

October 2019

Issues Associated with Late Onset Deafness

Margery A. Rothschild
none

Charlene M. Kampfe

Follow this and additional works at: <https://repository.wcsu.edu/jadara>

Recommended Citation

Rothschild, M. A., & Kampfe, C. M. (2019). Issues Associated with Late Onset Deafness. *JADARA*, 31(1). Retrieved from <https://repository.wcsu.edu/jadara/vol31/iss1/4>

Late Deafness

ISSUES ASSOCIATED WITH LATE ONSET DEAFNESS

Margery A. Rothschild & Charlene M. Kampfe

Abstract

Late deafened adults are individuals who have acquired a severe or profound hearing loss in adulthood. They comprise the largest proportion of the deaf population, yet little information is available about their condition and its influence on them. The current article will discuss problems experienced by late deafened adults, psychosocial aspects associated with late hearing loss, and suggestions that might assist professionals in working with these individuals. In addition to a literature review, personal accounts of the first author will be provided.

Introduction

The purpose of this article is to offer insight into the experiences of late deafened adults and to provide information that might aid physicians, audiologists, psychologists, counselors, and other professionals in assisting these adults in their adjustment to deafness. Late deafened adults account for approximately 78% of all deaf people in the United States (Luey, 1980); however, available information regarding the problems of this population is limited (Harvey, 1989; Luey, 1980; Rutman, 1989; Sayre, 1980; Thomas, 1984).

Because the literature relating to late deafened adults is comprised of clinical reports, personal accounts, and research findings; this paper has drawn upon all three types of references. This article will be divided into three sections: (a) problems experienced by late deafened adults; (b) psychosocial aspects of hearing loss as an adult; and (c) suggestions that might assist professionals in working with late deafened individuals. Jamero (1981) indicated that individuals who have experienced a specific situation are perhaps in the best position to act as chroniclers of these events; therefore, each problem area will include a review of the literature, followed by italicized anecdotes by Marg Rothschild describing her own experiences as a person who lost her hearing as a young adult.

The focus here will be on adults whose onset of deafness occurred from age 16 to age 65 (Jones, Kyle & Wood, 1987; Luey, 1980) and whose hearing losses are 70dB or greater (Jones et al., 1987; Thomas, 1984). Functionally, late deafened adults are defined as "those individuals who at one time possessed enough hearing to learn language and oral communication through hearing, but [whose present hearing loss is] so severe that audition is useless for purposes of receiving oral communication" (Krug, 1969, p. 99). Typically, late deafened adults have become deaf due to head trauma injuries from car accidents or falls, Meniere's Disease, or tumors; however, many causes of deafness are still unknown (Cherow, 1983; Heath, 1987; Thomas, 1984; Williams, 1983; Woolley, 1987).

Problems Experienced by Late Deafened Adults

Late deafened adults may experience other problems in addition to hearing loss. These include tinnitus, learning disabilities, receptive and/or expressive

dysfunctions, imbalance, and nausea. The type and extent of these problems will depend upon the cause (etiology) of the deafness (Cherow, 1983; David & Trehub, 1989; Heath, 1987; Luey, 1980; Thomas, 1984). One of the major problems is tinnitus, also known as “ringing in the ears” or “head noises,” when people experience ringing, whistling, or other noises in the ear(s) (David & Trehub, 1989; Jones et al., 1987; Thomas, 1984). In 1984, the National Association of Deafened People completed a survey of their members and found that 28.5% had tinnitus that was “distressing” or “very distressing” (Heath, 1987, p. 166). Much of this distress stems from language-processing interference caused by head noises (Jones et al., 1987).

On any given day, I may have 5 different noises going on in my ears. Sometimes there is a low-pitched hum and/or a high-frequency “ring” like you get when you have a cold or allergies. Another noise which is difficult to describe sounds like something clicking. I have one noise, an oscillating whistle, that occurs everyday. If I become very tired or stressed, this whistle becomes very, very loud and almost unbearable. I’ve learned to remedy these noises through masking by either using my hearing aids or wearing headphones and listening to a portable radio.

Deafened adults eventually seek help from either an ear, nose, and throat doctor (otolaryngologist) or a physician who focuses primarily on the ear (otologist) (Sayre, 1980). After examining the ears, the doctor usually refers clients to an audiologist for hearing tests and may, in addition, want to monitor patients' hearing losses through periodic audiological evaluations (Williams, 1983). These tests can be extremely stressful because deafened adults have to concentrate intensely in order to produce valid results. Generally, hearing loss creates stress in individuals because of this need for intense concentration (Vernon, 1984). In describing one of his clients, Vernon (1984) resolved that “she has to function with intense 100% concentration to understand half of what her normally hearing friends grasp incidentally without having to concentrate” (p. 4). The stress associated with intense concentration may then cause the tinnitus to intensify (David & Trehub, 1989; Jones et al., 1987). The implication is that these conditions, in combination, may result in inconsistencies in the hearing tests, creating a vicious cycle.

My specialist had my hearing tested every two weeks. I became so stressed from the hearing tests that I felt my stress influenced my hearing tests. My tinnitus would become so intense that it was hard to concentrate. I wasn't sure if the sound I heard was from the tinnitus or from the hearing test.

Occasionally, the diagnosis of a hearing loss is difficult to determine because the cause is not known and the condition does not “fit” into typical categories. Because deafness in adults is caused by a variety of conditions, such as head trauma or Meniere’s Disease (Cherow, 1983; Heath, 1987; Thomas, 1984; Williams, 1983; Woolley, 1987), it may be necessary to obtain evaluations from several types of professionals.

