INTISARI

Vinna Noviyani, NIM 3212099, Hubungan Kadar Timbal Dalam Darah Terhadap Kadar SGOT (*Serum Glutamic Oxaloacetic Transaminase*) Darah Pada Operator Stasiun Pengisian Bahan Bakar Umum Gombel Semarang.

Salah satu bahan yang menyebabkan pencemaran udara adalah Timbal hitam (Pb). Operator Stasiun Pengisian Bahan Bakar Umum adalah kelompok yang mempunyai resiko tinggi untuk terpapar timbal secara langsung. Akibat paparan timbal salah satunya terjadi gangguan fungsi hati, yang dapat dilihat dari nilai SGOT. Tujuan Penelitian untuk mengetahui hubungan kadar timbal dengan kadar SGOT dalam darah operator SPBU. Desain penelitian yang dilakukan adalah analitik observasional dengan pendekatan *cross sectional* (Satu waktu) dengan pengambilan sampel secara *Total Sampling* sebanyak 18 responden. Pengambilan darah untuk pemeriksaan timbal menggunakan sampel *whole blood (*tabung *trace element* Na-Heparin) dan pemeriksaan SGOT menggunakan sampel serum (tabung *clot activator*/SST). Pemeriksaan SGOT kadar timbal darah diukur menggunakan alat *Agillant* 7700 X dengan metode ICP-MS (*Inductively Coupled Plasma-Mass Spectrometry*) dan kadar Enzim SGOT diukur menggunakan alat *Architect c System* 4000 metode IFCC (*International Federation of Clinical Chemystry and Laboratory*). Hasil penelitian yang diperoleh, kadar timbal semua responden bernilai normal yaitu < 9 μg/dL dan kadar SGOT sebanyak 16 responden normal semua dan 2 responden lebih dari normal. Hasil penelitian diuji menggunakan analisis statistik dan *spearman rho test* diperoleh *p* value 0,428 dimana nilai tersebut lebih besar dari nilai tingkat kemaknaan $\alpha < 0,05$. Dari hasil tersebut dapat disimpulkan bahwa tidak ada hubungan kadar Timbal terhadap kadar SGOT pada operator SPBU Gombel Semarang

Kata Kunci : Operator SPBU, SGOT, Timbal

ABSTRACT

Vinna Noviyani, NIM 3212099, *Correlation Of Lead Levels in Blood to Concentration SGOT (Serum Glutamic Oxaloacetic Transaminase) at the Operators of Public Gas Station Gombel Semarang*.

One of the materials that causes the most dangerous air pollution is lead (Pb). Operators of General Fuel Refueling Stations are one of the groups that have a high risk of being exposed to lead directly. One of the consequences of lead exposure is impaired liver function, which can be seen from the SGOT value. The aim of the study was to determine the corellation between lead levels and SGOT levels in the blood of gas station operators. The research design is observational analytic with a cross sectional approach (one time) with a total sampling of 18 respondents. Blood samples were taken for lead examination using whole blood samples (tube trace element Na-Heparin) and SGOT examination using serum samples (tube clot activator/SST). SGOT examination blood lead levels were measured using the Agillant 7700 X using the ICP-MS (Inductively Coupled Plasma-Mass Spectrometry) method and the SGOT enzyme levels were measured using the Architect c System 4000 method using the IFCC (International Federation of Clinical Chemystry and Laboratory) method. The results obtained, the lead levels of all respondents were normal, namely < 9 µg/dL and SGOT levels were 16 respondents were all normal and 2 respondents were more than normal. The results of the study were tested using statistical analysis and spearman rho test obtained p value 0.428 where the value is greater than the value of the level of significance <0.05. From these results, it can be concluded that there is no corellation between lead levels and SGOT levels at the Gombel gas station operator in Semarang.

Keywords: Gas Station Operator, SGOT, Lead