

Treatment Efficacy Summary



AMERICAN
SPEECH-LANGUAGE
HEARING
ASSOCIATION

Hearing Loss and Hearing Aids in Adults

Hearing loss is measured as a difference from the normal ability to detect sound relative to established standards. Hearing loss interferes with communication efficiency and hinders interpersonal communication, the most basic of all human attributes. Difficulty in understanding conversation affects employment performance, familial and peer relationships, and interactions with health care professionals. Overall, 18% of the adult population in the United States experiences some hearing difficulty. One third of adults ages 70 and older have hearing loss. Individuals with hearing impairment benefit from the services of audiologists and the use of hearing aids as documented by clinical evidence. Additionally, audiologic rehabilitation promotes successful hearing aid use and improves communication and psychosocial functioning of individuals with hearing impairment.

Hearing aids have proven effective in alleviating the communicative and psychosocial consequences of hearing loss in adults with mild, moderate, and moderately-severe sensorineural hearing loss. A recent study conducted on 194 older adults with mild to moderately-severe sensorineural hearing loss found that beneficial treatment effects from hearing aids emerge as early as six

weeks after initiation of treatment. They are most pronounced in the areas of social, emotional, and communicative function, and remain one year after sustained hearing aid use.ⁱ The study concluded that hearing aids represent a relatively inexpensive intervention for the amount of benefit gained.ⁱⁱ According to a study released by the National Council on the Aging (NCOA), hearing aid users reported benefits in many areas of their lives including relations at home, mental health, sense of safety, and self-confidence.ⁱⁱⁱ A large-scale study conducted by the National Institute on Deafness and Other Communication Disorders (NIDCD) and the Department of Veterans Affairs (VA) provided strong scientific evidence that hearing aids provide benefit to adults with hearing loss in quiet and noisy listening situations.^{iv, v, vi}

The role of the audiologist in managing people with hearing impairment includes an evaluation and rehabilitation of the hearing loss and its negative effects. Evaluation entails identifying, assessing, and quantifying the degree of auditory dysfunction and obtaining the client's appraisal of the communication difficulties and associated adjustment. The rehabilitative component includes delivery of services and technology (e.g., hearing aid or assistive listening device) that enables functional communication, evaluation of client progress, and

assessment of treatment outcome. Intervention is considered successful when the communication and adjustment difficulties are alleviated for the short and long term.

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ⁱ Mulrow, E., Aguilar, C., Endicott, J., Tuley, M., Velez, R., Charlip, W., Rhodes, M., Hill, J., & DeNino, L. (1990). Quality of life changes and hearing impairment: Results of a randomized trial. *Annals of Internal Medicine*, 113, 188-194.

ⁱⁱ Chmiel, R., Jerger, J., Wilson, N., & Pirozzolo, F. (1994). Impact of amplification on the quality of life in elderly individuals with hearing impairment. *Journal of the American Academy of Audiology*.

ⁱⁱⁱ Untreated Hearing Loss Linked to Depression, Anxiety, Social Isolation in Seniors: A report by The National Council on the Aging. May 1999.

^{iv} Larson, V. (2000). Efficacy of 3 commonly used hearing aid circuits. *Journal of the American Medical Association*. 284:1806-1813.

^v Shanks, J., Wilson, R., Larson, V., & Williams, D. (2002). Speech recognition performance of patients with sensorineural hearing loss under unaided and aided conditions using linear and compression hearing aids. *Ear and Hearing* 23:280-290.

^{vi} Haskell, G. (2002). Subjective measures of hearing aid benefit in the NIDCD/VA Clinical Trial. *Ear and Hearing* 23: 301-307.