Late Deafness

For some reason, we never related my additional hearing loss to my car accident until later. My ear doctor became puzzled and referred me to the university's hearing center. I was tested by many different methods, but because of difficulties during the tests, the hearing center told my doctor that I was being inconsistent and uncooperative.

I was then referred to a psychologist by my ear doctor. At first, I protested but my mom told me to go ahead and prove to the psychologist that I was not crazy. I was surprised to find that the psychologist was extremely helpful. After I explained about the car accident, my past history, etc., the psychologist gave me the answer to my hearing loss! Using background information in speech and hearing pathology, I was told that I had a hearing loss for some time, because I had a very slight speech impediment, and that there was no way that I could imitate that type of speech impediment. The reason my hearing tests were inconsistent was that I had receptive aphasia (later, further documented as expressive-receptive language disorder). I was told that for people with normal hearing, the window is always open in the brain for receiving information from the ears. With receptive aphasia, the window shuts down about a million times a second, only allowing bits and pieces to be received. Therefore, what speech I hear sounds like garble. The psychologist told me that hearing aids may or may not help and referred me to another doctor and audiologist. This doctor agreed that hearing aids may not help but I could try them.

During those two years that my hearing declined, I always felt I had to constantly prove to the professionals that I could not hear. One of my specialists thought that I may have consciously or subconsciously wanted to be deaf. This assumption shocked me. What would I benefit from my hearing loss? Like I really enjoy all the barriers I'm confronted with!

Although nothing was found in the literature regarding doctors' reticence to accept a diagnosis of adult hearing loss, literature regarding hearing loss in children has consistently reported the lack of doctors' validation of parental concerns about their children's hearing problems (Luterman, 1979; Mindel & Feldman, 1987). Perhaps this applies to the difficulty in diagnosing hearing losses in adults, as demonstrated in the following example:

One of my specialists did not accept the answer from the psychologist. When I asked the psychologist about this, I was told that the specialist may only accept what is found in a medical book. Because the damage to my hearing occurred in both my ears and my brain, the specialist had trouble accepting this.

Later, at a support group meeting, this specialist was there giving a lecture on cochlear implants, and approached my mom and me and told us, "The game is not over," still refusing to validate my hearing loss and wanting to refer me to more doctors, someone who handled head trauma injuries, or whatever it took to find an accepted answer. My mom and I said thanks, but we accept the psychologist's answer because it described my hearing loss exactly. Enough is enough. Let me get on with my life.

Some deafened adults request assistance in researching the cause of their hearing loss (Orlans, 1987). If carried to an extreme, this activity may impede the progress of adjusting to the loss (Jones, 1987; Luey, 1980). On the other hand, this activity may help these adults identify other related problems. For example, some adults may complain to an otologist about having tinnitus. The tinnitus may be a warning sign of other medical problems as discussed elsewhere in this paper (Agnew, 1986). Instead of assisting the clients in finding the cause of their tinnitus, doctors may tell them to just "live with it." This may then cause their clients to feel that there is no need for concern (Jones et al., 1987), or may give the

clients little information about coping strategies that can be used to adjust to the condition.

A friend suggested that I see a psychologist or counselor to help me cope with my hearing loss. This psychologist helped me research part of the cause of my hearing loss. A reference book on prescription medicines indicated that the majority of my medication could cause either hearing loss, tinnitus, or both. Some entries explained that certain drugs were ototoxic only when taken in large doses, such as Ibuprofen, Erythromycin, and Flexeril. However, I had a feeling that some of my medication were still ototoxic even though I did not take them in large doses. At that time, I had been taking 1800 milligrams of Ibuprofen daily for several months to reduce inflammation from whiplash. No one explained the damage the medicines would cause until I researched them. Without researching my medication, the specialist told me that they would not affect me and just to live with my tinnitus.

Later, during a graduate course in audiology, I learned that tinnitus may be a warning signal for ototoxic medication and other problems. My teacher explained that when someone has a head injury, head organs can become very sensitive. Therefore, if medicine in large doses is ototoxic, it can also be ototoxic in smaller doses from the sensitivity.

If only I was told not to ignore my tinnitus and to "live with it"! My ears were sensitive because of my head injury, and research into this might have prevented some of the tinnitus and hearing loss that I currently have.

When consulting with professionals from various fields, deafened adults may experience problems with these service providers (David & Trehub, 1989; Heath, 1987; Luey, 1980; Rutman, 1989). Professionals typically do not have enough information about late deafened adults (Luey, 1980; Rutman, 1989; Sayre, 1980; Thomas, 1984). Additionally, they may not have effective methods of communicating and establishing relationships with late deafened adults (Luey, 1980; Kampfe, 1990; Thomas, 1984). They may have little knowledge about the repercussions of deafness and may be unable to separate the clients' difficulties in adapting to deafness from other issues such as personal situations, lifetime backgrounds, or temperaments (David & Trehub, 1989; Luey, 1980). Their own personal discomfort with deafness may interfere with the quality of services they provide to late deafened adults (Luey, 1980). They may even create problems by mistakenly presuming that all late-deafened adults prefer to interact and identify only with the deaf community or only with the hearing community (Rutman, 1989). Sometimes, because many late deafened adults speak clearly, some professionals may believe they are fabricating their deafness (Luey, 1980).

