INTISARI

Okvia Rhani Wijayanti, NIM 3212080, *Hubungan Kadar Timbal Dalam Darah Terhadap Kadar Gamma GT (Gamma – Glutamyl Transferase) Pada Operator SPBU Gombel Semarang*.

Laju pertambahan jumlah kendaraan bermotor menimbulkan peningkatan pencemaran udara. Salah satu bahan penyebabkan pencemaran udara yang paling berbahaya adalah Timbal (Pb). Emisi logam timbal merupakan hasil samping dari pembakaran yang terjadi dalam mesin kendaraan. Operator Stasiun Pengisian Bahan Bakar Umum sebagai salah satu kelompok yang mempunyai risiko tinggi untuk terpapar timbal secara langsung. Paparan timbal menyebabkan gangguan fungsi hati terutama pada hasil Gamma GT. Tujuan penelitian ini untuk mengetahui adanya hubungan kadar Timbal terhadap kadar Gamma GT pada operator SPBU. Desain penelitian yang digunakan adalah analitik observasional dengan pendekatan cross sectional (Satu waktu) dengan pengambilan *Quota Sampling* sebanyak 20. Penelitian dilakukan dengan mengambil sampel darah vena trace element dan clot activator kemudian diukur Kadar timbal darah dengan metode ICP-MS dan kadar Gamma GT dengan metode IFCC – Gamma-glutamyl-3-carboxy-4-nitroanilide. Hasil penelitian diuji dengan analisis statistik *spearman rho test* diperoleh p value 0,990, p value > 0,05, maka Ho diterima dan Ha ditolak. Dari hasil tersebut dapat disimpulkan bahwa tidak ada hubungan kadar Timbal terhadap kadar Gamma GT pada operator SPBU Gombel Semarang

Kata Kunci : Gamma GT,Operator, Pb, *Spearman*.

ABSTRACK

Okvia Rhani Wijayanti, NIM 3212080, *Correlation Levels Of Lead In Blood To Levels Of Gamma GT (Gamma – Glutamyl Transferase) At Gombel SPBU Operator Semarang.*

The rate of increase in the number of motorized vehicles causes an increase in air pollution. One of the most dangerous substances that cause air pollution is Lead (Pb). Lead metal emissions are a by-product of combustion that occurs in vehicle engines. Operators of Public Refueling Stations are one of the groups that have a high risk of direct exposure to lead. Lead exposure causes impaired liver function especially in Gamma GT results. The purpose of this study was to determine the relationship between lead levels and gamma GT levels in gas station operators. The research design used was observational analytic with a cross sectional approach (one time) by taking 20 Quota Sampling. The study was carried out by taking trace element and clot activator venous blood samples and then measuring blood lead levels using the ICP-MS method and Gamma GT levels using the ICP-MS method. IFCC – Gamma-glutamyl-3-carboxy-4-nitroanilide. The results of the study were tested by statistical analysis of spearman rho test obtained p value 0.990, p value > 0.05, then Ho is accepted and Ha is rejected. From these results, it can be concluded that there is no relationship between lead levels and gamma GT levels at the Gombel gas station operator in Semarang

Keywords: Gamma GT, Operator, Pb, Spearman.