

A Four-Week Group-Communication Training Program for Adults

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A Four-Week Communication Training Program was developed to facilitate the communication functioning of hearing-impaired persons in various real-life situations. It was designed to meet the communication needs of those individuals for whom the customary sequence of rehabilitative events—audiological assessment, hearing aid evaluation, hearing aid check—was not adequate. The program consisted of a group of hearing-impaired adults and their family members who met once a week over a four-week period. Topics for discussion included communication strategies, auditory-visual integration, hearing aid orientation, understanding the capabilities of hearing aids, and helping family members and friends understand the implications of hearing aid impairment. Group sessions were conducted in a special room which was designed to simulate a home environment. Upon completion of the program, group members were given a 20-item multiple-choice questionnaire. An analysis of the questionnaire revealed a positive attitude toward this type of rehabilitative approach.

Traditionally, group aural rehabilitation classes for hearing-impaired adults were based on speechreading drills using various speech materials (syllables, words, sentences, and paragraphs). The goal of the classic analytical or synthetic speechreading methodologies of the early 1900s (Bruhn, 1927; Bunker, 1924; and Nitchie, 1913) was to improve communication functioning by focusing on visible movements of the lips, tongue, and jaw. With the development of the electronic hearing aid, also in the early 1900s, group aural rehabilitation classes persisted in the teaching of speechreading skills, usually without benefit of sound; however, listening activities were occasionally included to improve auditory perception of speech through the use of hearing aids. The goal of the speechreading or auditory training programs was to improve overall communication abilities.

Recent research with auditory-visual speech perception (Binnie, 1976; Erber, 1975) has caused the audiologist to abandon visual-only drills in favor of training integration of the auditory and visual modalities and utilizing an amplification system. As a result, the focus of group aural rehabilitation

programs has shifted to an emphasis on audition. Hearing aids, other amplification devices for telephone or television, etc., have become integral components of training programs. Rather than recommending new hearing aids and then training visual communication skills, audiologists are spending more time advising and counseling relative to means by which hearing-impaired adults can evaluate their hearing instruments and adjust to amplification in various communication settings.

In part, this new direction in audiological rehabilitation stems from technological advances in hearing aids and earmold acoustics. These improvements allow audiologists to recommend hearing aids for persons for whom such purchases would have been ill-advised ten years ago. In addition, the various hearing handicap scales proposed by Alpiner (1978); Alpiner, Chevrette, Glascoe, Metz, and Olsen (1971); Rupp, Higgins, and Maurer (1977); and Sanders (1975), have alerted the audiologist to assess patient attitudes, communication functioning, and motivation toward hearing aid use within the audiological program. As a result, we are finding that many clients with mild sensorineural hearing losses and communication deficits are now using hearing aids with increased daily satisfaction. These are clients who have come to understand the relationship between the instrument (hearing aid) and person-to-person interaction (communication process).

The Hearing Clinic's four-week Follow-up Program in Communication Training was developed in an attempt to meet the communication needs of hearing-impaired adults; i.e., those wearing amplification and those for whom amplification was not the most appropriate rehabilitation strategy. Some of these needs included: (a) understanding and acceptance of hearing impairment and its effect on communication; (b) modification of attitudes and unrealistic expectations relative to wearing amplification; (c) education of family members and friends; and (d) effective stage management techniques, including auditory-visual integration training. The group program was designed specifically for hearing-impaired individuals for whom the customary sequence of rehabilitative events (audiological assessment, hearing aid evaluation, and hearing aid check) did not meet some of their communication needs. The group included both middle-aged and geriatric adults who were occupationally active as well as geriatric adults who had retired but were experiencing communication difficulties in daily situations. The program was designed to provide our clients and their families or significant others with information and interactions they needed to understand hearing impairment and to maximize their communication abilities.

Perhaps the most significant contribution to the development and success of this program is the perspective of hearing impairment/hearing handicap that has been gained through directly dispensing hearing aids. The quality of continual rehabilitative care that is made possible through direct dispensing of amplification systems in our clinic has been instrumental in the establish-

ment of the Follow-up Program in Communication Training.

