Addressing the hearing needs of people with dementia

BY PIERS DAWES

Dr Dawes provides a comprehensive overview of hearing needs of persons with dementia coupled with recommended guidelines for hearing-related considerations when assessing and intervening with persons with dementia.

ith ageing populations, we face a global dementia challenge. Rates of both hearing loss and dementia increase with age, so one might expect hearing impairment to be common among people with dementia. In fact, hearing loss is even more common among people with dementia than in people of a similar age without dementia. One study reported that 90% of people with mild/moderate dementia have hearing loss (>40 dB HL) [1]. Hearing loss may be particularly common among people with dementia living in aged care facilities [2]. Hearing loss appears to be more common among people with dementia because they tend to have poorer health in general, and because hearing loss is associated with poorer cognitive function. Given the age demographic with which many hearing

professionals work, they may expect to work frequently with people with cognitive impairment or dementia.

The impact of hearing impairment for people with dementia

Untreated hearing impairment exacerbates the impact of dementia [3]. Hearing impairment is associated with reduced quality of life, increased social isolation and withdrawal from activities. Cognitive decline may be more rapid among people with dementia with untreated hearing impairment; these people may have more behaviour that challenges (e.g., agitation, hallucinations, aggression, anxiety), reduced orientation and higher dependency on care givers. Increased behaviour that challenges may lead to increased use of pharmaceutical restraints. Higher care needs increase the burden on caregivers. Unfortunately, most people with dementia do not have their hearing needs recognised and supported by caregivers and/or healthcare professionals.

Hearing support for people with dementia

Hearing impairments tend to go underrecognised in people with normal cognition. Hearing difficulties may be attributed to other people mumbling or too much background noise on television, for example. Because dementia affects insight, people with dementia may be even less aware of hearing difficulties and even less likely to seek help than people with normal cognition. In addition, as the symptoms of dementia may appear similar to the symptoms of hearing loss (e.g., not keeping up with the conversation,

 Table 1. Key recommendations for hearing impairment in people with dementia. Adapted from Leroi et al [6].

 Detection

Detection

 Hearing impairment is identified and supported early, with hearing assessment offered to people newly diagnosed with cognitive impairment or dementia (recent UK National Institute of Clinical Excellence guidelines for assessment and management of hearing loss recommend referring people with dementia for a hearing assessment with re-assessment every two years for people not previously diagnosed with hearing impairment).

Assessment

- Cognitive testing for dementia diagnosis should consider the impact of hearing problems.
- Hearing assessment should consider a person with dementia's difficulty in self-reporting hearing problems, and provide feedback on hearing examinations.
- Hearing assessment should be adapted by (i) doing home assessments, if possible; (ii) scheduling assessments at times when a person is most alert; (iii) simplifying instructions and allowing extra time; (iv) allowing caregivers to be present; and (v) take into account that a person with dementia may have difficulty understanding instructions or may respond slowly.

Treatment and support

- · Hearing impairment should be considered as a contributing factor if a person develops behaviour that challenges.
- Hearing support should be person-centred, tailored to individual needs, and involve multidisciplinary working (e.g., with dementia professionals).
- Hearing professionals should receive training in dementia awareness.
- People with dementia should be given information about the impact of hearing problems and be offered support and advice about how to use and maintain hearing aids and other assistive devices.
- · Community support services should be offered.
- Home, clinic, and activity centres for people with dementia should have appropriate lighting, acoustics and noise reduction.
- Caregivers should be provided with supports to reduce caregiving burden and stress.

[•] Increased awareness of comordibity and impacts of hearing loss among hearing and dementia clinicians.

repeating questions, disorientation, memory difficulties), communication difficulties may be misattributed by clinicians, friends and family to being due to dementia, rather than being due to a remediable hearing problem.

If a person with dementia does receive a hearing evaluation, they may have difficulty following instructions and/or completing the hearing test, making the audiological evaluation challenging. Hearing professionals report that they lack training and expertise in how to recognise and/or work with people with dementia [4].

Dementia affects capacity for learning, including learning to use hearing aids and other assistive hearing devices. It may also affect insight for the need for hearing aids, making continued use of hearing aids problematic. People with dementia may require additional support for use of hearing aids and other assistive devices. The stage of dementia may impact ability for a new user to adapt to hearing assistance.

Addressing hearing impairment to improve the lives of people with dementia

A key global priority is to improve quality of life for people living with dementia. Hearing interventions offer an effective, low cost, non-pharmacological and culturally neutral opportunity to address this priority. Systematic reviews suggest that people with dementia are able to use, and do benefit from hearing interventions, with improvements in quality of life and in behaviour that challenges [3, 5]. Effective identification and support for hearing impairment for people with dementia is vital.

Evidence to inform best practice for people with dementia is scare, but accumulating. Guidelines for hearing impairment for people with dementia are being developed and some were addressed in the piece by Littlejohn in this special issue [6]. Key recommendations for addressing hearing impairment for people with dementia are summarised in Table 1.

Hearing professionals have an essential role to play in improving quality of life for people with dementia and their friends and families. It is time for hearing professionals to address the global dementia challenge.

References

- Allen NH, Burns A, Newton V, et al. The effects of improving hearing in dementia. *Age and Ageing* 2003;**32(2)**:189-93.
- Cohen-Mansfield J, Taylor JW. Hearing aid use in nursing homes, Part 1: Prevalence rates of hearing impairment and hearing aid use. Journal of the American Medical Directors Association 2004;5(5):283-8.

- Dawes P, Wolski L, Himmelsbach I, et al. Interventions for hearing and vision impairment to improve outcomes for people with dementia: A scoping review. *International Psychogeriatrics* 2018;**31(2)**:203-21.
- Wright N, Stickley T, Mulla I, et al. Hearing loss and dementia: an exploratory study of the views of audiologists. *Quality in Ageing and Older Adults* 2014;**15(4)**:220-31.
- Mamo SK, Reed NS, Price C, et al. Hearing Loss Treatment in Older Adults With Cognitive Impairment: A Systematic Review. Journal of Speech, Language, and Hearing Research 2018;61(10):2589-603.
- Leroi I, Constantinidou F, Langenbahn D, et al. Hearing and Vision Impairment in People With Dementia: A Guide for Clinicians. Archives of Physical Medicine and Rehabilitation 2020;101(9):1667-70.

AUTHOR



Senior Lecturer, Department of Linguistics, Macquarie University, Sydney, Australia; Manchester Centre for Audiology and Deafness, University of Manchester, Manchester, UK.

Piers Dawes, PhD,