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Hearing Loss and Isolation

Why focus on isolation?

A person is considered socially isolated if they live alone, have less than monthly contact with friends or family, and don't belong to a group such as a religious congregation, club, work or volunteer activity.

Human beings are social creatures. Historically, we thrive in tribes. Our connection to others enables us to survive. But, as we age, many of us spend increasing amounts of time alone, leaving us vulnerable to social isolation and loneliness. Studies demonstrate that health problems such as cognitive decline, depression, and heart disease are strongly associated with loneliness and isolation. People who engage in meaningful, productive activities with others tend to live longer, boost their mood, and have a sense of purpose. The risk, presented by social isolation is very similar in magnitude to that of obesity, smoking, high blood pressure, lack of access to care and physical inactivity. Anything that contributes to social isolation increases health risk. Hearing loss is one such factor.

What specifically is hearing loss?

Hearing loss is the total or partial inability to hear sound in one or both ears. Minor decreases in hearing are common after age 20. Hearing problems usually come on gradually, and rarely end in complete deafness. ⁽¹⁾

The term hearing impairment is used to mean a deviation or change for the worse in either hearing structure or hearing function, usually outside the range of normal. ⁽⁵⁾

What are the co-morbidities associated with untreated hearing loss?

In only the last dozen years, many important studies have surfaced linking hearing loss to disabling conditions, such as cognitive decline and Alzheimer's disease, clinical depression, diabetes, falls among the elderly, heart disease, and many more. These linkages are often referred to as "*comorbidities*," which can be defined as the simultaneous presence of two or more chronic conditions or diseases in a patient. A "*chronic condition*" can be defined as a health condition or disease that is persistent or otherwise long-lasting in its effects. The term chronic is often applied when the course of the disease lasts for more than 3 months. Under this definition, hearing loss clearly qualifies as a chronic condition. ⁽²⁾

How is hearing loss isolating?

People with hearing loss often will avoid social situations because they can't follow a conversation; sometimes they lose the thread and attempt to participate based on what they thought they heard and give responses that are not relevant or get an unexpected reaction from those they are speaking with. They may be laughed at or insulted. This often causes embarrassment, a blow to self-esteem and often depression. For some it is just not worth it to put themselves in situations where this can happen. Not just limited to conversation, individuals will avoid sitting with others at meals, recreational activities that once gave them joy, lectures, shopping, religious services, activism. ⁽⁴⁾

My grandmother had profound hearing impairment and was always so unhappy when people around her were talking, laughing, sharing information and she couldn't hear or participate. She had a terribly frustrating and embarrassing incident in a pharmacy when she showed her Medicare card to make a medication purchase and the pharmacist didn't believe she was old enough to be on Medicare and accused her of using a false ID card. An argument ensued that was very loud because the pharmacist had to shout at her to be heard by her and everyone in the pharmacy heard him accuse her. She was mortified. This impacted her independence and she became dependent on family and friends to do tasks that she should have been able to accomplish herself. She felt a supreme loss of privacy with the severity of her hearing loss.

In its study of 2,000 people with hearing loss and their families, the National Council on the Aging demonstrated a link between the use of hearing aids and significant improvements in the social, emotional, psychological and physical well-being of the wearer. Hearing impaired seniors who don't use hearing aids participate significantly less in organized social activity, compared to hearing aid users. Among those with milder hearing loss, non-users were more than 20 percent less likely than users to regularly participate in social activities. ⁽³⁾

How is communication impacted?

Individuals with hearing impairment may only be able to communicate effectively in a one-one conversation in a quiet environment at close proximity. Hearing for distance and/or in noise may be frustrating or not even possible for some people. Sometimes the hearing individuals in the conversation will become frustrated that they can't get their message across to the hearing impaired person and just be dismissive.

How are relationships impacted?

- Again, dismissiveness is likely as well as frustration, anger, fatigue, tension, stress and depression. These are factors impacting both the HOH individual as well as the spouse, family, friends, employers and co-workers. It's important to mention that all the aforementioned can impact all parties not just the HOH person. It is very tiring to try and listen and interpret speech or environmental sounds that don't come through clearly, and it can be fatiguing for the hearing partner to keep repeating, rephrasing, talking loudly and if

words or sentences are misheard this can result in anger. Inability to communicate effectively is very stressful for relationships of all kinds.

- Sometimes the HOH person may be perceived as standoffish, with people incorrectly assuming that they are being ignored when the HOH person had no idea he or she had been spoken to. ⁽⁴⁾
- Many people with hearing difficulties don't believe their hearing problems warrant treatment. ⁽⁶⁾ As a result, others find it difficult to communicate with them and will avoid socializing with them.

