

Respect (and Treat!) Your Elders

By Dennis Colucci, AuD, MA

In the aging population, hearing loss is associated with an increased risk of dementia, cognitive decline, depression and loneliness, balance deficits and falls, hospitalizations, and even early death. Information from the National Health and Nutritional Examination Survey indicates that 80 percent of adults above 85 years of age have significant hearing loss. For nonagenarians, the lack of socialization and increased isolation caused by hearing loss are the most important motivating factors for using hearing devices.

Rea et al. report that nonagenarians consider genetics, diet, good health, physical activity, social networking and resilience to be responsible for successful aging and a healthier life-course (Rea. *Biogerontology* 2015;16[5]:587-97).

According to Nosraty et al., "Models which emphasize the absence of disease and activity as criteria for successful aging may not be the most relevant and applicable in the oldest old. Instead, preference should be given to models that focus more on autonomy, adaptation, and sense of purpose" (Nosraty. *J Aging Res* 2012;2012:868797). Therefore, hearing loss treatment in the eldest patients is about ensuring daily engagement and use of devices that foster usability and wearability without discomfort.

NONAGENARIAN AUDIOLOGY

In a recent study on hearing loss in 50 nonagenarians, 95 percent had mild to severe low-frequency hearing loss (52.3 dB mean, 12.0 dB SD) and moderate to profound high-frequency hearing loss (77.4 dB mean, 12.7 dB SD), and 52 percent had profound loss at 8,000 Hz (Colucci. *HJ* 2014;67[2]:32). The average hearing loss was 60.1 dB (9.1 dB SD) with 14 (28%) patients demonstrating asymmetrical or mixed hearing loss. The average speech discrimination score on the NU-6 was 73.2 percent (19.8% SD).

Furthermore, the peripheral and central effects of hearing in noise or listening in complex environments with multiple talkers are evident in the nonagenarian and centurion populations. For this purpose, testing in noise and using dichotic sentence tests may be of significant value when considering lifestyle and amplification needs (Parham. *Otolaryngol Head Neck Surg* 2013;148[4]:537-9). For a number of nonagenarians, a monaural fitting may be more appropriate.

HEARING FOR HAPPINESS

The goal for treating hearing loss in nonagenarians is to help them have a more fulfilling life for the remainder of their days, regardless of possible co-morbid health issues. The effects of



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visual impairment from macular degeneration, cataracts, retinopathy, and glaucoma are also significant in this group, as these may cause a sense of isolation and impaired functionality. However, a blind patient who is more auditorily engaged is less likely to feel as isolated.

It is important to profile the patient by personality type, physical disabilities, psychological state, economic barriers, and desire and readiness to improve communication. Moreover, the degree of hearing loss, discrimination scores, and central effects must be considered so counseling could present a realistic outcome and meet the patient's specific needs, while noting limitations and areas for success.

Patients must have some level of confidence in the benefits to be gained from the time and cost invested in acquiring a hearing aid. This means the fitting of hearing aids and ALDs must be as transparent as possible. The device must be very easy to use with no physical or sound discomfort, and manageable for the patient and caregivers from day one. Roadblocks to use will result in rejection.

Selecting the hearing aid style is important for usability. Built-in T-Coils and Bluetooth capabilities are a must as connectivity for television and telephone are primary needs. Hearing instruments should be set for automated functions that enhance hearing at home. Having a telephone amplifier is necessary to insure audibility with or without hearing aids. However, many nonagenarians are homebound. Only higher functioning individuals interacting in more demanding environments will need more advanced technology.

For nonagenarians with a variety of sensory and motor disabilities, using fancy electronics and peripheral devices can be confusing, stressful, and even unnecessary to meet their needs. Simplified hearing solutions for activities make the most sense. Primary activities include interacting with visiting families, talking with friends and caregivers, seeing their doctors, and home activities and games like playing cards. Due to physical and psychological changes and more limited executive resources, the elderly need simple solutions. ■



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