Prevalence of abnormal hearing status and its association with personal factors among workers exposed to noise at a textile factory

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ABSTRACT

Introduction: Exposure to noise among industrial workers may cause abnormal hearing status (permanent standard threshold shift, hearing loss and hearing impairment). Nevertheless, other non-work factors may also contribute to the abnormal status. Among the industries, textile industries is notorious for being one of the noisiest workplace. However, the burden of abnormal hearing status among textile workers in Malaysia is infrequently studied. Thus, the objective of this study is to assess the prevalence of abnormal hearing status and its association with personal factors among workers in a Malaysian textile factory. **Results:** It was found that 152 workers were exposed to noise level above the permissible exposure limit (PEL). Majority of them are between 20-29 years old (30.9%), female (58.6 %), Malay (86.8%), married (72.4%) and received at least secondary education (86.2%). Twenty five percent of them had at least one comorbidity. As for the duration of employment, 52.6% of the workers worked more than 10 years, 19.1% worked for 2-10 years and 28.3% worked for less than 2 years. The prevalence of abnormal hearing status was 45.4%. There were no significant association found between all personal factors with abnormal hearing status on bivariate analysis. However, there was a trend seen between abnormal hearing status and increased in age group. **Conclusion:** As a conclusion, nearly half of the workers had abnormal hearing status and personal factors may not be an important factor that influenced abnormal hearing status among workers exposed to noise above PEL in a textile factory.