

Aural Rehabilitational Programs for the Aged Can Be Successful

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Audiology, I believe, is at a crossroads and a critical factor in determining its future role is related to what we do in the area of aural rehabilitation. As you know, the field was born out of concern for the rehabilitative needs of the hearing impaired, and you are also aware that during the intervening years we have drifted away from delivering rehabilitative services. Many would say that as long as we recommend hearing aids we were concerned about the rehabilitation of the hearing impaired, however, I would contend that recommending hearing aids without additional accountability is not rehabilitation but merely an extension of an impersonal diagnostic and evaluative process. It seems to me that we have several forces impinging on us at the present time that dictate that we fish or cut bait. One of these factors is the hearing therapy that is currently being done by teachers of the hearing impaired or by speech pathologists. This is dramatized by the fact that one of the major sessions of this institute revolves around this matter and its potential consequences. Another factor of concern is the heated battle taking place between audiology and the hearing aid dealer, and while we are trying to decide the extent to which we would like to be involved in the dispensing of hearing aids or upgrading the hearing aid dealer, he is making good points by arguing that we don't know anything about hearing aids or the real problems of the hearing impaired. While I believe that his contentions are generally untrue I would have to agree that our typical clinical behavior certainly gives the impression to our patients and to our colleagues in other professions that we are not particularly interested in the hearing impaired beyond defining and describing the hearing loss and giving our best notion of an appropriate prosthetic device to purchase.

The third force impinging upon us is the patient himself, although this pressure is very subtle. I see it over and over again in my legislative efforts because this brings me in contact not only with legislators but opposition groups and consumers. The hearing impaired want help and frankly they all too often are unimpressed with what they receive from audiologists. It's not that audiologists don't do a very adequate job of testing and describing the patients condition, but this is lost on the hearing impaired because they have no way of judging the adequacy and importance of that aspect of your work. But they are a judge of the extent to which we help them with the problems imposed by their hearing loss, and the feeling I get through interactions with the hearing impaired population is that our grades are not very high in this respect. We do not stand out in the minds of the hearing impaired as an important resource to turn to for any problem associated with hearing impairment; they want more, they need more, and the future of audiology is closely tied to what we do along these lines. The fourth force impinging on us is organized medicine. If we are to stand as an independent profession then we must deliver something worthwhile to the consumer and it must consist of a variety of services unavailable from other specialists, or better delivered, and reasonably unrelated to the practice of medicine. Without aural rehabilitation services we will have a difficult time from becoming medical technicians.

My personal feeling is that it is time for us to get back on the aural rehabilitation track. For too long we have copped out of aural rehabilitation either because it was too unscientific or because we couldn't see any way for it to be profitable or even cover expenses. I think that conditions are right for us to embark, nationwide, on the development of good quality aural rehabilitation programs. Furthermore, I detect a feeling in an increasing number of students that testing hearing all day can be rather dull and that, in so doing, they haven't necessarily addressed themselves to and resolved the patients problems. These students are ready for more and it is time for us to take a fresh look at aural rehabilitation programs. This is what I have been doing for the past few years and I would like to share my observations with you so that you might take from them what seems useful or worthwhile and apply them to your own unique setting. I am not ready to propose to you that I have made a science of aural rehabilitation but I have demonstrated to my colleagues satisfaction at the university that aural rehabilitation for adults can be successful under the most adverse conditions.

The title of the presentation says that aural rehabilitation programs can be successful. I know that many of you are asking what the definition of successful is. It seems to me that there are three ways of defining the word: 1) In terms of benefit to the hearing impaired; 2) In terms of the rich resource of research data and accumulated clinical knowledge; 3) In

terms of financial success. My experiences have told me that my aural rehabilitation programs are successful in terms of the first two definitions, and this success has convinced me indirectly that the programs could be successful financially also. This is not to imply that I have not charged for service, but I have made no attempt to determine fees on a cost basis or analyzed the programs from a financial point of view. Whether I am right or wrong, or whether you agree with me or not, I feel that it is imperative that aural rehabilitation services be functionally available with evidence that audiologists are advertising these services in the various professional communities and that some attempt is being made to render them, because it is far easier to sell an existing program to third party purchasers or to defend audiology politically than it is to sell a program we would like to develop if someone would help us.

Before describing two basic kinds of aural rehab programs that I have developed there are some general things I would like to say about what it takes to maintain a successful program. A few moments ago I said something about operating programs under adverse conditions, so I think it is important that you remember where I am located. Our hearing clinic is located in the center of Detroit surrounded on all sides by crime-ridden neighborhoods. I was told from the beginning that it would be next to impossible to provide aural rehab services in this facility because people from the suburbs would not travel to this part of the city especially on a weekly basis. This seemed especially true since people in suburban Detroit seemed to have more negative attitudes toward the inner city than you do. This has proved incorrect, although for the first two years my aural rehab programs were offered at other sites. By then I had developed enough confidence to move the program down to our clinic since I wanted to collect research data and needed the instrumentation and the controlled environment that could not be duplicated elsewhere. Since moving the program to our clinic I have been unaware of any noticeable decrease in the number of people interested in availing themselves of these services. I am sure there are some people that reject this program because of fear of the location or because of increased transportation problems but since I draw from the entire metropolitan community there are more hearing impaired people out there than I can serve in a lifetime anyway. You should also keep in mind that I have no competition in this matter, since of the half-dozen or so major audiological facilities in the community and the dozen or so audiologists in private practice settings with otologists, there is only one other program offering large scale rehabilitative services and those are the lip-reading classes traditionally offered by hearing societies. I will say some specific things about the source of clients for my aural rehab program in a few moments, but I can say that local, county, and state agencies for the aging have been of

tremendous help to me: the consumer protection offices of the Mayor's office or the prosecuting attorney's office have been of help; the parks and recreation departments of various localities have been helpful; and labor unions have been of significant help.

Aural rehab programs become eminently more successful as the audiologist plays a leading role as a consumer advocate. The more closely involved I am in the dispensing of hearing aids the easier it becomes to perpetuate an ongoing program. I personally am not interested in selling hearing aids, but I am interested in doing everything possible to retain professional management of the patient, to help him obtain an appropriate instrument at the lowest price possible; paying only for products or services rendered; and am willing to be held accountable for my decisions. While our clinic is talking about opening a dispensary eventually, I am at the present time, very happy with the mail-order purchase of hearing aids from a dealer in Kalamazoo (Figure 1).

Aural rehab programs are possible and successful only if the audiologist exhibits certain attitudes. In short, the audiologist must be client-centered rather than audiometer centered, diagnosis centered, or "professional centered" (see Luterman, pg. 65, *JARA*, 9:1:April, 1976). When you say these things to an audience of colleagues or students they all shake their heads up and down in agreement but what they don't do is analyze themselves to discover their own attitudes. I have gotten to the point that when I see a university, hospital, community agency, or private practice setting that does not have an aural rehabilitation program, but claims to want one, I know that the audiologists are not client-centered no matter what they claim and that the attitudes exhibited to the hearing impaired are not conducive to inspiring participation.

My intent here is to provide you with a skeletal outline of what I regard as the important aspects of the program I have developed. This part of the presentation can be divided into three parts that can be regarded as mutually exclusive but together provide for a continued series of programs that are self perpetuating and rewarding for all concerned. The first part deals with mechanisms for entry into the program; the second deals with the interviewing process that is so important in motivating individuals to participate; and, the third deals with the basic characteristics of my program.

For the past few school terms I have been operating two simultaneous aural rehab programs and although many features of these programs are the same the methods of entry are quite different. The first method of entry is the one I have used the longest. We have been running three day workshops for training industrial hearing technicians for several years. We average about four of these training programs per year. Since each participant in these three day workshops pays us \$150.00 for the course, it



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Figure 1.

is possible for us to bus senior citizens so that technician trainees can gain some practical experience testing individuals with hearing impairment. Through the contacts I have developed with the area agencies on aging, the parks and recreation programs for senior citizens, and the retirement section of the UAW, there is no difficulty in providing a constant flow of senior citizens who wish to have their hearing tested free of charge. This technique as you can see, serves several purposes. It provides all the publicity required to keep our department well-known in the retirement community and the programs representing it. It makes our services known to individual hearing impaired senior citizens and thus serves as an important source of person to person publicity, while at the same time providing needed services to a proportion of the population with limited income but high incidence of hearing impairment. At the time these senior citizens are tested, no attempt is made to review their audiograms but rather I make arrangements to go to them. For example, last week I took the assembled audiograms from our last technicians course out to the parks and recreation building in Oak Park, Michigan, where that community program for seniors is centered. The center staff had notified all of the people who had been tested to assemble at the center at 1:00 p.m. The first part of my session with them consisted of talking about various aspects of hearing loss and answering general questions posed by the group. The second part consisted of individually reviewing each person's audiogram making appropriate recommendations based upon audiometric findings, relevant case history information, and the individuals assessment of his communication difficulty. My estimate was that forty of these fifty individuals exhibited significant communication problems and would be willing to participate in an aural rehabilitation program. Thus, I have developed a pool of candidates for aural rehabilitation for the next year if I worked with no more than 10 per school term. The programs for senior citizens that are recruited in this fashion are done at no expense to the individual, except for the cost of an ear mold or two and outside ancillary expenses. While this type of program is obviously done to provide some benefit to the hearing impaired and training for our students, the primary reason for doing so without charge is to produce publicity, to demonstrate the feasibility and worth of such programs, and to support our arguments with insurance carriers and legislative bodies of the need to provide some form of financial support for improving the communication efficiency of that segment of the population that is so severely discriminated against in this regard.

The second method of entry into the program is by referral only. Since I don't believe that aural rehabilitation services are necessary for all hearing impaired people it was necessary for me to develop some criteria for prospective referral sources. I will digress for a moment to comment

on that statement I just made. My clinical experience tells me that perhaps no more than 25% of hearing impaired adults need services beyond the recommendation of a hearing aid and sufficient counseling to insure that the client knows how to operate the hearing aid and is aware of the benefits and limitations of amplification. At the moment, though, I can not predict very well at the time I recommend the hearing aid, who is going to need more elaborate services than this. While I know that a larger proportion of senior citizens will need additional help, I cannot even predict those with a satisfactory degree of precision. Figure 2 shows a "true life-size replica" of the announcement that I prepared and sent out to all audiologists and otologists in the metropolitan Detroit area announcing the existence of an aural rehabilitation program and giving some guidelines that I would think appropriate to employ as a basis for referral. In addition, copies of this were sent to appropriate vocational rehabilitation counselors in the area. Although there have been enough referrals by this mechanism to maintain an aural rehab program every term for the last four years, I must admit that the best source of referrals has been out of our own clinic and through vocational rehabilitation counselors. I am certain this occurs because our clinicians do a much better job of obtaining relevant case history information and because VRS counselors face the problem of successful placement of severely handicapped people and thus are more likely to see the non-clinical implications of hearing loss and the need for supplementary services.

The second important division is the interviewing process. It is by means of the interview that the audiologist comes through as a professional who is genuinely interested not only in hearing loss, its diagnosis, and possible medical or surgical treatment but interested in all other problems imposed by the impairment. Hopefully our clinicians and students are fascinated by all aspects of hearing loss and display a willingness to listen to all manner of problems unrelated to the audiogram. This interest is communicated subtly to the hearing impaired, makes them much more inclined to identify with the audiologist as a concerned professional, and provides the mechanism for the client to display a willingness to follow through with the recommendations of the audiologist.

For myself, I find it most economical to establish the relationship I am speaking of through an open-ended interview process, quite similar to that employed by psychologists or psychiatrists. The interview is simply opened by saying, "Tell me about your hearing problem." This immediately gives the patient the feeling that I am interested in hearing what he has to say about his problem, and through this mechanism, I can steer the interview to make sure that it covers all the areas that I think are important. In addition to eliciting the expected case history information

AURAL REHABILITATION CLINICAL SERVICES PROGRAM

This is to announce the development of an aural rehabilitation program for adult hearing-impaired persons with good speech and language proficiency. As a professional working with the hearing impaired, you undoubtedly come in contact with people sixteen years of age and older who have significant communication problems but pose difficulties in rehabilitation. I am developing a clinical research program to aid these individuals. I am specifically interested in working with hearing-impaired individuals who meet one or more of the following conditions:

1. marginal or equivocal candidates for amplification, i.e.
 - a. mild hearing loss
 - b. profound hearing loss
 - c. traumatic hearing loss
 - d. poor discrimination
 - e. unilateral hearing loss
 - f. geriatrics
2. previous unhappy or unsatisfactory hearing aid experience that would or does interfere with benefits of amplification or accepting a new or more appropriate hearing aid, etc.
3. unrealistic attitudes or expectations about hearing aids or difficulty in adjusting to hearing loss or amplification.

The goal of this program is to improve receptive communication through careful attention to the potential use of amplification as the focal point of rehabilitation. Speech reading, counseling, and speech conservation services will be integrated as appropriate. The program will consist of trial use of amplification in and outside of the rehabilitative sessions including use under normal background conditions as well as controlled testing and listening experiences.

Six to ten sessions will be scheduled on a once per week basis at the Rehabilitation Institute located in the Detroit Medical Center. Presently these group and individual sessions are scheduled during the day on Tuesdays, but other arrangements may be made.

The cost of the program is \$30.00. No person, however, will be denied service because of inability to pay.

If you know of any individuals who might benefit from this type of short term but concentrated rehabilitation program, please have them contact me either by mail or telephone.

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Figure 2.

relative to time of onset, family history, previous treatment, etc., I also show an interest in knowing the effect of the hearing loss on employment status, family relationships, social interaction, the practice of religion, emotional status, and attitudes about hearing aids. Rosenberg, in his chapter in the *Handbook of Clinical Audiology*, gives a somewhat negative view of this interview technique and concludes that, "It is rarely well

sued to the practice of Audiology.” He prefers and recommends the authoritarian approach commonly used by the medical profession. He indicates that this approach “provides the maximum amount of information in the minimum amount of time.” Perhaps it does, but my experience as a patient indicates to me that this approach does not allay my fears or encourage me to talk about related effects of my problem. Through the process of responding to questions I get the distinct impression that matters tangential to the direct response are unwelcome. An interesting thing to note in conjunction with these two approaches to interviewing is a recent publication entitled, *Interviewing and Patient Care* by Enelow and Swisher. Both of these gentlemen are physicians, and their book is written for physicians and medical students. Their thesis is that the traditional medical model for interviewing is inadequate in that it is symptom oriented and thus in no way is designed to treat the whole person. They advocate the open-ended interview and the use of the problem oriented record. We don’t have time to talk further about this, but I think you will find it fascinating, and I believe it has great significance for the practice of Audiology and immediate application as a mechanism for motivating potential Aural Rehabilitation candidates to participate in a program. While there might be times and job settings where the authoritarian approach to interviewing makes the most sense, I reject it in general and specifically in the case of Aural Rehabilitation because it inhibits the development of necessary feelings in the patient that the clinician is interested in the problems posed by the hearing loss and is willing to help work toward the resolution of these problems. When asking the patient about the impact of the hearing loss on his family, for example, I want to know whether it has caused friction between husband and wife because one doesn’t always hear what the other is saying; whether playing the television set loud enough to suit the hearing impaired produces friction with other family members; and the extent to which members of the family “nag” the hearing impaired about paying more attention. I am also interested in knowing whether the hearing impaired person has difficulty hearing his alarm clock in the morning. In addition to revealing my interest in these matters I also imply that there are reasonable solutions to most of these problems that do not necessarily involve the use of a hearing aid. An audiologist with a sincere desire to deliver aural rehabilitation services and using interviewing techniques skillfully, can without difficulty, develop and maintain a worthwhile program in aural rehabilitation. If the dental industry can convince us of the need to pay for appointments on an annual or semi-annual basis to determine the health status of our mouth, and if the medical industry can convince us that we need annual physical checkups whether or not we feel we need them; then audiology can successfully

offer aural rehabilitation programs. These programs can only exist, however, if they deliver something of value to the hearing impaired. I submit that whether or not we can materially improve a person's ability to read lips or significantly improve their auditory discrimination, that we can provide answers to many perplexing problems faced daily by the hearing impaired, those who live with them, and those who interact with them in the employment setting and socially.

At this point, I would like to discuss the basic characteristics of our aural rehabilitation programs and our goals. It should be kept in mind that aural rehabilitation programs take on characteristics of the personality that is directing them. The rest of this presentation is a co-mixture of what I think are essential characteristics of a successful program and my own personal orientation toward how those characteristics should manifest themselves. At this point I will make no attempt to separate them, perhaps you can do a better job than I can anyway. These observations have been tested by some 400 "graduates" of aural rehabilitation programs over the past six years.

Characteristic #1. The program must be client-centered. This means the audiologist must be interested in the specific problems of each participant. The audiologist must be a good listener because he must learn what the primary problem is from the patients' point of view. I am truly amazed at how little the audiogram tells me about the patients primary problem. This is determined by his personality organization, his lifestyle and the attitudes of those in close contact with him. The client-centered rehabilitation program must deal effectively with what the patient feels is his biggest problem. This is not to say that the audiologist should not direct his attention to other matters that he knows will be of benefit, but it is important for the patient to feel that his primary complaint is uppermost in the mind of the audiologist. I frequently ask myself if I have evidence from the patients that what I am doing is necessary, or is what I am doing merely an audiologists conception of what needs to be done.

Characteristic #2. The program must revolve around amplification and/or modifying the communication environment. My programs do not involve any formal work in lipreading unless it is used in conjunction with amplification. We work mightily to find some form of amplification that provides benefit for each person, can be tolerated, and will be worn. Equally important, we will if necessary, help the family re-organize their home or place of business if doing so can conceivably improve communication patterns and signal to noise ratios.

Characteristic #3. All programs consist of group therapy with some individualized help when necessary and if I have assistance in running the program. I function most efficiently in group situations and feel that all the forces usually present in group therapy are of tremendous significance

to the rehabilitation of the hearing impaired. There are some problems in organizing groups and while I can give no definitive rules, I do have some observations. It seems to me that the important parameters of group organization are amount of hearing loss, duration of hearing loss, age, and socioeconomic status. While I have been entirely surprised and pleased with the results achieved by some of my most heterogeneous groups, on the average things work best when there is some homogeneity with respect to amount and duration of hearing loss.

Characteristic #4. The group must contain normal hearing friends or relatives of the hearing impaired person. It should be a person the hearing impaired identifies with and spends considerable time with. I feel that this ingredient is probably one of the most important of all. For the past year and a half I have denied entry into the group hearing impaired individuals not accompanied by this normal hearing person. You and I know that hearing aids, lipreading, and auditory training will not restore normal communicative function for a large proportion of the patients we see. I feel that it is extremely important that people other than the audiologist and the hearing impaired individual become aware of this. The worst enemy the hearing impaired person has are those well-intentioned, advice-giving, normal hearing family and friends. At the end of the rehabilitation program it is usually these normal hearing people who are most verbal about and appreciative of the program. Building of confidence and willingness to make public disclosures of hearing loss are helped immeasurably if the hearing impaired has support from some significant other person.

Characteristic #5. My aural rehabilitation programs are all short-term programs. There are no intermediate or advanced courses. The programs last anywhere from six to twelve sessions depending upon the size and the make-up of the group. I have certain goals, to be enumerated later, that must be accomplished and as soon as that is done the program is terminated. I do not believe that I can make these hearing impaired people "normal" again and I refuse to give the impression to anyone that such might be the case if the person stays in therapy long enough. Those people who need further support are referred elsewhere, if they insist. These six to twelve sessions are scheduled on a once per week basis, with each session approximately two hours in length.

Characteristic #6. The program is consumer oriented. We try to provide as much information as we can about hearing, hearing loss, hearing aids and earmolds including how to shop for them, and the role of relevant professionals and agencies. In other words we try to make the hearing impaired consumer and his family as knowledgeable about his needs as possible so that the marketplace (or places) do not confuse him.

Characteristic #7. Perhaps this item should not be listed here but I feel

it is of a paramount importance to a better realization by my colleagues and other professions of the existence of aural rehabilitation programs and their potential benefits. I have seen too many people who have been told by their otologist that no hearing aid would help or to go buy a hearing aid, or enroll in a lipreading class or to do both. Any or all of these recommendations are a serious over-simplification of the problem which makes it more difficult for me to convince the hearing impaired of the necessity of my services. I have been working hard to encourage my otologic colleagues simply to refer patients to me for aural rehabilitation and to respond to questions about what that means, by suggesting that they call me to find out. Since these significant figures of authority are so important to the delivery of services by the audiologist, it is imperative that more audiological facilities offer and deliver these services and that we take a strong leadership role in advertising them. They must be as much a part of the program as is puretone audiometry.

Characteristic #8. We make use of "successful graduates" as resource people in group activities whenever feasible. At this point I would like to briefly discuss the goals, and to some extent the techniques we employ to accomplish them. The goals are as follows:

- A. To inform about:
 1. How we hear
 2. Hearing loss in general and specifically the participant's loss
 3. Hearing aids, including all accessories and service.
 4. Services offered by relevant professionals and agencies.
- B. To acquaint them with lipreading and all of the problems involved:
 1. Deterrents to complete understanding of speech visually.
 - a. Visual factors and the effects of aging.
 - b. Factors related to the code, i.e., rate, homopheneity, and varying visibility of phonemes.
 - c. Factors related to the speaker.
 - d. Factors related to the environment, i.e., lighting, distance, and distractions.
 - e. Factors related to the lipreader.
 - f. Factors related to problems of measurement of lipreading alone or in combination with acoustic energy.
 2. Positive aspects
 - a. Almost all people can read lips to some extent.
 - b. Linguistic factors, i.e., predictability of topics, of words within sentences, and of sentences upon previous sentences.
 - c. That it is best done in conjunction with acoustic energy available to the hearing impaired.

My purposes here may seem essentially negative to you but I do believe that while the role of lipreading has not been overdramatized, the notion that we are all capable of it has been. My hope is to deemphasize lipreading as a primary means of rehabilitation, but at the same time being realistic about it and encouraging the hearing impaired to utilize it as best they can. I have no evidence that people can lipread more after any form of therapy so I do not wish to infer to my patients or their families that they will get better if they practice a lot. While discussing all the factors that argue against their being able to lipread the way they show in spy movies, we do get some practice because I use actual lipreading to demonstrate the points. I also use lipreading practice to demonstrate positive aspects of lipreading, so it can be said that some attention is directed toward lipreading practice. My observation is that approaching lipreading from this point of view produces the same benefits as programs that ostensibly set out to improve lipreading proficiency. One patient summed it up best when she said "Even though you spend a lot of time down-playing the possibility that my lipreading skill could be improved, I want you to know that I feel that I am a better lipreader after finishing your program." My personal feeling is that she probably is no better lipreader than she ever was, but she feels more relaxed, comfortable, and better able to use the cues she receives because she is no longer so concerned about all visual cues she cannot identify or misses.

C. To experiment with hearing aid use.

1. Each session consists of trial use of a hearing aid—whenever possible a drastically different hearing aid than the one used the week before. That is, one week we may use a conventional behind-the-ear hearing aid and the next week a cros and the following week a bi-cros, etc. Sometimes it is the earmold that we drastically alter from week to week. This is determined by our analysis of the hearing loss and the patient's past history. The first step is to take an impression of the patient's ear or ears and obtain an individually molded earmold.
2. Each session consists of a variety of experiences to help us (including the patient) evaluate the benefits of amplification and their ability to tolerate and adjust to it.
 - a. Traditional sound room testing is used whenever possible or necessary.
 - b. Group testing of auditory discrimination, both in quiet and noise. We utilize recorded modified rhyme test materials so that the task becomes an easy paper and pencil test for the patient. We have also developed an overlay key that allows us to analyze results quickly and accurately.

- c. Group audio-visual discrimination tasks also in quiet and noise. We have prepared some video-tapes of sentence materials, such as the revised CID sentences for this purpose. At the beginning of the program we do use one of these video tapes, minus audition, to obtain a lipreading score.
 - d. Some time is allotted in each session for the patient to use the hearing aid in some common environmental context. For example, we might go for a walk out of doors, go to the hospital cafeteria for coffee, etc.
 - e. At the end of each session the patient is asked for his reaction to the specific hearing aid worn that day. We feel that their reaction is quite important, not only to give them the feeling of participating in the decision-making process, but also because we have many times found their comments extremely insightful and helpful in planning the following weeks amplification arrangement or group activity.
 - f. Each participant is allowed to wear an appropriate hearing aid for a one-week trial at home. We are interested not only in his reactions to this experience, but also the reactions of the normal hearing person accompanying him.
 - g. The normal hearing participant also has the opportunity to wear a hearing aid at least once during the sessions and is required to participate in all testing activities. This is an excellent means of familiarizing the normal hearing person with the problems encountered by the hearing impaired and the limitations of amplification. It also provides the hearing impaired with benefit because they observe the deleterious effect of noise on the auditory discrimination of normal people.
3. Eventually our experimentation with hearing aids and earmolds allows us to settle down to one hearing aid-earmold arrangement for the remaining sessions. Sometimes, however, we have to give up on amplification or try some other approach such as the use of tactile sensation to supplement visual cues. Approximately ten percent of the people in the program cannot seem to make sufficient use of amplification or cannot adjust to the use of amplification to warrant purchase. These people continue in the program however, so that we can help them adjust to this situation and perhaps significantly alter their environment to make communication easier.
 4. The last thing we do with respect to amplification is to help the patient obtain the desired hearing aid by whatever means he has chosen. We see each person at least once after the hearing aid has been obtained for purposes of checking its electroacoustic charac-

teristics and making this a part of his record for future reference. With some patients the hearing aid recommendation is a rather straight-forward process and the aid may be obtained before the program is completed. In that case the patient continues to attend and gives us the opportunity of insuring that adjustment is satisfactory.

