

Hearing Screening in Older Adults: A Brief Hearing Loss Screener

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WHY: Hearing impairment is common in older adults; its prevalence increases progressively with age. Studies estimate that at least 30% of individuals aged 65 to 74 years and 40% to 66% of those aged 75 years and older have some degree of hearing loss. Hearing loss related to normal aging is the most common cause, but other risk factors include: advancing age, male gender, lower educational status, exposure to regular, excessive noise, cerumen impaction, ototoxic medications, tumors, and diseases that affect sensorineural hearing. Hearing loss can lead to miscommunication, social withdrawal, confusion, depression, and reduction in functional status. Although it is treatable, hearing loss often goes undetected and untreated.

BEST TOOL: The Brief Hearing Loss Screener is a simple self-report screening instrument consisting of 7 questions. It is not designed to replace other validated screening methods, such as the audioscope, but can be used as a tool when audiologic screening is impractical. The Brief Hearing Loss Screener is unique in that it considers the risks associated with advancing age, gender and educational level of the individual. Scores can range from 0 to 8. A score of 3 or more points is a positive score indicating a need for further evaluation.

TARGET POPULATION: The Brief Hearing Loss Screener can be used with non-institutionalized older adults in a variety of clinical and community settings. It can be administered using a face-to-face interview. However, time constraints or a severe-to-profound hearing loss may preclude a face-to-face interview, in which case the tool can be administered by having the individual do a paper-and-pencil self-report.

VALIDITY AND RELIABILITY: The Brief Hearing Loss Screener was developed in 1998 using data from a probability sample of non-institutionalized older people who participated in the National Health and Nutrition Examination Survey during the mid 1970's. Data was used retrospectively to develop a logistic model. Hearing loss was defined using Ventry and Weinstein (VW) criteria and the High Frequency Pure-Tone Average (HFPTA) scale. The instrument had 80% sensitivity and 80% specificity in predicting hearing loss using the VW criteria and 59% sensitivity and 88% specificity in predicting hearing loss using HFPTA criteria. No reliability data was reported.

STRENGTHS AND LIMITATIONS: Although the Brief Hearing Loss Screener cannot measure the amount of hearing sensitivity loss as detected by audiometric testing, it is a simple, inexpensive and quick tool that can identify individuals who need further hearing evaluation. It also differs from other currently used hearing loss screening instruments in that it includes sociodemographic information as well as specific hearing loss questions. Self-reporting requires that the individual is cognitively intact and can respond verbally or in a written form to the questions.

MORE ON THE TOPIC:

Best practice information on care of older adults: www.ConsultGeriRN.org.

National Academy on an Aging Society. (December 1999). Hearing loss: A growing problem that affects quality of life. Number 2 in a series on Challenges for the 21st Century: Chronic and Disabling Conditions. Retrieved February 28, 2007, from <http://ihcrp.georgetown.edu/agingsociety/pdfs/hearing.pdf>

Reuben, D.B., Walsh, K., Moore, A.A., Damesyn, M., & Greendale, G.A. (1998). Hearing loss in community-dwelling older persons: National prevalence data and identification using simple questions. *JAGS*, 46(8), 1008-1011.

Yueh, B., Shapiro, N., MacLean, C.H., & Shekelle, P.G. (2003). Screening and management of adult hearing loss in primary care: Scientific Review. *JAMA*, 289, 1976-1985.

Brief Hearing Loss Screener

Clinical Scale to Detect Hearing Loss

Points

1) Age: _____

If age >70 years = 1 point _____

2) Sex:

Male Female

If male = 1 point _____

3) Highest grade attended

12th grade or less
 greater than 12th grade

If ≤ 12th grade = 1 point. _____

4) Have you ever had deafness or trouble hearing with one or both ears?

Yes No

If "Yes", continue to Question #5.

If "No", go to Question #6. 0

(No points assigned based on this question)

5) Did you ever see a doctor about it?

Yes No

If "Yes" = 2 points _____

6) Without a hearing aid, can you usually hear and understand what a person says without seeing his/her face if that person whispers to you from across the room?

Yes No

If "No" = 1 point _____

7) Without a hearing aid, can you usually hear and understand what a person says without seeing his/her face if that person talks in a normal voice to you from across the room?

Yes No

If "No" = 2 points _____

TOTAL _____

3 or more points is a positive score indicating a need for further evaluation.

Source: Reuben, D.B., Walsh, K., Moore, A.A., Damesyn, M., & Greendale, G.A. (1998). Hearing loss in community-dwelling older persons: National prevalence data and identification using simple questions. *Journal of the American Geriatrics Society*, 46(8), 1008-1011. Reprinted with permission from Blackwell Publishing.



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