I found a psychologist who was deaf. I figured that because this person was deaf, one must understand what I was going through. However, this psychologist had limited experience with late deafened adults and had dealt mainly with people who were born deaf. At first, I thought this psychologist was great but then I felt our work together became a barrier.

The psychologist had changed attitudes about me several times as well. Because I have very good speech (thanks to my mom), I was told to "wake up tomorrow and tell everyone I could hear." To me, that was living a lie. The psychologist may have suggested this to give me some kind of hope, or possibly to lessen some barriers. (NOT!) I was told that I should use the phone because I can hear, too, even though I explained time and again that I could not. I believe the psychologist may have been uncomfortable with counseling me, for some reason I never understood.

Late Deafness

Overall, the problems associated with late onset deafness can create additional distress. This distress, in concert with the stress of the hearing loss itself, can influence an individual's adjustment to the condition.

Psychosocial Aspects of Late Deafness

According to Ramsdell (1978), hearing loss affects late deafened adults on three different psychological levels: (a) the primitive or auditory background level which provides an unconscious awareness of background information on which to monitor and understand the changing environment; (b) the signs/warnings level which provides a conscious awareness of events or things to come such as an approaching fire engine; and (c) the symbolic level which provides the opportunity to comprehend language and appreciate sounds such as music. These levels are discussed, in detail, by Kampfe and Smith (in press-a).

After diagnosis and realization of the impact of their hearing losses on their abilities to communicate and function in everyday living, late deafened adults may start to search for some type of cure (Luey, 1980; Orleans, 1987; Woolley, 1987). They want to deter any chance of further decreases in their hearing, and possibly have it restored (Orleans, 1987; Woolley, 1987). They may obtain hearing aids but need to understand that these devices will not replace hearing (Jones et al., 1987; Sayre, 1980). Although they can be disappointed because the hearing aids may not assist them in communication, they may still continue to persevere (Pegg, 1983; Thomas, 1984). Eventually, they may become frustrated with the hearing aids because they hear only amplified distorted sounds, and can tire from maintaining something that helps very little (Orleans, 1987).

Before my car accident in 1986, I already had a mild hearing loss in my left ear and a moderate one in my right, for which I used a hearing aid. After my car accident and my hearing reduction, I started experiencing frustration and isolation due to communication barriers. I wore my right ear's hearing aid on full, but this was not enough because my hearing was decreasing in both ears. I borrowed a friend's old hearing aid (she had a profound hearing loss) but, even though I wore hers on full, this was still not enough. I then demanded, "I need stronger hearing aids!" I knew then that it was time for me to seek help. The hearing aids I received amplified sounds, but my expressive receptive language disorder inhibited my understanding of speech. Therefore, the only help I received from my hearing aids at that time was through signals or warnings and some sense of the sounds of life.

I don't wear my current aids that often now because of weather changes and pollen increases. Since high school, I have also had a problem with my Eustachian tubes. Whenever the weather changes, my allergies bother me, or I get sick from a cold or flu, this creates a sensation of being in an airplane or driving up a mountain road. When I have this pressure in my ears, the last thing I want to do is put something else in my ear that causes more pressure (sound). The intensity of sound doesn't bother me, only the pressure on my ear drums themselves. My mom complains when I don't wear my hearing aides because she does not understand what I feel when I wear them.

People who lose their hearing may experience the same emotional adjustment stages/states as those who have had other losses. Although professionals use inconsistent labeling, they agree that these stages or states include denial, anger,

guilt, depression, and acceptance (David & Trehub, 1989; Kampfe, 1989; Kampfe, 1990; Kampfe & Smith, 1997, in press-a; Luey, 1980; Luey, Belser, & Glass, n.d.; Rezen & Hausman, 1985; Rutman, 1989; Sayre, 1980; Schwartz, 1985; Thomas, 1984; Vernon, 1984). The stages can occur in any order; and sometimes late deafened adults can experience more than one stage at a time. Many repeat the stages over and over, which can anger them (David & Trehub, 1989) or result in a persistent sense of helplessness and loss (Woolley, 1987). The key here is variability in response to deafness. For example, some deafened adults may be less likely to experience these stages/states, whereas others may experience all of them (Kampfe, 1998; Kampfe & Smith, 1997, in press-a). Late deafened adults may deny their hearing loss, and often blame their difficulties solely on other people (e.g., persons not talking clearly enough) or the environment (e.g., too much background noise) (Orlans, 1987; Richardson, 1983). Communication becomes difficult and may cause them to become angry and frustrated (Luey, 1980; Richardson, 1983; Rutman, 1989). They may feel guilty because of the communication breakdown or because they need to depend on help from others to communicate (Jones, et al., 1987; Luey, 1980; Rezen & Hausman, 1985; Rutman, 1989; Smith & Kampfe, 1997). When late deafened adults ultimately realize the impact of their hearing loss, they may feel depression and a great emptiness that is difficult to fill (Rutman, 1989). Overwhelming depression may occur and cause them to believe that nothing can be resolved (Rutman, 1989). Many professionals believe that late deafened adults never really accept the hearing loss, but rather come to acknowledge it and engage in constructive action to cope with it (David & Trehub, 1989; Luey, 1980; Rutman, 1989). This is due to the constant reminder that hearing loss causes communication barriers in various situations (David & Trehub, 1989; Luey, 1980; Rutman, 1989).

My first stage was denial. While my hearing was declining, I noticed sounds missing that I normally heard everyday, such as the chirping of birds in our trees in the front yard. I thought that this was due to something as simple as my allergies, and it would clear up. I then went through anger, because conversing with family and friends became difficult. Instead of repeating themselves, they would tell me that what they said was not important and to "just forget it." But I did not care that what they said was unimportant. I wanted to know what they said anyway, to feel included in the conversation.

