INTISARI

Wiwit Tresmia.NIM 3212102. *Hubungan Kadar Timbal Terhadap Albumin Pada Darah Pekerja Operator SPBU Gombel.*

Timbal merupakan salah satu logam berat yang keberadannya bebas dalam udara atau tanah. Timbal dapat digunakan dalam industri perminyakan sebagai bahan campuran pada bahan bakar bensin. Timbal dapat mencemari udara melalui asap kendaraan. Operator SPBU merupakan kelompok pekerja yang memiliki resiko terpapar timbal melalui asap kendaraan dan bensin yang berada di area SPBU. Paparan timbal pada tubuh yang terakumulasi dalam jumlah yang banyak dan sering, dapat menimbulkan berbagai permasalah didalam tubuh, salah satunya yaitu mengganggu sintesis protein hati yang akan menghambat pembentukan salah satu protein penting bagi tubuh yaitu albumin. Penelitian ini bertujuan untuk mengetahui hubungan kadar timbal dengan kadar albumin darah pada operator SPBU Gombel. Penelitian menggunakan desain *cross sectional,* dengan metode observasional deskriptif analitik. Pengambilan sampel penelitian terhadap 18 responden dilakukan secara total sampling. Kadar timbal diukur dengan metode ICP-MS dan alat Agilent 7700 X. Kadar albumin diukur dengan metode BCG dan alat Arcitecht. Hasil penelitian diuji menggunakan analisis statistik uji korelasi *Pearson*. Didapatkan hasil nilai signifikansi 0.021 yang berarti nilai $p \leq 0,05$ yang disimpulkan dari hipotesa bahwa ada hubungan antara kadar timbal dalam darah dengan kadar albumin darah pada operator SPBU Gombel.

Kata kunci: timbal, albumin, hubungan, SPBU Gombel

ABSTRACT

Wiwit Tresmia. NIM 3212102. *The Correlation Of Lead Levels To Albumin In Blood At The Gas Station Operator In Gombel.*

Lead is a heavy metal that exists freely in air or soil. Lead can be used in the petroleum industry as an ingredient in gasoline. Lead can pollute the air through vehicle fumes. Gas station operators are a group of workers who are at risk of being exposed to lead through vehicle fumes and gasoline in the gas station area. Lead exposure in the body which accumulates in large quantities and frequently, can cause various problems in the body, one of which is interfering with liver synthesis which will inhibit the formation of one of the important proteins for the body, namely albumin. This study aims to determine the relationship between lead levels and blood albumin levels at the Gombel gas station operator. The study used a cross sectional design, with descriptive analytic observational method. Sampling of the research on 18 respondents was carried out by total sampling. Lead levels were measured using the ICP-MS method and the Agilent 7700 X device. Albumin levels were measured using the BCG method and the Arcitecht instrument. The results of the study were tested using statistical analysis of the Pearson correlation test. The results obtained a significance value of 0.021 which means a p value <0.05 which is concluded from the hypothesis that there is a relationship between blood lead levels and blood albumin levels at the Gombel gas station operator.

Keywords*: lead, albumin, Correlation, Gombel gas station Semarang.*