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The Speech Language Pathologist's Role in Auditory Rehabilitation Therapy

Clinical Mentoring Program
Speech-Language Pathology

Last Reviewed: November 2006



Objectives

- To understand the anatomy and physiology of hearing loss
- To understand how to assess a patient's hearing handicap
- To understand how to develop and implement an auditory rehabilitation plan of care
- To understand how to develop goals and document progress for auditory rehabilitation patients



What is Auditory Rehabilitation?

"... an ecological, interactive process that facilitates one's ability to minimize or prevent the limitations and restrictions that auditory dysfunctions can impose on well-being and communication, including interpersonal, psychosocial, educational, and vocational functioning."

American Speech-Language Hearing Association. (2001)
Knowledge and skills required for the practice of audiologic/aural rehabilitation



Why is the SLP Involved?

- In 2001, ASHA redefined the role of the Speech Language Pathologist and the Audiologist in Auditory Rehabilitation Therapy. They determined the following:
 - Both Audiologists and Speech Language Pathologists traditionally have provided rehabilitation services for children and adults with hearing disorders



Why is the SLP Involved?

continued

- In 2001, ASHA redefined the role of the Speech Language Pathologist and the Audiologist in Auditory Rehabilitation Therapy. They determined the following:
 - Hearing disorders profoundly affect the acquisition, development, and use of speech and language
 - The role of the speech language pathologist and the audiologist may be complementary, interrelated and at times overlapping



Why is the SLP Involved?

continued

- In 2001, ASHA redefined the role of the Speech Language Pathologist and the Audiologist in Auditory Rehabilitation Therapy. They determined the following:
 - Inherent in the practice of Auditory Rehabilitation (AR) are many areas of knowledge and skills that are fundamental to both audiology and speech language pathology



Why is the SLP Involved?

continued

- AR is broader than just speechreading and auditory training to help compensate for loss of hearing due to some peripheral impairment or hearing aid orientation. It includes:
 - Mode of communication
 - Literacy
 - Self advocacy
 - Rehabilitative assessments and measures
 - Educational, behavioral, technological counseling
 - Intervention procedures
 - Ongoing patient-clinician interaction to evaluate and monitor progress as well as the impact on the family



Why is the SLP Involved?

continued

- The evolving breadth of AR services makes it less likely that audiologists and speech language pathologists have identical roles in AR or that they bring the same knowledge and skills to the AR process



Knowledge and Skills Speech Language Pathologists Possess

- Describes the impact of various disorders of auditory function on communication
- Assesses and determines the patient's preferred mode of communication
- Verifies adequate visual acuity for communication purposes
- Determines types of assessments



Knowledge and Skills Speech Language Pathologists Possess continued

- Determines the need for referral to other medical and non-medical specialists
- Provides for ongoing assessment of developmental progress
- Conducts audiological screening as appropriate for initial identification or referral purposes
- Describes type and degree of hearing loss from audiometric test results



Knowledge and Skills Speech Language Pathologists Possess continued

- Provides diagnostic evaluations of speech perception in auditory, visual, auditory visual, or tactile modalities
- Identifies the effects of hearing loss on speech perception, communication performance, listening skills, speechreading, communication strategies, and personal adjustment
- Monitors the patient's prescribed use of personal amplification systems



Knowledge and Skills Speech Language Pathologists Possess continued

- Describes options and applications of sensory aid and telecommunication devices
- Describes effects of amplification on communication
- Describes the effect of hearing loss on psychosocial development
- Makes appropriate referral to an Audiologist



Basic Audiology



How Do We Hear?

