The Need for Audiologic Habilitation: A Different Perspective

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As we are all aware there are thousands, if not millions, of hearing impaired adults who are potential candidates for amplification. The hearing aid industry informs us that there are an estimated 2,800,000 hearing aid users in the United States today (Anonymous, 1978) and incidence figures indicate as few as 8 million and as many as 15 million hearing impaired people in the country. A significant proportion of these people not wearing hearing aids could benefit from the use of amplification and other aspects of audiologic habilitation. The answer to the question of why more individuals do not avail themselves of habilitation is complex, consisting of factors associated with the delivery system, the nature of hearing impairment and communication, and human nature. Habilitation is expensive and, particularly for the retired individual who has no third party purchase support available, this factor can be significant. Another important factor is that hearing aids have not yet achieved the wide level of acceptance of prosthetic devices employed with other physical impairments; probably because they are a recent development rather than because of cosmetic factors, although that is an element. Another deterrent to more widespread use is the poor image of the hearing aid dispensing system and confusion of the consumer concerning the relevant professionals. Even if the public understands the role and responsibilities of the otologist, the audiologist, and the hearing aid dealer, the necessity of visiting two or more of these individuals complicates the service delivery system for many people — particularly the elderly. The last reason to be cited, and the focal point of this presentation, is that professionals are not dealing very effectively with human reactions to impairment.

Human Reaction to Impairment

Emotional acceptance of a health condition is desirable, if not necessary, if the patient is to accept an habilitation plan or follow

it through to improve adjustment and satisfactory use of prosthetic devices. We should differentiate emotional acceptance from intellectual acknowledgment of impairment. One can be intellectually aware of a visual or cardiovascular problem, for example, but on an emotional level deny the existence of the condition or the need to alter behavior or to use appropriate prosthetic devices. If acceptance of impairment can be induced it often is followed by the desire to follow whatever habilitative program is appropriate. Review of the literature in the area of psychology of physical impairment reveals that denial of the condition is a common characteristic of physical impairment; it is one of several initial reactions anticipated. It is not unique to hearing impaired people. For example, Dembo, Ladieu, and Wright (1948) stated that visually impaired individuals experiencing difficulty accepting the problem really did not exist, Nathanson, Berkman, and Gordon (1977) found that 28% of a hundred consecutive cases of hemiplegia exhibited denial; Gray, Reinhardt, and Ward (1977) concluded that unwillingness or inability to accept impairment was a major reason why cardiovascular patients were rehabilitated less often than other disabled individuals. Until denial is overcome and acceptance of impairment occurrs it is very unlikely that successful habilitation can be achieved.

Whether denial occurs more frequently in the hearing impaired population is now known, but it might be expected to be especially prevalent in individuals with mild or mild-moderate hearing losses. These people, although aware of not hearing well in certain situations or under adverse conditions, perform well enough under many circumstances to support their contention of not having a hearing problem. Perhaps the very nature of communication including the infinite variations in the parameters of acoustic events and the wealth of acoustic, visual, and linguistic redundancies conspire to lengthen the Hwareness process from the first indication that a hearing loss might be present to that point in time when it can no longer be ignored. It is not uncommon to see hearing impaired people who report intellectual awareness of loss for 10 years or more prior to taking action. Visual deterioration is probably more obvious but even here habilitation is not instantaneous, due in part to denial. Many of you who wear bifocals may see some similarity between hearing loss and deterioration of near vision; in the senior author's case it was approximately five years between initial awareness of a problem and final acceptance of reality.

Another aspect of human behavior that contributes to the strength and length of the denial stage, thereby impeding develop-

ment of emotional acceptance, is the difficulty most of us experience dealing with the aging process in a personal way. Since most of us do not conceive of ourselves as being as old as the calendar suggests and find old age threatening in one or more ways, we experience difficulty accepting the milestones that suggest the degeneration of bodily systems that is inherently related to aging. Procrastination, which is a milder form of denial, is evident in many who experience difficulty coping with mortality.

An Alternative Approach to Scheduling Habilitation

One point of this discussion is that human reactions to hearing impairment are probably not much different than reactions to other physical impairments. Denial exists but is not unique to the hearing impaired; therefore it has no peculiar mystique that forbids modification. Other health related disciplines have developed habilitation programs that assist the impaired to work through initial reactions to misfortune. We need to approach audiologic habilitation from a fresh perspective and the authors suggest the need for habilitation programs that assist individuals to cope with the denial-acceptance issue. Traditional audiologic habilitation programs have been thought of as short or long term clinical interactions calculated to improve communication and adjustment after the hearing impaired person has initiated a clinical contact and probably completed a hearing aid consultation. Voluntarily scheduling clinical appointments, particularly related to amplification or following through with the recommendation, takes a level of commitment that may be inconsistent with degree of emotional acceptance. If we wish to reach a larger proportion of the hearing impaired population that is presently being serviced, we need to seek out hearing impaired adults and prepare them for habilitation prior to the hearing aid evaluation or recommendation in order to assist the individual in working through the denial phase of adjustment.

