ABSTRACT

Convection workers have at risk of developing eye fatigue. Poor lighting can cause eye fatigue (astenopia) and may result increased the work accident.

The objectives of this research were to study the lighting, eye fatigue, and work accident among convection workers. This was an observational study with cross-sectional approach. The population was 54 workers and the samples was 33 workers in Kedung Waru Sub-district, Tulung Agung. The variables studied were individual characteristics (such as age, kind of job perform, time duration, refraction disorders, and health condition), lighting, subjective complains of eye fatigue, and work accident. The data were obtained from interview, check-list, and lighting measurement. The data were analyzed descriptively and used coefficient contingency to analyze the correlation strength between variables.

The result of this research showed that the majority of workers age ≤ 40 years (78,8%) and most of them were sewers (42,4%). Most of work area were inadequate lighting (87,9%). Most of workers had no complains of eye fatigue (r=69,7) and had no work accident (r=84,8). There were strong correlation between age and eye fatigue as well as eye fatigue and work accident.

For increasing the illumination in the work place, it is recommended that the owner of Tika Collection’s convection improve the workplace decoration and maintain the existing lamps regularly.

Key words: Lighting, Eye Fatigue, Work Accident.