Hearing Loss in Older Adults
Who's Listening?

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The manifestations of age-related hearing loss (ARHL) in many older adults are subtle—having to increase the volume of the television, missing words of a conversation—and hence, hearing loss is often perceived as an unfortunate but inconsequential part of aging. This observation is borne out by the epidemiologic data, which report that although 26.7 million US adults aged 50 years or older have a clinically significant hearing loss, fewer than 15% use hearing aids.

The current approach to studying and treating ARHL is unfortunately rooted in this perception rather than in actual scientific evidence. The broader consequences of hearing loss in older adults are now beginning to surface in epidemiologic studies. ARHL has been found to be independently associated with poorer cognitive functioning and incident dementia, such that compared with individuals with normal hearing, those with mild, moderate, and severe hearing loss had a 2-, 3-, and 5-fold increased risk of developing dementia, respectively. The specific mechanisms underlying this association are unknown but may be related to the effects of hearing loss on cortical processing, increasing cognitive load, and social isolation, non–mutually exclusive pathways that could precipitate other cascading downstream effects of hearing loss on the health and functioning of older adults.

Although the effects of ARHL on cognitive pathways have yet to be fully elucidated, its effects on impaired verbal communication and reduced social engagement are commonly accepted. This latter point though, if indeed true, is profoundly important. Social engagement in older adults is a key determinant of overall morbidity and mortality in later life with direct causal and neurobiological pathways linking loneliness with physiologic pathology. Determining the long-term consequences of ARHL and whether the mechanistic pathways underlying these associations would be amenable to hearing-rehabilitative therapies in older adults is critically needed.

The current approach toward treating hearing loss, however, remains flawed and shaped by a medical model of disability in which a hearing impairment is simply addressed with medical devices. Consequently, there is an overwhelming impression among health care professionals and also the public that a hearing aid is all that is needed to “treat” hearing loss. In reality, ARHL is like any other physical impairment and requires concerted counseling, rehabilitative training, environmental accommodations, and patience.

ARHL begins and proceeds insidiously and is often characterized by the inability to understand words rather than the inability to hear, leading to the refrains of “I can hear you but I can’t understand you” or perhaps more commonly, “My hearing is fine. You’re just mumbling.” Overcoming these biases toward hearing loss and convincing patients of the functional and clinical significance of hearing loss is not easily accomplished in a 45-minute clinical appointment. There are currently no major public health programs focused on educating the public and the medical community about ARHL. Rather, efforts to understand the scope of the problem and address it are coming only from advocacy groups lacking the resources needed to have an appreciable influence on public health.

The current criterion standard for hearing health care is focused on clinic-based audiologic evaluation and follow-up appointments for hearing aid fitting and adjustments, a model of care that remains inaccessible to all but the most motivated of patients. Community-based interventions are needed to ensure that older adults are able to integrate and apply hearing technologies in their daily lives. The role of other alternative models of hearing health care delivery (eg, through self-fitting of hearing aids), while generally frowned upon by hearing professionals because of concerns about improper programming, also deserves thorough consideration.

In many cases, however, even adequate counseling, rehabilitative training, and properly fitted hearing aids are not enough. The most advanced hearing aids will still preferentially amplify whichever sounds are loudest and closest—useful in some situations but disadvantageous in many others, particularly those where people are gath-

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that historically have operated within distinct cultures and silos of thinking. Answering these basic questions will, therefore, require research initiatives that span the interface of these fields and that can foster collaboration between auditory and gerontological researchers across multiple research areas (eg, understanding the biology of aging in the cochlea, conducting epidemiologic studies of hearing loss in older adults, developing community-based approaches to hearing loss rehabilitation, and conducting clinical trials).

As a society with a rapidly aging population, implementing innovative strategies to promote successful aging in older adults is a public health, economic, and moral imperative. Concerted and interdisciplinary public health and research initiatives joining physicians, audiologists, gerontologists, public health researchers, and community advocates to study and treat hearing loss in older adults could potentially have substantial implications for society and the health of older adults—a message to which everyone needs to listen.

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REFERENCES