

Physician Update

on Hearing and Balance Disorders

A Clinical Newsletter for Physicians

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Hearing Loss and Dementia Can Hearing Aids Help?

It's not your imagination. The patients in your waiting room are getting older. In fact, according to AARP, more than 10,000 baby boomers are turning 65 every day.

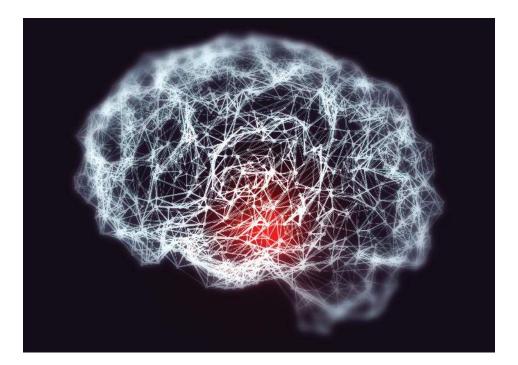
Not only are they getting older, but many are having problems hearing, and their hearing loss also may be connected to cognitive decline.

A recent study led by researchers at the Johns Hopkins Bloomberg School of Public Health and published in the *Journal of the American Medical Association* covered 2,413 individuals, about half of whom were over 80. The research showed a clear association between severity of hearing loss and dementia.¹

The study analyzed a nationally representative dataset from the National Health and Aging Trends Study (NHATS). The NHATS has been ongoing since 2011 and used a sample of American Medicare beneficiaries over age 65.

In the study, 33.5% of the participants had normal hearing; 36.7% had mild hearing loss; and 29.8% had moderate-to-severe hearing loss.

The prevalence of dementia among the participants in the study with



moderate-to-severe hearing loss was 61% higher than prevalence among participants who had normal hearing. The use of hearing aids was associated with a 32% lower prevalence of dementia in the 853 participants who had moderate-to-severe hearing loss.

More Evidence that Hearing Aids Can Help

Another recently released study published in the medical journal *The Lancet*, also showed that for people with hearing loss, wearing hearing aids may reduce their risk of developing dementia.²

This study was conducted by an international team of researchers and found that people experiencing hearing loss who are not using hearing aids may have a higher risk of dementia than people without hearing loss; however, using a hearing aid may reduce this risk to the same level as people without hearing loss. The study analyzed 437,704 people in the UK Biobank ages 40-69 between 2006-2010. The average age of study participants at recruitment was 56 years old, and the average follow-up time was 12 years.

Around three-quarters of the participants had no hearing loss, and the remaining one-quarter had some hearing loss. Among those with hearing loss, 11.7% used hearing aids. After controlling for other factors, the study suggested that, compared to participants with normal hearing, people with hearing loss not using hearing aids had a 42% higher risk of all-cause dementia, while no increased risk was found in people with hearing loss who used hearing aids.

While the exact connection between hearing loss and cognitive decline is not understood, many theorize that wearing hearing aids helps stimulate the brain, mitigating the risk of memory loss to that of someone with normal hearing.

This lower prevalence of dementia in those using hearing aids, makes it even more important that older adults have their hearing evaluated by a hearing healthcare professional/audiologist, and if diagnosed with hearing loss, consider the possibility of wearing hearing aids.

Hearing aids also have been shown to improve overall quality of life, including providing improved communication, better relationships, lower rates of mental health issues, such as depression, and a better ability to be productive personally and professionally.

How Can an Audiologist Help?

Because patients see their audiologist on a regular basis (often every 6 to 8 months), the audiologist may note a decline in cognitive ability, especially if the person has difficulty operating their hearing aids as well as they once did, or if they have problems understanding basic instructions. An audiologist also may better understand the dementia process, and how such a diagnosis could impact an individual's ability to continue functioning on a daily basis.

To stay on top of a patient's hearing needs and any possible cognitive issues, Associated Audiologists recommends:

- Scheduling appointments and check-ups at regular intervals. This includes a patient's annual Medicare check-up, at which time their primary care provider can assess cognitive function.
- Encouraging a trusted family member or friend to go to each appointment if possible so they can help keep track of details and instructions.
- Adding any individuals responsible for helping with healthcare decisions to their HIPAA privacy form. This gives the healthcare team permission

to discuss issues or concerns with the individuals listed.

Remember, an audiologist can be a trusted partner, helping to spot unusual behavioral changes or more significant lapses in memory. Once aware of the issue, the audiologist can alert other members of the healthcare team so that treatment options can be discussed or a referral can be made to a specialist.

And while hearing aids can't prevent dementia, the evidence shows a decreased risk for those who wear them. In addition to diagnosing hearing loss, an audiologist can recommend technology appropriate for the individual's cognitive abilities, as well as program and check these devices to be sure they are performing effectively, while mitigating hearing loss and potentially memory decline.

References

- 1 Alison R. Huang, Kening Jiang, Frank R. Lin, Jennifer A. Deal, Nicholas S. Reed. Hearing Loss and Dementia Prevalence in Older Adults in the US. JAMA, 2023; 329 (2): 171 DOI: 10.1001/jama.2022.20954.
- 2 Jiang F, Mishra SR, Shrestha N, et al. Association between hearing aid use and all-cause and cause-specific dementia: An analysis of the UK Biobank cohort. Lancet. 2023; published online April 13, 2023.

About Associated Audiologists, Inc.

Associated Audiologists is the region's leader in audiologic care for hearing loss, tinnitus/sound sensitivity and vestibular disorders. The practice has eight clinics conveniently located in Overland Park, Shawnee Mission, Prairie Village, Leavenworth, Manhattan and Lawrence in Kansas; and Kansas City and Independence in Missouri. Each clinic is staffed by doctoral-level audiologists who utilize state-of-the-art technology to assess and diagnose hearing loss, along with a host of intervention options for all budgets.



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