

NORTHERN ILLINOIS UNIVERSITY

"An Informational Presentation for Parents on Stuttering"

A Thesis Submitted to the

University Honors Program

In Partial Fulfillment of the

Requirements of the Baccalaureate Degree

With University Honors

Department of Communicative Disorders

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DeKalb, Illinois

May 10, 2003

University Honors Program

Capstone Approval Page

Capstone Title: (print or type):

"An Informational Presentation for Parents
on Stuttering"

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Department of (print or type):

Communicative Disorders

Date of Approval (print or type):

5/5/03

HONORS THESIS ABSTRACT
THESIS SUBMISSION FORM

AUTHOR: L-au~ #t\~

THESIS TITLE: ~tvrth(/)1f.1 ~p\hOYL . rIY pll.r.wfs > 6Y ~"

ADVISOR: :by, H1yVAR-J SyhWvutz ADVISOR'S DEPT: wrv/"D

DISCIPLINE:~ech pcf11()OtJy S-hA/km(1~ YEAR: 2003

PAGE LENGTH: ?-5 BIBLIOGRAPHY: ILLUSTRATED:

PUBLISHED (YES O~ LIST PUBLICATION:

COPIES AVAILABLE ~MICROFILM, DISKETTE):

ABSTRACT (100-200 WORDS):

Abstract

This paper will educate parents about the nature of stuttering. Characteristics of stuttering and stutterers are examined, in an attempt to help those parents with concerns and questions about stuttering in their child. Many people are unaware how stuttering develops. This paper informs parents interested in stuttering development and makes them more knowledgeable about the important aspects of this speech disorder. In addition, parents can learn about the problem and techniques for assisting their child at home. Parents of children who stutter often desire information about their child's problem and how they can contact a speech pathologist. Contact information for professionals in the area is provided. This paper fulfills a parent's need for more information by providing practical knowledge about stuttering.

"Stuttering is a complex, multidimensional disorder in which disfluency is but one component." (Yairi 1996, p.274) According to Schwartz (1999), "stuttering develops as a function of the child's inherent speech skills, the communicative environment and the child's awareness of, and reactions to his stuttering." (Schwartz, 1999) This paper will focus on these components and discuss methods for parents to help their child who stutters.

Stuttering has been described as a disorder of childhood. "It begins by 7 years of age and the typical age of onset ranges from 2 to 4 years of age. About 1% of the school-age population is classified as stutterers." (Conture 2001, p.15) There is an important genetic component that is also involved in the development of stuttering. "On average, boys are 3 times more likely to stutter than girls and for 50% or more of people who stutter, some other family member also stutters." (Conture 2001, p.15) There are many inherent characteristics that can cause a child to be susceptible to stuttering, but the development of the disorder involves a number of components. According to Conture (2001), "Stuttering relates to a complex interaction between the environment of the person who stutters and the skill and abilities the person who stutters brings to the environment." (p. 53) Let's examine the three components that make up the stuttering problem.

Speech Skills

Speech, like many other human behaviors, is occasionally produced by speakers with hesitations, interruptions, prolongations, and repetitions. These disruptions in... ongoing speech are termed disfluency and the frequency, duration, type, severity, and so forth of these speech disfluencies vary greatly from person to

person and from speaking situation to speaking situation. Some of these speech disfluencies, particularly those that involve within-word disruptions (such as sound or syllable repetitions), are most apt to be classified or judged by listeners as stuttering. (Conture, 1990a, p.2)

Normal Disfluencies

There are different types of normal disfluencies that are evident in all children's speech. They are often referred to as between-word disfluencies because they don't break up words but occur across word boundaries. Normal disfluencies are often produced easily and effortlessly as children familiarize themselves with the language and learn how to communicate their ideas. When a child produces these normal disfluencies, there are usually no signs of tension or struggle associated with them and the child is generally unaware of the disfluencies. These normal disfluencies are not considered stuttering. These disfluencies include: Interjections, multi-syllabic whole-word repetitions, phrase repetitions and revisions. Here are some examples of the different types of normal disfluencies.

1. Interjections: I will, *uhm*, you know, be late
2. Multi-syllabic whole-word repetitions: She *really-really* is here.
3. Phrase Repetitions: / was-/ was there.
4. Revisions: *She is-she* was here.

All children produce normal disfluencies as their language and communication skills are maturing.