- The human ear serves as an astounding transducer
- It converts sound energy to mechanical energy
- It converts mechanical energy to a nerve impulse which is transmitted to the brain
- The pitch of sound is detected by the wave's frequency
- The loudness of sound is detected by the wave's amplitude
- The timbre of the sound is detected by various frequencies which make up a complex sound wave



Three Parts of the Ear

- The Outer Ear
- The Middle Ear
- The Inner Ear



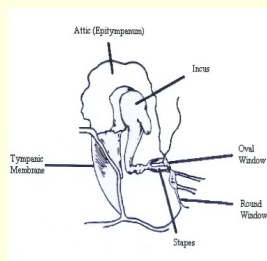
The Outer Ear

- The outer ear consists of the pinna on the side of the head
- It has a canal through which sound travels
- The curvature of the ear prevents the gathering of water and other objects
- The outer portion is soft and the inner portion is bony
- The inner wall contains glands that secrete earwax
- It localizes, collects, and enhances sounds



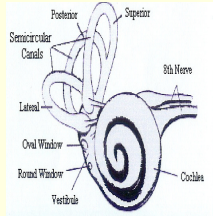
The Middle Ear

- The middle ear consists of air-filled space behind the eardrum
- Contains 3 small bones
 1. Hammer
 2. Anvil
 3. Stirrup
- When sound makes the eardrum vibrate, the chain of bones is set into vibration
- The stirrup induces a wave movement in the lymphatic liquid in the inner ear



The Inner Ear

- The inner ear is filled with fluids and many microscopic components which behave like a microphone
- When the liquid is set into motion, it will set the basilar membrane and the hair cells into vibration
- Different hair cells correspond to different sounds, with the low frequency sounds placed at the top of the cochlea and the high frequency sounds at the bottom
- The vibrations convert sound waves into a message that travels to the brain via the auditory nerve



Types of Hearing Losses



- Conductive
- Sensory-neural
- Mixed



Conductive Hearing Loss

- The transmission of sound to the inner ear is impeded by some condition of the outer or middle ear



Conductive Hearing Loss

continued

- Causes:
 - Collapse of the ear canal
 - Cerumen accumulation
 - Calcification of the small bones of the middle ear
 - Tumors or growth in the outer and middle ears such as cholesteatomas



Sensori-neural Hearing Loss

- Sound is delivered to the inner ear effectively, but the nerve response in the cochlea is not what it should be
 - Accounts for 75%-80% of all losses
 - Is usually inoperable



Sensori-neural Hearing Loss

continued

- Causes:
 - Congenital
 - Presbycusis
 - Ototoxicity
 - Acoustic Trauma (noise induced)
 - Lesions
 - Heredity



Mixed Hearing Loss

- A combination of sensori-neural hearing loss and conductive hearing loss
- The patient has a sensorineural hearing loss that includes a conductive component



Audiologist

- Has a general knowledge of the basic communication process
- Identifies, describes, and differentiates among disorders of auditory function, including:
 - Disorders of the outer, middle, and inner ear
 - Disorders of the vestibular system
 - Disorders of the auditory nerve
- Refers to a SLP or other professionals as appropriate
- Performs Audiological Assessment and Procedures
- Evaluates and manages the devices and technologies for individuals with hearing impairments



Audiological Evaluation

- The Audiological Exam consists of:
 - Interview to determine factors that may have impacted hearing
 - Otoscopic examination of the ear canal and ear drum
 - Pure tone testing in a sound-proof booth to determine the severity and type of the hearing problem
 - Speech discrimination to determine how speech is perceived
 - Middle ear testing to determine the integrity of the middle ear
- The results are recorded on the audiogram



Audiogram

- A graph which gives a detailed description of your hearing acuity
 - The vertical axis represents sound volume or intensity
 - The horizontal axis represents sound frequency
- Shows your hearing threshold at various frequencies
 - A hearing threshold between 0 and 25 db is considered normal



Results of the Audiological Evaluation

- As a result of the audiological evaluation, the audiologist:
 - Refers to an ENT for a differential diagnosis of any otopathology
 - Recommends hearing aids or other types of assistive listening devices
 - Refers to a speech language pathologist for speechreading to enhance communication and ensure that the patient is benefiting from the hearing aid



Hearing Aids

- Significantly increase the ability to hear for some hearing losses
 - Do not restore hearing to normal
- Allow individuals to hear sounds they were missing (i.e.: birds singing, door bells ringing, the wind, water running)
- May improve social, psychological and physical sense of well-being



