
Knowledge and Practices Related To Fire Safety and Their Associated Factors among Factory Workers At CEAT - Kelani International Tyres (Pvt) Ltd

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According to the World Health Organization estimates, more than 250,000 deaths occur annually due to fire in the world. Fire at work place has been one of its main contributory factors. Apart from death, work related fire injuries lead to substantial social and economic cost to the victim and employers.

To describe the knowledge and practices related to fire safety, and their associated factors among factory workers in Sri Lanka

A cross-sectional study was carried out among 217 workers in the factory of CEAT-Kelani International Tyres (Pvt) Ltd having minimum work experience of one year, selected using simple random sampling. A pre-tested self-administered questionnaire used to collect data on knowledge on fire safety, use of fire safety practices and socio-economic characteristics. Marks were given for knowledge: Very good (100-80), Good (79-60), Average (59-40), Poor (Below 40) and practices: Satisfactory (100-75), Unsatisfactory (below 75). Associations of knowledge and practices were assessed using chi-square test.

Response rate was 81.2%. The majority was Sinhalese (98%), married (77%) and educated up to Ordinary level examination (66%). 51% have had fire related accidents while 59% had never participated in fire drills. 'Very good' knowledge was seen with fire safety practices (39%), fire-fighting and basics on fire (20%) and first aid during fire (19%). Workers' overall knowledge on fire safety was 'satisfactory' in 75%, with 17% having 'very good' knowledge and 58% having 'good' knowledge. None were in poor knowledge group. Majority of workers' (89%) overall practices related to fire safety was 'satisfactory'.

Being a machine operator, more than ten years work experience, advanced level/ vocational training as highest education level, experience on fire accidents and their participation in fire drills were significantly associated with workers' 'good' level of knowledge on fire safety. However, a significant association was not seen between the use of fire safety practices and knowledge on fire safety with any socio-economic characteristic of the workers.

Tyre factory workers showed satisfactory knowledge on fire safety and use of fire safety practices. Though knowledge was associated with many characteristics of workers, practices did not. Conducting fire training sessions and fire drills are necessary to improve their skills in practices related to fire safety.

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