

**KNOWLEDGE AND SAFETY MEASURES FOR  
OCCUPATIONAL HAZARDS AND LEVEL OF  
NOISE AND COTTON DUST AMONG WORKERS  
IN NO.(5) TEXTILE FACTORY  
IN PAKOKKU TOWNSHIP**

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## ABSTRACT

Myanmar as the developing country, national economy of the country depends largely on the industry with growing in textile manufacturing. Occupational health and safety hazards are important for every industrial worker. The main aim of the study was to explore the knowledge of textile workers on occupational hazards and safety measures, to check out workplace compliance according to the checklist and to measure the noise and cotton dust level at workplace. It was a cross-sectional descriptive study with 162 respondents at No.(5), Textile Factory, Pakokku. Semistructured questionnaires and workplace compliance checklist were used as data collection tools and digital sound level meter and 3M Air Sampler were used as measurement tools. According to the findings, mean age of respondents was 36.43 years with SD of 7.612 and 51.9% of respondents were in age group of 30-39 years. Over three-fourth 78.39% of represented population was female and 46.3% of respondents had middle school education level passed. Nearly half of the respondents 43.8% had good knowledge level score regarding occupational hazards and there was only significant association between their educational level and level of knowledge. Good knowledge level score had seen in workers with higher educational level. Most of the respondents in the study did not utilize PPE while operating machine or performing their work. Workplace compliance level was unsatisfactory in all three sections. Assessing to the study results, cotton dust concentration was lowered in both of the reference values of 10  $\mu\text{g}/\text{m}^3$  (ACGIH) and 15  $\mu\text{g}/\text{m}^3$  (OSHA) in two sections. There was high level of respirable dust (particulate matter 10) 0.021  $\mu\text{g}/\text{m}^3$  in spinning section than weaving section where 0.0036  $\mu\text{g}/\text{m}^3$  of particulate matter were found. And noise level was just higher only in the weaving section (91.94 dBA) in the continuous 8 hours working period. Moreover, there were unsatisfactory safety measures utilizations in all three sections by using the compliance checklist. Health and safety education and periodic medical examination as well as training on what and provision of PPE were therefore strongly recommended to prevent or minimize work related accidents, injuries and illness.