The senior author (Hardick, 1977) described an aural rehabilitation program that was designed to serve the needs of (1) Marginal or equivocal candidates for amplification, (2) Those with previous unhappy or unsatisfactory hearing aid experience, and (3) Unrealistic attitude or expectations about hearing aids or difficulty in adjusting to hearing loss or amplification. That program consisted of weekly meetings over a ten week period during which the clients were given information, wer exposed to different forms of amplification, were provided with practice in listening and combined auditory-visual reception, and participated in group counseling sessions concerning attitudes and communica-

tion behaviors that might be summarized as either "coping" or "succombing" behaviors. It was not necessary for clients to have newly obtained hearing aids or to have obtained previous complete audiological work-ups, in order to participate in this program. Clients were found through hearing screening programs conducted at various sites frequented by the aged. Individuals were encouraged to participate if they had some measurable hearing loss, showed any concern about their communication deficits, or could be coerced into attending by family or friends providing they had met the first two criteria. Those programs were successful if success were measured solely by the number of participants who obtained personal hearing aids and adjusted satisfactorily to their use. In addition, attendance at meetings was good and most participants were enthusiastic about the program and its impact on their attitudes and the development of positive approaches to their personal difficulties in communication whether or not a hearing aid was a component of the solution.

The thought has recently occurred to the authors that one of the more significant aspects of the program was the opportunity it provided for working through the denial stage to acceptance of the impairment, followed by a desire to complete the habilitiation process including the acquisition of a personal hearing aid if it provided any benefit. This, of course, is nothing but an hypothesis since, as we are aware, there are other reasons why hearing impaired people might not take action to explore or resolve their communication problems; but it is a reasonable one and provides a mechanism for establishing contact with that supposedly large reservoir of adult hearing impaired people who do not want to be "discovered," as is often implied of the hearing impaired adult.

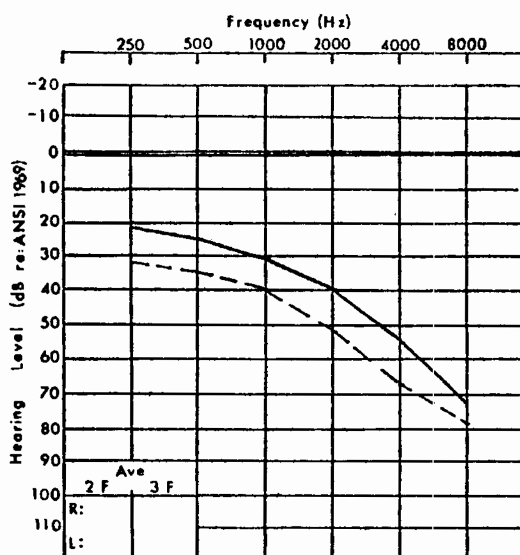
For the past year we have been conducting group audiologic habilitation programs in Columbus, Ohio. The philosophy and program ingredients are essentially the same as previously described.

Free hearing screening is provided to the general adult population or specifically for senior citizens on one or more days per year. The term "screening" is a misnomer since actual air conduction pure-tone test results are obtained through the frequency range from 500 to 4000 Hz if conditions permit. Each person is counseled relative to the findings and questioned about the existence of receptive communication problems and their reaction to the deficit. Those expressing concern about their communication are informed of the audiologic habilitation program and their interest in participation is determined. the program is described to them as a series of group meetings to provide them

with information about hearing impairment and the various means of improving receptive communication. They are told that they will experiment with hearing aid use and if found useful the staff will assist them in obtaining amplification at the lowest possible cost, although no pressure will be involved. They are informed that the weekly sessions are free of charge but there will be some costs involved during the course of the program. Out of this pool of clients a group of 8-12 is organized 3 or 4 times per year in concert with the schedule of academic terms at the university. At the first group meeting, to which spouses or friends are also invited, they are given more detailed information as to the content of the sessions and rather precise information about costs. They are required to obtain a complete audiological work-up at a facility of their choice and pay the usual fee, although no one is denied an appointment because of financial constraints; most will need one or more earmold impressions for which they must pay; they will need a medical examination prior to the recommendation of a hearing aid; and ultimately they will need to purchase a hearing aid if that becomes a significant part of the habilitation process. Aside from providing information, our present orientation is that weekly sessions should be organized around communication evaluation activities and group discussions. Evaluation activities are designed to permit the hearing impaired person to compare and contrast performance on auditory and combined auditory-visual tasks with others in the group and with any normally hearing participants. These evaluations are conducted unaided in quiet and noise, with different speakers, and are repeated weekly utilizing various forms of amplification. These evaluatin activities, while providing useful data to the audiologist, permit the hearing impaired participants to more realistically determine their status and the need for attitude change which hopefully will be of assistance to them in developing emotional acceptance of impairment facilitating adjustment to the use of amplification. The group discussions center around commonly held myths about hearing loss or misinformation about hearing loss or hearing aids that might be uncovered in casual or contrived conversations with them, their own personal reaction to hearing loss, and the reactions of others, and communication strategies that are commonly employed by hearing impaired adults.

