## Study finds hearing aids contribute to lowering dementia risk

• By Esteban Fernandez | Times West Virginian



A large clinical trial found that for older adults at risk of cognitive issues, using hearing aids for three years cut their rates of cognitive decline in half.

FAIRMONT — Treating hearing loss might be the best way to prevent dementia, according to a new study published in the JAMA Otolaryngology Head & Neck Surgery Journal.

It all comes down to recognizing the brain is a muscle, Hearing Care Practitioner Amber Weaver said. Weaver works in the Fairmont office of the Beltone Hearing Care Center.

"Anytime it is struggling in any area, it kind of becomes deficit in other areas," Weaver said. "So when people have a hearing loss, their auditory cortex decreases, which is the same nerve cells that involve memory as it carries the sounds to our brain. So the brain is struggling to hear. It's taking up more of the room that it allows for the process and speech in it."

When the muscle processing speech atrophies from disuse, it fades away, making the brain less active, she said. Over time, dementia develops. To counteract that outcome, Weaver said practitioners rely on hearing aids to keep the brain working, active and alive.

Weaver's office sees an average of 30 patients a week in Fairmont. Out of those, maybe eight to 10 report back they have some type of cognitive issue. She said 83% of patients who are diagnosed

with dementia also have hearing loss. According to the JAMA study on dementia and hearing loss, in a study of almost 3,000 participants up to 32% of eight year incident dementia could be attributable to audiometric hearing loss. Self reported hearing loss was not associated with increased dementia risk.

Age is also a factor, since hearing diminishes with age. A study published in 2019 through the Lancet Regional Health-Americas Journal found West Virginia had the highest prevalence of hearing loss at 18.2%. Individuals living in rural parts of the country were at higher risk for hearing loss overall. According to a map from <a href="Soundcheckmap.org">Soundcheckmap.org</a>, Marion County had a hearing loss rate of 18.7%. SoundCheck is a research and communications project that is working to identify the extent of hearing loss in the U.S. by state and county.

Dr. Joseph Malone, a specialist in neurology at WVU Medicine, said West Virginia ranks high in a lot of bad statistics. Treating hearing loss is something the state needs to focus on.

Asking patients about hearing loss is part of his routine evaluation and is something that should be asked in just about every evaluation. According to SoundCheck, rates of hearing loss increase exponentially starting at age 35, and one in 11 people aged 35-64 have bilateral hearing loss, a condition in which hearing is impaired in both ears.

Malone said there's been a growing interest over a number of years by scientists who study dementia in order to determine what kind of risk factors can be mitigated to prevent the disease. High blood pressure is one such factor, since high cholesterol or heart disease can damage the blood vessels that feed the delicate structures needed to process hearing.

Using hearing protection in loud environments may prevent risk of hearing loss, which also lowers the risk of developing dementia.

"But what also seems promising is that people who do have hearing loss that's measured by standardized audiological testing, if you were to correct the hearing loss with hearing aids early, that may actually help reduce your risk of dementia later in life."