Hearing Aids

continued

- May not be effective for everyone; some individuals have difficulty adjusting to hearing aids
- Are often costly and some individuals are not able to afford them



Hearing Loss in the Elderly



Presbycusis

- Hearing loss caused by the aging process
 - Develops slowly as people age
 - Affects the ability to hear sound at a lower volume
 - Affects the ability to understand speech in a normal conversation
 - Grows worse with age
 - Causes difficulty understanding speech when there is background noise (sounds are garbled)



Presbycusis

continued

- Physiologically:
 - The eardrum loses elasticity
 - The joints of the bones in the middle ear stiffen, affecting the transmission of sound
 - The number of sensory cells or hair cells declines



Presbycusis

- Speech is garbled because:
 - Hearing in the low pitch range is spared which allows perception of the vowel sounds, but
 - Hearing loss occurs in the high pitch ranges which reduces or eliminates the perception of consonants which carry most of the meaning of speech
 - The decreased recognition of consonant sounds and the intact recognition of vowel sounds causes speech to sound garbled



Prevalence of Presbycusis

- Aging is the number one factor in hearing loss
- 25% of the population over age 65 suffers from hearing loss
- 50% of the population over the age of 75 suffers from hearing loss



Prevalence of Presbycusis

continued

- Over the age of 85, four out of every five people have hearing problems
- Hearing loss is the third most common chronic condition in elderly Americans, after high blood pressure and arthritis
- 2/3 of elderly individuals with hearing impairments refuse or fail to seek treatment that could help, even though they are urged to do so by family and friends



Impact of Hearing Loss

- Hearing loss has a profound impact on individuals' emotional, physical and social well-being
- Elderly people with hearing impairments are more likely to report:
 - Depression
 - Dissatisfaction with life
 - Reduced functional health
 - Withdrawal from social activities
 - Isolation
 - Embarrassment

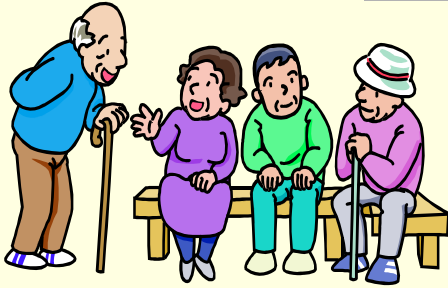


Potential Obstacles to Successful Treatment

- The low tech generation is often embarrassed to wear a hearing aid
- Hearing aids alone sometimes do not restore hearing to functional levels
- Some individuals have difficulty adjusting to wearing hearing aid
- The elderly usually do not seek out help or treatment
- The elderly are not always knowledgeable about how auditory rehabilitation can be helpful



Auditory Rehabilitation Therapy



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The Role of the SLP in AR Therapy

- Conducting assessments to determine the patient's preferred mode of communication, educational needs, communication strengths and weaknesses
- Providing speechreading therapy to improve overall communication ability
- Providing patient advocacy and caregiver training

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The Line in the Sand

- Medicare does *not* allow the SLP to:
 - Teach auditory training
 - Prescribe a hearing aid
 - Perform an auditory evaluation
 - Instruct the patient or the caregiver on how to operate and care for a hearing aid

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Assessment Objectives

- Determine the handicap caused by the hearing impairment, especially in terms of the patient's communication ability
- Determine the intervention techniques that will minimize or alleviate the handicapping effect
- Determine the educational needs of the family and caregivers to assist with reducing the hearing handicap



Assessment Objectives

continued

- To determine what methods are most useful for a specific patient
 - Visual recognition of sound
 - Use of contextual cues/language redundancies
 - Use of situational cues
- To assess how much speechreading is contributing to the person's overall communication



Testing Conditions

- Auditory cues only
- Visual cues only
- Visual and auditory cues



Problems with Testing

- Most tests have individual unrelated sentences
- The sentences and vocabulary may be unfamiliar
 - This causes lower scores, and therefore may not reflect speechreading ability



Problems with Testing

continued

- Tests give the expectation that the patient will recognize every word
 - This is not necessary in conversation because of contextual cues
- Some speakers/testers are easier to speechread than others



