Hearing Loss, Hearing Aids, and Communication Problems

If you are reading this, you have likely already visited me or another physician who has asked you to consider more fully the extent and character of your hearing difficulties. Hearing problems can represent very different experiences for different individuals, because some people lose hearing slowly, others suddenly, some in high frequencies, some in low frequencies, and some in all frequencies. Hearing losses which look the same on paper (audiogram) may have dramatically different impacts on two individuals. Hearing aids will help immensely in one person, but less in another. Regardless of the cause or character of the hearing loss, one element is constant: deterioration of normal hearing compromises our ability to communicate.

It is important to recognize that the reason you have sought medical attention is not because you have a hearing problem, but a communication problem. Because there are so many ways to be an effective communicator, we can feel confident that we will succeed in fixing our communication problems even if we are among those for whom hearing aids are of only limited benefit. If we are unable to communicate effectively with our families and members of the community, and we are not willing to take this broad view, our only option is to withdraw, which invariably leads to frustration and complicated webs of rationalization.

Deciding to confront your communication problem directly as soon as it becomes evident to you, rather than withdrawing from all situations in which your problem currently makes you feel frustrated or inadequate, is the most important positive decision you can make on behalf of yourself and your family. I congratulate you for reading this now as it is proof you have the courage to confront your problems.

We have all experienced or witnessed others deny their communication problems. The effects on their loved ones are no less severe than the effects on their own lives. The typical complaints go along these lines: “I don’t have any problem hearing anyone except my husband/wife”, “Everyone mumbles”, “I have no problem hearing people who know how to speak clearly”, “I don’t enjoy their company as much as I used to”, “Restaurant food is too expensive”, “I wouldn’t have to ask you to repeat if you would speak clearly”.

The above statements betray a rich subtext of defensiveness, insecurity, and even anger that are typical experiences for patients living with unaddressed hearing loss which grow exponentially the first time the patient realizes the family has been speaking secretly about his or her communication problem. It is natural to feel tremendous anger whenever you feel your point of view is disregarded and the patient in this case becomes even more firmly entrenched in rationalization and justification than before. This decreases the chance of making an effective change.

An absolute rejection of the idea of using hearing aids prevents many from addressing their problems. It is easy to understand concerns about cost, cosmetics, image, and ineffectiveness of hearing aids, but most of these concerns melt away in the face of simple explanations.

Are you prepared for a challenge? Go To: http://www.dbi.udel.edu/MichaelTeixidoMD/pdfs/HearingLossExercise.pdf to take a brief self-assessment of your current communication habits.

How much do hearing aids cost?

Hearing aids may cost anywhere from $1000 to $4000 each, and most people need one for each ear. Remember, we stopped using one eyeglass a long time ago. We are built for stereo-hearing, just as we are for stereo-viewing. This is indeed an investment, but quality of life estimates show that hearing instruments are a great value because of the profound positive impact they can have on us, our families, and our relationships in general. Some exotically expensive hearing aids have more features than most people need.

I don't want people to notice my hearing aids

Current fitting trends favor tiny hearing aids that hang behind the ear and that deliver sound to the ear canal through a transparent microtube that is difficult to see unless you know it is there. If your hairstyle is long enough to cover the top of your ear, it is unlikely that this type of aid can be seen. Because current hearing aids have automatic function of pre-programmed settings, they do not require you to touch them for any reason except to put them in and take them out. Some patients with severe hearing loss need larger amplifiers that are too large to hide completely.

People will think I am less competent if they see me wearing hearing aids

Unfortunately, many begin to see their hearing loss and frustrations with communication as a reflection of a larger problem, and begin to believe that they are inferior or unintelligent. Many worry they will be seen as unattractive or aging if they are seen wearing hearing aids. All of these are, of course, self-created and destructive myths that are born of hard experience. It is easy to adopt such thinking if you have felt unable to participate or even excluded from interesting conversations with people you admire. It is common to feel foolish when caught playing along, but not really understanding a conversation. The reality is that a person with hearing aids who can fully participate in communication rarely feels embarrassed and is seen not as an incompetent person but as the person they are.

I've known lots of people who say their hearing aids don't help

Unfortunately, we can all attest to the truth of the above statement. It is a reflection of the poor job the hearing health care community has done to address not just the hearing, but the communication problems of their patients. It also reflects natural attitudes of disappointment among patients who are only moderately helped by hearing aids.

Only 15 years ago, it was easy to tell if a person wore hearing aids, because his/her finger was constantly in the ear adjusting the volume. It is hard to imagine the hearing aid industry lagged so far behind other electronic technologies, but it has caught up. Modern hearing instruments do not have to be

sent back to the factory to be adjusted. They can be reprogrammed in the office according to the listening experiences of the patient. New instruments have directional or dual microphones which can detect the direction of sounds and automatically suppress noise from directions other than the nearby voice. Just as a digital camera takes many pictures with varying focus, contrast, brightness, flash, and chooses the best settings before our finger pushes the shutter all the way down, modern hearing instruments can be programmed to include and exclude sounds we teach it. This new generation of "smart" hearing aids only became available in early 2005 and improvements are continuing rapidly. They do improve the listening experience compared to older technology hearing aids for most patients.

I tried hearing aids, and they didn't work for me

It is important to have realistic expectations when we use hearing aids. Unrealistic expectations will result in continual disappointment, frustration, and move the focus of attention from the important communication problem you are having to a blaming of inadequate technology for your problems. Realize this: *a hearing aid is always used by a damaged ear.* Because of this, a hearing aid can never allow you to hear as you could before.