I loved singing to music and learning new songs from the radio, but that became too difficult as well. The guilt I felt came from the times when my mother or father asked me to do something and I misunderstood what they said. I went through a lot of depression. All of my dreams and goals seemed to fade away. Many times, the depression became so overwhelming, I cried so hard that it felt like someone was tearing my heart out. Although I believe I have accepted the hearing loss, I am constantly reminded of it and I go through the stages all over again.

The impact of the hearing loss may be influenced by whether the hearing declines gradually or suddenly. Adults who lose their hearing suddenly may accept the hearing loss more quickly than those whose hearing decreases gradually (David & Trehub, 1989). For example, people who have a progressive hearing loss make decisions about prospective methods of communication more slowly than

Late Deafness

people who lose their hearing abruptly (Benderly, 1980; David & Trehub, 1989). This delay in decision-making can impede the acquisition of new skills (Luey, 1980; Rutman, 1989). But as Jack Ashley, who is a late deafened adult, explained, "Sudden deafness is traumatic whereas its slow development is insidious. But ultimately the effects are the same. There is a loss of confidence, growth of misunderstanding, social isolation and, in extreme cases, demoralization" [sic] (Ashley, 1983, p. vii).

My hearing loss was gradual. Every two to three weeks, I noticed a slight drop in my hearing when something would become more difficult to hear. I felt like I was on a never-ending roller coaster ride. Just when I thought it might stabilize, and I would become joyful, my hearing decreased again. And again. The worst of my experiences happened one evening when I came home from work. I had a 20-gallon aquarium with expensive fancytail goldfish. I was always worried that I would come home and find that the air pump was not working. When I entered my bedroom, I could not hear the pump's humming sound. I panicked and grabbed the pump. I could feel it vibrating. I suddenly realized that my hearing was definitely decreasing and felt a profound loss. This was the last straw.

A common question asked by angered late deafened adults is, "Why me?" (Van Hecke, 1994, p. 109) or "Why should it be me, I haven't done anything wrong" (Jones et al., 1987, p.131). They may think they are being punished for some unknown reason or believe that other people are inflicting this new burden on them (Rezen & Hausman, 1985; Woolley, 1987). They may believe that their predicament is unfair (Jones et al., 1987; Van Hecke, 1994) and that many communication barriers would not occur if they could still hear normally (Woolley, 1987). They may continually compare how their lives were prior to the hearing loss to new situations that occur after becoming deaf (Rutman, 1989). They simply want "the hearing person I once was back again" (Woolley, 1987, p. 172).

I continually asked myself why this was happening to me. I tried to think of what I could have done so wrong in the past to receive this punishment. My mom explained that there is usually a purpose for events that happen. But why this? Because I am repeatedly reminded that I have a hearing loss when communication breaks down, one thought runs through my mind continuously - "This wouldn't be happening if I could still hear normally." For example, when the closed captioning on television gets garbled or stops and I can't understand what is happening on the show, I think of this and ask myself again, "why me? What can I benefit from experiencing this?" I have concluded that I am to help other people who experience this too.

In summary, late deafened adults are affected by hearing loss on a primitive or auditory background level, a signal/warning level, and a symbolic level. The impact of the hearing loss may cause individuals to experience grieving similar to that of other losses. The stages of mourning/loss may be experienced in any order and may be repeated through out their lives.

Suggestions for Professionals

Most research regarding late deafened adults furnishes information about the problems of deafened adults but provides few solutions. Professionals, however, need to be informed about how to work with late deafened adults (Orlans, 1987). Furthermore, additional research on the phenomenon of deafness late in life is needed because of the limited information in this area (Lowensteyn-Kooperman, 1987; Luey, 1980; Rutman, 1989; Sayre, 1980; Thomas, 1984). Following is a discussion of suggestions that might assist professionals when working with late deafened adults.

Suggestions Regarding Tinnitus

A number of things can be done to assist late deafened adults with tinnitus. Because tinnitus is a symptom, not a disease; it is important to determine the cause of this condition and whether or not it can be treated (Agnew, 1986; House, 1989; Lindsay, 1983). For example, high blood pressure, arteriosclerosis, dental problems, medication, middle ear infections, otosclerosis, a hole in the eardrum, Meneire's disease, or certain kinds of tumors may be causing the tinnitus and, therefore, may be treatable (House, 1989; Ludman, 1981; Rakel, 1994; Vernon, 1994). The cochlea is one of the most sensitive body organs to toxic chemicals, and tinnitus is often one of the first indications of cochlear toxicity. Because certain medications such as birth control pills, diuretics, tranquilizers, and antibiotics can cause or contribute to tinnitus and/or hearing impairment (Agnew, 1986; Thomas, 1984), physicians should be cautious when prescribing these; and other professionals should encourage people with hearing impairments to consult their pharmacists about their use. Allergies may also exacerbate tinnitus (Agnew, 1986); therefore physicians can test for and treat allergies.