Stuttered Disfluencies

"Stuttering is a temporal disruption in the forward flow of speech characterized by sound and syllable repetitions and sound prolongations (audible and inaudible)."

(Schwartz 1999) Stuttered disfluencies are often referred to as within-word disfluencies.

According to Conture (2001), "Stuttering or stuttered speech is defined as typically involving: (1) sound or syllable repetitions; (2) Sound Prolongations; (3) monosyllabic whole-word repetition; or (4) within-word pause." (p.5) Perception of stuttering is quite variable depending on the listener, but Conture (2001) stated that these types of disfluencies are most likely to be judged as stuttering. Stuttering can be characterized in three different ways. The type, frequency, and duration of stuttered disfluencies have been related to the development of the problem and a listener's perception of stuttering severity.

Characteristics of Stuttering

Type of Stuttering

Sound and syllable repetitions and sound prolongations are the two most common types of stuttered disfluencies. Stuttering is not a random event and often occurs on the first syllable of a word. For example, a child with sound and syllable repetitions might state, "Can I have my ba-ba-ba-baby?" Stuttering usually begins with these types of disfluencies. According to Yairi (1982), "Part-word repetitions and, to a lesser extent, whole-word repetitions and sound prolongations are the most common first signs of stuttering." Further, sounds occurring in the initial position of a word will often be prolonged as in "mmmmommy." It is even possible for sound prolongations to be difficult to perceive as they are often produced when a speaker is initiating a sentence or

phrase and come out of silence. Conture (1996) has suggested that, "Sound prolongations may be viewed as reflecting a more advanced stage of stuttering." Within-word disfluencies can also be seen in the speech of normally developing children but are much more prevalent in children who are classified as stutterers.

Stuttered disfluencies create concerns in clinicians as well as parents. Parents are often concerned when their child produces sound and syllable repetitions and sound prolongations in a noticeable manner. There is also more reason for concern when the sound and syllable repetitions become more frequent and the prolongations become longer, not audible or block the production of speech. As the diagnosis of stuttering requires more than the presence of stuttered disfluencies, it is necessary to examine other characteristics of the problem.

Frequency of Occurrence

The frequency of stuttered disfluencies also contributes to the identification and perception of the problem. In general, it is obvious that stutterers are simply more frequently disfluent in their speech. According to Yairi and Lewis (1984), "Analyses of spontaneous speech indicated that stutterers were three times more disfluent than nonstutterers." (p.268) Frequency of stuttered disfluencies is a good way for differentiating between stuttered and nonstuttered speech. "Individuals who exhibit 3 or more sutterings per 100 words spoken (averaged across various types and complexities of speaking situations) have some degree of fluency concern (however, this frequency of within-word disfluencies in and of itself does not mean that the person is an individual who stutters." (Conture 2001, p.79)

A clinician will calculate the frequency of stuttered disfluencies in the client's speech and determine if the client is a stutterer. According to Schwartz (1999), "Frequency of occurrence of stuttering is calculated as the number of stutters observed during a sample of speech that is counted in terms of syllables or words." (p.22) Zebrowski (1994b) and Conture (1997) suggested that three or more within-word (stuttered) disfluencies exhibited by a young child suggest that this child is at risk for continued stuttering. Other characteristics such as duration of stuttering need to be taken into account to further decide whether or not a person is a stutterer.

Duration of Stuttering

Duration has been identified as another characteristic of stuttering that has been related to measures of severity. Duration is the extent or length of the stuttering and has been used by some clinicians when making judgments of severity. To determine the severity of stuttering based on duration, the Stuttering Severity Instrument (Riley 1980) may be used. This test uses duration as one of three dimensions (frequency, duration and physical concomitants) "in which the duration of the three longest stutters are used in a severity formula. This severity judgment provides us with a qualitative description of the client's stuttering." According to Schwartz (1999), "When calculating the duration of stuttering, it is best to analyze at least ten stutters taken randomly from two or three conversational samples throughout the evaluation." (p.24) "The SSI is one of the few measures of stuttering that has standardized procedures for gathering and scoring speech samples and the only one that includes the three dimensions just cited." (Guitar 1998, p.163) This test is evidence of how duration along with other components can be important in assessing the severity of stuttering.

