

Patient Reaction to Hearing Aid Use: A Ten-year Review

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Because of many discussions about the lack of follow-up and a real knowledge of how adequately the recommendations we make for hearing aids are carried out by our patients and how successful they really are, I decided to look back over a ten year period and with a brief questionnaire contact all patients seen for hearing aid evaluations during that time.

It is somewhat impossible, with the occasional patient who comes back after three or four years, to generalize about what really happened when they do not routinely come back for a hearing aid recheck. The hearing aid recheck approach at a period from one month to eight weeks is a recommendation we customarily make. However, because of the geographic spread of the patient load with which I deal, this has often been an impossibility. This is particularly true since I do have a large population which are referred by industrial organizations out of the city. What happens also in the years, not weeks, that follow?

A cover letter was sent indicating that it had been some time since a hearing aid had been recommended and that we were interested in the success and/or problems they had encountered with hearing aid use. Since I am personally somewhat irritated by the varieties of questionnaires that I receive from other audiologists and speech pathologists, I really questioned whether or not I would get a reasonable number of responses to the questionnaire. Because we had expressed an interest in their welfare, at least from those who did respond, I cannot deny, there was a tremendous enthusiasm. I not only received detailed responses from some on the form but also received many additional letters in which they described, in detail, how they had done. Because I had expressed an interest in their well-being, many also requested additional appointments for follow-up studies.

The questionnaire was concerned with the following items:

1. Had they, in fact, purchased the specific hearing aid I had recommended or not?
2. If they had not, had they purchased a different one, and why had they not followed the recommendation?

I must confess that I was interested here in whether or not some of the dealers had changed the recommendations without my knowledge.

3. What was the time lag following the evaluation before the hearing aid was actually purchased?
4. Would they describe the quality of dealer service and give the dealer's name.

Because I went back over a ten year span from 1963 through 1973, I also asked:

5. Had they purchased a new and different hearing aid since the original one, for what reason, and how long after the first was this done?
6. Was the new hearing aid recommended by a dealer or a clinic?
7. I indicated the types of adjustment problems one might have encountered and asked them to describe
 - a. whether they actually had any problems;
 - b. whether these involved actual placement of the earmold in the ear;
 - c. whether there was a problem with the fit of the mold;
 - d. whether they had trouble with group situations or ones with noisy background;
 - e. whether they were troubled by the sound of their own voice; and
 - f. whether it was a matter of learning to adjust the controls.
8. How much do you wear the hearing aid?
9. What types of advice could we have given that would have been more helpful to them in the adjustment to amplification use?
10. Was it worthwhile to have had a clinic perform the hearing aid evaluation making a specific recommendation versus shopping around at various dealers on your own?

The patients with whom I corresponded were all my personal patients at Henry Ford Hospital and did not involve those of the rest of the staff. The period covered was from October, 1963 through October, 1973. Of the 580 patients to whom questionnaires were sent, 231, or 39.7% were answered in some way, either by the patient directly, by parents, by children of some of the older people, or relatives of those deceased. Of the total contacted, 349 were unanswered, but of this group, 92 were returned because there was no available forwarding address. This meant

close to 50 % response. Again, in the mobile age in which we live, over a ten year period one could expect this. Of the responses we received, nine were deceased but on six of those we have information.

The age at the time of the hearing aid evaluation ranged from six to seventy-nine years. Of the 580 letters mailed out, 316 were private patients in the sense that they had referred themselves for hearing loss originally. The largest other single group of my caseload was 157 from industrial concerns, primarily the automobile companies. There were 63 referred from a variety of school systems. Twenty-six were referred by the State Department in one form or another, eight through Michigan Crippled Children's Commission directly or from Vocational Rehabilitation Services. In terms of third party payment, many of the school referrals were handled through the Michigan Crippled Children's Commission but the original referral came from a school. Eighteen of the patients were referred by doctors outside Henry Ford Hospital, usually otolaryngologists who did not have the facilities for hearing aid evaluation or other clinics which did not have an available supply of hearing aids for evaluation.

Of the 231 responses, 196 or 86 % actually purchased the hearing aid or aids that we had recommended; 32 did not. The discrepancy between the 231 answers and the 228 total on which we have information is explained by the fact that three were deceased individuals whose relatives merely answered that they were deceased but did not give any information regarding the questionnaire. With the other six of the nine deceased, someone had filled in the information to the best of his knowledge.

Naturally, I cannot deny being pleased that 86% of the respondents had actually purchased what I had recommended.

