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Hearing Health and Cognitive Health: Ten Things That People Who Are Hard of Hearing Should Know

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Over the last four decades, research has shown that there are connections between hearing and cognition in older adults. Over the last few years, research has turned to some important questions. What reasons explain why hearing loss and cognitive decline or dementia seem to be connected? If they are connected by a known cause, then could treatments for hearing loss reduce cognitive decline or dementia? If another cause affects both hearing and cognition, then could treatments for their common cause protect both hearing health and cognitive health? Here are ten things that people who are hard of hearing should know about what we know so far about the answers to these questions. These points will be expanded in future articles.

1. On average, older people who are hard of hearing have faster cognitive decline compared to people with good hearing. This does not mean that all individuals who are hard of hearing will have faster cognitive decline. Cognitive health depends on many factors other than hearing loss.

2. The reasons for the connections between hearing loss and cognitive decline remain unknown and we do not know whether or not hearing loss causes cognitive decline.

3. Theoretically, if hearing loss does cause dementia and if hearing loss could be eliminated totally, then there could be a 7% reduction in dementia globally, but this calculation is meaningless if hearing loss does not actually cause dementia.

4. If hearing loss were eliminated totally, then the theoretical reduction in dementia globally would be 7%, but it would only be 3.5% in Canada. Even if hearing loss does cause dementia, the calculation depends on how many people in the population have hearing loss. The number of people with hearing loss depends on the specific population being measured: the number is greater in older compared to younger people, greater in men compared to women, and greater in low-income compared to high-income countries. Global calculations are higher than calculations based on Canadian data.

5. Rather than hearing loss causing cognitive decline, it is possible that both are caused by some other common factor. There is evidence that, as adults grow older, declines in both hearing health and cognitive health may be due to lifestyle factors (e.g., low amounts of physical exercise, poor diet, smoking, excessive alcohol consumption), other chronic health conditions (e.g., hypertension, diabetes, obesity, depression, loneliness), and other characteristics (e.g., education, sex, income).

6. Adopting a healthy lifestyle and managing other chronic health conditions may protect both hearing health and cognitive health for older people, regardless of when their hearing loss began or how long they have been using hearing aids.

7. Overall, once other factors are accounted for, there is no current convincing scientific evidence proving that using hearing aids can prevent or slow cognitive decline (or dementia) in people who are hard of hearing.

8. Some media headlines and hearing aid ads present information that misleads people by suggesting that using hearing aids will reduce the risk of dementia. These misleading claims scare people and increase stigma.

9. Increasing physical activity has the greatest promise for reducing the risk of dementia. On average, people who have hearing and/or vision loss exercise less than people with good sensory health. People with sensory loss are also more likely to have poorer balance and more falls. Overcoming hearing-related barriers to participating safely in physical exercise may, in turn, protect cognitive health. Increasing accessibility to physical activities may deserve more attention by people who are hard of hearing and by hearing professionals.

10. Having a positive attitude towards aging and participating as fully as possible in physical activity, as well as in mental and social activities will help people who are hard of hearing to age well.

Additional Reading

- Further reading (free, online) that has been shared with hearing professionals in the *Canadian Audiologist*, a publication of the Canadian Academy of Audiology:

- Pichora-Fuller, M. K. (2023). Findings from the ACHIEVE RCT: Does hearing care modify dementia risk? *Canadian Audiologist, 10(5).* https://canadianaudiologist.ca/issue/volume-10-issue-5-2023/findings-from-the-achieve-rct

- Pichora-Fuller, M. K. (2023). Is hearing loss in older adults predictive of later development of dementia?and does hearing care modify dementia?risk? *Canadian Audiologist, 10(1).* https://canadianaudiologist.ca/is-hearing-loss-in-older-adults-predictive-of-later-development-of-dementia-and-does-hearing-care-modify-dementia-risk/

- Pichora-Fuller, M. K. (2024). The risks of explaining hearing loss as a potentially modifiable risk factor for dementia – Summer 2024 update on new global and Canadian population attributable fractions (PAFs). *Canadian Audiologist, 11(5).* https://canadianaudiologist.ca/issue/volume-11-issue-5-2024/the-risks-of-explaining-hearing-loss-as-a-potentially-modifiable-risk-factor-for-dementia-summer-2024-update-on-new-global-and-canadian-population-attributable-fractions-pafs/

- Pichora-Fuller, M. K. (2023). Views of aging: Positive beliefs and attitudes matter for hearing and other health issues. *Canadian Audiologist, 10(3).* https://canadianaudiologist.ca/issue/volume-10-issue-3-2023/column/whats-new-about-getting-older/