Prevalence and Patterns of Hearing Loss among the Elderly with Hypertension in Southwest, Nigeria

Authors: Ayo Osisanya, Promise Ebuka Okonkwo

Abstract: Reduced hearing sensitivity among the elderly has been attributed to some risk factors and influence of age-related degenerative conditions such as diabetes, cardiovascular disease, Alzheimer's disease, bipolar disorder, and hypertension. Hearing loss; especially the age-related type (presbycusis), has been reported as one of the global burden affecting the general well-being and quality of life of the elderly with hypertension. Thus, hearing loss has been observed to be associated with hypertension and functional decline in elderly, as this condition makes them experience poor communication, fatigue, reduced social functions, mood-swing, and withdrawal syndrome. Emerging research outcomes indicate a strong relationship between hypertension and reduced auditory performance among the elderly. Therefore, this study determined the prevalence, types, and patterns of hearing loss associated with hypertension, with a bid to suggesting comprehensive management strategies and a model of creating awareness towards promoting good healthy living among the elderly in Nigeria. One hundred and seventytwo elderly, aged 65-85 with hypertension were purposively selected from patients undergoing treatment for hypertension in some tertiary hospitals in southwest Nigeria for the study. Participants were suggested to Pure-Tone Audiometry (PTA) through the use of Maico 53 Diagnostic Audiometer to determine the degree, types ad patterns of hearing loss among the elderly with hypertension. Results showed that 148 (86.05%) elderly with hypertension presented with different degrees, types, and patterns of hearing loss. Out of this number, 123 (83.11%) presented with bilateral hearing loss, while 25 (16.89%) had unilateral hearing loss. Degree of hearing loss, 74 moderate hearing loss, 118 moderately severe and 50 severe hearing loss. 36% of the hearing loss appeared as flat audiometric configuration, 24% were slopping, 19% were rising, while 21% were tough-shaped audiometric configurations. The findings showed high prevalence of hearing loss among the elderly with hypertension in Southwest, Nigeria. Based on the findings, management of elderly with hypertension should include regular audiological rehabilitation and total adherence to hearing conservation principles, otological management, regulation of blood pressure and adequate counselling / follow-up services.

Keywords: auditory performance, elderly, hearing loss, hypertension

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