

ABSTRACT

A cross sectional descriptive study was done to study lung function among the workers in No.(3) Saw Mill, Shwepyithar township. Information was collected by two methods. Face to face interview and lung function was also measured by spirometer. In this study, lung function was measured on 115 workers in saw mill who gave consent. Among 115 workers, 87 workers were male and 28 workers were female. All workers were categorized into dusty and non dusty workplace who engaged in this area. In this study, description of working environment and measurement of lung function of workers were include. Regarding to the working environment, dust measurement in the two cutting sections revealed that respirable dust concentration was greater than threshold Limit Value (TLV) and total dust value was less than TLV. In re saw section, respirable and total dust revealed greater than TLV. Band saw section revealed less than TLV level in both respirable and total dust. TLV for total dust was 10 mg/m^3 and respirable dust was also 10 mg/m^3 for 8 hours duration. So TLV for total dust and respirable dust was 5 mg/m^3 for 4 hours duration. On lung function measurement among 115 workers, 19 workers revealed abnormal lung function (less than 85%). Out of 19 workers with abnormal lung function, 14 workers were male and 5 workers were female workers. In relationship between lung function and dusty workplace, more found abnormal lung function in non dusty workplace . Abnormal lung function was more found in workers with prolong service duration. In assessment of relationship between lung function and smoking, abnormal lung function was more observed in non smoker. There was also observed relationship between abnormal lung function and old age groups that was more than 45 years in this study. In overall consideration there was no definite finding of effect of wood dust on abnormal lung function. Abnormal lung function was appeared due to combination effect of service duration, smoking duration and other smoke exposures. In spite of increasing dust concentration above TLV in the working environment , abnormal lung function was less likely observed in dusty area . So effect of wood dust on lung function among the workers was very controversial.

