

Hearing Loss amongst the Elderly in a Southeast Asian Population – A Community-based Study

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Abstract

Introduction: The aim of this study was to determine the prevalence of hearing loss amongst the elderly population attending community services in Singapore. The usefulness of the Hearing Handicap Inventory for the Elderly Screening version (HHIE-S) in detecting hearing loss was also investigated. **Materials and Methods:** Pure-tone audiometry was carried out on a randomly recruited cohort of people (n = 338) over 60 years old and who were attending rehabilitation and social day care services for senior citizens at St Luke's Elder Care centres located throughout the city. Prior to the hearing test, subjects were administered the HHIE-S questionnaire, which was translated into the language they were most conversant in. **Results:** The study cohort showed mean pure-tone average at speech frequencies (0.5, 1, 2 and 4 kHz; 4-frequency average hearing level [4FA HL]) of the subjects' better hearing ear that has worsened with age. The percentage of the elderly with disabling hearing impairment (4FA >40 dB HL) was 9.1% (60 to 69 years old), 22.0% (70 to 79 years old), 35.7% (80 years old and above). Across all age groups, males had significantly poorer thresholds at 4 kHz than females. When adjusted for the demographic profile of the country, the prevalence of hearing loss (4FA >25 dB HL) and disabling hearing impairment (4FA >40 dB HL) amongst the elderly in Singapore was 63.7% and 16.2%, respectively. We estimate that there are currently 422,000 elderly with hearing loss greater than 25dB HL and over 100,000 elderly with disabling hearing loss of over 40 dB HL. Of subjects with a disabling hearing impairment, only 7.5% used hearing aids. The use of self-reporting HHIE-S showed poor sensitivity in detecting hearing loss of various severities amongst the elderly. **Conclusion:** These data provide estimates of the prevalence and severity of hearing loss in older persons in Singapore and suggest that more can be done to help the elderly recognise, acknowledge and address hearing loss in the country.

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