Noise Induced Hearing Loss and the Use of Personal Hearing Protection Devices among Liquefied Gas Cylinder Infusion Factory Workers in Biyagama Zone, Sri Lanka

K.P.A.Perera[1], R.Fonseka[2], C.Siriwardana[3]

[1] *Department of Disability Studies, Faculty of Medicine, University of Kelaniya*
[2] *Ratmalana Audiology Centre, Ratmalana*
[3] *Vision Care, Optical Services, Colombo 07*

The purpose of this study was to determine the prevalence of Noise Induced Hearing Loss (NIHL) and the use of Personal Hearing Protection Devices (PHPDs) among Liquefied Petroleum Gas (LPG) cylinder infusion factory workers in Biyagama, Sri Lanka. 79 workers who were exposed to noise in the working environment volunteered to participate in this cross-sectional study. Data were collected through screening audiological evaluations, diagnostic audiological evaluations, interviewer-administered case histories and a questionnaire. Four sound level meter measurements were taken in the open work area during a regular work shift and average noise exposure level in the worksite was calculated using those measurements. The mean age of the participants was 32.67 (SD=8.37) years. The mean work duration was 5.58(SD=4.62) years. The average noise exposure level in the worksite was 97.2dBA. 20.3% (n=79) of the workers had signs of NIHL. NIHL was associated with age (p=0.02) and the knowledge regarding the use of PHPDs as a prevention method was high (97.5%). Self-reported use of PHPDs was 69.6%. The major complaint of the non-users was discomfort. There was an association between work duration and PHPDs use (p=0.02). NIHL was associated with use of PHPDs (p=0.017). Despite having good knowledge of PHPDs, use of PHPDs was much less. Industrial authorities should institute hearing conservation programmes and should strictly monitor implementation of noise regulations.