Duration of unit repetitions has also been identified as an important characteristic of stuttering. Yairi and Lewis (1996) examined the number of repetition units per disfluency. They looked at part word repetitions, the most common type of stuttered disfluencies, and concluded that the stutterers showed a greater range as well as a greater average number of repetitions than nonstutterers. Throneburg and colleagues (1994) provided data to suggest that the duration of each element within the repetition may be useful when diagnosing the problem. Therefore, duration can be considered an important component when evaluating those people who stutter..

Onset and Development of Stuttering

The onset of stuttering can be explained by two different positions. Many clinicians believe that stuttering emerges from normal disfluencies while other clinicians believe that stuttering emerges from the fluent speech of children.

It may start as a gradual increase in the frequency of repetitions and prolongations that are common in children learning to talk. It also may begin suddenly with disfluencies that are striking in terms of their frequency and duration,, as well as the amount of physical tension the child shows when stuttering. (Guitar 1998, p.15)

Clinicians such as Yairi (1996) concluded that, "Many of the disfluencies produced by children near stuttering onset are objectively different than those of normally speaking children." (p.293) The types of disfluencies that are displayed by children near stuttering onset consist of within-word disfluencies rather than the between-word disfluencies produced by normally disfluent children. Opposing opinions of other clinicians such as Johnson indicated that, "on the date of original diagnosis, stuttering

children may speak in a manner that is not always to be clearly differentiated from that of other children of like age who have not been diagnosed as stutterers." (Johnson 1942, p.125) According to Johnson, there is little or no difference in the speech of children who stutter and who are fluent. Stuttering begins only as a reaction to normal disfluencies, which eventually become stuttered disfluencies.

I've found that the majority of evidence supports the theory that stuttering emerges suddenly with specific characteristics different from those of normally disfluent children. I agree with Schwartz (1999) that the speech of children who stutter appears to be different from the speech of normally fluent speakers, right from the onset of stuttering. Nonstutterers never produce the frequency of stuttered disfluencies to the extent of stutterers. It is clear to me that stutterers show these stuttered disfluencies consistently at onset and nonstutterers will produce mostly normal disfluencies.

The time from the onset of stuttering is often based on a subjective parental report, and therefore difficult to know exactly when the stuttering really began. However, continued questions of parents will help the investigator to focus in on a time when the problem first emerged. "Researchers and clinicians should be alert to the possibility that initial variations in type of onset and in speech characteristics may provide diagnostic and prognostic differentiation of young stutterers." (Yairi and Ambrose 1992b, p.56) More specifically, the time from stuttering onset will assist our decisions regarding continued development of the problem, growing out of the problem (spontaneous recovery) and planning therapy.

Yairi and Ambrose (1992a) examined the development of stuttering in 27 children who had been followed for three to twelve years. These investigators concluded that

there were significant reductions in total disfluencies as well as reduction in stuttered-like disfluencies. Most of the improvements made were within the first fourteen months after stuttering onset. "Lack of positive change (decrease in frequency) in stuttering by 7 months post stuttering onset suggests the need for evaluation and possible treatment." (Yairi, 1997)

However, there is often a decrease in stuttered disfluencies that occurs without treatment and is referred to as spontaneous recovery. "About one or more of every five children who begins to stutter will probably continue on into later childhood and beyond. This indicates that as many as four out of every five children who begin to stutter recover, with or without therapy." (Conture 2001, p.21) It is really difficult to know exactly which children at the time of onset will be the ones to "outgrow stuttering." Even though the vast majority of stutterers spontaneously recover, for some individuals, spontaneous recovery and improvement of their problem doesn't occur. In this case, their stuttering may continue to develop.

Development of Stuttering

Although it has been consistently demonstrated that disfluencies of normally fluent children decline with age (Davis, 1939; Yairi, 1982), the belief that disfluencies of beginning stutterers most often increase in frequency and severity with time has persisted for many years. There are different perspectives on how stuttering develops into adulthood. Many clinicians believe that disfluencies decrease as the stutterer ages, and other clinicians believe that there is an increase in the frequency of stuttering.

Guitar (1998) believes that if spontaneous recovery did not occur, stuttering increased in frequency and duration as it developed. According to Guitar (1998),

"Persistent stuttering in older children, adolescents, and adults occurs most frequently as part-word repetitions, prolongations, or blocks at the beginning of sentences." (p.80)

Many individuals who stutter into adulthood exhibit common behaviors. According to Guitar (1998), "Most can anticipate which words they will stutter on, are consistent in their loci of stuttering, and become more fluent if they read a passage several times over." (p.80)

Another perspective comes from a previously stated study by Yairi and Ambrose (1992a), which concluded that frequency of stuttering decreases over time. "They stated that stuttering peaks for many children during the first two to three months of onset, usually prior to a sharp decline." (Yairi 1996, p.63) Rapid declines in the disfluencies of young stutterers have also been reported in longitudinal studies by Ryan (1990).

