

Hearing-Loss Profile of Ground Handling Workers In Juanda Airport Surabaya

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ABSTRACT

Background : The World Health Organization (WHO) reports that there are 466 million people in the world who are currently suffering from hearing loss. Hearing loss can be caused by many factors, including genetic factors, degenerative factors, infectious diseases, trauma, consumption of drugs that can affect the sense of hearing, and noise. One of the work environment that can cause noise is at the airport. At the airport, we can find noise that is quite loud, especially in the ground handling section. If workers in the ground handling section are exposed to noise continuously, then it is possible that the worker will experience hearing loss.

Methods : This type of research is descriptive with cross-sectional design. The research was conducted from April 2018 to November 2018 at Juanda Airport Surabaya. The samples in this study were workers of Jasa Angkasa Semesta Ltd., chosen using a simple random sampling technique. The subjects who fulfilled the criteria were 89 people from 160 workers, i.e working minimum 2 years and the age between 20-60 years. The research data were obtained from audiometric examinations and the answers of the questionnaire related to the reasearch from the subjects.

Results : The normal hearing were found in workers with the age range 40-49 years (16.85%), whereas in the age range 50-60 years more workers had bilateral type hearing loss (13.48%). Among male workers, 40.45% had normal hearing, 16.86% unilateral type, 29.21% bilateral type. While in the female workers, 6.74% had normal hearing, 3.37% had both unilateral and bilateral type. The hearing loss mostly happened on workers in the ramp section (± 93.4 dB) with unilateral and bilateral type of loss, successively 4.49% and 6.74%. The normal hearing were mostly found in workers with working period <10years (24.72%), meanwhile the most number of unilateral type was 10-15 years (6.74%), and bilateral type was 16-20 years (12.36%). Workers using ear protectors mostly had normal hearing (25.84%), while workers without ear protectors mostly had unilateral type hearing loss (14.61%). In the bilateral type of hearing loss, there were no significant difference between the workers using and not using ear protectors.

Conclusions : The workers who mostly get hearing loss are at the age of 40-49 years; in the Ramp section; working period of 17-21 years; and rarely used ear protectors. We recommend that prevention programmes is held.

Keywords : Hearing Loss, Ground Handling Workers, Juanda Airport Surabaya