In most cases, however, the cause of tinnitus is unknown and cannot be treated (Agnew, 1986). In these cases, individuals may be assisted in adapting to head noises through (a) stress reduction exercises such as biofeedback, meditation, self-hypnosis, or other relaxation activities (Attias, Shemesh, Sohmer, Gold, Shoham, & Faraggi, 1993; House, 1989; Katon, Sullivan, Russo, Dobie, & Sakai, 1993; Wineburg, 1994); (b) education, close follow-up, focused attention, reassurance, emotional support (Attias et al., 1993; House, 1989; Katon et al., 1993; Lindsay, 1983); (c) self-help groups such as local peer groups with similar problems (Gant & Kampfe, 1997; Myers & Schwiebert, 1996), the American Tinnitus Association, the Meniere's Network, and Self Help for the Hard of Hearing People; and (d) masking the head noises by introducing other less irritating sounds via a masking device, hearing aid, or radio (Agnew, 1986; Hazell et al., 1985; House, 1989; Vernon & Schleuning, 1978; Vernon, 1994). Other methods of treating tinnitus (i.e., acupuncture, electrical stimulation, diet, zinc)

Late Deafness

are also being discussed in the literature (Agnew, 1986; Debartolo, 1989; Hazell, Jastreboff, Meerton & Conway, 1993; House, 1989; Shambaugh, 1989).

Over time, individuals seem to come to terms with tinnitus, and it becomes less stressful (Hallam, 1986; Hazell, 1979; Thomas, 1984); however, one study did not find this to be true (Kirsch, Blanchard & Parnes, 1989). Therefore, those who report a great deal of stress with tinnitus should be taken seriously, and this stress should be considered when developing a rehabilitation plan (Thomas, 1984). This may particularly be true of those who have non-fluctuating tinnitus or a combination of several head noises (i.e., buzzing and tonal tinnitus) (Hallberg & Erlandsson, 1993) and those with left-sided localization of tinnitus (Erlandsson, Rubinstein, Axelsson, & Carlsson, 1991).

General Suggestions

During the evaluation process, doctors and audiologists need to remember that fluctuations in the intensity of tinnitus can influence the validity of audiograms and put stress on the client (David & Trehub, 1989; Jones et al., 1987). The manner in which clients are informed of their hearing losses may influence their responses to the diagnosis, and how they cope with the loss. Clients need to understand clearly about their hearing loss and whether hearing aids will help. Understanding the cause of their hearing loss might also help them cope with it (Ashley, 1983; Orlans, 1987; Thomas, 1984). Professionals need to give clients information about the diagnosis that is not obscured by medical jargon (Woolley, 1987) and communicate with patients effectively to ensure the latter's understanding (Kampfe, 1990; Thomsett & Nickerson, 1993).

Strategies that can assist with communication include repeating or rephrasing (Erber, 1987; Kampfe, 1990), providing additional information about the topic (Erber, 1987), speaking at a normal pace (not too fast, slow, or exaggerated) (Kampfe, 1990), looking directly at clients and speaking only when they are looking back, using facial and hand expressions, providing contextual cues, refraining from putting objects (e.g., pencils, hands) over one's mouth when talking, and avoiding facial hair or hair styles that would impede view of the face (Dodd, Worrall, & Hickson; Erber, 1987; Kampfe & Smith, in press-b). The most important thing to remember when conversing with late deafened adults is patience (Kampfe, 1990; Luey, 1980). Measuring the conversation reduces frustration on both sides (Kampfe, 1990; Luey, 1980) and will reduce the chance of the clients giving up (Thomas, 1984) or being unable to concentrate (Thomsett & Nickerson, 1993) because they become tired and anxious (Thomas, 1984).

Thomas (1984) suggested taking the rehabilitation process out of the hearing aid clinics. Clients' families need to become involved in the rehabilitation so that some of the pressure is relieved from the clients.

Families can assist clients with the rehabilitation processes, such as auditory training and making environmental adjustments at home.

Professionals who work with late deafened adults should make assessments as to their clients' communication needs (Compton, 1993; Smith & Kampfe,

1996). They can provide resources on communication aides such as assistive listening devices, telecommunication devices for the deaf (TDDs) (i.e., teletypewriters), sign language classes, and computers if lipreading and listening does not suffice (Kampfe, 1990; Richardson, 1983; Sayre, 1980; Vernon, 1984; Williams, 1983). Professionals can inform clients of associations such as the Association of Late Deafened Adults and Self Help for the Hard of Hearing, and can assist them in contacting local support groups such as the Adult Loss of Hearing Association in Arizona. They can be provided with written materials regarding a wide variety of topics such as the articles and books cited in this paper (e.g., Agnew, 1986; Cherow, 1983; Luey, 1980; Schwartz, 1985; Stone, n.d.; Vernon, 1984; Williams, 1983).

Late deafened adults may benefit from attending an aural rehabilitation group because they may obtain information about effective communication strategies and coping strategies. By meeting other late deafened adults with similar experiences, they may decrease their feelings of frustration and inferiority. They may learn assertiveness training which will assist them in improving their listening situations. Overall, the aural rehabilitation class may help increase their independence and self-confidence (S. Mintz, personal communication, November 21, 1995).

Suggestions Regarding Psychosocial Aspects

Because of the potential for psychological distress, late deafened adults should be provided with the opportunity for counseling, described here as a process by which individuals are allowed to express their feelings and perceptions in a non-judgmental environment (Gant & Kampfe, 1997; Luterman, 1979). Counseling involves warm, empathetic listening that conveys to individuals that they are being understood, that their concerns are being validated, and that they are respected (David & Trehub, 1989). This assists them in adjusting to change and feeling less stress associated with their condition (Attias et al., 1993; David & Trehub, 1989; Kampfe, 1994; Gant & Kampfe, 1997; Goldstein & Higginbotham, 1991; Wright, 1980).

