Stuttering may have an impact on some daily activities, specifically those that a person finds challenging to perform. For some people, talking on the telephone or talking before large groups may result in communication difficulties. For most others, however, communication difficulties occur across activities at home, school, or work. Some people may limit their participation in certain activities. Such “participation restrictions” often occur because the person is concerned about how others might react to disfluent speech. Other people may try to hide their disfluent speech by rearranging the words in their sentence (circumlocution), pretending to forget what they wanted to say, or declining to speak.

Other people may find that they are excluded from participating in certain activities because of stuttering. Clearly, the impact of stuttering on daily life can be affected by how the person and others react to the disorder.

**Communicating more effectively with someone who stutters**
Often times, people are unsure of how to communicate with people who stutter. When talking with people who stutter, the best thing to do is give them the time they need to say what they want to say. Look them in the eye and try not to finish sentences or fill in words for them. Doing so only increases the person’s sense of time pressure. Also, suggestions like “slow down,” “relax,” or “take a deep breath” can make the person feel even more uncomfortable because these comments suggest that stuttering should be simple to overcome, but it’s not!

Keep in mind that different people who stutter will have different ways of handling their speaking difficulties. Some will be comfortable talking about it with you, while others will not. In general, however, it can be quite helpful to simply ask the person what would be the most helpful way to respond to his or her stuttering. You might say something like, “I noticed that you stutter. Can you tell me how you prefer for people to respond when you stutter?” Often, people will appreciate your interest. You certainly don’t want to talk down to them or treat them differently just because they stutter. However, you can still try to find a matter-of-fact, supportive way to let them know that you are interested in what they are saying, rather than how they’re saying it. This can go a long way toward reducing awkwardness, uncertainty, or tension in the situation and make it easier for both parties to communicate effectively.

**Diagnosing this disorder:**
Diagnosing stuttering requires the skills of a certified speech-language pathologist (SLP).

During an evaluation, an SLP will note the number and types of speech disfluencies a person produces in various situations. The SLP will also assess the ways in which the person reacts to and copes with
disfluencies. The SLP may also gather information about factors such as teasing that may make the problem worse. A variety of other assessments (e.g., speech rate, language skills) may be completed as well, depending upon the person's age and history. Information about the person is then analyzed to determine whether a fluency disorder exists. If so, the extent to which it affects the ability to perform and participate in daily activities is determined.

For young children, it is important to predict whether the stuttering is likely to continue. An evaluation consists of a series of tests, observations, and interviews designed to estimate the child's risk for continuing to stutter. Factors that are noted by many specialists include the following:

- a family history of stuttering
- stuttering that has continued for 6 months or longer
- presence of other speech or language disorders
- strong fears or concerns about stuttering on the part of the child or the family

No single factor can be used to predict whether a child will continue to stutter. The combination of these factors can help SLPs determine whether treatment is indicated.

For older children and adults, the question of whether stuttering is likely to continue is somewhat less important, because the stuttering has continued at least long enough for it to become a problem in the person's daily life. For these individuals, an evaluation consists of tests, observations, and interviews that are designed to assess the overall severity of the disorder. In addition, the impact the disorder has on the person's ability to communicate and participate appropriately in daily activities is evaluated.

Treatment:
SLPs work to help people who stutter lessen the impact or severity of disfluency when it occurs. The goal is not so much to eliminate disruptions in fluency—which many people find difficult to do—but to minimize their impact upon communication when they do occur. People may be taught to identify how they react to or cope with breaks in speech fluency. They learn other reactions that will lead to fluent speech and effective communication. As people become better at managing fluency in therapy, they practice the newly learned skills in real-life situations.

In addition to treatment provided by SLPs, some people who stutter have found help dealing with their stuttering through stuttering self-help and support groups. In general, stuttering support groups are not therapy groups. Instead, they are groups of individuals who are facing similar problems. These individuals work together to help themselves cope with the everyday difficulties of stuttering.

Many support group members report that their experiences in the support group improve their ability to use techniques learned in therapy. Thus, many people benefit from participating in treatment provided by an SLP and a stuttering support group. Indeed, most support groups have developed strong partnerships with the speech-language pathology community to promote and expand treatment options for people who stutter.

Resources:

Websites:
National Stuttering Association [www.nsastutter.org/](http://www.nsastutter.org/)
Stuttering Foundation of America [www.stutteringhelp.org/](http://www.stutteringhelp.org/)
American Speech and Language Hearing Association [www.asha.org](http://www.asha.org)
Fundación Americana de la Tartamudez [www.tartamudez.org](http://www.tartamudez.org)
Stuttering Homepage http://www.mnsu.edu/comdis/kuster/

Books for Kids:
Sometimes I Just Stutter (“Je begaie”) by Eelco de Geus
Jeremy and the Hippo by Gail Wilson Lew
Jason’s Secret by Ellen-Marie Silverman

Books for Parents:

Support Groups:
Stuttering Home Page Chat Room www.mnsu.edu/comdis/kuster/chat/chatroom.html

References:

