

TINNITUS DI KALANGAN WARGA TUA

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Kajian ini bertujuan untuk menyelidik ciri-ciri epidemiologikal, psikoakustikal, and kesan ketidakupayaan tinnitus di kalangan warga tua. 12.8 % daripada 507 orang warga tua (55 – 93 tahun) di kawasan-kawasan terpilih Selangor dan Kuala Lumpur melaporkan tinnitus. Mereka yang melaporkan tinnitus terdiri daripada 35 orang lelaki and 30 orang wanita (min umur = 67 tahun). Prevalens tinnitus didapati tinggi secara signifikan dalam golongan lelaki, dalam kumpulan yang melaporkan kurang pendengaran, dalam kumpulan yang pernah terdedah kepada bunyi bising pekerjaan, dan dalam kumpulan pengguna alat bantu pendengaran ($p < 0.05$). Prevalens tinnitus meningkat mengikut umur; and interaksi pelbagai faktor dalam proses penuaan menyebabkan peningkatan prevalens. Hampir separuh (48 %) telah dikenalpastikan mengalami ketidakupayaan pada tahap sedikit hingga teruk akibat tinnitus. Tempoh, corak permulaan, lateraliti (*laterality*), bilangan lokasi, jenis-jenis bunyi, bilangan bunyi, naik turun kekuatan bunyi (*loudness fluctuation*), dan peratusan masa tinnitus didengari, didapati tiada kaitan dengan tahap gangguan dan keterukan ketidakupayaan tinnitus. 94 % daripada mereka yang mempunyai tinnitus dapat memadamkan frekuensi tinnitus dalam lingkungan 125 – 8000 Hz, dan memadamkan kekuatan tinnitus dalam julat 0 – 13 dB SL (min = 2.5 dB SL). Warga tua mempunyai tahap nada dan kekuatan tinnitus yang lebih rendah secara relatif. Frekuensi padan nada tinnitus (*pitch-matched frequency*) dan kekuatan relatif (*relative loudness*) didapati tiada korelasi yang signifikan dengan tahap gangguan dan keterukan ketidakupayaan. Penentuan kekuatan secara subjektif (*subjective rated loudness*) adalah satu-satunya faktor yang menyumbang ke atas tahap gangguan ($p < 0.05$) dan keterukan ketidakupayaan (korelasi spearman = 0.6, $p < 0.01$).

Kata kunci : Tinnitus, warga tua

TINNITUS IN THE ELDERLY

This study was conducted to investigate the epidemiological, psychoacoustical and handicapping characteristics of tinnitus in the elderly population. 12.8 % of the 507 elderly (55 – 93 years old) selected from Selangor and Kuala Lumpur areas reported tinnitus. Tinnitus sufferers were consisted of 35 males and 30 females (mean age = 67). The prevalence of tinnitus was significantly higher in males, in those who reported hearing loss, in those who exposed to occupational noise, and in those who were hearing aid users ($p < 0.05$). Prevalence of tinnitus increases with age; and the interaction of multifactor in aging caused an increased prevalence. Nearly half (48 %) were identified to have mild to severe degree of handicap. Duration, onset, laterality, number of perceived location, type of sound, number of sound, loudness fluctuation, and percentage of time tinnitus being heard were not related to the annoyance levels and handicap severity of tinnitus. 94 % of tinnitus subjects had the pitch of their tinnitus matched within 125 – 8000 Hz, and the loudness was matched within 0 – 13 dB SL (mean = 2.5 dB SL). Elderly had relatively lower pitch and loudness level of tinnitus. Pitch-matched frequency and relative loudness (dB SL) were not significantly correlated to annoyance levels and handicap severity. Subjective rated loudness (10-point scale) was the only contributing factor to annoyance levels ($p < 0.01$) and handicap severity (Spearman correlation = 0.6, $p < 0.01$).

Keywords : Tinnitus, elderly

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