D. To improve listening:

1. My experience tells me that many hearing impaired, particularly the elderly, enjoy the peace and quiet the hearing loss provides. The resulting ambivalence toward hearing through a hearing aid must be acknowledged and dealt with. Some people seem to be able to adjust to amplified ambient noise while others cannot, but the hearing impaired must know and accept that amplified ambient noise accompanies amplified speech.
2. Participants in the aural rehab program also have to know that the hearing impaired tend to use their hearing selectively. This doesn't mean that normal hearing people don't do the same thing, but it is more noticeable and the possibility of attention reduction is much greater in the hearing impaired. It is important that they realize that this is very normal behavior and certainly very reasonable behavior for the hearing impaired, but they must be conscious of what they are doing so that they minimize antagonizing others or becoming unnecessarily selfish or dependent on someone else. This awareness makes it possible for them to utilize listening selectivity to better advantage.
3. Some practice is given during the sessions in gross, fine, and difficult discrimination and environmental sound identification to re-awaken their interest in listening while at the same time learning the limits imposed by their hearing loss and the limits of amplification.
4. Various outside assignments are also given to encourage the participants to think about listening and all the factors involved. They are asked to share their experiences at the next session. One elderly lady with a relatively mild hearing loss reported that the discussion and activities related to listening provided her with enough benefit that she did not feel that she required amplification at the moment. I agreed with her.

- E. To counsel regarding attitudes and behaviors. This goal is very psycho-therapy oriented but I feel that it is very important to the well-being of the hearing impaired, that they be able to interact successfully with normal hearing people. It is essential that the hearing impaired accept the natural consequences of hearing impairment, that they develop a sense of humor about the communication errors

they are going to make, and that they develop a thick skin to serve as a buffer against those cruel and inconsiderate attitudes of normal hearing people. They must be able to acknowledge publicly that they have a hearing impairment and further should have the knowledge and willingness to explain to others what is required of the speaker if they are interested in maximizing understanding of their message. To accomplish this we discuss some of the non-productive behaviors of the hearing impaired, such as; bluffing; avoiding; self-deprecation; and guilt. Through open discussion of these matters we try to provide the basis for positive attitudes that will alter their own behavior and the outside forces impinging on them.

- F. To provide them with helpful suggestions for specific problems:
- a. alarm clocks
 - b. telephones
 - c. television and radio
 - d. personal safety
 - e. use of wireless microphones & FM receivers in large group situations, i.e., church

As you can see we try to accomplish a lot during this period of time. Obviously, the extent to which we are successful varies according to the make-up of the group and the competency, sensitivity, and interest of those assisting me. My aural rehabilitation experiences in Detroit have been most positive and rewarding. There is no question in my mind that these programs can be run successfully, that the hearing impaired need them, and that they will avail themselves of them if the audiologist is identified as sincerely interested in their problems. As audiologists we must develop an enthusiastic attitude about these programs and advertise their existence. The hearing impaired won't seek out these services until they know they exist and until they have some evidence that they are worthwhile. A quote from the article, "Are we meeting the needs of our hearing aid users" (Blood and Danhauer, 1976) serves to illustrate the point. "A high percentage of the respondents indicated receiving some form of counseling regarding their hearing loss and hearing aid. This was done primarily with the audiologist as the counseling source. Surprisingly, about 50% of the informants said that they were not advised regarding periodic reevaluations (hearing or hearing aid), and hearing or speech therapy. Also, about the same percentage said they were not presently, nor were they ever enrolled in any therapy program, yet about 30% indicated that they would be interested in receiving such services. Those reporting having had therapy were satisfied with it and felt it helped them in their daily communication." I can secure almost 400 testimonials that would corroborate this last statement.

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