Family-Centered Care: Successful Strategies in Adult Aural Rehabilitation
K. Todd Houston, PhD, CCC-SLP, LSLS Cert. AVT
Professor
The University of Akron

Learning Objectives
► Define family-centered aural rehabilitation and related service delivery models;
► Identify at least three aural rehabilitation strategies and explain how they can be implemented;
► List three outcomes that positively benefit adults with hearing loss after they’ve enrolled in family-centered aural rehabilitation.

Disclosure Statement
Dr. Houston has no relevant financial or nonfinancial relationship(s) with the products or services described, reviewed, evaluated, or compared in this presentation.

Dr. Houston is the author/co-author of Telepractice in Speech-Language Pathology (2014), Assessing Listening and Spoken Language in Children with Hearing Loss (2015), and Telepractice in Audiology (2016), all published by Plural Publishing.

Current Hearing Loss Statistics by Age

Hearing Loss Statistics

1 in 6 U.S. adults ages 18 & over report trouble hearing

28.8 million U.S. adults could benefit from using hearing aids

What is Aural Rehabilitation?
“Adult aural rehab is the reducing of hearing loss induced deficits of function, activity, participation, and quality of life through a combination strategies.”

Boothroyd, 2007
Overall Goal of Aural Rehabilitation

“...to increase the probability that successful communication will occur between a hearing-impaired person and his or her verbal environment.”

(Houston & Montgomery, 2000)

Status of perceptual training (or auditory brain training) in audiological practices

ASHA’s 2012 survey of 2,000 ASHA-certified audiologists from a variety of work settings:

- 17% provide ‘auditory training’
- 4% provided speech reading/lip reading

“There is much current focus on the instrument and so little on the rehabilitation of the user”

(Maurice H. Miller, Ph.D, Hearing Review, Mar 2015)

Technocentric Model of Service Delivery

- Audiologists diagnose hearing loss and prescribe/fit appropriate hearing technology
- Technology without aural rehabilitation treatment is not sufficient to produce a successful outcome
- Need a well-rounded approach
- Industry is slowly moving in this direction. AR treatment is taking patient’s life & desired outcomes into consideration and spouses & family members are seen as partners in the process

Cognitive Decline

- Without proper hearing intervention, cognitive decline can occur
- When hearing is difficult, the brain requires greater cognitive resources to process auditory signals
- Case studies hypothesize that HL leading to social isolation and decreased quality of life also impacts cognitive decline

Effortful listening due to untreated hearing loss is associated with increased stress and poorer performance on memory tests.
According to Malcolm Shepherd Knowles, andragogy is the art and science of adult learning, thus andragogy refers to the art and science of helping adults learn.

Hearing loss is the THIRD MOST prevalent age-related disability following arthritis and hypertension suffered by adults 75+.

Memroy Loss & Hearing Loss

Adults with hearing loss develop a significant impairment in their cognitive abilities, 3.2 years sooner than those with normal hearing.

Those with hearing loss experience a 30% to 40% greater decline in thinking abilities compared to their counterparts without hearing loss.

2x more likely to develop dementia

3x more likely to develop dementia

5x more likely to develop dementia
Most people forget at least 60% of training delivered within the first 24 hours!

Knowles’ 4 Principles of Andragogy (that are applied to adult learning)
1. Adults need to be involved in the planning and evaluation of their instruction.
2. Experience (including mistakes) provides the basis for the learning activities.
3. Adults are most interested in learning subjects that have immediate relevance and impact to their job or personal life.
4. Adult learning is problem-centered rather than content-oriented.

Adult Learning Theory
Adults
- bring knowledge, skills, attitudes
- bring experience
- like to solve problems
- like to apply what they learn to real situations
- like to have choices
- like to share in the setting learning objectives
- have variety of learning styles/preferences
- do best in an environment where they feel safe, accepted, and respected
- want and need feedback
- need to have their abilities and achievements honored

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Adult Learning Principles
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Adult Learning Principles

**Adults**
- Like to have choices
- Like to participate in the setting of goals and objectives

**SMAR**
- Specific
- Measurable
- Attainable
- Relevant
- Time Based

Adult Learning Theory

**Adults**
- Have a variety of learning styles & preferences

Adult Learning Theory

**Adults**
- Do best in an environment where they feel safe, accepted, & respected

Patient/Family-Centered Core Concept

- Patient- and family-centered care is working with patients and families, rather than providing services "to" or "for" them.

