Occupational noise-induced hearing loss in India

Abstract

Noise is the insidious of all industrial pollutants, involving every industry and causing severe hearing loss in every country in the world. Exposure to excessive noise is the major avoidable cause of permanent hearing impairment. Worldwide, 16% of the disabling hearing loss in adults is attributed to occupational noise, ranging from 7 to 21% in the various subregions. The estimated cost of noise to developed countries ranges from 0.2 to 2% of the gross domestic product (GDP). Noise-induced hearing loss (NIHL) is bilateral and symmetrical, usually affecting the higher frequencies (3k, 4k or 6k Hz) and then spreading to the lower frequencies (0.5k, 1k or 2k Hz). Other major health effects are lack of concentration, irritation, fatigue, headache, sleep disturbances, etc. The major industries responsible for excessive noise and exposing workers to hazardous levels of noise are textile, printing, saw mills, mining, etc. Hearing protectors should be used when engineering controls and work practices are not feasible for reducing noise exposure to safe levels. Earmuffs, ear plugs and ear canal caps are the main types of hearing protectors. In India, NIHL has been a compensable disease since 1948. It is only in 1996 that the first case got compensation. Awareness should be created among workers about the harmful effects of noise on hearing and other body systems by implementing compulsory education and training programs. There are very few published studies of NIHL in India. More extensive studies are needed to know the exact prevalence of NIHL among the various industries in India.