Counseling can help individuals discuss their thoughts and feelings about their deafness (Gant & Kampfe, 1997). During the counseling process, individuals can be given emotional support and can be helped to work through the stages of mourning for their loss. Counselors can also provide information on the "grieving process" (Sayre, 1980; Thomas, 1984) and provide support when situations occur that could cause individuals to repeat stages (Luey, 1980). Likewise, counseling can assist individuals in (a) coping versus succumbing to the hearing loss, (b) containing/compartimentalizing the disability in order to avoid psychological spread, (c) enlarging the scope of values in order to perceive their positive qualities unrelated to hearing loss, (d) subordinating hearing to other of their sustained abilities, (e) avoiding comparison of themselves to others who can hear, (f) perceiving certain aspects of the loss as an asset, and (g) generally reframing

Late Deafness

the meaning/perception of the hearing loss (Harvey, 1989; Myers, 1990; Rossi, 1982; Wright, 1983).

Counseling should also be made available to significant others. Unless this is done, a significant lag in adjustment to the deafness may exist between the deafened adult and his or her family. This imbalance will curtail the adjustment of all concerned individuals (Kyle, Jones & Wood, 1985; Myers & Schwiebert, 1996). Furthermore, because family members are directly affected by impaired communication and they may have different perspectives on what the problems actually are, they should be involved wherever possible in the rehabilitation process (Thomas, 1984). When involving families, it is important to first ask permission of the person with a hearing loss (Corey, 1996).

The goal of counseling is to assist individuals to become as independent as possible within the limitations that might be imposed on them by their physical loss and/or their environment (DeLoach, 1992; Myers & Schwiebert, 1996; Nosek, 1988; Waters & Goodman, 1990; Wright, 1980). To accomplish this, professionals can focus on assisting late deafened adults express their thoughts and feelings about their loss, recognize and utilize their assets; and engage in problem-solving (Myers & Schwiebert, 1996; Nosek, 1988; Waters & Goodman, 1990). Professionals can do this by first examining their own attitudes about the hearing loss, thereby developing their own abilities to work with persons with this condition (Myers & Schwiebert, 1996).

Although counseling is best conducted by professional counselors, psychologists, or social workers (i.e., mental health professionals); other professionals can be aware of and practice to some degree the aforementioned strategies as they work with persons who have lost their hearing (Attias et al., 1993; Katon et al., 1993; Lindsay, 1983). For example, Attias et al. (1993) found that when audiologists encourage individuals with tinnitus to express their feelings and concerns, and give them support, encouragement, and reassurance; these individuals reported feeling less restless and less disturbed by noisy environments. Likewise, Katon et al. (1993) found that when concerned physicians provided close follow-up, extra education, time, and understanding; their tinnitus patients were helped significantly with their depression and anxiety. Furthermore, professionals who work with hearing impaired people are encouraged to think of them as normal people who have difficulty in hearing, and to attribute unexpected behaviors and/or responses to communication difficulties rather than personality problems (Thomas, 1984).

Summary

Individuals associated with late deafened adults need to realize that no matter how much is known about deafness, hearing people will never fully understand what a late deafened adult experiences unless they lose their hearing themselves (Sanders, 1993). It is also important to note that there is tremendous variety in the reaction to deafness, and significant others and professionals must therefore be sensitive to each individual's unique experience of the condition.

Professionals can assist late deafened adults by providing support and information regarding their hearing loss and assistive devices and by learning strategies that will enhance communication. Support groups and counselors may help give them increased assurance and provide a place to discuss their difficulties with others who had similar experiences.

References

Agnew, J. (1986). Tinnitus : An overview. *The Volta Review*, 88 (4). 215-221.

Ashley, J. (1983). Foreword. In W. J. Watts (Ed.), *Rehabilitation and acquired deafness* (p. vii). London: Croom Helm.

Attias, J., Shemesh, Z., Sohmer, H., Gold, S., Shoham, C., & Faraggi, D. (1993). Comparison between self-hypnosis, masking and attentiveness for alleviation of chronic tinnitus. *Audiology*, 32, 205-212.

Benderly, B. L. (1980). *Dancing without music: Deafness in America*. Garden City, NJ: Anchor Press/Doubleday.

Cherow, E. (1983, March/April). Sensorineural hearing impairment: What's in a name? *SHHH*, 8-10.

Compton, C.L. (1993). Assistive technology for deaf and hard-of-hearing people. In J.G. Alpiner & P.A. McCorthy, *Rehabilitation audiology: Children and adults* (2nd ed.). Baltimore, MD: Williams & Wilkins.

Corey, G. (1996). *Theory and practice of counseling and psychotherapy* (5th ed.). Pacific Grove: CA: Brooks/Cole.

David, M., & Trehub, S. E. (1989). Perspectives on deafened adults. *American Annals of the Deaf*, 134, 220-224

DeBartolo, H. M. (1989). Clinical Vignette: Zinc and diet for tinnitus. *The American Journal of Otology*, 10, 256.

DeLoach, C. (1992). The independent living movement. In J. K. O'Brien (Ed.), *National short-term training program: Americans with Disabilities Act* (4th ed., pp. 96-115). Carbondale: Rehabilitation Continuing Education Program, Southern Illinois University.

Dodd, B., Worrall, L., & Hickson, L. (1990). *Communication: A guide for residential care staff*. Canberra: Australian Government Publishing Service.