Patient/Family-Centered Care: Core Concepts

- People are treated with respect and dignity
- Health care providers communicate and share complete and unbiased information with patients and families in ways that are affirming and useful
- Patients and families are encouraged and supported for participation in care and decision-making at the level they choose
- Collaboration among patients, families, and providers occurs in policy and program development and professional education, as well as in the delivery of care
**Why Patient/Family-Centered Care?**

- Individuals who are most dependent on health care are most dependent on families:
  - Those with chronic conditions
  - The very young
  - The very old

- Families are allies for quality and safety by:
  - Providing constant support across settings and assisting with transitions of care
  - Participating in developing care plans and supporting patients in following plans

**What is Family-Centered Care?**

- Supports the whole family as a unit
  - Includes spouses, children, close family friends
  - Empowers family choice and decision-making
  - Establishes a collaborative relationship between the provider and family members
  - Encourages support group attendance for all family members

**The Importance of Family-Centered Care**

- The World Health Organization describes the impact of hearing loss on families as a third party disability.
- When one person is affected, those around them are affected as well

- Spouses report:
  - Feeling the burden of communication
  - Frustration
  - A change in their relationship, loss of intimacy
  - They avoid socialization and daily activities

**Benefits of Family-Centered Care**

- More effective than patient centered care
- Provides more relevant functional therapy activities that address the individual and family needs
- Reduction in the impairment
- Better communication outcomes
- An improvement in family relationships
- Greater family engagement
- Higher patient satisfaction

**Creating Family Centered Care**

- Arrange the physical environment to accommodate the family
- Inform the family that you are seeking and value their input
- Obtain case history and questionnaire assessments from both the patient as well as their family
- Acknowledge communication challenges for both parties
- Develop goals that address the needs of both the individual and their spouse, family or caregiver
  - Goals should address the needs of both the patient and spouse, family
  - Encourage spouses or family members to join therapy sessions
  - Provide ongoing counseling
  - Acknowledge emotions, ask open-ended questions, re-state concerns, and wait

**Role of the Family**

- Practice good communication
- Be patient
- Attend audiologist appointments together
- Provide your input
- Be flexible
- Participate in the aural rehabilitation process
Client/Family Education

- Vital for patient to understand their level of hearing loss and what to expect in the future.
- Spouse or family member should tag along in the meeting to become educated on the patient’s needs.
- Discuss topics regarding HA or CI with the audiologist.
  - How to work the device.
  - What to do if technology is failing.
  - What will the device do and not do.
- Rearrange household.
  - Have furniture face each other.
  - Use lighting in conversational areas.
  - Carpet absorbs noise.
- Background noise.
  - Request table away from kitchen/walk in area in restaurant setting.

Lois’ Journey

Adult Aural Rehabilitation
Audiology & Speech Center
School of Speech-Language Pathology & Audiology
The University of Akron
Akron, OH

12 Principles of Aural Rehabilitation

1. Treatment should always adjust to the specific needs of the patient.
2. Educate to empower patients to advocate for themselves.
3. Model effective communication.
4. Work together with the patient to develop communication goals & definition of success.
5. Provide individual and group therapy options, support groups.
6. Offer opportunities for successful communication in therapeutic activities as well as “real world” settings.

Assessment and Beginning Therapy

- Determine Strengths and Weaknesses.
  - Formalized tests, checklists, interviews.
- Determine where they are in the listening hierarchy.
  - Detection, Identification, Discrimination, Comprehension.
- Discuss needed supports, therapy model for intervention, and counsel the family.
- Develop family centered goals and determine functional activities for intervention.
Questionnaires for Assessment of Listening Difficulties

- Communication Confidence Profile (CCP)
  - EXAMPLE: If you are having trouble understanding, how likely are you to ask a person you are speaking with to alter his or her speech by slowing down, repeating or rephrasing? (1-5, Extremely-Not at all)

- Qualitative Outcomes Assessment for cLEAR (QOAC)
  - EXAMPLE: We are having dinner at a restaurant. There is background music. I have to ask my partner to repeat something: (1-7, None of the Time-All of the Time)

Adult Aural Rehabilitation Strategies

As Boothroyd (2007) describes, the four components of aural rehabilitation include:

- Sensory management – to target & enhance auditory function
- Instruction – to increase the probability of positive outcomes from sensory management
- Perceptual training – to target activity by supplementing the learning opportunities provided by everyday communication
- Counseling – to target issues of participation & quality of life that result from residual deficits of function & activity

Sensory Management & Instruction

- Types of hearing technology you may need
- Cochlear Implants
- Hearing Aids
  - Behind the Ear Hearing Aids (BTE)
  - In the canal (ITC)
  - Completely in the canal (CIC)
  - Receiver in the Canal (RIC)
  - Bone Anchored Hearing Aids (BAHA)
- Hearing assistive technology

Sensory Management & Instruction: Hearing Assistive Technology

- Assistive technology can help individuals with hearing loss in difficult situations and improve quality of life
- Assistive devices may include:
  - Cell phone adaptations
  - Personal amplification
  - Alert systems
  - Home amplification systems
  - Hearing loops
  - Closed captioning
- Hearing assistive technology can be used as a support to make communication more effective.

