Noise Exposure and Hearing Symptoms Among Laundry Workers and Mechanical Cutters in a Teaching Hospital

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ABSTRACT: Workers who are exposed to high noise level were at risk of noise-induced hearing loss (NIHL). This cross-sectional study was conducted to investigate the noise exposure level and hearing symptoms among workers exposed to noise in a teaching hospital. Utilising convenience sampling method, 20 laundry workers and 17 mechanical cutters were recruited into this study. Noise exposure levels were measured using noise dosimeter for 8 hours and information on hearing symptoms were gathered using a modified questionnaire adopted from the American Speech Language Hearing Association (ASHA). A significantly higher mean noise level (85±2 dB(A)) was reported among mechanical cutters as compared to laundry workers (80±3 dB(A)), p=0.001 although the former had shorter duration of noise exposure (20±3 hours per week vs. 28±12 hours per week). Fourteen (70%) laundry workers and six (35%) mechanical cutters had reported having hearing problem in noisy background. Higher proportion of laundry workers (n=8, 57%) had reported having hearing symptoms compared to mechanical cutters (n=6, 43%) and longer work years was found to be significantly associated with hearing symptoms (p=0.049). There is a need of appropriate education and training on noise exposure, NIHL and hearing protection devices usage in the workplaces.

Keywords - Hearing Symptoms, Laundry Workers, Mechanical Cutters, Noise Exposure