

## Quick Answers

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### Question #1

**What should audiologists tell their clients about hearing aids and reducing dementia risk?**

### Answer

#### **Part 1: AR benefits communication.**

Hearing aids are beneficial for improving communication when they are part of comprehensive audiological rehabilitation (AR) based on a person-centered goal-setting approach. Comprehensive AR includes technologies, training to change attitudes and behaviours, and information about selecting and modifying communication environments (i.e., AR is more than just hearing aids). By helping older adults set and achieve their communication goals, audiologists play an important role in promoting healthy aging by supporting them to be physically, mentally, and socially active.

#### **Part 2: AR (with hearing aid use) has no overall effect of AR on cognitive decline.**

While declines in hearing correlate with cognition in older adults, no causal mechanism has been proven. There is insufficient evidence that hearing aid use will have any direct effect in preventing or reducing the risk of dementia. The ACHIEVE trial results published in 2023 provide evidence that comprehensive AR effectively improves communication outcomes; however, there was no significant overall effect of AR on the rate of cognitive decline. A reduction in the rate of cognitive decline was only observed for a subgroup who had other risk factors for dementia insofar as they were older, had poorer health and started the trial with poorer cognition. For those living with hearing loss who are concerned about cognitive decline, a discussion of multiple ways to reduce the risk of dementia may be appropriate.

#### **Part 3: Dementia risk may be attributable to many other health factors**

It is important not to focus solely on hearing loss or hearing aids because dementia risk may be attributable to many other health factors that intersect with hearing loss and communication. For those living with hearing loss, besides using hearing technologies, there are many ways to reduce dementia risk. Physical activity is the intervention with the strongest evidence for reducing the risk of dementia. Increasing physical activity might be a key goal for AR if older adults with hearing loss want to reduce their risk of dementia.

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## Question #2

**What should audiologists learn from the story of the retraction of the Jiang et al. paper about hearing aids and dementia?**

## Answer

The main lesson is that audiologists should question provocative results. They should base their clinical practice on evidence published in peer-reviewed journals because the peer-review process relies on scientists to protect the public from misinformation. The retraction of the Jiang et al. paper shows that errors can be made but that the peer-review process was able to alert the public to a serious error. It is important not be confused about which paper was retracted. The retracted paper by Jiang and colleagues is about an analysis of UK Biobank data. The findings about the ACHIEVE Randomized Control Trial in the USA reported by Frank Lin and colleagues in 2023 have NOT been retracted.