This paper presents (a) the goals underlying the development of such a program, (b) an outline of the general program format, and (c) a description of the communication training that takes place on a week-to-week basis. In addition, case studies are cited representing some of the people in attendance, their special problems and attitudes toward their communication status, and the degree to which they experienced success or failure in this type of rehabilitative setting. The degree of success or failure that was experienced by a hearing-impaired individual was determined by the individual's evaluation of the program which was completed following the fourth week and/or by the audiologist's evaluation of the individual's level of performance, attitude modifications, and apparent gains in communication function.

Goals of the Program

The fundamental goal of an audiological rehabilitation program is to facilitate the communication functioning of the hearing-impaired person in various real-life situations. The Follow-up Program in Communication Training is based on five objectives that are directed toward the achievement of this goal:

1. *Communication Tactics*--to develop the ability of structuring various listening situations in order that maximum use can be made of hearing aids when integrating auditory and visual cues.
2. *Auditory Training*--to develop the ability of recognizing and comprehending spoken messages in various noise environments.
3. *Speechreading*--to develop the ability of anticipating and synthesizing key ideas from a spoken message using visual cues (speechreading) as well as situational and contextual information.
4. *Information*--to gain a greater understanding of the cause of hearing problems, audiogram interpretation, and relationships between hearing impairment and hearing handicap.
5. *Interaction*--to provide a forum for discussing various problems associated with hearing aid use and communication performance.

Outline of the Program

The Follow-up Program in communication training consisted of four one-and-one-half-hour weekly sessions. Group sessions were conducted in a special room designed for use in the audiological rehabilitation of hearing-impaired individuals. The room provided a simulated home environment including living room space with television, a kitchen and dining area, and a complete switchboard system for use with a variety of telephones and telephone adaptors. All furniture in the room was movable to provide very easy replication of real-life communication situations that were reported by group members. This type of room provided an excellent atmosphere for the facili-

tation of program goal achievement.

The following is a basic format of weekly topics for discussion:

Session 1

1. Communication tactics
2. Speechreading evaluation
3. Discussion—use of communication strategies in different situations

Session 2

1. Hearing aid orientation—care and operation of hearing aids
2. Introduction to auditory-visual integration training and speechreading
3. Discussion—understanding a hearing aid's capabilities

Session 3

1. Hearing loss and the audiogram
2. Practice in auditory-visual integration training and speechreading
3. Discussion—helping family members and others understand the implications of hearing impairment

Session 4

1. Telephone, television, and other sensory communication devices
2. Practice in auditory-visual integration training and speechreading
3. Evaluation of the communication training program

Description of the Program

The topic, communication strategies, was selected for the first session and was designed to meet the most immediate needs of the individuals in the group. Communication strategies involved in the implementation of various techniques to optimize the communication process. It is imperative that hearing-impaired persons and their family members realize that hearing aids are only mechanical/electronic devices which do not allow persons to regain normal hearing per se. Group members were encouraged to discuss various strategies which they had found helpful in their communication situations. Such strategies included: (a) "keep it close" or maintain a distance of approximately six to ten feet from the speaker, (b) "keep it quiet" or position oneself with the better or aided ear toward the speaker but away from extraneous background noise, and (c) "keep it slow" or inform others to speak slowly and distinctly. Group members were encouraged to use their "EARS" to hear; i.e., *E*valuate why they are having difficulty in certain situations, *A*adjust the environmental conditions in order that communication may be improved, and *R*ealize that the communication process takes at least two people and that others are prepared to change their behavior to improve understanding if they know what to do.

A further suggestion related to resolving any breakdown in communication was to use "wh" questions to obtain more information. Group members, the hearing-impaired person, as well as their family members agreed that fre-

quent requests for repetition of utterances were frustrating for both parties. Group members were urged to use "wh" questions to seek additional information from the speaker, to inform the speaker what information was not obtained, and to identify what portion of the message required additional emphasis. For example, if the message was, "Mary will pick you up from work at 4:00," and only the initial portion of the message was understood, a preferable response would be "What time will Mary pick me up?"

