

ABSTRACT

About 88% of occupational accidents are caused by unsafe acts of workers. Unsafe act is an act of a person that does not comply with the rules and may cause hazards and accidents and may result in losses for them selves and others. The purpose of this research was to analyze factors associated with unsafe act in casting division of PT. Barata Indonesia.

This research was a descriptive research with cross-sectional design. Respondents included in the research was entire population, as many as 74 individuals. The variables studied were the characteristics of workers, that included: age, tenure, years of education, exhaustion, and knowledge, and physical environmental factors, namely: ergonomics, and management factors, namely: supervision. Analysis of data in this research used Spearman statistical test with a significance level 0,05.

The results of the research indicated that unsafe act that most workers practiced fell into low category (35,1%). Spearman statistical test indicated that there was relationship between knowledge, exhaustion, ergonomics, and age with unsafe act ($p < 0,05$). The relationship between unsafe act knowledge, exhaustion, and ergonomics was medium, and the relationship between unsafe act with age was low. While variables that were not significant to unsafe act were supervision and tenure. The relationship between unsafe act with supervision and tenure was low.

Occupational Health and Safety related training is also necessary to improve the knowledge of workers regarding to workplace hazards and risks. Improvements in incompatible designs for equipments are necessary to improve workers comfort and lower exhaustion which can lead to unsafe act

Keywords: unsafe act, characteristics of workers, ergonomics, supervision