ABSTRACT

Street sweeper is a job which has a high risk of being street dust and irritant gases. Dust and irritant gases induce respiratory disorder. Therefore, this study aims to identify respiratory disorders and the association between respiratory disorders and the factors that affect respiratory disorders in Street sweeper in Ahmad Yani Surabaya street.

This research was a descriptive research which using a cross sectional design. The sample used in this research was total population in a number of 21 employees. The primary data was obtained by questionnaire and the measurement of dust and gas concentration, while secondary data obtained from the CV Riski of the street sweepers. Then, the data was analyzed by using spearman correlation test and contingency coefficient.

From total 21 employees there are 12 employees who have respiratory disorders symptom. The symptoms include cough, shortness of breath, sore throat and nasal congestion. Beside, there are 3 employees often cough with phlegm. The statistic result confirmed that association between the number of respiratory disorder symptom with age (\( \rho_s = 0.360 \)) and years of work (\( \rho_s = 0.327 \)). Other variables showed a very weak correlation with the number of respiratory disorder symptom, variables include: History of education (\( \rho_s = 0.03 \)), use PPE (\( \rho_s = 0.181 \)), smoking habit (\( \rho_s = 0.193 \)), cigarette dose (\( \rho_s = 0.139 \)) and gender (contingency coefficient = 0.13). Based on the results, it can be concluded that dust, SO\(_2\) dan NO\(_2\) in Ahmad Yani street have a low risk induce respiratory disorder and highest correlation between variable and respiratory disorders symptom is age.

Regarding the result of the research expected that the street sweeper will be aware to keep their lung stay healthy, especially for the elderly by keep using PPE (respirator) and not smoking.

Key words : Street sweeper, Individual characteristics, Respiratory disorder symptom.