

Working for Better Hearing and Speech Month: Age-Related Hearing Loss

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The American Academy of Otolaryngology-Head and Neck Surgery Foundation works collaboratively with members and with other organizations to improve awareness, to promote public policy, and to advocate for people with hearing loss in the United States. The AAO-HNSF helped support an evidenced-based workshop on “Hearing Loss and Healthy Aging” hosted by the Institute of Medicine (IOM) and the National Research Council (NRC) held in Washington, DC on January 13-14, 2014.

Frank Lin MD, PhD of Johns Hopkins University School of Medicine and Alan Jette, PhD of Boston University School of Public Health and acted as co-chairs of the workshop. Otolaryngologists, neurotologists, audiologists, and industry and consumer representatives held open forums to: (1) characterize the public health impact of hearing loss and the relationship between hearing loss and healthy aging, (2) discuss the range of hearing needs and the current

array of hearing rehabilitation strategies, (3) identify areas of needed research and opportunities to explore innovative technologies and barriers to their use, and (4) consider collaborative strategies that can be adopted to identify hearing loss and intervention strategies.

A Growing Public Health Issue

The prevalence of hearing impairment doubles with each decade and is reported to affect two-thirds of adults over 65 years and 80% of adults over 80 years.¹ The significance of Age-related hearing loss (ARHL) has historically been minimized, viewed as a normal “part of aging,” and the subject of considerable social stigma.² Current insight into the intimate relationship between hearing health and healthy aging, together with rapid progress in technology and wireless connectivity, and an aging global patient population have catalyzed a major change in this view.

Despite the high prevalence of ARHL, hearing aids are only used by approximately 14% of those suffering from ARHL. Lack of awareness among health professionals of the role of hearing as a determinant of

healthy aging and of the treatment options beyond traditional hearing aids, the insidious nature of ARHL progression, and the lack of third party coverage for hearing healthcare services contribute to this low rate of access to comprehensive hearing loss treatment.

The Connection between Hearing Health and Healthy Aging

Evidence amassed from longitudinal and cross-sectional studies demonstrates that ARHL has implications extending far beyond traditional domains of speech and environmental awareness. Kathy Pichora-Fuller, PhD, Professor of Psychology and Audiology at the University of Toronto explained that many individuals with ARHL avoid the cascade of frustration associated with conversational speech in challenging auditory environments such as family gatherings and public meeting places by social withdrawal and isolation correlating strongly with depression.³

Neurotologist and AAO-HNS member Dr. Lin presented his compelling data showing that older adults with ARHL expend a greater amount of cognitive resources to decode a very impoverished



auditory signal. Coupling this higher cognitive load with social isolation and direct changes in brain structure imparting functional changes, older adults with ARHL, may have a lower threshold for decline in cognitive function and development of dementia.^{4,5,6} Functional disabilities and their associated societal costs are higher in those with ARHL. Data presented from the Baltimore Longitudinal Study on Aging and other longitudinal correlation studies showed increased risk of falls, walking difficulty, poor mobility, and incident disability among those with ARHL.^{7,8,9} Those with ARHL are less likely to be employed and more likely to develop reliance on community support services.¹⁰ Most profoundly, ARHL is associated with increased all-cause mortality via three mediating variables: disability in walking, cognitive impairment, and self-rated health.¹²

Identifying and Eliminating Barriers to Access of Hearing Healthcare Delivery

Significant barriers to access of hearing healthcare delivery must be understood

and overcome. Social stigma associated with hearing loss and use of hearing aids continues. Payment systems such as Medicare do not support hearing health due to exclusionary clauses (Section 1862 (a)(7) of the Social Security Act),¹³ which classify hearing aids and auditory assistive devices as “comfort items” resulting in categorical denials. Limitations in access to patient information about hearing health and ARHL interventions, an uncoordinated and highly variable auditory assistive device market for people who do make it to a hearing health specialist, and the high costs associated with these devices further challenges to people with ARHL.

In the second half of the workshop, various stakeholders in hearing healthcare including consumer advocates, healthcare providers, industry representatives, policy makers, and public health professionals discussed innovative strategies toward eliminating these barriers to hearing healthcare delivery. Charlotte Yeh, MD, Chief Medical Officer for AARP Services, Inc., outlined the need to shift the emphasis to “what can be gained from what has been lost.” For patients and consumers this may

take the form of raising awareness about the impact of hearing impairment and the tremendous potential quality-of-life gains associated with improved hearing health. In medical professional and public health domains this means promoting recognition among primary care providers of the link between hearing health and healthy aging and the opportunities for improving outcomes through preventative and protective measures.

Establishing partnerships between hearing health professionals, technology and business innovators, and policy-makers holds promise for making hearing health more affordable and more accessible to consumers. David Green, a MacArthur Fellow and founder of Sound World Solutions™, related his experience meeting the hearing health market needs and maintain profitability while using a social enterprise business model. Based on the tenets of price affordability and accessibility, this model aims to bring hearing aids and assistive listening devices to underserved consumers and to change the competitive landscape through pricing. Other novel strategies discussed included

tele-audiology (i.e., remote hearing aid programming, remote screening), taking advantage of smart phone technologies, and expanding online patient and provider education forums and support groups.

A James Firman, EdD, President and CEO of the National Council on Aging, remarked, hearing loss in older adults in the U.S. is “prevalent and insidious, but treatable, and it should be recognized as a solvable public health challenge.” By making hearing health a priority for policy makers we can influence allocation of funds for critical research on ARHL, improve auditory assistive device standards, bring pricing within reach of more consumers, and affect major changes toward improving healthy aging.

The Hearing Committee continues to track these critical debates in order to provide the AAO-HNS with needed expert input as our academy maintains a critical role in consumer advocacy and public policy making by governmental agencies. Please join us this May, during Better Hearing and Speech Month, to enhance opportunity for people with ARHL.

For more information and to view talks from “Hearing Loss and Healthy Aging: An IOM-NRC Workshop,” visit <http://www.iom.edu/Activities/PublicHealth/HearingLossAging.aspx>. 

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