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Occupational Noise Exposure at Entertainment Business Premises in Selangor

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Structured Abstract

Background: Noise pollution in workplaces, especially in the entertainment industry, is a significant occupational hazard. According to the Factory and Machinery Act of 1967, noise exposure above 85 dB can lead to hearing loss and other health issues. Repeated exposure to intense sounds, such as loud music in entertainment venues, can result in temporary or permanent hearing loss. This study evaluates noise exposure levels at entertainment business premises in Selangor and their impact on workers' hearing health, highlighting the need for effective noise control measures.

Methods: The study was conducted at karaoke business premises in Setia Alam, Selangor. Noise levels were measured using a sound level meter during both weekdays and weekends. Seven sampling points within the premises were strategically selected based on areas with high noise generation, such as proximity to loudspeakers and machinery. The noise measurements were taken following the guidelines by the Industry Code of Practice (ICOP) for Occupational Noise Exposure and Hearing Conservation 2019. Additionally, a questionnaire was distributed to assess hearing symptoms among workers, including ear pain, difficulty in understanding conversations, and noise-related stress.

Results: The noise levels varied across different locations within the premises, with higher levels recorded during weekends. The average noise levels ranged from 75 dB(A) to 89 dB(A), often exceeding the permissible exposure limit of 85 dB. Sampling Point 7 recorded the highest average noise levels, with 86.5 dB(A) on weekdays and 88.3 dB(A) on weekends, exceeding the Noise Exposure Limit (NEL). The questionnaire results indicated that workers frequently experienced hearing-related symptoms such as ear pain, difficulty in understanding conversations, and occasional tinnitus. These symptoms are consistent with the potential effects of chronic noise exposure. Noise mapping provided a visual representation of the noise distribution, highlighting areas with excessive noise levels.

Conclusion: The study confirms that noise levels at entertainment business premises in Selangor often exceed safe limits, posing a risk to workers' hearing health. The findings highlight the need for effective noise control measures and regular hearing assessments to protect workers from noise-induced hearing loss. Implementing the recommendations of the ICOP for Occupational Noise Exposure and Hearing Conservation is important for improving workplace safety in the entertainment industry.

Keywords: Noise level, Hearing loss, Entertainment industry, Sampling point, Noise assessment

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