Erber, N. P. (1987). Electronic simulation of hearing loss: Developing speech-communication skills in family and friends. In J. G. Kyle (Ed.), *Adjustment to acquired hearing loss: Analysis, change, and learning* (pp. 55-63). Bristol: University of Bristol.

Erlandsson, S. I., Rubinstein, B., Axelsson, A., & Carlsson, S. G. (1991). Psychological dimensions in patients with disabling tinnitus and craniomandibular disorders (CMD). *British Journal of Audiology*, 25, 15-24.

Gant, N. D., & Kampfe, C. M. (1997). Psychosocial challenges faced by persons with Meniere's Disease. *Journal of Applied Rehabilitation*, 28 (4), 40-49.

Late Deafness

Goldstein A. P., & Higginbotham, H. N. (1991). Relationship-enhancement methods. In F. H. Kanfer & A. P. Goldstein (Eds.), *Helping people change: A textbook of methods* (4th., pp. 20-69). New York: Pergamon Press.

Hallam, R. S. (1986). Psychological approaches to the evaluation and management of tinnitus distress. In J. Hazell (Ed.), *Tinnitus* (pp.1-50). London: Churchill Livingstone.

Hallberg, L. R-M., & Erlandsson, S. I. (1993). Tinnitus characteristics in tinnitus complainers and noncomplainers. *British Journal of Audiology*, 27, 19-27.

Harvey, M. A. (1989). *Psychotherapy with deaf and hard-of-hearing persons: A systemic model*. Hillsdale, NJ: Lawrence Erlbaum.

Hazell, J. W. P. (1979). Tinnitus. In J. Ballantyne & J. Groves (Eds.), *Diseases of the ear, nose and throat* (4th ed., pp. 81-91). London: Butterworths.

Hazell, J. W. P., Wood, S. M., Cooper, H. R., Stephens, S. D. G., Corcoran, A. L., Coles, R. R. A., Baskill, J. L., & Sheldrake, J. B. (1985). A clinical study of tinnitus maskers. *British Journal of Audiology*, 19, 65-146.

Hazell, J. W. P., Jastreboff, P. J., Meerton, L. E., & Conway, M. J. (1993). Electrical tinnitus suppression: Frequency dependence of effects. *Audiology*, 32, 68-77.

Heath, A. (1987). The deafened - A special group. In J. G. Kyle (Ed.), *Adjustment to acquired hearing loss: Analysis, change, and learning*. (pp. 163-168). Bristol: University of Bristol.

House, J. W. (1989). Therapies for Tinnitus. *The American Journal of Otolaryngology*, 10, 163-165.

Jamero, P. M. (1981). Organizational configurations affecting the administration of rehabilitation services: The state of Washington's experience. In W. G. Emener et al. (Eds), *Rehabilitation administration and supervision* (pp. 107-123). Baltimore: University Park Press.

Jones, L. (1987). Living with hearing loss. In J. G. Kyle (Ed.), *Adjustment to acquired hearing loss: Analysis, change and learning: Proceedings of a conference held in University of Bristol* (pp. 126-139). Bristol: Center for Deaf Studies, University of Bristol.

Jones, L., Kyle, J., & Wood, P. (1987). *Words apart: Losing your hearing as an adult*. London: Tavistock.

Kampfe, C. M. (1989). Parental reaction to a child's hearing impairment. *American Annals of the Deaf*, 134, 255-259.

Kampfe, C. M. (1990). Communicating with persons who are deaf. *Journal of Rehabilitation*, 56, 41-45.

Kampfe, C. M. (1994). Vocational rehabilitation and the older population. *The Southwest Journal on Aging*, 9, 65-69.

Kampfe, C. M. (1998). *Variability in response to late hearing loss*. Manuscript in preparation.

Kampfe, C. M., & Smith, S. M. (1997). Older persons' psychological reactions to presbycusis. *Southwest Journal on Aging*, 13, 53-59.

Kampfe, C. M., & Smith, S. M. (in press-a). Intrapersonal aspects of hearing loss in persons who are older. *Journal of Rehabilitation*.

Kampfe, C. M. & Smith, S. M. (in press-b). Suggestions for working with older people who have late onset hearing loss. *Journal of Adult Development and Aging: Practice*.

Katon, W., Sullivan, M., Russo, J., Dobie, R., & Sakai, C. (1993). Depressive symptoms and measures of disability: A prospective study. *Journal of Affective Disorders*, 27, 245-254.

Kirsch, C. A., Blanchard, E. B., & Parnes, S. M. (1989). Psychological characteristics of individuals high and low in their ability to cope with tinnitus. *Psychosomatic Medicine*, 51, 209-217.

Krug, R. F. (1969). The relevance of audiologic data in planning mental health services for the acoustically impaired. In K. Z. Altschuler & J. D. Rainer (Eds.), *Mental health and the deaf: Approaches and prospects*. Washington, DC: U. S. Department of Health, Education, and Welfare.

Kyle, G. J., Jones, L. G., & Wood, P.C. (1985). Adjustment to acquired hearing loss: A working model. In H. Orlans (Ed.), *Adjustment to adult hearing loss* (pp. 119-138). San Diego, CA: College-Hill Press.

Lindsay, M. (1983, February). The roaring deafness. *Nursing Times*, 61-63.

Lowensteyn-Kooperman, T. (1987). Professionals and hearing loss. In J. G. Kyle (Ed.), *Adjustment to acquired hearing loss: Analysis, change, and learning* (pp. 253-259). Bristol: University of Bristol.

Ludman, H. (1981). Help for deaf adults. *British Medical Journal*, 282, 292-293.