Areas of Assessment

- Otoscopic evaluation
- Speechreading
- Patient's perception of hearing handicap
- Other assessment areas
 - Language/Memory
 - Visual problems
 - Reading



Otosopic Examination

- Ensure the otoscope has light
- Pull up slightly on the pinna
- Place the otoscope into the ear canal
- Visualize the tympanic membrane
- If the view of the tympanic membrane is blocked by excessive wax or a growth, refer to the physician for wax removal or further evaluation



Speechreading Assessments

- Assess recognition skills for visual characteristics of individual sounds and/or sound groups of speech as they occur in words, phrases and sentences
- Determine the functional integrity of the auditory/visual perceptual systems as well as communicative efficiency
- Use formalized tests such as *Utley Lip Reading Test*, or develop a similar informal phrase and sentence list
- If the patient has a hearing aid, use it during the bimodal testing. Speak within 3 feet of the patient



Speechreading Assessments

continued

- Have the patient repeat sentences given under the following conditions:
 - With visual and auditory cues (visual acuity should be determined prior to testing)
 - With auditory clues only (patient's eyes are closed or covered)
 - With visual cues only (remove aid and use very soft or no voice)
 - With noise (turn the TV volume up just to the point that it interferes with your speech)



Interpretation

- By comparing the results under the various testing conditions, the following can be determined:
 - The strongest modality and whether or not the addition of second modality increases the score
 - If the patient is an analytic speechreader or a synthetic speechreader
 - *Analytic speechreader* – only gives the words he can actually perceive
 - *Synthetic speechreader* – attempts to give entire sentence, filling in words missed by guessing



Interpretation

continued

- By comparing the results under the various testing conditions, the following can be determined:
 - Whether to begin treatment at the word or the sentence level.
 - The impact of noise on speechreading



Patient's Perception of Hearing Handicap

- Hearing Handicap Inventory
 - Assesses the social and emotional effect of hearing impairments on the patient
 - Standardized on 100 subjects over 65 years old
 - Divided into 2 major subscales
 - Emotional effects
 - Situational effects
 - Questionnaire is given face to face with the tester reading the questions to the patient



Interpretation

- By comparing responses, one can determine:
 - Factors influencing functional communication levels
 - Overall acceptance of hearing loss
 - Overall awareness of hearing loss
 - Where blame is placed when communication breakdowns occur
 - Knowledge and use of compensatory techniques
 - Overall degree of handicap



Other Areas to Assess

- Auditory comprehension
 - To determine whether underlying perceptual difficulties inhibit the patient's communicative effectiveness
- Visual comprehension
 - To determine the impact of visual perception, memory and reading skills on communicative effectiveness



Other Areas to Assess

continued

- Voice and Articulation
 - To determine whether hearing loss has an adverse effect on the patient's speech
- Language
 - To determine overall language ability, cognition, judgment and retention skills



Speechreading Therapy



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Speechreading

- The ability to understand a speaker's thoughts by watching the movements of the face/body and by using information provided by the situation and the language
 - Increases speech synthesis skills
 - Develops effective educated guessing skills
 - Recognizes body language and gestures to assist with comprehension
 - Recognizes the visual appearance of classes of phonemes in words, phrases, and sentences

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Speechreading Approaches

- Analytic approach
 - Recognizes speech movements while de-emphasizing use of contextual or situational cues
 - Eye training
- Synthetic approach
 - Emphasizes use of language redundancy for speech understanding and minimizes training in recognition of lip movement
 - Mind training

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Components of Speechreading

- Gestures and body language
- Facial expressions
- Situational clues
- Linguistic factors



Gestures and Body Language

- Hand and body movements used to supplement speech
 - Research has shown that understanding of speech with hearing impaired patients significantly improves when gestures are used, and deteriorates when gestures are not used or are not appropriately used
 - The speaker's emotions are often visible in body language



