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The progression and asymmetry of age-related hearing loss has not been well characterized in those 80 years of age and older because public datasets mask upper extremes of age to protect anonymity. We aimed to model the progression and asymmetry of hearing loss in the older old using a representative, national database. This was a cross-sectional, multicentered US epidemiologic analysis using the National Health and Nutrition Examination Study (NHANES) 2005-2006, 2009-2010, and 2011-2012 cycles. Subjects included non-institutionalized, civilian adults 80 years and older (n=621). Federal security clearance was granted to access publicly-restricted age data. Outcome measures included pure-tone average air conduction thresholds and the 4-frequency pure tone average (PTA). 621 subjects were 80 years old or older (mean=84.2 years, range=80-104 years), representing 10,600,197 Americans. Hearing loss exhibited constant acceleration across the adult lifespan at a rate of 0.0052 dB/year2 (95% CI = 0.0049, 0.0055). Compounded over a lifetime, the velocity of hearing loss would increase five-fold, from 0.2 dB loss/year at age 20 to 1 dB loss/year at age 100. This model predicted mean PTA within 2 dB of accuracy for most ages between 20 and 100 years. There was no change in the asymmetry of hearing loss with increasing age over 80 years (linear regression coefficient of asymmetry over age=0.07 (95% CI=-0.01, 0.24). In conclusion, hearing loss steadily and predictably accelerates across the adult lifespan to at least age 100, becoming near-universal. These population-level statistics will guide treatment and policy recommendations for hearing health in the older old.

RANDOMIZED CONTROLLED TRIAL OF TAILORED MUSIC LISTENING INTERVENTION FOR SLEEP IN DEMENTIA

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Sleep disruption in older adults living with Alzheimer's disease and related dementias (ADRD) is debilitating and contributes to increased institutionalization, reduced cognitive function, and accelerated disease progression. Given the potential harmful effects of pharmacologic treatment, nonpharmacologic approaches, such as music, may provide a safer alternative to improve sleep quality in this vulnerable population. No empirically validated music protocol exists to address sleep disruption in older adults with ADRD living at home. Therefore, the specific aims of this wait-list randomized controlled trial were to examine the 1) feasibility; 2) acceptability; and 3) preliminary efficacy of a tailored music intervention in home-dwelling older adults with ADRD with sleep disruption and their caregivers. This presentation focuses on baseline characteristics of dyads, which included persons with ADRD and their caregivers who have completed the clinical trial so far (N=28). The mean age of persons with ADRD was 71.6 (SD: 7.6). The mean age of caregivers was 58.7 (SD: 16.7). Sixty-eight percent (n=19) of persons with ADRD were female. Similarly, the majority of caregivers were female (n=20, 71.4%). Seventy-four percent of persons with ADRD scored 0.5 on the Clinical Dementia Rating instrument, indicative of very mild dementia. The majority of dyads identified themselves as non-Hispanic (>92%). Seventy-nine percent of persons with ADRD identified themselves as Black or African-American (n=22, 79%), while 82.1% of caregivers identified themselves as Black or African American. Preliminary analysis of qualitative data indicates high acceptability of the intervention. Results from this research study will inform a future efficacy trial.

SELF-REPORTED UPTAKE OF CLINICAL PREVENTIVE SERVICES BY VISION IMPAIRMENT STATUS

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Disease prevention is central to healthy aging. People with vision impairment are more likely than those without to report barriers to accessing health care and have unmet health care needs. We examined the association between functional vision impairment and preventive care uptake among adults aged 65 years and older in the 2016 and 2018 Behavioral Risk Factor Surveillance System (BRFSS) survey. The outcome of interest was being up-to-date with the recommended core clinical preventive services, as defined by Healthy People 2020: influenza and pneumococcal vaccination, and colorectal cancer screening for men, with the addition of breast cancer screening for women. Self-reported vision impairment was defined as blindness or serious difficulty seeing, even when wearing glasses. In models adjusted for sociodemographic characteristics (including age), access to care, and health/functional status, there was no difference in the odds of reporting being up-to-date with the recommended core preventive services among men with vision impairment compared to those without (odds ratio [OR]=0.90, 95% confidence interval [CI]=0.8-1.01); however, men with vision impairment were 0.82 times (95% CI=0.71-0.94) less likely than those without to report being up-to-date with colorectal cancer screening. Women with vision impairment were less likely than those without to report being up-to-date with the recommended core preventive services (OR=0.77, 95%) CI=0.69-0.87); among the different services, the odds were lowest for reporting breast and colorectal cancer screening. These findings suggest that to achieve higher rates of preventive care uptake, especially cancer screening, older adults with vision impairment may be a special group to target.

SUPPORTIVE HOME ENVIRONMENTS AS A MEDIATOR BETWEEN SENSORY IMPAIRMENT AND DISABILITY

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Home environments are important to older adults and can help to preserve independence in every day functioning