"Together, the studies of Ryan and Yairi and his colleagues provide objective support of many past reports concerning high rates of spontaneous recovery during early childhood." (Yairi 1996, p.63)

Communicative Environment

Most children who become stutterers are affected by environmental pressures. "The communicative environment has the potential to contribute to the development of stuttering in young children and to the maintenance of stuttering for both children and adults." (Schwartz 1999, p.30) There are many factors that can create an environment that isn't suitable for a child who is stuttering. These factors include: reactions of parents, a hurried environment, verbal demands and displays, as well as interruptions. "It is evident that a large minority of children aged 2 to 5 are likely to exhibit discontinuous

(disfluent) speech that is unusual enough to worry their parents. This means, typically, an excessive amount of whole- and part-word repetitions." (Bloodstein, 1960)

Reactions of Parents

It is normal for parents to worry whenever there is something wrong with their child. Even though these concerns occur because the parent loves the child, the concern can result in the child reacting emotionally and ultimately trying to modify their speech, which makes their stuttering worse. Parental concern is an important factor because (1) the parents see the child more often and know the child better than the clinician, and (2) their concern seems often to translate into reactions to the child's disfluency that do not help the recovery process. (Starkweather 1990, p.12)

A clinician will often observe parent-child interaction during a session and notice nonverbal as well as verbal reactions to the child's stuttering. Therefore, the clinician is able to observe the child's reactions to the parent's reactions. "Parents are often unaware of their reactions to their child's stuttering." (Schwartz 1999, p.37) "In many cases, these reactions- such as holding very still while the child stutters, looking away, wincing, trying to correct the child's speech, speeding up their own rate of speaking, interrupting the child- may easily create in the child a desire to struggle even more and force even harder. (Starkweather 1990, p.12)"

We recognize that these behaviors do not cause stuttering and, unlike Johnson and associates (1956), we don't believe that stuttering onset occurs because of the parents' behavior.. However, if we note that a child appears to be reacting to a parent's reactions, we will talk with the parents about their reactions (many parents are oblivious to their reactions until the clinician calls attention to the

behavior) and plan some management strategies to assist the parents. (Schwartz 1999, p.37)

Therefore, according to Starkweather (1990), parental concern may itself be a significant variable in the development of the disorder.. (p.12)

Hurried Environment

A child who is stuttering can find great difficulty communicating in an environment with many time pressures. These time pressures include rapid speech, usually by family members, and a generally fast paced lifestyle that many children today experience. Researchers in the past believed that mothers of stutterers spoke more rapidly than did mothers of nonstutterers. "This may be critical, since a mother's high speech rate has the potential to make a child try to speak faster than his optimal speech." (e.g., Jaffe & Anderson, 1979). The possibility that a rapid speech rate may lead to stuttering is supported by Johnson and Rosen's (1937) finding that adult stutterers were more likely to stutter when they spoke more rapidly than normal. Children who stutter may be even more vulnerable than adults who stutter to fluency breakdowns during rapid speech, by virtue of the fact that children's natural rate of speech is slower and their temporal coordination less (e.g., Kent, 1981). However, more recent investigations by Yaruss and Conture (1995) have found no difference in the speaking rate of mothers of stutterers and mothers of nonstutterers. However, "these new findings could be a result of parents becoming increasingly aware of the importance of speaking slowly because of publicity aimed at stuttering prevention." (Yaruss and Conture, 1995)

While not all parents of children who stutter exhibit fast speaking rates, other aspects of our society can create additional time pressures that can negatively affect a

child's speech. Clinicians will observe some clients with a very rushed household, in which every minute is filled with activity. In some cases this has been because the parents themselves felt time pressure to accomplish the activities of daily living. With others there was a sense of poor time management, and on some occasions, it came from parents trying to fill their child's day with meaningful activities. "A general climate of time pressure can particularize itself in the child's speech. If people are rushing to get things done there is not very much time to do anything and that includes talking."