Now for some data summarizing our past year's experience with this group audiologic habilitation program. The past four groups consisted of a total of 49 individuals (17 males, 32 females). Sixteen of the forty-nine were accompanied to each session by a family member, usually a husband or wife. Figure 1 shows the

composite audiogram and mean speech reception scores of the participants. It can be sen that this group on the average would be considered mildly impaired. The average age of the females was 74 and the males was 72 with an age range across groups of 65 to 91. Since our facility dispenses hearing aids it is possible for us to have rather precise information about the number of individuals purchasing hearing aids and their use and adjustment to them. To date 21 (43%) of the clients who have completed the program are wearing amplification; another 5 (10%) are being resolved at the moment. Hearing aids were not recommended for 6 (12%) of the participants and at least 10 (20%) have chosen not to purchase



—— Better ear

------ Poorer ear

SRT:

BE	29 dB
PE	40 dB

PB Discrimination;
Sound Field @ 50 dB HL

Females	81%
Males	73%

Figure 1. Composite Audiogram and Mean Speech Reception Scores for Aging Group in Audiologic Habilitation (N = 49)

hearing aids even though one was recommended. Seven (14%) dropped out of the program for various reasons prior to completion. We can say, therefore, that we have provided some degree of habilitation to 42 individuals, or 86% of the original group. Our hypothesis at the present time is that most of the 14% who dropped out and some of the 20% not purchasing an aid are people who

Table 1. Mean Scores on Hearing Handicap Scale Obtained from Habilitation Group Participants before Initiation of the Program

Participants	HHS Mean Score
Obtaining hearing aids	50.91
Not obtaining recommended hearing aids	48.60
No hearing aid recommended	41.00

have not yet worked through the denial stage of impairment. Analysis of audiolgic data indicates that the 20% not following recommendations do not noticeably differ in terms of amount of impairment or handicap from the group that did obtain amplification. Table 1 shows the results of pre-habilitation administration of the **Hearing Handicap Scale** (High, Fairbanks, and Glorig, 1964). Mean scores were not submitted to statistical analysis but it does appear that there is a greater similarity in degree of handicap between the group that obtained amplification and the

Table 2. Mean Improvement in Discrimination from Unaided to Aided Condition

Participants	Mean Improvement
Obtaining hearing aids	14%
Not obtaining recommended hearing aids	13%
Not completing program	19%

group for whom amplification was recommended but not obtained than the degree of handicap for the group not receiving a hearing aid recommendation. Further support that we might be dealing with denial of impairment is evident by looking at improvement in auditory discrimination for monosyllabic words. Table 2 shows mean improvement in discrimination as a function of amplifica-

tion. These date reveal that individuals not obtaining hearing aids or not completing the program received no less benefits than those who obtained the recommended instruments(s).

Summmary

What does all of this mean& We think it means that viable audiologic habilitation programs for adult hearing impaired people with mild to moderate impairment can be provided in most communities. We further believe that the habilitation program should be organized in such a way so that it is possible for professionals to assist clients to cope with the problem of denial of impairment. While we believe that audiologic habilitation may be necessary or desirable for some people after they receive a hearing aid by the usual means, those programs are not appropriate and will not be subscribed to by the majority of mild to mild-moderate hearing impaired adults. There is a chasm between intellectual acknowledgment or awareness and emotional acceptance of a problem and the hearing impaired adult, like many other physically impaired people, must be assisted across that chasm. We have described an audiologic habilitation program that makes no prior personal commitments from the individual. Group dynamics, personal attention, and interesting and informative activities assist the hearing impaired person to gently confront the problem in indirect and subtle ways and lead to improved communication performance for a significant number of people who might not otherwise be helped.

We think the program we've described makes it possible to reach larger numbers of hearing impaired adults because it assists them in moving along the denial-acceptance continuum. As indicated before, this is merely an hypothesis, and perhaps not very testable. It could be that our success is assured only because of the personality and leadership abilities of the staff. We do think there is merit to our argument however, and encourage audiologists interested in habilitation of the hearing impaired adult to develop programs based upon non-traditional strategies. The people we have served through this program are individuals who have known of their hearing impairment for some time; many have had previous encounters with audiologists, otologists, or hearing aid dealers; and all had apparent problems in receptive communication but had not seen fit to pursue habilitation. Had we not extended ourselves into the community and gently led these clients through an habilitation program without requiring the usual psychological commitment in advance, there would be several more people in our community procrastinating aobut or dealing ineffectively with impaired hearing.

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