Facial Expressions

- Facial expressions are a typical component of normal communication
 - A smiling face indicates happiness; raised eyebrows indicates questioning; a puzzled look suggests lack of understanding
- The more expressive a speaker, the better he/she is understood
- The more a speechreader can interpret facial expressions, the better he/she understands



Situational Clues

- Situational clues include the place of the conversation and the roles of the people talking
- The speaker's role in a given situation affects what is said
 - In a restaurant, a waiter will not use the same words as your dinner companion
- Situational cues help the speechreader predict the words being spoken



Linguistic Factors

- There are many linguistic cues that help in the understanding of spoken language
- These cues are based on the structure of language and the many opportunities to correct interpretation of a spoken message that occur simultaneously
- These are called redundancies



Redundancy

*I am the **teacher** in this class*

- You may understand the key word, *teacher*
 - The way it looks on the lips
 - The way it sounds
 - The context of the sentences itself
- All of that is redundancy
- The more redundant a language is, the less likely you are to make mistakes, and the better you are able to function if some clues are missing that impact the clarity of the message



Linguistic Factors

- There are a limited number of sounds in the English language (38). All spoken messages must consist of only those sounds
- Sound can be combined only in certain ways
 - e.g. /pr/ as in the word pretty is possible, but combinations such as /sr/ or /gt/ are not
- Prefixes and suffixes can be connected to main words only in certain ways
 - e.g. “coming” not “ingcome”



Linguistic Factors

continued

- Words can only be combined in certain ways; the subject comes first, then the verb and then the object
 - “Going to the store he” is obviously incorrect
- When people speak, they emphasize certain words to give meaning to what they say
 - they use various intonations



Linguistic Factors

continued

- Pauses in a sentence
- The difference between long and short words
- The stressed word in a sentence
- Intonation
- Some vowel sounds



What Makes a Good Speechreader?

- Synthetic ability and the willingness to guess
- The amount of training
 - The more training the better
- Good language comprehension
 - Knowledge of vocabulary
 - Knowledge of grammar
 - Knowledge of everyday and idiomatic expressions



What Makes a Good Speechreader

continued

- Degree of hearing loss in younger hard-of-hearing population
- Emotional factors
 - Motivation
 - Self-confidence
- Visual skills



Problems with Speechreading

- | | |
|--|-----------------------------|
| ■ Facial hair, small lips or accents | ■ Not guessing |
| ■ Distance from the speaker | ■ Lack of a sense of humor |
| ■ Lighting problems | ■ Speed of the conversation |
| ■ Distractions | ■ Lack of topic knowledge |
| ■ Group communications at parties, meetings or dinner tables | ■ Homophenes |



Homophenes

- Homophenes, or consonants that look like other consonants, make speechreading difficult
- Many words look like other words
- We identify the correct word by whether it makes sense in the sentence or conversation
- Some sounds which are difficult to see are easy to hear – and vice versa



Treatment Approaches/Strategies



Speech Language Pathologists need to train our Hearing Impaired Patients to...



Be Assertive

- Be willing to admit a hearing problem
 - The speaker may think you are not listening, not interested, not paying attention or not too intelligent
- Be willing to explain the problem to others as appropriate
 - The speaker often thinks that all he or she needs to do is speak louder, and often that is not helpful



Be Assertive

continued

- Be able to suggest ways to improve communication
 - The speaker needs to express his or her needs to the listener (i.e.: speak slowly, face me when you speak...)



Deal with Problem Speakers

- Speakers with food or cigarettes in their mouths
- Speakers who talk too fast
- Speakers with sloppy pronunciation
- Speakers with voices too loud, too soft or too high-pitched



Deal with Problem Speakers

continued

- Unfamiliar speakers
- Speakers with distracting gestures
- Speakers with limited facial expressions
- Speakers who have a beard or mustache that covers their lips



Utilize Repair Strategies for Coping with Problem Speakers

- Anticipatory strategies
- Repetition
- Rephrasing
- Key word
- Spelling and code word
- Digits
- Writing



Anticipatory Strategies

- Identify potential problems in advance
- Explain the difficulty and tactfully ask/inform the speaker of what is needed for better communication such as:
 - Having the speaker remove gum/food from his mouth before speaking
 - Asking the speaker to speak more loudly
 - Having the speaker stand in better light or on your better side
 - Encouraging the speaker not to exaggerate when speaking



Repetition

- Repetition is used most often, but the patient must be careful not to overuse it (no more than once or twice)
 - Ask the speaker to "please say that sentence (word) again"
 - Ask the speaker to repeat only the part missed. ("I met John at the store." "You met John where?")
 - Develop a few key phrases that seem pleasant and use them instead of "What?", or "Huh?"