The *Digits, Towns, and Sentences Lipreading Evaluation* (Binnie & Wales, 1978) is a test of visual communication providing information about speechreading ability of words and sentences. It was administered during this first session. This evaluation was included to provide the audiologist with baseline information regarding visual communication abilities and to serve as the basis for a discussion of how the group members defined speechreading and how they expected speechreading to assist them in their overall conversational functioning.

Topics in the second session were hearing aid orientation and an introduction to auditory training and speechreading, emphasizing integration of auditory and visual cues for the perception of speech.

The hearing aid orientation section involved a discussion of the care and operation of hearing aids coupled with a discussion of the advantages and limitations of amplification systems. Primary emphasis was placed upon hearing aid troubleshooting and daily listening checks. The auditory-visual integration training portion involved a discussion of three components of communication: (a) hearing or the physical status of the ear, (b) listening or attending to the spoken message, and (c) understanding or comprehension of the spoken message. Following this discussion was auditory-visual integration training, which consisted of several video-taped exercises. These exercises were designed to allow the greatest amount of flexibility in terms of the contribution of visual and auditory cues to the perception of speech. Each segment was varied with respect to the degree of listening difficulty; i.e., the initial exercises were presented under optimal listening conditions--in quiet with visual cues. The exercises gradually progressed in difficulty with the introduction of background noise and limited visual cues when appropriate.

The final portion of this session was speechreading which may be more appropriately termed "nonverbal communication training" since its focus is on the process of deriving meaning from situational, postural, facial, and gestural cues. Nonverbal communication training was presented to these groups as an ancillary tool for maximizing communication, especially under less optimal listening conditions. It was emphasized that while one could not realistically expect to obtain all information on the basis of visual cues alone, awareness of visual differences between phonemes could provide a valuable supplement to reduced auditory input. Group members were, therefore, encouraged to use "aided" auditory cues as their primary mode for receiving

spoken messages complemented by speechreading cues to provide additional information.

The group was provided with a brief introduction to homophenous categories, emphasizing that only one-third of the phonemes in the English language can be distinguished on the basis of visual cues alone. Practice materials included a series of videotaped recognition tasks of the various phonemes in syllables, in words, and finally, at the sentence level.

Information and tactics regarding basic rules for speechreading were also provided. Such tactics included watching for general ideas as opposed to isolated words, arranging the environment to maximize visual cues, and watching the speaker carefully to enable oneself to see the total expression of the speaker.

Topics for the third session included the anatomy of the ear and an explanation of the audiogram. This session provided basic information about the auditory system. The major anatomical divisions of the ear and their functions were discussed and related to the various types of hearing impairments (i.e., conductive, sensorineural, and mixed) and how these typically affect communication. Each group member was given a copy of her or his personal audiogram. The audiogram was explained and related to types of communication difficulties one might expect. The remainder of this session was devoted to additional practice in auditory-visual speech recognition and to an open discussion among group members relative to helping family members and others understand the implications of hearing impairment.

The fourth session was devoted to various hearing aid accessories and sensory communication devices which might further improve communication functioning in specific listening situations. Many group members reported communication difficulty on the telephone and/or understanding messages on television. In these instances, commercially available adaptors for the telephone and television were used for evaluation and training. Other devices which serve as visual aids to alert the hearing-impaired person that the doorbell or telephone is ringing were available for evaluation within the home-simulated environment. All of these devices were available for purchase from the training facility upon recommendation of the audiologist.

Upon completion of the communication training program, a course evaluation form, consisting of twenty multiple-choice questions related to program topics, group dynamics, and an overall rating of the program, was distributed to each group member. An analysis of the course evaluations revealed that the assessment of this type of rehabilitative approach was favorable; i.e., those in attendance: (a) responded favorably to a group approach to audiological rehabilitation as opposed to an individual approach, (b) ranked informal group discussion and communication strategies as the most informative components of the program, (c) noted an

improvement in their communication abilities, and (d) indicated that the number and length of sessions were satisfactory.

