Fluency Disorders: Stuttering and Cluttering

Definitions of stuttering - a fluency disorders where speech is interrupted abnormally by repetitions or prolongations of a sound, syllable, or posture, and/or by avoidance or struggle reactions

Often is experienced as a loss of voluntary control in saying words has too many, or abnormal repetitions, prolongations, blocks, or avoidance behavior accompanied by stress and negative emotion (feelings)

Cooper and Cooper talked about the A,B,C's of stuttering
A - affective - things a person is feeling
B - behavioral - things a person does
C - things a person thinks

Attributes of stuttering - overt (things you can hear and see)
In the speech
- repetitions
- prolongations
- blocks
- interjections
- broken words
- false starts and revisions
- voice quality abnormalities

Techniques used to prevent or get out of stuttering
- Avoidance behaviors
- Postponement
- Starters
- Distractions
- Struggle and forcing

Associated movements
- tremors
- movements in the articulators
- other head and body movements

Covert symptoms of stuttering (things you can NOT hear or see) - the ICEBERG
Physical reactions
- Heart beat increases
- Muscles tighten up

Emotional reactions
- frustration
- anger
- fear
- embarrassment, shame, guilt
- relief

Some facts about stuttering
- Prevalence - 1 percent (1 out of 100 people)
- Incidence (how many people have EVER stuttered) - 4 percent (4 out of 100)
- Rates are higher in children (about 70-80 percent may grow out of it)
- Stuttering is more common in males than females
- Stuttering sometimes runs in families
- Stuttering is more common in identical twins
- Stuttering is a universal disorder
- Stuttering has been know throughout history
- Stuttering is featured in a lot of movies
- There are many famous and successful people who stutter
People who stutter are basically the same as those who do not stutter
We ALL have disfluencies in our speech

What causes stuttering - some theories
At first - superstition
Psychogenic
some thought it was only a psychological problem but
research concludes more PWS are pretty much like anyone else
Learning/environmental
some thought it was caused by parents or others who were trying to help
their child talk better
Organic/constitutional - look especially at how the brain functions
most believe there is a slight difference in the way the brain is "wired"

SO, what causes stuttering? -- a combination of all three? Or perhaps we just don't know yet.

Van Riper's idea was that there may be different paths (tracks) to becoming a PWS

Track 1
starts between ages 2 ½ -4 when child is learning how to put words together
usually not specific time that it started - it came on gradually
starts with excessive repetitions
50-80 percent of children "outgrow" it
Telling the difference between those who may or may not outgrow it
multiple repetitions
intrusive schwa vowel
prolongations (especially with pitch rise)
tremors
struggle, tension and fear when speaking
avoidance
lots of pressure for fluent speaking
More concern if
it is a boy
there is a family history of stuttering
if it has been going on for a long time
if it started after the age of 3
if there are relatively poor speech and language skills
Less concern if
it is a girl
there is no family history of stuttering
if the disfluency decreases in less than a year
if the disfluency started before age 3
if the child has good speech and language skills

Track 2
later onset, often a delay in language development
speech is disorganized
may have speech sound errors
repetitions - usually single syllables, short words, and phrases
poor concentration and short attention span
seem to be searching for words
repetitions - hurried and irregular
not a lot of frustration
usually no secondary symptoms
may have reading and writing disorders, too
have little self-awareness - mixes up words without realizing mistakes
Spoonerisms! - words or phrases in which letters or syllables get switched

Often referred to as "Cluttering"
1. A disorder of the thought process. May be inherited
2. A central language problem that shows up in speaking
3. A problem of fluency where the speaker has a rapid rate and erratic
   (choppy) rhythm that makes him hard to understand. Doesn't use pauses
   properly and instead speaks in "burst of speech". Is usually not aware of
   any problem with communication, but is hard for the listener to
   understand and follow what he is trying to say.

Tracks 3 and 4 are very rarely seen and not important to describe here

Neurogenic Stuttering - a symptom that is sometimes seen in adults with brain disease or injury

**Child Language Disorders**

Speech and Language Development is
   A sequential process (step by step)
   A building process
   Has overlapping stages

Birth – 4 weeks
   Birth cry – the first sound a baby makes
   Discomfort sounds
   Undifferentiated crying
4-6 weeks
   Differentiated crying
   Looks in the direction of a sound – ‘localizes sounds’
8-12 weeks
   cooing and comfort sounds
   has more sounds than are found in the adult speech of his parents
4-6 months
   increased vocalizations
   babbling
6-9 months
   babbling with changes in vocal inflection (tones)
   echolalia – meaningless repetitions of sound he hears from other people
   important to receive reinforcement of making sounds
   place child in front of a mirror
   show colorful books and magazines
   show excitement
   point to and name simple objects
   imitate the child’s voice
   use single words or short phrases
   use the same word for things – be consistent
9-12 months
   responds to simple questions and commands
   first meaningful word
12-18 months
   longer utterances
   more inflectional patterns
   has real words but also a lot of “jargon” (unintelligible speech)
   by 18 months has 10-15 words he can say
18 months – 2 years
   starts to combine words
   grammar missing
   still has lots of speech you can’t understand
   understands 2-part commands
2-3 years
   normal disfluency is common
   says about 300 different words
uses pronouns
tells when he has to go to the toilet
understands inflectional difference

3 years
can repeat 3-4 word sentences
can say 900-1000 words
can understand 2000-3000 words

4 years
understands some abstract concepts
can say 1500-2000 words
sentences are more complex
articulation is improving, but may not be “perfect”

5-7 years
totally understandable
may still have a few sounds he can’t say
can use over 2500 words

Child Language Disorder Definition: the inability to speak or understand the language code as well as age-peers in the same community.

One way to look at child language problems
Based on “presumed etiology” (what you think probably caused the problem)
Unknown reasons
Environmental reasons
Physical (organic) reasons, for example
Hearing loss
Mental retardation
Can be caused by environmental reasons
Physical reasons
Brain damage
Genetic factors – and many genetic syndromes

We’ll look at 3 examples

Language disorders caused by social isolation/environmental deprivation
Lack of motivation to talk
Lack of adequate stimulation
Lack of reinforcement

Language disorders caused by autism (an umbrella term with a range of severity)
Starts before age 30 months
Doesn’t respond well to people
Big problems with language development – may have strange speech pattern
Strange playing, body movements, etc.
Number of children with autism is increasing at an alarming rate!
What causes autism? – Nobody knows for sure. NOT caused by the parents

Language disorders caused by Fetal Alcohol Syndrome or Fetal Alcohol Effect
Alcohol abuse by a pregnant woman is the NUMBER ONE cause of mental retardation in the western world! 10 % of all retarded persons
History – known for a long time that pregnant women should drink NO alcohol, but FAS wasn’t officially identified until 1973
FAS cannot be cured – it is permanent brain damage
FAS/E is 100 PERCENT PREVENTALBE!
Clinical Features include: small before and after birth, malformations of the skeleton, heart and kidney problems, mental retardation, hearing and vision problems, hyperactivity, attention and learning problems, abnormal facial features
Behavioral features of FAS: immature, impulsive and lack fear, highly suggestible, difficulty understanding rules, lying and stealing, don’t learn from mistakes
A woman who is planning pregnancy or is pregnant should not drink ANY alcohol!!