Perceptual Training

- Goals:
  - Enhance auditory perception skills
  - Increase conversational confidence and fluency
- Patients differ in how they improve in these skills
  - Some learn spontaneously
  - Some need the support of a family member or close friend
  - Some need guidance with encouragement to have the confidence to improve their perceptual skills and have the confidence to use these new skills
- Many patients can benefit from active perceptual training

Are hearing and listening the same thing?

- **Hearing** allows you to receive acoustic information (speech)
- **Listening** requires your brain to attend to and interpret speech

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Can’t hearing aids or cochlear implants solve all listening problems?

Hearing technology reduces listening problems, but alone they cannot develop the listening and mental skills that are necessary for comprehension.

*We need to help the brain interpret the information it is receiving!*

Top-Down vs. Bottom-Up Strategies

- **Top-Down Strategies**
  - Analytic Training
  - Sentence & phrase training
  - Relies on linguistic context, conversation
  - Communication breakdown/repair

- **Bottom-up Strategies**
  - Analytic Training
  - Segmental and suprasegmental level
  - Pitch, intonation, stress, timing
  - Phoneme level

Aural Rehabilitation Testimonial

Instruction: Self Awareness & Self Advocacy

- Important to not be afraid to ask for the communication partner to repeat their statement or question
- Explain your hearing loss to the communication partner, others
- Type of equipment you own
- How to work it
- Why you are wearing it
- Close family members and relatives must advocate for the person who has a hearing loss in all environments
- Explain person has hearing loss
- Ask for repetition
- Not polite to discriminate

Repairing Communication Breakdowns

- Ask the speaker to repeat
- Ask the speaker to face you
- Ask the speaker to slow down
- Ask the speaker to rephrase
- Listen for keywords when there is a topic change
- Repeat back what you heard
- Ask questions
- Mention that you are interested in what was said, and you would like for them to repeat

UA Continuum of Aural Rehabilitation

- Individual Aural Rehabilitation
- Community Therapy
  - Taken out of speech room, to a natural environment
  - Working on phone conversations
  - Role-playing
  - Listening in noise
  - Using normal, everyday items in functional situations
  - Teaching self-advocacy strategies
- Telepractice
- Support Group: Hear No Fear
Bottom Up, Community Therapy, & Counseling

We are here to provide a supportive group environment for adults with hearing loss and their families to learn and share their unique experiences. We strive to provide a place for communication opportunities, growth, education and encouragement from others.

Hear No Fear: A Hearing Loss Workshop For Adults with Hearing Loss and their Families

- Introductions
- Educational Topic
- Sub-groups
- Family members/support
- Adult with Hearing Loss
- Discussion Piece
- Advocacy
- Journey
- Assistive Technologies
- Game/Social Break
- Wrap up/Share Take Aways

Hear No Fear: Sample Topics

- Anatomy & physiology of hearing
- Audiogram & speech perception
- Caring for hearing technology: hearing aids & cochlear implants
- Candidacy – Cochlear Implants
- Assistive Listening Devices, Loop Systems
- Auditory learning/training
- Coping with hearing loss
- Conversational Repair Strategies
- Implications of the ADA & other policies/laws
- Cognitive Issues / Reinforcing Brain Health
- Insurance & Medicare Issues related to hearing loss coverage
- Deaf Culture vs. Hard of Hearing

Hear No Fear: Support Group

Discussing Acceptance of Hearing Loss

Hear No Fear: Meet Jim & Jean
Telepractice: Jim

Reimbursement for Aural Rehabilitation

- Medicare will reimburse for audiologic diagnostics, but not audiologic treatment (i.e., aural rehab provided by audiologists)
- The Affordable Care Act includes reimbursement as part of 10 essential benefits for health care plans
- SLPs and Audiologists can cooperate to create better outcomes and reimbursement levels for clients
- Continued advocacy to state and national legislators is necessary to keep reimbursement for aural rehabilitation services

Charging for Aural Rehabilitation

- Bundled Pricing
  - Included with hearing aid sales
- Unbundled Pricing
  - Included in a service package
  - Itemized
    - Individually
    - Community Support

Resources

Resources


Thank You for Listening!

K. Todd Houston, PhD, CCC-SLP,
LSLS Cert. AVT

Email: houston@uakron.edu
Office: (330) 972-6141
Facebook: K Todd Houston
SnapChat: KToddHouston
Twitter: ktoddhouston
LinkedIn: www.linkedin.com/in/toddhouston
LinkedIn Groups: 6 Sound-Off Telepractice In Speech-Language Pathology Telepractice In Audiology