Of the 32 who did not purchase the recommended hearing aid, the following is the breakdown as far as it was answered. The unfortunate thing about many questionnaires is that many will just check "no" and not indicate why they made the change. There are some interesting factors in terms of the "whys" I did receive. Of the group, three indicated that the hearing aids were too costly, three indicated that no hearing aid had been recommended, and the results on two showed their own hearing aid performed better than any of the clinic instruments available. I must confess that this is my own negligence in not reading through the details of evaluation results when I mailed out the letters of inquiry. As long as I noticed there was a hearing aid evaluation, I merely mailed out the letter without looking at my results. Technically, that lowers to 27 those who did not follow my instructions. One individual wrote that his hearing had returned and, of course, I have no audiogram to prove this. One could not wear the hearing aid because he had too much tinnitus. I often explain to those who are complaining of tinnitus that customarily when

the hearing aid picks up ambient noise levels plus conversation and the like at an adequate level, the tinnitus fades into the background although it is still there. However, in this one case the patient indicated that the tinnitus became even louder with hearing aid use. Five of the individuals reacted negatively to the dealers and changed dealers. In so doing, they changed hearing aids. Two waited several years and the hearing aids were no longer available as recommended. One waited long enough that the dealer he had been referred to no longer handled that particular make and switched him to another. One chose to shop around to many dealers after having had the evaluation and specific recommendation.

The question was also asked about how soon the recommended hearing aid was purchased. Interestingly enough, this ranged from the same day, which I should have guessed in view of the fact that many people coming back after having had a hearing test a month or so prior to the hearing aid evaluation are eager to get the hearing aid as soon as possible. Often, we give them a card and call the dealer and make arrangements to have them see the dealer that same day. Many had indicated that they purchased it either the same day or immediately. The range usually went up as high as three months following the actual evaluation. There were two exceptions which were nine months. This, again, is referring not to those who actually purchased the aid recommended and not the group that waited several years and did not purchase the same. In one case, a father and three children were all tested on the same day. Two of the aids were purchased immediately and two of the children, who already had older model hearing aids that were functioning, waited nine months. There was a distinct financial problem in this case.

Of the 196 who responded, with regard to the quality of dealer service, 179 indicated that they did get good service. Seventeen stated that they did not. Some, as a matter of fact, changed dealers still buying the same hearing aid.

Because of the ten year span of this group and also because I wondered if some of the specific dealers might be inclined to sell a newer model before the hearing aid was troublesome to maintain, I inquired whether or not the former patient had purchased a new or different hearing aid since the time we had originally seen him. Interestingly enough, 178 of these patients indicated that they had not. Many made comments that the old hearing aid was still perfectly satisfactory. I realize that there is quite a range here but some were actually ten years old, others much newer. It is an interesting fact that there was that degree of satisfaction. Of the 18 among those who indicated that they had purchased new or different hearing aids on their own, the time span from the first to the second ranged anywhere from three to nine and one-half years. One of these patients indicated that he had not purchased a different aid but had

actually purchased the second one for a binaural fitting which had originally been recommended at Henry Ford Hospital but of which he was afraid. After two years, he tried the second hearing aid and was most enthusiastic about the response with two. Because of the variation in the specifics of the purchase of a different hearing aid, rather than give a brief review, let me just comment about what things led to a new hearing aid because they are rather interesting. First of all, since I had inquired whether or not a patient had returned for a dealer's decision on a new hearing aid or whether they went back to our clinic or some other clinic, it is interesting to note that in this group only five dealers had recommended the change. One was six years after the original purchase. A drug store recommended change at two years, another dealer at one and one-half years, another at one year, and another at six months. The dealer who recommended the change from my recommendation in six months had previously been a professional turned dealer. He made the change after the full purchase price had been paid, without refund. One had purchased the new hearing aid after a loss of the first. Six patients had come back either to Henry Ford Hospital or to some other hearing and speech clinic in the State of Michigan.

Another question concerned the problems each individual encountered in adjustment to the hearing aid. I will summarize here, but I cannot deny that the reading of the comments was in many respects a real revelation of the possible items that cause trouble. By far the greatest number listed their key problem as that of functioning in group situations or in noisy background whether or not they were in groups. Many indicated that I had warned them that this would be one of the problems, but it still was difficult. They did, in most cases, learn to tolerate it. Many indicated that even with vented molds used because they had reasonably good low frequency hearing, the noisy background was still difficult. Many have complained of wind noise when they are outside as being quite intolerable. This was a much smaller group, of course. A small group indicated that there had been difficulty in placing the mold in the ear in the beginning and that they did have trouble learning how to do it easily. We have a few with rather bad crippling arthritis that we anticipated would have difficulty. We also had some who had difficulty even using a mirror to monitor the activity. Here again, the majority learned quickly to twist the earmold back into the ear and the aid over the ear with great ease. A small group had trouble with the fitting of the earmold initially but with the cooperation of the dealer soon were much more comfortable and tolerated it well. I should add here, not as part of the survey that I made but from my experience in dealing with many people as they have come back, that we have had trouble with the so-called "canal mold" that rests in the lower half of the concha and in the canal but has no portion of

the mold which holds it suitably seated in place. We have had better luck with the invisible mold which, of course, is cut out but at least has a ring around the posterior margin of the concha so that it can hold in place.

Some reported difficulty initially in tolerating their own voices and were quite perturbed at the sound. So-called familiar noises and the sound of many common environmental sounds upset some. Some had difficulty in learning to adjust the controls. The stiffness of the gain control, or a loose fitting over-the-ear hearing aid often proved to be clumsy. The use of the phone with the hearing aid proved to be quite difficult for many patients. Some with milder hearing losses removed the hearing aid and placed the phone directly over the ear especially true of those who have amplifier phones. Others find it difficult with or without a telephone switch to adapt to hearing through two systems which often creates more distortion. Others indicated it was no problem, but they were able to jockey the position of the telephone over the microphone without feedback and get along perfectly well. One male patient listed one of the biggest problems as that of vanity. He wrote quite a little dissertation on the fact that his use of the hearing aid was markedly limited because, although he knew well that he functioned much more successfully with it, he somehow could not tolerate what he thought were the looks in people's eyes as they spotted the hearing aid. He felt inclined to stay pretty much withdrawn from situations, wearing the hearing aid only occasionally. He did admit, also, that he did hear and understand beautifully with it. There was no question in his mind that he needed the help and that it was excellent for him. Vanity was his downfall.

I did not record an exact number of responses to the question of whether or not the hearing aid was worn all the time for a very obvious reason. I had given the question in terms of "Do you wear the hearing aid all the time? Explain." As a result, many said "yes" then promptly explained situations in which they did not. As a result, the count could not be accurate in any way. However, including the explanations, it was obvious that a goodly majority do wear the hearing aids all the time. I must confess that one of my bits of advice as people leave the first time following a hearing aid evaluation and certainly as they arrive for hearing aid recheck when they do, that I emphasize the fact that I hope they will wear it "every waking hour". I remind them that if they feel the need to place the hearing aid on first thing as they get up in the morning or as soon as they wash their face or shave, that then they are in fact really becoming well adjusted to hearing aid use.

Because of the number of industrial cases I see, they obviously have times at work in the automotive plants when the noise is too high to wear hearing aids. In some of the areas of industry, they are forced to wear ear muffs today, and very obviously, would not be expected to wear a

hearing aid under those circumstances. Many reviewed these specifics of times when they wear their hearing aids religiously and other times when it did not seem so essential. We do have ever so many high frequency hearing losses with the auditory acuity for spondees relatively within normal limits which we merely fit in an attempt to improve discrimination. As a result, you can well imagine those who are hunters would not wear the hearing aids when they are hunting because of the noise level. One or two avid fishermen indicated that they were afraid of losing the hearing aid in the water while struggling to land a fish. Again, I was pleased with the response to this particular question.

The next item was one in which I requested whether or not there was any advice we could have given to the patient when we saw him that would have been helpful in the use of the hearing aid. I was particularly concerned with this area since we do not have an organized program of training in the use of hearing aids merely counselling as they leave and again if there is a hearing aid recheck. Often there is no chance to have a hearing aid recheck to give us the opportunity to meet with the patient after the time that he is beginning to grow accustomed to a hearing aid and, thus, give him an opportunity to voice his concerns or to give us an opportunity to try to clarify some of the things that might be advisable in terms of adapting to hearing aid use. This particular section was often left blank and included in the question that followed. In general, most of the patients were quite happy with the advice they had been given and felt that it did benefit them immensely. Many were quite flowery in their praise of what this had meant to them in adjusting to the use of individual amplification. I am sure many times as we counselled the patients before they left the clinic that we missed certain items or areas of advice. Occasionally, there was a comment that they would have liked more detail because they did not feel that the hearing aid dealer counselled them or instructed them as well as they could have.

Very obviously, when you consider the 196 who thought it worthwhile to answer the questionnaire, the results are going to be skewed in the favor of appreciating what we have done. So, the question that I just discussed and the one to follow are going to be reasonably complimentary. However, there were some very interesting responses to my question with regard to whether it was more worthwhile to have had the hearing aid evaluation versus shopping about with the various dealers. Certainly individuals who had purchased their hearing aids as recommended were enthusiastic about the hearing aid evaluation service and planned to return as some of them already had.

In summary, the fact that 86% of the respondents purchased the hearing aids that were recommended, generally seemed exceedingly well pleased with the manner in which they have adapted well to a world of

communication, is most gratifying. If it were possible, with our geographical location problem, to establish as part of the hearing aid evaluation and follow-up procedure a number of group or individual appointments during which we could work with each patient to improve his ability to handle the use of amplification, it would undoubtedly be much more beneficial. Perhaps most of the problems of adjustment that were listed could either be totally aborted or at least relieved to some degree.