My Professional Life Had Been Misdirected

Van Riper

As I neared the end of a long career in speech pathology it became evident that my professional life had been misdirected.

- I had concentrated my efforts on relieving stuttering in the adult rather than in children.
- This I regret for I was wrong—dead wrong.

- In the early 1950s, Philip Glasner had said:
  - "You should be working exclusively with young stutterers to prevent or to reverse the morbid growth of the disorder rather than to treat it after it has become full-blown."

"As a boy, I was a very severe stutterer"

Van Riper

- "I had awful blockings, struggling so badly that I looked like an epileptic.

- People would slap me across the face to get me out of it."

- "The attitudes of society toward people with speech defects were crude back then. Their treatment was reprehensible when compared to today's standards."

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Van Riper, Dill & Readon-Reeves, 2010

Thinnes, 1990
Stuttering is Not a Low-Incidence Disorder

- There is belief that stuttering is a low-incidence disorder
- 80% of preschool CWS recover before age 5, and 20% continue to stutter (Yairi & Ambrose, 2005)
- The lifetime incidence of stuttering is 8% (Yairi & Ambrose, 2013)
- Many CWS avoid words or speaking situations (Coleman & Yaruss, 2014)
  They use circumlocutions and word substitutions, change sentence structure
- They are misdiagnosed and underserved

Perceived Severity of Stuttering in Children

- **Jeffrey** - frequency
  My stuttering was really mild because I didn’t stutter very often.
- **Chris** - intensity
  My stuttering was pretty severe because I struggled a lot.
- **Jane** - duration
  My stuttering was severe because the stutters lasted so long.
- **Nancy** - different types
  My stuttering was pretty severe because I stuttered in such different ways sometimes repeating, sometimes prolonging, sometimes with silent blocks when I couldn’t even get my voice started.
- **Marshall** - negative feelings were worse than his stuttering
  My actual stuttering wasn’t too bad, but it seemed awful because I was such a nervous wreck, I was afraid, nervous, worried and anxious.
- **Billy** - guilt and shame
  I hardly ever stuttered because I was able to hide it. But I felt miserable and guilty and ashamed, even though my friends hardly ever saw me or heard me actually stutter. I hate that I have to try to hide it all the time.
- **The degree of stuttering may not be relevant to the negative experiences** (Hood, 2014)

Challenges from Preschool to University

- Negative peer reactions
- Ignoring, interruptions
- CWS show frustration and anger
- Difficulty maintaining attention
- Control emotions and behavior
- Pressure to conform to group norms
- Need for peer acceptance
- Fear of speaking, anxiety
- Difficulties talking to strangers
- Communication apprehension

(O’Brien et al, 2011)
Multidimensional Impact of Stuttering on the Educational Process

- A limited ability to verbally address teasing
- Difficult to understand
- Perceived as a “slow learner”
- They do not speak in class
  - Avoid coming to school on days when they are required to talk
- Don’t ask a teacher to clarify a misunderstood idea
- Difficulties with school work
- Some drop out from school prematurely
- Negative attitudes to school

(O’Brien et al., 2011; Ribble, 2006)

SLP Need to Address

- Participation in classroom discussions
- Oral presentations
- Oral reading fluency
- Refusal to participate in cooperative learning projects.
- “Passing,” but do not reach their potential.
- “I don’t know,” when they actually do know

(Ribble, 2006)

Covert Stuttering

- I’ve Got a Secret – And It’s Scaring Me to Death!
  - Fluency was rewarded; stuttering was stigmatized
    - Slow down...
    - speak more clearly...
    - think before you speak...
    - try harder
    - You can do better
    - Your future is counting on it
    - Stop the stuttering or consequences will follow
    - Work harder, longer, smarter
    - You CAN overcome the stuttering. We’ve seen you do it
  - I thought that I have a choice
  - Stuttering is MY fault.
  - Art of deception—avoidance
  - “Kiss of death”

(Hood & Beuk, 2001)

International Conference Fluency Disorders: Theory and Practice, Katowice, Poland, 2016

Ribble, 2006

Hood & Beuk, 2001

International Conference Fluency Disorders: Theory and Practice, Katowice, Poland, 2016

Ribble, 2006
Comprehensive Assessment and Treatment for School-Age Children

How to ensure that all aspects of stuttering are addressed?