Clarification/Confirmation

- Clarification/confirmation is useful when patients want to be sure they understood what was said
 - They will either confirm what they thought they heard or ask for clarification
 - If they understood correctly the speaker will confirm what was said, or correct it



Rephrasing

- Rephrasing is a good alternative to repetition
- It is useful when the speaker is using technical or unfamiliar language
 - Tell the speaker, "I don't understand what you said. Please say it a different way."



Key Word

- Ask the speaker to provide the most important word or key word
- Ask the speaker to repeat it or spell it to ensure understanding
- If one key word is not enough, ask for a second key word
- An individual with good English skills can figure out a whole sentence by knowing one or two key words.



Spelling and Code Word

- If there is a problem understanding a word, a name or a number, ask the speaker to spell the word
- In many instances, names or people and places are difficult to speechread
- Numbers are often confused with each other and context is of little help



Spelling and Code Word

continued

- One cannot guess these words because precise information is necessary
- If there is a problem understanding a letter, relate it to an object:
 - "a" as in apple?



Digits

- Use when trying to understand a large number or several numbers spoken together
 - Ask the speaker to give the number digit-by-digit
 - If the digit is not understood, ask the speaker to spell the digit
 - After all the digits are spoken, repeat what you understood in order to confirm



Writing

- In situations requiring specific information, writing makes the most sense
 - Asking the speaker to write information ensures that the information is correct and that names and numbers will not be trusted to memory
 - This strategy is appropriate when getting directions, addresses, phone numbers, and bus, train, or airplane schedules
 - It is also good when all other strategies fail to keep communication going



Using Receptive Repair Strategies

If you...

Understood nothing A	Understood only 1 word B	Understood more than 1 key word C	Understood every thing but 1 word D	(Think) understood everything E
<ul style="list-style-type: none"> - Ask to repeat - Ask to rephrase - Ask to shorten - Ask for key word - Ask to write 	<ul style="list-style-type: none"> - Ask general question - Ask to repeat - Ask rephrase - Ask to shorten 	<ul style="list-style-type: none"> - Ask general question - Ask specific question - Make an educated guess 	<ul style="list-style-type: none"> - Ask specific question - Ask general question - Make educated guess - Ask to spell 	<ul style="list-style-type: none"> - Confirm



Problems with Group Communication

- Conversation jumps quickly from person to person
- Some of the speakers may not be visible
- Topics change quickly
- More than 1 person may be speaking at one time



Utilize Group Repair Strategies

- Ask one member of the group to give a cue when the topic changes
- Ask each speaker to signal prior to speaking
- Sit at the head of the table because most people can be seen
- Sit in a chair where no one will be seated beside you
- Ask "what are you talking about...?"



Visual and Auditory Technology

- Take advantage of group amplification systems if available:
 - Induction loops
 - Infrared systems
 - FM devices
 - Closed captioning



Listening Strategies for Groups

- Have appropriate light and face the speaker
- The speaker should speak naturally
- Ask for repetition
- Sit in the best position to see the speaker's face
- Keep the good ear facing the speaker
- Request that the speaker use a microphone if appropriate



Poor Lighting

- Light should be on the face of the speaker
 - A light source behind the speaker will create a shadow, interfering with the ability to see the speaker's face
 - Light should not be shining into the face of the speechreader, as it will impair his or her ability to see the speaker
- Use anticipatory strategies to ensure proper seating