(Starkweather 1990, p.18) Children who are stutterers or at risk for stuttering may react to these time pressures and have difficulty communicating in such an environment.

Verbal Demands

According to Sheehan (1970; 1975), "a child who has begun to stutter is probably a child who has had too many demands placed on him while receiving too little support."

Some demands come from the rapid development of language between ages 3 and 7 years. Others may come from fast-talking parents whose speech rates may be hard for a child to keep up with. Demands for speech performance are sometimes from within the child, sometimes from outside stimuli, and sometimes from both.

(Neilson and Neilson, 1987)

"Demands on the child include those of his internal environment, such as increasingly complex thoughts to be expressed, which require increasingly sophisticated use of phonology, syntax, semantics, and pragmatic skills to express them." (Starkweather, 1987) The external environment often places its demands on the child's fluency through parents' interactions. According to Starkweather (1987), "They may ask questions rapidly, interrupt frequently and use complex sentences choked with big words." These

demands can cause stress for any child, but they make it even more difficult for a child who is struggling to be fluent.

Interruptions

Another suspected stressor in parents' conversations is the frequency with which parents interrupt their children. It is often difficult for many adults to speak with someone who constantly interrupts them. They trip over their words and often forget what they wanted to say. This situation is even more difficult for a child who stutters. "Parental interruptions, some of which may have been elicited by the child's disfluencies, may, in turn, elicit changes in the child's speech. Some children might increase tension and rate and thereby develop the struggled behaviors of stuttering." (Guitar 1998, p.67)

Adults are not the only people who interrupt.. Often siblings or friends of a child will often interrupt. "If children are allowed to interrupt others, they are more likely to stumble over their words during the interruption. Also, if a child who does not stutter is interrupted by another speaker, the child will most likely be disfluent if he or she tries to continue speaking." (Starkweather, Gottwald & Halfond 1990) For the child at risk for developing a stuttering problem,, interrupting or being interrupted can seriously interfere with fluency.

Awareness Of, And Reactions To, Stuttering And The Environment

Anticipatory Struggle

The theory of Communicative Failure and Anticipatory Struggle, developed by Bloodstein (1987, 1997), suggests that stuttering may develop when a child experiences frustration and failure when trying to talk..

If a child cannot make himself understood or is penalized for the way he talks, he may begin to tense his speech muscles and fragment his speech. These become the core behaviors of the child's stuttering. And they, in turn, form the experiences of frustration and failure in communication that the child anticipates with dread. (Guitar 1998, p.72)

According to Bloodstein 1993, "As stutters approach feared words, there is hardly anything that seems to make stuttering more certain than their conviction that they will stutter on them." (p.72)

Avoidance/Anxiety

The reactions by parents that were discussed earlier can cause children to react negatively. These reactions can cause children to become anxious and avoid the behavior that parents are inadvertently communicating as undesirable or unpleasant. "Many children, made more acutely aware of the "dead time" that stuttering occupies, begin to struggle and force their way through stuttering behaviors or learn tricks based on timing or vocal change, or simply figure out ways to avoid talking." (Starkweather 1990, p.21)

A child will not only avoid words that cause them to stutter, but also situations. For example, "When a client has difficulty communicating on the telephone, the client develops strategies for using the telephone or avoiding the telephone." (Schwartz 1999, p.44) This avoidance and anxiety that a stutterer lives with on a daily basis can be complicated and frustrating and affect their lives greatly.

Associated Behaviors

Associated behaviors are the physical manifestations that are a result of a child's awareness of, and reactions to stuttering. "All children who stutter regardless of the

duration from the onset of the problem produce behaviors in association with their stuttering." (Schwartz and Conture, 1988)

... those children who exhibit the largest number and variety of behaviors ... may be signaling to the trained observer, a keener awareness of their stuttering as well as more frequent and varied attempts to adjust or to respond to the problem, and therefore, are more in need of direct therapeutic intervention. (Schwartz and Conture 1988, p.69)

The following are examples from Schwartz and Conture (1988) of some of the most common associated behaviors exhibited by young stutterers:

1. Eyelid opening and closing
2. Eyeball movement (lateral or vertical)
3. Head movement
4. Limb movement
5. Torso movement
6. Audible inhalation
7. Vocal intensity change
8. Audible exhalation
9. Lip movement

While such measures as stuttering frequency are often viewed to be quantitative measures reflecting stuttering severity and development, associated behaviors provide additional objective information related to a child's awareness of or reactions to, his stuttering. (Schwartz, et al, 1990)

Anticipatory struggle, avoidance, anxiety and associated behaviors all occur when a child reacts to his or her stuttering and the environment in which it occurs. These behaviors, which result from a negative attitude toward stuttering, can prevent a child from communicating to his or her greatest ability. There are many simple ways parents can help create a more positive environment to improve their child's stuttering right at home.