- ASHA views treatment and assessment of fluency disorders in the context of the World Health Organization (WHO, 2001)

- An International Classification of Functioning, Disability, and Health (ICF) is a framework for assessment and treatment of school-age children:
  - Assessment
  - Goal setting
  - Treatment planning
  - Outcome measurement

http://www.asha.org/Practice-Portal/Treat/Childhood-Fluency-Disorders/Treatment

International Conference Fluency Disorders: Theory and Practice, Katowice, Poland. 2016

Negative impact of stuttering on CWS based on the ICF Model

Functional communication depends on:
- ability to effectively convey a message
- and not on the frequency of stuttering

Quality of life depends on ability to:
- manage tension and negative reactions
- communicate effectively in various situations

Reaction to stuttering depends on:
- affective aspect
- Behavioural aspect
- Cognitive aspect

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Yaruss, Pelczarski, Quesal, Guitar & McCauley, 2010

Three Major Components of the ICF Framework

- Explores human experience for normal and disordered functioning:
  1. Body function and structure
  2. Activities and participation
  3. Personal and environmental contextual factors

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Yaruss et al. 2010
Body Structure and Function

- The brain imaging studies show anomalies in:
  - **Cortical areas**
    - The white matter is responsible for skilled movement control
  - **Subcortical areas**
    - Basal ganglia and cerebellum
    - Sensorimotor functions
      - supporting motor control and the timing of speech movements

Chang, Zhu, Choo, & Angstadt, 2015

Activities and Participation

Impairments in Body Function and Structure can lead to:

- Limitations in a child’s ability to perform activities
  - what a person wants to do in life
  - initiating and maintaining conversations
  - socializing with peers

- Restriction in a child’s ability to participate in life and reach educational and social goals

Yaruss et al., 2010

Contextual Factors

The context in which the children live:

- **Personal contextual factors:**
  - Speaker’s negative reactions (feelings, behaviors, and thoughts)

- **Environmental:**
  - The reactions of parents, teachers, and peers
Assessment of Stuttering Based on the ICF

Outline

• Evaluation must be comprehensive to address the multiple problems of school-age children who stutter (CWS)

• Stuttering Severity Instrument-4 (SSI-4, Riley, 2009)
  • frequency, duration and concomitant features

• The Overall Assessment of the Speaker's Experience of Stuttering (OASES, Yaruss, Quesal, Coleman, 2010)
  • assess the child's thoughts on:
    • Impairment, reactions
    • functional communication abilities
    • activity limitations
    • participation restrictions
    • environmental and personal contextual factors
    • quality of life

• Fluency Assessment Battery (van Zaalen & Reichel, 2015)

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Assessment of Stuttering Based on the ICF

Informal/ portfolio based

Readiness
Hands down- child lists positive and negative characteristics
Worry ladder- child ranks worries in order
Various questionnaires for parents and children
Child Interview
• Previous experience with stuttering
• surface behaviors of stuttering
• strategies
• how the child and others in her environment react to stuttering
• how stuttering affects the child's life as a whole

• Data to design stuttering intervention
• Baseline data to evaluate the efficacy of treatment

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Stuttering vs. Normal Disfluency

Normal Disfluency (NDF)
Between-word disfluency
  • easy, effortless, rhythmic, infrequent
  • multisyllable whole word repetitions
  • revisions, interjections, hesitations, incomplete phrases
  • usually only one or two repetitions

Suttering-like Disfluency (SLD)
Within-word disfluency
  • More fragmented: sound and syllable repetitions
  • single-syllable whole word repetitions,
  • prolongations
  • disrhythmic phonation
  • tense pauses
  • repetitions of repetitions usually more than two

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Normal Disfluencies

• “I want to…. I wish …I had… but actually lets say uhm..uhm.. the day of the..the moment I was healed healed I was not completely not fully recovered.”
• “I am very busy working eh on my paper eh essay.”
• “I am very busy working on my essay.”

Van Zal and Reichel, 2015

Assessment of Other Areas of Communication

• Oral-motor mechanism
• Articulation
• Expressive and receptive language skills
• Social use of language
• Story narrating skills

A Comprehensive Approach to Treatment
ICF Model

• Improve
  • fluency
  • acceptance of stuttering and of being a person who stutters
  • self-confidence
  • communication skills in the child's life
• Decrease
  • the adverse impact of stuttering
  • secondary behaviors
  • avoidance
• Managing bullying effectively
### Strategies for Reducing Impairment in Body Function

- Fluency shaping
- Stuttering modification
- Integrated approach

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### Fluency Shaping

- **School-age children**
  - do not want to sound unnatural and different from their peers.
- **Clinicians** encourage children to achieve improved and not “normal” fluency
- Use a hierarchy of easier to harder tasks and situations
  - Imitation reading, structured speech, spontaneous speech
  - Therapy room, home, playground, classroom

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### Fluency Shaping

- Techniques focusing on:
  - Changes to the timing and tension of speech production
  - Altering the timing of pauses between words—controls rate but doesn’t sound natural.
- **Continuous phonation**
  - Light articulatory contact
- **Slow and smooth speech initiation**
  - Easy onset
- **Connecting across word boundaries**
Managing Tension

- Continues phonation: Ease out of a stuttering moment instead of to "eliminate" or "fix" stuttering.
- Slow and smooth speech initiation: Rate yourself on a Scale of 1 to 10 (one = no tension; 10 = the most you have ever felt).
- Slow Rate: Go 5 miles per hour slower.
- Easy Starts: Slightly slowing, softening and easing into a word.
- Easy onset: Slightly stretching the beginning sound to ease into a production.
- Light Contacts: Touching the articulators together lightly and softly especially on sounds that involve more contacts such as plosives and labials.