Avoid Noisy Situations and Environments with Poor Acoustics

- Hearing aids pick up all sounds within their range, including background noises
- Be aware that rooms with hard walls, tiled floors and no drapes may have poor acoustics
- Avoid listening situations with televisions or radios or running water
- Sit in the corner in restaurants to avoid hearing others conversations
- Use anticipatory strategies for noisy situations



Utilize Discourse Strategies

- Attention Getting
 - Using subtle gestures such as waving
 - Making eye contact with another person
 - Using phrases like "Excuse me"
 - Gently touching the other person
 - Tapping a surface
- Turn Taking
 - Using facial expressions and watching the speaker's facial expressions
 - Waiting for natural breaks to speak



Utilize Discourse Strategies

continued

- Terminating a Conversation
 - Slowly moving away from the speaker
 - Looking at your watch
 - Politely excusing yourself
 - Standing up
 - Collecting belongings
 - Putting your coat on
 - Saying, "I'd love to continue but..."
 - Being alert to others' conversation termination strategies



Activity

- Bingo
- Current Events
- Happy Hour
- Meal Time in Dining Room
- Bus Trip to the Mall
- Care Plan Meeting
- Therapy
- Concert at the Theatre



Treatment Activities

- Role play various communication scenarios to determine if the response should be passive, assertive or aggressive. Evaluate the consequences
- Provide various written scenarios and discuss how the patient would handle them
- Set up actual problem listening situations and evaluate the patient's responses



Treatment Activities

continued

- Work on asking specific questions to help limit the amount of the response
- Discuss and practice appropriate seating arrangements for the situations in which the patient is experiencing problems
- Provide seating charts, evaluate various seating arrangements and rank them in various situations like restaurants, dining room, conference etc.



Treatment Activities

continued

- Identify topics or situations and speechread single words, phrases, sentences, and conversations related to topics.
 - Utilize educated guessing and speechreading redundancies to maintain topic
- Use sentence completion tasks to enhance guessing abilities
- Have the patient speechread lists of related words then and give topic or complete lists



Treatment Activities

continued

- Conduct a session in various poor listening situations
- Give a clue and have the patient guess the answer
- Use repair strategies on the phone
- Utilize the facility staff in role play activities



Treatment Activities

continued

- Practice using repair strategies in structured and non structured situations
- Have patients speechread sentences with topic known and topic unknown
- Develop conversations around a known topic and have the patient speechread to follow conversations

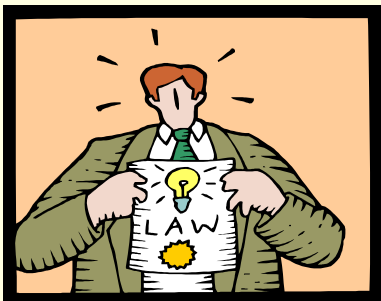


Treatment Strategies Activity

- Review the case study given
- List as many treatment activities as you can
- You have 5 minutes
- Start



Coding and Regulations



Coding and Regulations

- **92507:** "Speech Therapy - should be used for auditory (aural) rehabilitation treatment interventions"
- **92626:** "Evaluation of auditory rehabilitation status; first hour"
- **92627:** "Evaluation of auditory rehabilitation status; each additional 15 minutes have been added for use when an evaluation is being done for a referral that is primarily due to hearing loss/impairment"
- **92508:** "Group Therapy"
- NOTE THAT **92510:** "Aural Rehabilitation Code" is *no longer an acceptable code*

Updated: January 2006



Coding and Regulations

continued

- Must be determined and documented that the use of a hearing aid or other amplification alone would not sufficiently improve the patient's understanding of speech
- Visual skills, cognition, and language comprehension must be sufficiently intact that the patient could benefit from services



Regulations

- "Therapy services and supplies directed toward the operation, use, maintenance or management of a hearing aid or other amplification device are not covered."



Goals

- Are patient based
- Insure that they are agreed upon by the patient
- Should be functional; related to a specific functional outcome
- Outcome should be easily measured



Goal Activity



Conclusion

- Questions and Answers
- Pre-test/Post-test
- Course Evaluation
- CEU Forms