Creating A Positive Environment For Enhancing Fluency At Home

Parents can help improve their child's speech at home by creating an environment that is conducive to fluency. Advice for parents of stutterers, given by clinicians with experience treating young stutterers (e.g., Ainsworth & Fraser, 1989; Starkweather, Gottwald, & Halfond, 1990; and Van Riper, 1973), often includes observing and, when appropriate, changing the speech and language environment in the home. The following are suggestions for parents to enhance fluency at home.

Calm and Nonhurried Environment

"Fluency can be compromised whenever there is time pressure; it is one of the most common demands on fluency." (Starkweather, Gottwald & Halfond 1990) It helps to keep the environment and atmosphere as calm and non-hurried as possible. You may be able to help the child feel less hurried by setting his alarm in the morning a half hour earlier to give him some needed extra time. Also, you may want to eliminate one activity from the child's busy schedule. By reducing the time pressure, you provide an environment that makes it easier for the child to communicate.

Speak Slowly

"One thing parents can do is to slow down while speaking to or in front of the child. It is important to try to talk as slowly as your child." (Starkweather, Gottwald & Halfond 1990) It can be difficult for adults to slow down their speech, but it will become easier as the adult practices every time he or she converses with the child. "Rather than chopping up the words in a sentence to slow down, draw out the sounds and let one word flow into the next." (Starkweather, Gottwald & Halfond 1990) This process of slowing down speech should not only be done by parents, but all members of the family. Telling a child to "slow down and take your time" isn't really helpful unless everyone in the family puts in the effort to speak more slowly.

Allow Greater Pause Time

It is very important to provide a good model of fluent speech for your child. Allowing more pause time while you talk can be very beneficial for a child who is stuttering. "Wherever commas or periods would appear if you were writing your speech, stop and take a breath. This provides a model for your child that reduces time pressure and places value on carefully presented, well thought out speech." (Starkweather, Gottwald & Halfond 1990) This greater pause time will increase silence in general, which will let your child know that every second doesn't need to be filled with speech. This, too, will reduce the pressure the child may feel to keep a conversation going. By allowing pause time to occur we reduce the pressure to hurry, and this in turn allows time to organize our thoughts and formulate our language.

Reduce Certain Kinds of Questions

When a question is presented to a child, there are many steps required to answer this question in a quick, concise manner..

First, they must figure out what the question means. Then they need to organize their thoughts to answer the question appropriately, and find the right words and grammar to respond with. Finally, they need to execute the message orally. All of this must be accomplished immediately, since that's what the question-and-answer format demands. (Starkweather, Gottwald & Halfond 1990)

It is much more difficult for a child who is still developing language competency to answer questions requiring long, thoughtful or narrative answers. These types of questions can contribute to fluency breakdown. It is best to avoid questions such as "What did you do in school today?" or "Tell Aunt Corrine what you saw at the zoo." However, it is still important that you get the information to these questions, just in a different way. Make a few comments about your own activities. This will usually cause your child to talk about his or her activities as well. "If something pops into your child's mind at this time about the school day, he or she will spontaneously share it with you. Spontaneously shared information is much more likely to be fluent." (Starkweather, Gottwald & Halfond 1990)

Talk With Your Child

Most often a parent's role is to be the disciplinarian or caretaker of the child and the manner in which the parent speaks, reflects this role. Usually during these times, the parent gives instructions and rules, and therefore talks "at" the child. It is important for parents to realize that a good amount of time should be spent talking "with" your child as well. This means that you and your child engage in a conversation that is shared by both of you. "In this way, talking become more of a pleasurable experience, something to anticipate. Engaging in activities with your child that the child enjoys doing sets the tone

for quality talking." (Starkweather, Gottwald & Halfond 1990) As a child is engaged in a task that is enjoyable, he or she will be certain to comment on the task and initiate conversation. According to Starkweather, Gottwald & Halfond (1990), "Allow your child to introduce the speech topics and then follow his or her conversational lead."

