



Iran's Aging Population and the New Responsibility of Audiologists: Preparing for the Near Future, Policy Brief

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Dear Editor,

Human aging is an incredibly complex process characterized by time-dependent declines in function, leading to a decline in quality of life (1). Advances in medical technology and increasing life expectancy have been accompanied by a global decline in birth rates, accelerating population aging. The United Nations predicts that by 2050, one in six people will be over 65 years of age, and the number of people over 80 years of age will triple (2). Although hearing loss in children remains a global health priority, more than 90% of the burden falls on older adults. Almost everyone, if they live long enough, will experience some degree of hearing loss, with at least 50% developing moderate to profound impairment requiring intervention (3). Epidemiological studies indicate that hearing loss prevalence doubles approximately every decade of life, with two-thirds of people aged 70 and over affected (3). According to WHO, more than half of adults with disabling hearing loss are aged 65 years or older, and prevalence is higher in low- and middle-income countries (1).

In Iran, studies show a high prevalence of hearing loss among the elderly. Roohbakhsh et al. reported 79% among nursing home residents, Jalali et al. reported 95.8% in rural elderly populations, and Nemati et al. reported 93.8% in northern rural areas (4-6). In the largest national study on the elderly in Tehran, 68.7% of individuals over 60 had hearing loss, and 10.4% had significant impairment (7). Population aging trends suggest that by 2030, about 30% of Iranians will be

elderly, highlighting the need for targeted interventions (2, 7).

Hearing loss in adulthood can decrease employment opportunities and affect psychosocial health, including loneliness, depression, and anxiety (8). It can also impair social functioning and contribute to cognitive disorders and dementia (8). Early diagnosis and rehabilitation, including hearing aids and auditory training, are crucial to prevent disability progression (8). Other common age-related auditory problems include tinnitus and central auditory processing disorder (CAPD), which affect speech comprehension, especially in noisy environments, and can lead to fatigue, anxiety, and social isolation (8). Balance and vestibular disorders are also prevalent, leading to instability and an increased risk of falls, one of the leading causes of injury-related mortality among the elderly (9, 10). In Iran, nearly half of the elderly in Ardakan report dizziness, which is associated with a higher fall risk (10). Therefore, performing accurate clinical assessments and implementing targeted management strategies play a significant role in preventing complications and improving the quality of life in this vulnerable group.

Policy Recommendation

- National registry for elderly hearing screening data: Establishing a national infrastructure to systematically record screening data for hearing and balance disorders in the elderly population with the aim of promoting preventive care and improving health macro-planning.

- Expansion of geriatric audiology clinics: Development of specialized clinics in the field of geriatric audiology to provide comprehensive

rehabilitation services to the elderly with hearing and balance disorders.

- Inclusion of gerontology courses in audiology curricula: Including the subject of geriatric care and creating a dedicated geriatric course unit in the curriculum of rehabilitation disciplines, especially audiology, to improve the professional preparation of graduates in response to the challenges posed by the aging population.

- Enhanced insurance coverage for auditory services: Strengthening insurance and subsidy coverage for hearing aids and hearing rehabilitation services, given the limitations of current support and long-time lags in providing financial assistance, especially with the aim of increasing access for the elderly and vulnerable groups to essential hearing services.

Strengthening interdisciplinary collaboration: Strengthening interdisciplinary interaction and collaboration between audiologists, rehabilitation specialists, geriatricians, psychologists, and social workers to provide more comprehensive and efficient services to the elderly population.

- Elder-friendly clinic infrastructure: Adaptation of the physical spaces of audiology clinics to accommodate the elderly by equipping them with facilities such as elevators, lifts, toilets, grab bars, safe flooring, and barrier-free paths.

- Home-based and tele-audiology services: Expansion of home audiology services using modern technologies, including tele-audiology, with the aim of increasing access to hearing assessment and rehabilitation for the elderly, especially in deprived areas or for people with limited mobility. Services may include remote assessment, hearing aid adjustment and monitoring, consultation, and training in the use of hearing aids.

Footnotes

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References

1. Noto S. Perspectives on Aging and Quality of Life. *Healthcare (Basel)*. 2023;**11**(15):2131. [PubMed ID: 37570372]. [PubMed Central ID: PMC10418952]. <https://doi.org/10.3390/healthcare11152131>.
2. Department of Economic and Social Affairs. *World Population Prospects*. New York, USA: United Nations; 2019.
3. Goman AM, Lin FR. Prevalence of Hearing Loss by Severity in the United States. *Am J Public Health*. 2016;**106**(10):1820-2. [PubMed ID: 27552261]. [PubMed Central ID: PMC5024365]. <https://doi.org/10.2105/AJPH.2016.303299>.
4. Rouhbakhsh N, Tatarm Z, Alipourhaydari M. [A comparison of self-reported hearing handicap and audiometric thresholds in nursing home residents]. *Audiol*. 2006;**15**(2):46-52. FA.
5. Jalali M, Gerami H, Nemati S, Dadashi A, Banan R, Karimi Z, et al. [Investigating Hearing Impairment in the Elderly Population of Rural Areas of Rasht City, North of Iran]. *J Guilan Univ Med Sci*. 2015;**24**(94):24-8. FA.
6. Nemati S, Saberi A, Jalali M, Gerami H, Karimi Z, Nasirmohtaram S, et al. Hearing Impairment and Hearing Aid Usage in the Elderly of Northern Iran's Rural Areas: A Field Study. *Caspian J Neurol Sci*. 2022;**8**(1):60-5. <https://doi.org/10.32598/cjns.8.28.32.156>.
7. Rashedi V, et al. Prevalence of disability in Iranian older adults in Tehran, Iran: A population-based study. *J Health Soc Sci*. 2016;**1**(3):251-62.
8. Lin FR. Hearing loss and cognition among older adults in the United States. *J Gerontol A Biol Sci Med Sci*. 2011;**66**(10):1131-6. [PubMed ID: 21768501]. [PubMed Central ID: PMC3172566]. <https://doi.org/10.1093/gerona/glr115>.
9. Agrawal Y, Carey JP, Della Santina CC, Schubert MC, Minor LB. Disorders of balance and vestibular function in US adults: data from the National Health and Nutrition Examination Survey, 2001-2004. *Arch Intern Med*. 2009;**169**(10):938-44. [PubMed ID: 19468085]. <https://doi.org/10.1001/archinternmed.2009.66>.
10. Morowatisharifabad MA, Sharifabad MH, Aboutorabi-Zarchi M. Prevalence and Related Factors of Dizziness Among Older Adults: A Cross-Sectional Study in Ardakan City, Iran. *Curr Aging Sci*. 2024;**17**(3):237-46. [PubMed ID: 38415494]. <https://doi.org/10.2174/0118746098277513240207070946>.