INTISARI

Chusnul Chotimah. Nim 3212034. Hubungan usia pekerja dan status gizi terhadap enzim *Cholinesterase* pada pekerja salah satu industri pembuatan bahan baku cat di Surabaya

Zat *Additive* merupakan salah satu komponen bahan cat yang berfungsi untuk menghambat pertumbuhan bio-organisme didalam produk jadi cat yang mempunyai sifat seperti pestisida. Pekerja pembuatan bahan dasar cat adalah salah satu populasi yang memiliki resiko terpapar logam berat dan pestisida yang berasal dari komponen bahan baku cat dimana masuk kedalam tubuh pekerja melalui inhalasi dalam waktu panjang yang kontinyu. Tujuan penelitian ini untuk mengetahui ada tidaknya Hubungan usia pekerja dan status gizi terhadap enzim *Cholinesterase* pada pekerja salah satu industri pembuatan bahan baku cat di Surabaya. Penelitian dilakukan di Laboratorium Klinik Prodia dengan pengukuran aktivitas enzim *cholinesterase* menggunakan Roche Cobas c8000. Penelitian ini menggunakan desain studi *Cross sectional* dengan jumlah sampel 89 pekerja. Variabel penelitian ini adalah usia, nilai status gizi yang diukur dengan nilai IMT dan aktivitas enzim *cholinesterase*. Hasil uji statistik dengan SPSS uji korelasi dengan menggunakan uji non parametrik yaitu dengan uji korelasi *Spearman* (uji nonparametric), dimana didapatkan hasil korelasi menunjukkan bahwa nilai signifikasi antara usia dengan kadar CHE didapatkan nilai sig. adalah 0,376 (sig>0,05) artinya bahwa tidak ada hubungan antara usia dengan kadar CHE. Hasil nilai signifikasi antara nilai IMT terhadap kadar CHE menunjukkan nilai sig. 0,003 (sig<0,05) artinya ada hubungan antara nilai IMT dengan kadar CHE.

Kata Kunci: Pekerja pabrik cat, keracunan , *Cholinesterase*

ABSTRACT

Chusnul Chotimah. Nim 3212034. The Correlation Between Worker Age And Nutritional Status On Cholinesterase Enzymes In Once Industrial Workers Making Paint Raw Materials In Surabaya

The Additive is a component of paint that functions to inhibit the growth of bio-organisms in the finished paint product that has pesticide-like properties. Workers in the manufacture of paints are one of the populations that are at risk of being exposed to heavy metals and pesticides which enter the body of workers through inhalation for a long time continuously. The purpose of this study was to determine whether there was a relationship between the age of workers and nutritional status of the Cholinesterase enzyme in workers in one of the paint raw material industries in Surabaya. The study was conducted at the Prodia Clinical Laboratory by measuring the activity of the cholinesterase enzyme using Roche Cobas c8000. This study used a cross sectional study design with a sample of 89 workers. The variables in this study were age, nutritional status values as measured by BMI values and cholinesterase enzyme activity. The results of statistical tests with SPSS correlation test using non-parametric tests, namely the Spearman correlation test (nonparametric test), where the correlation results show that the significance value between age and CHE levels is sig. is 0.376 (sig>0.05) meaning that there is no relationship between age and CHE levels. The results of the significance value between the BMI value and the CHE level showed a sig value. 0.003 (sig <0.05) means that there is a relationship between BMI value and CHE levels.

Keywords: Paint factory workers, poisoning, Cholinesterase