Luey, H. S. (1980). Between worlds: The problems of deafened adults. *Social Work in Health Care*, 5, 253-265.

Luey, H. S., Belser, D., & Glass, L. (n.d.). *Beyond refuge: Coping with losses of vision and hearing in late life*. Sands Point, NY: Helen Keller Center for Deaf-Blind Youth and Adults.

Luterman, D. (1979). *Counseling parents of hearing-impaired children*. Boston: Little Brown.

Mindel, E. D., & Feldman, V. (1987). The impact of deaf children on their families. In E. D. Mindel & M. Vernon (Eds.), *They grow in silence: Understanding deaf children and adults* (2nd ed.) (pp. 1-29). Boston: Little, Brown.

Myers, J. E. (1990). *Empowerment for later life*. Ann Arbor, MI: ERIC Counseling and Personnel Services Clearinghouse.

Myers, J. E., & Schwiebert, V. L. (1996). *Competencies for gerontological counseling*. Alexandria, Virginia: American Counseling Association.

Nosek, M. A. (1988). Independent living and rehabilitation counseling. In S. E. Rubin & N. M. Rubin (Eds.), *Contemporary challenges to the rehabilitation counseling profession* (pp. 45-60). Baltimore: Brookes.

Orlans, H. (1987). Sociable and solitary responses to adult hearing loss. In J. G. Kyle (Ed.), *Adjustment to acquired hearing loss: Analysis, change, and learning* (pp. 95-112). Bristol: University of Bristol.

Late Deafness

- Pegg, K. S. (1983). Experiences of acquired deafness. In W. J. Watts (Ed.), *Rehabilitation and acquired deafness* (pp. 50-54). London: Croom Helm.
- Rakel, R. (1994). *Conn's current therapy*. Philadelphia: W. B. Saunders.
- Ramsdell, D. A. (1978). The psychology of the hard-of-hearing and deafened adult. In H. Davis, & S. R. Silverman (Eds.), *Hearing and deafness* (4th ed., pp. 499-510). New York: Holt, Rinehart, & Winston.
- Rezen, S. V., & Hausman, C. (1985). *Coping with hearing loss*. New York: Dembner Books.
- Richardson, C. (1983). Hearing therapy. In W. J. Watts (Ed.), *Rehabilitation and acquired deafness*. (pp. 251-256). London: Croom Helm.
- Rossi, E. (1982). Erickson's creativity. *Family Therapy Network*, 6, 5.
- Rutman, D. (1989). The impact and experience of adventitious deafness. *American Annals of the Deaf*, 134, 305-311.
- Sanders, D. A. (1993). *Management of hearing handicap: Infants to elderly* (3rd ed.). New Jersey: Prentice Hall.
- Sayre, J. M. (1980). *Helping the older adult with an acquired hearing loss*. Illinois: Interstate Printers & Publishers.
- Schwartz, M. G. (1985, May). Programs in action: Speechreading for adults deafened later in life. *The Volta Review*, 87, (4), 231-235.
- Shambaugh, G. E. (1989). Clinical Vignette: Zinc: The neglected nutrient. *The American Journal of Otology*, 10, 156-160.
- Smith, S. M., & Kampfe, C. M. (1996). Creating a user-friendly counseling office environment for older persons with hearing impairments. *Arizona Counseling Journal*, 21, 21-26.
- Smith, S. M., & Kampfe, C. M. (1997). Interpersonal relationship implications of hearing loss in persons who are older. *Journal of Rehabilitation*, 63, 15-21.
- Stone, R. (n.d). *SHHH presents questions and answers on hearing loss* [Brochure]. Bethesda, MD: SHHH.
- Thomas, A. J. (1984). *Acquired hearing loss: Psychological and psychosocial implications*. London: Academic Press.
- Thomsett, K., & Nickerson, E. (1993). *Missing words: The family handbook on adult hearing loss*. Washington, DC: Gallaudet University Press.
- Van Hecke, M. L. (1994). Emotional responses to hearing loss. In J. G. Clark & F. N. Martin, *Effective counseling in audiology*. (pp. 92-115). Englewood Cliffs, NJ: Prentice Hall.
- Vernon, J. G. (1994). Questions and answers about tinnitus. *Tinnitus today: Excerpts and articles of interest*. (p. 5)
- Vernon, M. (1984, July/August). Psychological stress and hearing loss. *SHHH* pp. 3-6
- Vernon, J. A., & Schleuning, A. (1978). Tinnitus: A new management. *Laryngoscope*, 88 (3), 413-419.
- Waters, E. B., & Goodman, J. (1990). *Empowering older adults: Practical strategies for counselors*. San Francisco: CA: Jossey-Bass.

Williams, P. S. (1983, January/February). Is there life after sensorineural hearing loss? *SHHH*, pp. 4-6, 14.

Wineburg, E. (1994). Tales of tinnitus and recovery. *Tinnitus today: Excerpts and articles of interest*. (pp. 8)

Woolley, M. (1987). Acquired hearing loss - acquired oppression. In J. G. Kyle (Ed.). *Adjustment to acquired hearing loss: Analysis, change, and learning* (pp. 169-175). Bristol: University of Bristol.

Wright, B. (1983). *Physical disability-A psychosocial approach* (2nd ed.). New York: Harper & Row.

Wright, G. N. (1980). *Total rehabilitation*. Boston: Little, Brown.

Margery A. Rothschild
Charlene M. Kampfe

Tucson, Arizona
University of Arizona