Sounds play on a keyboard in our inner ears that is made up of approximately 15,000 hair cells. Their job is to change sound vibrations at particular frequencies into electrical impulses. With hearing loss, many hair cells are lost. It is easy to imagine that if enough keys on the keyboard are lost, we will lose the ability to easily identify words and tunes. The amount of clarity experienced by different people varies dramatically. Some can lose much hearing and retain a lot of clarity, and others with a similar amount of hearing loss can understand as little as 50% of spoken words. The reason for this variation lies in the many ways a hearing loss can develop and affect the complex workings of the inner ear.

If you have lost enough hair cells or hearing neurons that your hearing is diminished, it is almost always true that some of the potential for clear sound reception has been lost too. While a hearing aid can make inaudible sounds audible, it cannot fix problems that affect clarity in the ear itself. In photography, we can shine enough light on a subject to see it, but we cannot make up for the effects of a dirty or broken lens. This does not mean a hearing aid does not provide you with additional information that is useful for communication—it does shine more light on the subject which may not be very clear, but is much better than not seeing the subject at all.

Lip reading, for me?

A patient with diminished hearing but retained clarity will generally take very well to hearing aids. Patients with diminished hearing but poor clarity will take longer to realize how much their hearing aids are helping, and need to be more resourceful and take advantage of other communication skills such as speech reading. Fortunately, much of the information we need to understand what words have been spoken is visible in the movements of the lips, teeth, and

tongue as they articulate words. The ability to read these movements is called lip reading.

Speech reading, as opposed to lip reading, involves understanding which word has been said by the context of the conversation or sentence. If we are having a conversation about your hearing, and you are not sure if I used the word “hear” or “beer”, you would know that because we talking about hearing, I probably said “hear”. That, is speech reading. If we are at a table with 10 people and the conversation topic was changing constantly, and you were not sure from across the table if I said the word “hear” or “beer”, you could see that the words “hear” and “beer” look quite different and be sure of my meaning. That’s lip reading.

Patients are almost always rewarded by their efforts to improve their lip reading and speech reading. I say “improve” rather than “learn” because you already know more lip reading and speech reading than you realize. Have a family member mouth the days of the week. You will be pleasantly surprised how well you do on even the first test. Next, try the months, then numbers. You will begin to discover you can recognize most words and many phrases used in common conversation. The better you understand the context of the conversation, the easier speech reading will be.

More specific lip reading keys can be learned by watching instructional materials specially designed for this purpose. Interestingly, 80% of the intelligibility of visible speech content is carried by only 14 mouth postures. While becoming an expert lip reader is like learning to type, achieving a functional “hunt-and-peck” level of lip reading takes no time at all. One of the best programs we have found is “I See What You Say”. It systematically presents different speech sounds and their mouth shapes. You will have the feeling when you watch it that you are being reminded of things you already know. I suggest you watch it through every two or three months. Each time, you will realize that you have become intimately familiar with one or two more of the keys to your success. It is a common experience to learn a new word and then to see it two or three times the following week. It was always there. You will have the same positive experience learning lip reading.

Hearing aids, lip reading, and the communication environment

Of course, the best results in improving communication will come with the combined use of speech reading skills and hearing aids. Speech reading makes up for clarity which hearing aids cannot improve. Hearing aids can aid speech reading by giving you more audible clues to go by. Even more improvement can be realized once we learn to make smart choices about our communication environment.

When I speak to patients one-on-one in the office about their hearing problems, they are often performing much better than they do at home or in public. Some will use their ability to understand me well as testimony in their case against getting hearing aids. They forget that in my office, we are sitting face-to-face, there is no background noise, we have a defined topic, and that I speak loudly to patients with hearing loss. At home, the dishwasher or TV often

interferes, we are not always facing one another, or are not always even in the same room when a new topic comes up.

If you can create a more formal communication habit that mimics the successful environment you found in my office, you and your family will be rewarded. Learn to use the mute button on the TV or to pause the dishwasher and to turn and face one another directly when speaking. It is asking a lot for everyone around you to speak louder when a hearing aid will accomplish the same task. When people shout, their words become more audible, but less intelligible. Hearing aids will help, and directional microphones can diminish interfering noise that is difficult to control directly.

When you are out socially, you will usually find it is easier to understand conversations in some rooms more easily than in others. This may be because of the number of people or the amount of background noise, but it often has to do with the different acoustics of the rooms. Some rooms have hard floors, walls, and ceilings that reflect sound and make noises echo. These echoes interfere with our efforts to understand words and cannot be overcome with amplification alone. We have all been in churches and train stations (high echo environments) in which the reverberation is so great that little of the amplified speech from the PA system is intelligible, even to normal hearing ears. In contrast, rooms with carpets and draperies, or acoustic ceilings, absorb sound and decrease echoes. It will be easier to understand conversations in these rooms. You will learn to find them. Which room in your house is the easiest to have a conversation in? Do not hesitate to ask for the quietest table at the restaurant—the management has heard this request many times before and will know where it is.

One extremely useful add-on feature of hearing aids is the personal FM system. A personal radio station can be built into the hearing aid to help you with communication in noisy or acoustically difficult environments. Your hearing aid will come with a small lapel microphone which you can place on the podium, give to the tour guide, or clip on your spouse's sweater in the restaurant. The microphone will pick up sound from close to the person you are trying to hear and send it directly to your hearing aid.