Stuttering Modification
Learning about Speaking

- “Loss of control” makes a child regain control of her speech and she manifests “surface behaviors” of stuttering.
- Drawing the speech machine.
- The respiratory system – air for speaking.
- Voice.
- Learning about stuttering.
- What we do when we stutter.
- Different types of stuttering.
- The child becomes a teacher or an expert.
- Stuttering can be changed.

Stuttering Modification
STUTTER MORE FLUENTLY

- Identify a moment of stuttering.
  Locate the point of physical tension and struggle before, during, or after stuttering episode occurs.
  Preparatory set, pull-out, and cancellation.
- Reduce physical tension and struggle.
  “modify” and not say fluently.
- Recognize physical concomitant behaviors.
- Increase awareness and self-monitoring skills.
- Role play from a hierarchy of speaking situations (linguistic demands and stress levels).

Reducing Negative Reactions (Personal And Environmental Context)

- Desensitization strategies help speakers to reduce their fears in structured, supportive settings
- Voluntary stuttering
- Teaching the client ways to problem-solve to deal with self-defeating thoughts, feelings, and difficult speaking situations
- Talking about thoughts and feelings
Reducing Avoidance

- Say when and what they want to say
- Improve assertiveness
- Assume more positive attitudes
- Systemic hierarchy
- Learning about stuttering: “expert”
- “Pen Pal”
- Stuttering group
- Exploring the moment of stuttering
- “Freeze” during the moment of stuttering
- Pseudostuttering
- Drawing a picture of stuttering

Acceptance

- Resilience
- Regulation of emotional and cognitive reactions
- Mental health
- Quality of life
- Not an alternative to change but a stepping stone in the process of change

Cognitive Restructuring

- Learn to identify the thoughts underlying negative attitudes
- Examine the link between the thoughts, emotional reactions, and the speech
- Evaluate whether thoughts are valid
- Adopt positive assumptions or thoughts
Self-Disclosure and Support

- School-age children advertise stuttering in a classroom presentation with the help of the SLP or classroom teacher (Murphy et al., 2007b).
- Self-help group
- ISA (International Stuttering Association)
- Online chats
- Social media (e.g., blogs)

Accommodations At School

- CWS may qualify for accommodations
- using audio/video recording
- increasing the time provided for an oral reading or presentation
- providing an alternative assignment to oral reading
- altering the size of the audience

Coping and Minimizing Bullying

- Education minimizes inappropriate reactions
- React appropriately to bullies
- Educate others about effects of stuttering and bullying
- Desensitization, cognitive restructuring (reframe thinking about stuttering)

Murphy, Yates, & Quesal, 2007b
Learning About Bullying

- Bullies come from different backgrounds
- Derogatory and mean-spirited
- Some have leadership personality and can be popular in school
- Can be disruptive, impulsive, aggressive toward others
- Families can neglect or abuse them
- Some can have low self-esteem

Dealing with Bullying: Role-Playing

- Role-playing teaches assertive, non-confrontational methods to combat bullying
- Practice of bullying response within safe setting builds confidence

Class Discussion About Bullying

- Stuttering is nobody’s fault
- Discussion about other children who were bullied which normalizes child’s experience
- Discussion about coping with bullying
- The clinician participates as well
- The child shares how she would want to react to stuttering
- Allows for practicing to speak about stuttering openly
- Questions and answers
More Responses to Bullying

- “Power I” – I don’t want to answer your questions
- “Shrug” response
- “I don’t care”; “so what?”
- “Because I want to”
- “Mighty Might”; “You might be right”
- Short repeated answers
- Loud voice: “I don’t like that; don’t make fun of me”

Successful Outcome of Stuttering Intervention in School Age Children

As a result of treatment, CWS are able to focus on improvement of their:

- Self-image
- Quality of life
- Successes in social and academic interactions
- Ability to deal with bulling and teasing (Reichel & St. Louis, 2004)

References

- ASHA-Childhood Fluency Disorders, http://www.asha.org/Practice-Portal/Therapy-Topics/Childhood_Fluency_Disorders/
References