How much hearing loss does a person have to experience before they stop socializing/ participating in activities?

That depends. Some people are more handicapped by their hearing loss than others. Hearing handicap is a measure of the impact of hearing loss on an individual's everyday experiences and the psychosocial impact of a hearing loss. In other words, hearing handicap means the disadvantage imposed by a hearing impairment on a person's communicative performance in the activities of daily living. ⁽⁵⁾

What situations can lead to isolation of an individual with hearing loss?

- 🔊 Unsatisfactory and frustrating interaction with family and friends,
- 🔊 being unable to hold a conversation at parties, in restaurants,
- 🔊 seeking employment,
- 🔊 choosing not to work or volunteer because of fear of not giving appropriate responses to questions and comments.
- 🔊 Not being able participate fully in previously enjoyable or informational recreational activities.
- 🔊 Not seeking medical attention because they may misunderstand the medical history questions, the diagnosis and/or explanations for medical intervention.
- 🔊 Anyplace that would require active or even passive attention that consists of verbal presentation.

As a person's hearing loss worsens does this increase the odds for becoming lonely?

Hearing loss affects 1 of every 5 people and is strongly linked to loneliness: A Dutch study showed that every decibel drop in perception in people under 70 increases the odds of becoming severely lonely by 7%. As hearing declines, loneliness can intensify and set off a cascade of detrimental health effects. Now considered as hazardous as smoking 15 cigarettes a day, loneliness vastly raises the risks of depression, dementia and early death. ⁽⁴⁾

What is the ongoing research regarding the link between loss and loneliness?

In 2018, Frank Lin, MD, director of Johns Hopkins' Cochlear Center on Hearing and Public Health along with a team of Johns Hopkins University scientists began conducting the first randomized controlled trial to determine whether hearing treatment could actually prevent-or-slow cognitive decline. If they are able to show that hearing loss helps cause dementia, they say that hearing treatment could prevent up to 9% of the more than 47 million dementia cases in the world. The trial which is expected to be completed in 2022, will also examine the impact of hearing treatment on loneliness. It is not yet clear why hearing loss contributes to dementia, but loneliness could be an important mediating factor. Loneliness can raise stress hormones and inflammation, which can contribute to dementia. "Those with hearing loss meanwhile, can be so socially isolated that their brains get stimulated less, which could hasten cognitive decline," Lin says.

The upshot is that "hearing treatment can make a difference." ⁽⁴⁾

How does Medicare regard hearing loss?

For decades, age-related hearing loss was considered medically harmless. Medicare still treats hearing loss as a normal part of aging, not a medical problem, and doesn't pay for hearing aids or routine hearing tests.

How can isolation/loneliness associated with hearing loss be prevented?

- Regular assessment of hearing,
 - 👂 measured with calibrated equipment by a licensed audiologist.
- Appropriate treatment for diagnosed hearing loss:
 - 👂 Medical or surgical intervention if needed.
- Amplification in the form of hearing aids selected and fitted by a licensed audiologist.

UNTREATED HEARING LOSS AND SAFETY CONCERNS

What safety concerns are associated with hearing loss?

- Ear cleaning with Q-tips, strange home preps, ear candeling, items for sale on the Internet, social media
- Not using their amplification as prescribed – part-time, not at all, one aid vs. 2, setting amplification on lower volume than prescribed
- Not hearing intruders, whistling teapots, water leaking/flooding, phones, doorbells
- Not hearing directions for medication use, technology use
- Binaural hearing aid fitting vs. monaural. Inability to localize sound

What technology is available to keep someone with a hearing loss safe?

Hearing aids of course, various portable amplifiers such as the Pocketalker (worn around the neck, has a microphone, earbuds or headphones and sometimes a treble/bass control. Several models are available), TV amplifiers, amplifiers on telephones, captioned telephones, connectivity/streaming devices/accessories that work with hearing aids to enable hearing directly from telephones, Hearing Loop systems. Hearing aid technology that connects through Bluetooth to certain smartphone models. Open captioning in theaters, closed captioning on television.

Alerting devices such as vibrating alarm clocks, doorbells and smoke alarms that turn on lights that flash.

What strategies should a hearing impaired individual use to keep themselves safe? To keep others safe?