Case Studies

Mr. G., age 64 years, was referred to the Communication Training Program immediately following his hearing aid fitting. His audiometric configuration exhibited normal hearing through 1000 Hz with sensitivity dropping off sharply from 1500-8000 Hz. Mr. G.'s primary communication difficulties involved interacting with various sales personnel as part of his business. He was concerned that he might be missing a critical portion of a conversation during a business transaction. In addition, Mr. G. expressed increasing concern with the feelings of isolation he was experiencing in social situations. With the assistance of other group members, Mr. G. was able to compile some specific strategies to improve his communication abilities. These included: (a) manipulating his environment during business conversations to maximize visual cues and minimize background noise; (b) utilizing "wh" questions to obtain additional information from the speaker and to ensure that the spoken message was understood; and (c) whenever feasible, requesting a written agenda of topics for discussion before a business meeting.

Mr. G. later reported success with implementing these strategies. He was an active participant in group discussions and shared these positive experiences with other group members in an attempt to resolve some of their communication difficulties. Upon completion of the program, Mr. G. reported satisfaction with his hearing aid and his personal involvement in communicating more effectively.

E.B., age 88 years, sought audiological rehabilitation at his wife's suggestion that a hearing aid might solve his hearing problems. In addition to his moderate-to-severe bilateral sensorineural hearing impairment, Mr. B. had severely reduced visual capabilities and could not rely on visual cues to aid in his communication difficulties. He was not an assertive person and could not, or would not, tell people when he was having difficulty understanding them. He believed that if people wanted to communicate with him, it was their responsibility to see that he understood them. Mr. B. was referred to the Follow-up Program in Communication Skills following the fitting of a hearing aid that was appropriate for his hearing impairment. He began attending the group sessions and continued to appear very dissatisfied with his hearing aid and his communication status. An effort was made to include Mr. B. in all group discussions, but he would not participate. Mr. B. attended two of the group sessions but failed to attend thereafter. He was contacted by telephone about resuming attendance to the group or the possibility of individual audiological rehabilitation, but he was not interested. The case of Mr. B. is a good illustration of the point that this type of group setting is not always the most appropriate alternative for the provision of rehabilitative

services. The degree of his communication impairment was highly incompatible with that of the other group members. Perhaps rehabilitative services might have been better provided in continued individual sessions with the original audiologist.

Mrs. W.S., age 67 years, and her husband originally sought audiological rehabilitation because of increased communication difficulties experienced around their home. When it was established that Mrs. S. had a moderate bilateral sensorineural hearing impairment, the possibility of amplification was discussed with her. Mrs. S. was not sure how she felt about wearing a hearing aid; but with her husband's urging, she decided to at least evaluate one. After a lengthy hearing aid evaluation, during which the audiologist attempted to help Mrs. S. accept both her hearing impairment and the use of a hearing aid, Mrs. S. was referred to the Follow-up Program in Communication Training. At the end of this program, which she attended with her husband, Mrs. S. was wearing her hearing aid quite successfully. In addition, her husband was more aware of how he could be contributing to enhancing communication between his wife and himself. Through role-playing activities, Mr. S. realized how difficult it was, even for normally hearing people, to understand speech in the presence of noise and/or the absence of visual cues. He believed this helped him to understand his wife's communication problems more fully. In addition, he learned to rephrase his responses when his wife did not understand him. Specifically, Mrs. S. believed that the provision of communication strategies, the opportunity to interact with other hearing-impaired individuals who were experiencing the same kinds of difficulties, and the information imparted to assist her spouse in understanding hearing impairment were the most significant segments of the program.

Conclusions

Based upon our experiences in the four-week Follow-up Program in Communication Training, it was observed that the majority of those individuals participating in the group attained relative degrees of success. Upon completion of the program, these members reported increased satisfaction with hearing aid use as a result of both what they gained from the group and what they were able to contribute to the group. In addition, it was believed that the simulated-home environment contributed significantly to the success that was experienced by group members. While this type of group rehabilitative situation is not appropriate for all hearing-impaired individuals, we believe that it is an excellent vehicle for the provision of rehabilitative services to hearing-impaired adults.

ACKNOWLEDGMENTS

The authors are grateful to Dr. Carl A. Binnie and Dr. David P. Goldstein for their contributions to the development and success of this program.

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