Predicting Factors of Hearing Protection Device Use of Workers in Kaolin Mineral Dressing Factories, Thailand

Authors: Watcharapong Yaowarat, Thanee Kaewthummanukul, Waruntorn Jongrungrotsakul

Abstract : Noise-induced hearing loss, the most significant occupational and safety problem among the working population, can be effectively prevented through hearing protection devices (HPDs) use. This study aimed to examine whether the following factors, perceived benefits, perceived barriers, perceived self-efficacy, and interpersonal and situational influences about using hearing protection could predict HPD use among 132 qualified workers in production lines at Kaolin Mineral Dressing factories, Uttaradit and Lampang provinces. Data collection was undertaken from August to September 2020 according to the interview form developed by Yaruang et al. (2010), which was assured by a panel of experts and its reliability value was at an acceptable level. Data analysis was performed using logistic regression analysis. The results revealed that only the situational factor of using hearing protection could predict HPD use, which accounted for 21.80 percent of the total variance for HPD use. It was also found that the study sample who had a score for the situational factors on using hearing protection greater than or equal to the median was 4.16 times more likely to use HPDs than those who had lower median scores. (OR = 4.16, p < .05). The results, thus, indicate that organization policies addressing worker health along with enhancing a supportive environment for HPD use, in particular, the provision of various HPDs, are of great importance. Therefore, occupational health nurses and related health teams should enhance workers' use of HPDs effectively through knowledge dissemination by adopting strategies appropriate to the workplace context leading to an achievement of worker health policy focusing on work safety.

Keywords: predicting factors, hearing protection device, factors predicting hearing protection device use, kaolin mineral dressing factories

 $\textbf{Conference Title:} \ \ \textbf{ICOH 2023:} \ \ \textbf{International Conference on Occupational Healthcare}$

Conference Location : Tokyo, Japan **Conference Dates :** May 22-23, 2023