Increase Routine

"It is a lack of structure and uncertainty that contributes to an increase in stuttering." (Starkweather, Gottwald & Halfond 1990) It may seem strange that events such as birthday parties or vacations can cause a child to be more disfluent, but these events that do not follow the normal daily routine can cause anticipation and excitement and be a hindrance for a child who stutters. "If a child knows that after breakfast, he gets dressed, then watches TV and then plays, the uncertainty he might feel is significantly reduced. Preparing the child in advance for special events also helps to reduce the uncertainty that come from anticipation." (Starkweather, Gottwald & Halfond 1990) The more you are able to adhere to a child's normal routine in spite of special events, the better the environment will be for enhancing the child's fluency. "The important idea to keep in mind is that the child should know what to expect and that as much of the daily routine as possible should be preserved." (Starkweather, Gottwald & Halfond 1990)

Have Family Communication Rules

It is important for the family to be involved in all the strategies previously stated in order to create the best possible outcome for the child who is stuttering. It is helpful if all of the family members develop more effective speaking skills. One way to accomplish this is by stating specific family communication rules. The following are three examples of rules given by Starkweather, Gottwald & Halfond (1990):

1. Only one person speaks at a time.
2. Everyone gets an opportunity to speak.
3. No one evaluates the contribution of another speaker..

"These rules provide for orderly, fair, and safe family communication." (Starkweather, Gottwald & Halfond 1990) It is also important to have some method for enforcing these rules. One method that is often used in families is for each family member to have a jar of 25 pennies, nickels or dimes. Whenever a family member breaks one of the rules, they must remove a coin from their cup. At the end of the week, each person is able to keep the coins that they earned. "Not only do rules such as these facilitate fluency for the at risk child, they teach the rest of the family patterns of interaction that will be helpful in any environment." (Starkweather, Gottwald & Halfond 1990)

Contacting a Speech-Language Pathologist

Many parents wonder when the appropriate time is to contact a speech pathologist about their child's disfluencies. "When a child exhibits any of the characteristics of stuttering described earlier or if anyone expresses any concern about the child's fluency skills, a speech pathologist should be contacted." (Starkweather, Gottwald & Halfond 1990) It is most beneficial to your child to not wait in hopes of the problems getting better. Generally, the earlier intervention is begun, the shorter the therapy program will be. The following are excellent resources in the Northern Illinois area for parents who would like to contact a speech pathologist in regards to their child's disfluencies.

Center for Stuttering Therapy
820 Gaffield Place Avenue
Evanston, IL 60201
(847) 475-4757

Institute for Communicative Disorders, Inc.
9S 265 State Route 59
Naperville, IL 60564
(630) 922-6690
www.icdspeech.com

NIU Speech and Hearing Clinic
DeKalb, IL 60115
(815) 753-1481

Stuttering Foundation of America
3100 Walnut Grove, Suite 603
Memphis, TN 38111-0749
(800) 992-9392
<http://www.stutteringhelp.org/>

American Speech and Hearing Association (ASHA)
(800) 638-TALK (8255)

You can also contact your local public school for free services to those who qualify.

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An Informational Presentation for Parents on Stuttering

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An Introduction to Stuttering

- Stuttering is a complex multidimensional disorder in which disfluency is but one component.. (Yairi, 1996)
 - Speech Skills
 - Communicative Environment
 - Awareness of, and Reactions to Stuttering

Speech Skills

- Normal Disfluencies
- Stuttered Disfluencies
 - Type
 - Frequency
 - Duration
 - Onset and Development

Nonnal Disfluencies

- Between-word disfluencies: don't break up words, but occur across word boundaries .
 - Interjections
 - I will, *uhm*, *you know*, be late.
 - Multi-syllabic whole-word repetitions:
 - *She really-really* is here .
 - Phrase Repetitions:
 - *J was-I was* there.
 - Revisions:
 - *She is-she was* here.

Stuttered Disfluencies

Stuttering is a temporal disruption in the forward flow of speech characterized by sound and syllable repetitions and sound prolongations (audible and inaudible). (Schwartz, 1999)

Types of Stuttering

- Sound or syllable repetitions:
 - Can I have my *ba-ba-ba-baby*?
- Sound prolongations:
 - *Mmmmmmmommy*
- Monosyllabic whole-word repetitions:
 - *J-J-J* want a cookie.
- Within-word pause
 - He was go oing