

ABSTRACT**Analysis of Risk Factors Related with Occurrence of Photokeratitis to Welders
at PT. PAL Indonesia (Persero) Surabaya**

This study is aimed to analyze the risk factors related with the occurrence of photokeratitis to the welders in General Engineering Division of PT. PAL Indonesia (Persero) Surabaya, with respondents of 50 welders. The type of research was quantitative analytic survey with cross sectional study design and was done from November-December 2014.

Based on the analysis used *chi square* test with *contingency coefficient* it was revealed there were several factors which related to photokeratitis. Risk factors were based on the highest of risk that is periode of work, personal protective equipment, ages, eye complaints, consumed foods and suplemen that contains vitamin A, length of exposure.

Based on those results, the advice given to PT. PAL Indonesia (Persero) Surabaya among others were: serving food and supplementation containing vitamin A to prevent vitamin A deficiency; to reduce eye complaints, it is recommended that a welder get rest from welding activities for 48 hours; providing personal protective equipment especially eye protection equipment, should be giving a double eye protector and welding helmets which automatically adapts to the position of the welder; the measurement of the UV radiation intensity should be done on regular basis and do an eye examination for welders so that can be done precautions and appropriate treatment to address the occurrence of photokeratitis; workers aged 40 and above are recommended to be the supervisor.

Keywords: welder, ultraviolet radiation intensity, photokeratitis, General Engineering