

THRESHOLD SHIFTS AND CHANGES OF DPOAE AMPLITUDE AFTER NOISE EXPOSURE

Sulaiman Hamzah

This study was carried out as a pioneer research in the study to see the changes of auditory system and DPOAE amplitude after noise exposure among 40 workers of Pejabat Kesihatan, Daerah Gombak, Selangor. The purpose of this study was to measure the changes in Pure Tone Audiometry (PTA) threshold and Distortion Product Otoacoustic Emmission (DPOAE) amplitude among the noise exposed and non-noise exposed workers. The subjects consist of 20 of workers with noise exposure and also 20 workers (control) on non-noise exposed. The subjects were selected randomly among dengue vector fogging workers and control group was selected in strata among administration workers. Both groups were male aged between 18 to 45- year-old. They were tested by PTA and DPOAE before and after work. The level of noise were measured by dosimeter. The results of this study showed that there was an increase in PTA threshold and a decrease in DPOAE amplitude after been exposure to noise. This study also showed significant correlation ($p < 0.05$) between results of PTA and DPOAE. As a result, this study suggested inversely correlation between PTA and DPOAE result. This study showed that both tests produce reliable results and are suitable to be practiced in monitoring auditory system after noise exposure.

Hamzah, S. 2001. Threshold Shifts and Changes of DPOAE Amplitude after Noise Exposure. Bachelor of Audiology Thesis. Universiti Kebangsaan Malaysia.