- To be a successful self-advocate an individual must first be open about their hearing loss and be willing to disclose it to others.
- A self-advocate knows what they need to communicate and participate fully and has the confidence to request it from others.
- They learn all they can about the cause and impact of their hearing loss, understand their legislative rights, keep up with the latest technology that can benefit them, and are familiar with community, state and national resources.
- They routinely practice and teach interactive strategies to enhance communication and reduce stress. ⁽⁷⁾

How is hearing loss impacting individuals during the coronavirus pandemic? (Blog: Sheri Gostomelsky, Au.D.)

During the COVID-19 pandemic, audiologists and other hearing healthcare professionals are concerned about our patients. With social distancing, we are communicating at a distance of six feet which is difficult if not impossible with a loss of hearing. ⁽⁸⁾ *So many of my patients need to hear at closer proximity in order to understand conversation especially if they are not using amplification and most need to use visual cues: they need to see lip and mouth movements and other facial expression. At this time when face masks are strongly recommended or mandated they pose many challenges – conversation is muffled and reduced in volume. And the ability to see visual cues to augment the auditory is totally obscured.* With masks, deaf people will lose at

least half of the facial expressions on which they depend. A socially distanced get together or visit to a doctor's office might mean attempting to converse through a window or other solid clear panel that attenuates sound even more can be quite frustrating. Various clear panel masks, homemade as well as a brand that is medically approved are very helpful where seeing faces is concerned are in demand but very hard to acquire. ⁽⁹⁾

Behind-the-ear (BTE) hearing aids and cochlear implants (CIs) in particular pose a great risk for difficulty. When one removes glasses, flips off a hat or hood, or removes a scarf, hearing aids can go flying off the ear. An active adult or child may forget to check that the hearing aid is still in place. ⁽⁸⁾

This closure of businesses and practices has also caused a dilemma for audiologists to provide procedures and services to our patients. We can do some limited consultation and hearing aid troubleshooting via telehealth including by telephone and teleconferencing platforms if the patient is amenable to a private pay arrangement. The technology isn't available to conduct hearing evaluations so we can't accept new patients or update hearing information for established patients. New hearing aids ordered and devices sent for repairs just as the state mandated the closures created some work-arounds, especially curbside pick-ups and deliveries. Some makes and models are designed for remote adjustments because they connect to smartphones with Bluetooth or other similar connectivity method. Of course, use of these technologies depends on whether the patient or a caregiver has access to the electronics needed and knows how to use them.

During COVID-19, we all need to be cognizant of the difficulties that masks pose to people with hearing loss. (8)

- (1) <http://www.umm.edu/ency/article/003044.htm>
- (2) <https://www.hearingreview.com/hearing-loss/hearing-loss-prevention/risk-factors/hearing-loss-associated-comorbidities-know>
- (3) <https://www.ncoa.org/search-results/?q=hearing%20loss>
- (4) https://www.npr.org/sections/health-shots/2019/09/12/760231279/untreated-hearing-loss-linked-to-loneliness-and-isolation-for-seniors?fbclid=IwAR0-qsRWgokVDr8fEj_u1AljLiE7wz-kBnQn4Q2tLnIValDV3MSKxqnfZB8
- (5) <https://www.asha.org/policy/RP1981-00022/>
- (6) <https://www.prweb.com/releases/2011/12/prweb9002726.htm>
- (7) <http://www.hearingloss.org/advocacy/selfadvocacy.asp>
- (8) <https://hearinghealthfoundation.org/blogs/the-challenges-of-masks-with-hearing-loss?rq=Sheri>
- (9) https://www.cbc.ca/news/canada/calgary/covid-19-deaf-community-1.5582340?fbclid=IwAR1VN6URoYLi1KBZGh0iEMTKGFbOVeJ2SZ7HGguSnKVVTEBc_49AnHSYveo

Dr. Willa Horowitz is an audiologist, a professional who specializes in evaluating and treating people with hearing loss. She holds the Au.D. degree, which is the doctoral level designation.

Dr. Horowitz specializes in the rehabilitation of non-medical hearing issues of adults and senior adults in the Greater New Haven area. She holds the Certificate of Clinical Competence in Audiology from the American Speech, Language and Hearing Association; she is a Fellow of both the American Academy of Audiology and the Connecticut Academy of Audiology and is a former board member of the Association of Adult Musicians with Hearing Loss.

She is the owner of Acuity Hearing Solutions, LLC an audiology private practice providing home visit hearing healthcare services in the Greater New Haven area and several towns along the shoreline. Her goals are to improve the communication abilities of every patient referred to her and to increase awareness and implementation of integrating hearing examination and treatment as an essential part of delivery of comprehensive patient-focused health care services in various settings.