

ORGANIZATION NEWS

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Hearing and Vision Impairment in People With Dementia: A Guide for Clinicians



Age-related hearing and vision problems are common in people living with dementia, but these problems are often not detected or properly managed. Untreated hearing or vision impairment worsens a person's ability to function and live independently and interferes with their ability to remember things and engage in social activities. It can also impact their quality of life by increasing isolation.

Health care professionals working with people with dementia should be aware of hearing and vision problems and should include hearing and vision in their evaluation and management of care plans. Good hearing and vision care can improve the lives of people with dementia.¹⁻³

How common is hearing and vision impairment in people with dementia?

It is very common. Nearly 90% of people with mild or moderate dementia have significant hearing loss (>40 decibels hearing loss is considered "disabling")²; more than 30% have vision impairment (visual acuity worse than 6/12).⁴ Hearing and vision impairments are even more common in people living in residential care homes (ie, assisted living or nursing homes).^{4,5}

What is the impact of hearing and vision impairment in people with dementia?

People with dementia who have hearing and/or vision impairment often have a poorer quality of

life and are often isolated. They may have more challenging behavior (ie, anxiety, agitation, aggression, or visual hallucinations), difficulties in adapting to environments (ie, getting lost), and may become more dependent on caregivers. This contributes to caregiver burnout. The symptoms of dementia may also progress faster.¹

How are hearing and vision measured?

Regular hearing and vision tests are important to identify and treat problems early.

Hearing tests can be done by:

- A primary care physician.
- An audiologist.
- An audiometrist.
- Referral to an otolaryngologist.

Hearing testing involves: (1) checking the outer ear, ear canal, and the function of the middle ear and cochlear, (2) checking a person's ability to hear low- to high-pitch sounds, and (3) may also include tests of speech recognition. Hearing tests determine if someone may benefit from a hearing aid, a cochlear implant, or other hearing intervention.

Eye tests can be done by:

- An optometrist.
- A primary care physician.
- Referral to an ophthalmologist.

Eye tests involve checking: (1) the muscles that control eye movement; (2) a person's ability to identify letters or symbols from near and far away (visual acuity testing, which determines if glasses are needed and what lens prescription is

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Table 1 Recommendations for aging-related hearing and vision impairment in people with dementia

Theme	Specific Recommendation
Detection	Raise awareness among hearing, vision, and dementia experts about the overlap of these problems ⁸
Assessment	Detect hearing and vision problems early to ensure better outcomes, such as improved quality of life and functional ability ^{1,9}
	Offer hearing and vision testing to people newly diagnosed with dementia ^{1,9}
	Consider the impact of the impact of hearing and vision problems on cognitive testing for dementia diagnoses to ensure accurate diagnosis ^{7,8,10}
Treatment and support	Modify hearing and vision testing to consider a person with dementia's difficulty in self-reporting symptoms and providing accurate feedback during clinical examinations ^{7,8,11,12}
	Hearing and vision specialists should adapt testing by: (1) doing home assessments, if possible; (2) scheduling sessions at times when a person is most alert; (3) simplifying instructions and allowing extra time for the testing; (4) allowing caregivers to be present during the testing; and (5) considering that a person with dementia may not fully understand instructions or may respond slowly ^{7,8,11,12}
	Consider hearing and vision impairments as a contributing factor if a person with dementia develops challenging behavior (ie, apathy, agitation, aggression, hallucinations) ⁵
	Use person-centered approaches, tailored to individuals' needs, and with all relevant disciplines or specialties ^{3,6,7,13,14}
	Provide dementia awareness training for hearing and vision professionals
	Give people with dementia and their care partners information about the impact of hearing and vision problems and offer support and advice about how to use and maintain sensory aids ^{6,13,14}
	Offer opportunities to connect with community support services ^{6,13,14}
	Ensure that local environments (ie, home, clinic, activity centers) have appropriate lighting, acoustics, and noise reduction
	Provide caregivers with additional means of support to reduce caregiving burden and stress ^{1,13,14}

required); (3) the health of the outer eye, including pupil reactions to light; and (4) the health of the inner eye, including the cornea, lens, iris and anterior chamber.

Can addressing hearing and vision loss in older people improve cognitive function and enhance the lives of people with dementia?

If hearing and vision is corrected or improved, quality of life and challenging behavior may also improve.^{1,3} Customizing hearing and vision

support to an individual's specific needs is very important. Testing should be done annually or more often if the person shows continued decline in memory and sensory abilities.⁶

Are hearing and vision impairments adequately diagnosed and managed in people with dementia?

No. Most people with dementia do not have their hearing and vision problems adequately recognized and managed.⁷ Hearing and vision professionals often lack expertise in how to support

people with dementia. People with dementia may not receive appropriate corrective devices such as glasses and hearing aids. If they are prescribed, they are often used incorrectly.^{4,5}

What are the challenges to assess and manage hearing and vision impairments in people with dementia?

Dementia may decrease a person's awareness of their hearing and vision ability. Therefore, they are less likely to report problems and ask for help. Difficulty following instructions and responding to testing stimuli make hearing and vision assessments difficult. Dementia makes learning to use hearing aids and other devices harder. It may also impair insight into the need for corrective devices, such as hearing aids.^{6,7}

Recommendations for aging-related hearing and vision impairment in people with dementia

Specific evidence-based guidelines for hearing and vision impairment for people with dementia are still being developed. These recommendations arise from several sources and clinical experience (table 1).

Authorship

This page was developed by Iracema Leroi, MD, FRCPC, MRCPsych (*e-mail address: Iracema.Leroi@tcd.ie*); Fofi Constantinidou, PhD; Donna Langenbahn, PhD; Patricia Heyn, PhD, FGSA, FACRM; Wai Kent Yeung, PhD; and Piers Dawes, PhD.

Disclaimer

Table 1 is not intended to reflect a full list of evidence-based guidelines. This information is based on the best currently available in the published literature, as well as the clinical experience of the authors. You should consult your health care provider regarding specific medical concerns or treatments. This information/education page may be reproduced for non-commercial use by health care professionals to share with their patients and caregivers with appropriate attribution.

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