

The Connection Between Hearing Loss and Dementia/Alzheimer's Disease

PHYSICIAN SUMMARY

Because studies suggest that hearing impairment contributes to the progression of cognitive dysfunction in older adults, an audiologist can be an important member of the patient's healthcare treatment team. If not managed, with hearing aids for example, hearing loss can interrupt the cognitive processing of spoken language and sound, even in otherwise healthy individuals.

Incidence

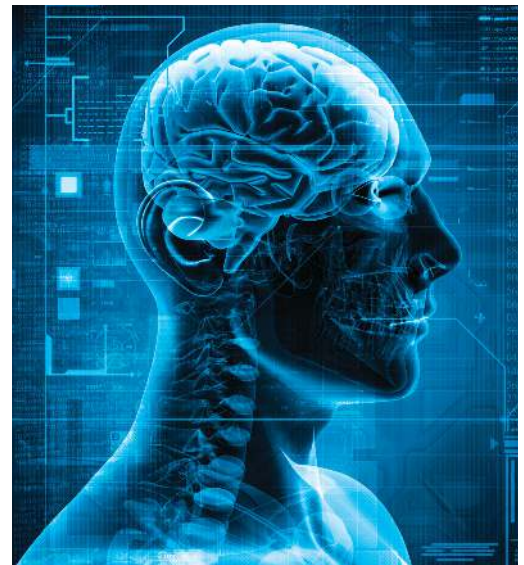
According to the Heart of America Chapter of the Alzheimer's Association, there are approximately 50,000 individuals living in the organization's service area who are dealing with Alzheimer's disease. This service area covers 66 counties in Missouri and Kansas, including the greater Kansas City area, Leavenworth and Manhattan, Kan.

Untreated hearing loss can compound the difficulties that people with dementia or Alzheimer's and their families already face. But in many cases, the regular use of hearing aids can benefit people with hearing loss, including those with dementia, Alzheimer's and their caregivers.

Symptoms of Untreated Hearing Loss

Numerous studies have linked untreated hearing loss to a wide range of physical and emotional conditions, including:

- Impaired memory and ability to learn new tasks
- Reduced alertness
- Increased risk to personal safety
- Negativism
- Irritability
- Fatigue
- Tension
- Stress
- Depression
- Diminished psychological and overall health



A comprehensive hearing assessment should be part of any medical evaluation in conjunction with an evaluation for dementia. By addressing the question of hearing loss and making any necessary recommendations, an audiologist can improve quality of life for those who have dementia or Alzheimer's.

Making the Connection

A study released in 2011 from researchers at Johns Hopkins and the National Institute on Aging found adults with hearing loss are significantly more likely than adults with normal hearing to develop dementia. The study found that the greater the hearing loss, the higher the risk.

Men and women in the study who experienced severe hearing loss were five times more likely to develop dementia than those with

normal hearing. But even mild hearing loss doubled the risk of dementia.

The study followed 639 people ages 36 to 90 who initially did not have dementia – the insidious loss of memory, logic and language that interferes with daily living. The volunteers were tested for hearing loss and dementia every two years for nearly two decades.

Researchers found that those with hearing loss at the beginning of the study were much more likely to develop dementia by the end, even after taking into account age and other risk factors. The risk of dementia only began to rise once hearing loss began to interfere with the ability to communicate – for example, in a noisy restaurant. The study also found that hearing loss increased the risk of Alzheimer’s disease, but the two were not as strongly linked as hearing loss and dementia. The study was published in the medical journal *Archives of Neurology*¹.

Other facts about the connection between hearing loss and dementia/Alzheimer’s disease include:

- people with dementia have higher rates of hearing loss, yet lower levels of hearing healthcare intervention;
- undiagnosed hearing loss can play a confounding role in the medical evaluation of dementia; and

- the appropriate use of hearing aids can often improve quality of life for both the individual with dementia or Alzheimer’s and the caregiver.²

The Audiologist’s Role in Diagnosing and Treating Hearing Loss in Patients with Dementia/Alzheimer’s

Being at the entry point in the hearing healthcare delivery system, the audiologist is in a unique position to identify “at risk” individuals, facilitate referral to the appropriate medical specialist (e.g., neurologist), and also provide comprehensive care. Often, starting with intervention sooner leads to better long-term outcomes with hearing aid use, especially if dementia progresses.

It is important to note that we have many excellent options for hearing devices that can help patients with limited cognitive ability and/or dexterity. For example, one of the newest hearing aids is an extended-wear device that can be worn when showering, sleeping or talking on the phone, usually for up to four months at a time. The audiologist inserts and removes the device in the office, eliminating the need for the patient to remember to remove the device each day.

For more information about hearing loss, visit www.hearingyourbest.com.

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1. Frank R. Lin, M.D., Ph.D.; E. Jeffrey Metter, M.D.; Richard J. O’Brien, M.D., Ph.D.; Susan M. Resnick, Ph.D.; Alan B. Zonderman, Ph.D.; and Luigi Ferrucci, M.D., Ph.D., “Hearing Loss and Incident Dementia,” *Archives of Neurology*, February 2011, Vol. 68, No. 2.
2. “2012 Alzheimer’s Awareness Campaign,” Better Hearing Institute, www.betterhearing.org.

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