INTISARI

Windu Aprina Krisna, NIM 3212101 *Pengaruh Paparan Timbal (Pb)Terhadap GAMMA GT Darah Pada Karyawan Yang Memakai Kendaraan Bermotor Roda Dua di Laboratorium Klinik Prodia Cibubur.*

Peningkatan polusi udara yang dapat menimbulkan dampak buruk terhadap lingkungan karena dicemari oleh asap kendaraan berupa Timbal (Pb), Nitrogen Oksida (NOx), Hidro Karbon (HC), dan Karbon Monoksida (CO). Tingginya kadar Pb diudara akan mempengaruhi kadar Pb dalam darah, salah satu masyarata yang memiliki resiko terpapat kadar Pb diudara adalah masyarakat yang menggunaan sepeda montor dalam melakukan aktifitas sehari-hari. Timbal diudara akan memasuki tubuh dan terdistribusikan ke organ-organ pada tubuh seperti ginjal, hati, otak, dan tulang, paparan timbal bisa berhubungan dengan ketidaknormalan fungsi hati, berdasarkan latar belakang diatas maka dilakukan penelitian dengan judul pengaruh kadar timbal (Pb) dalam darah terhadap kadar Gamma GT pada petugas messenger dan karyawan laboratorium Klinik Prodia Cibubur dan penelitian ini diharapkan dapat membantu memberikan informasi yang baik kepada semua karyawan pengendara sepeda motor di Laboratorium Klinik Prodia Cibubur. Penelitian merupakan penelitian analitik observasional dengan menggunakan 13 sampel karyawan Laboratorium Klinik Prodia Cibubur, Jawa Barat yang menggunakan model transportasi roda dua. Pemeriksaan kadar Pb menggunakan metode *ICP-Ms* dengan alat Agilent 7700X dan pemeriksaan kadar Gamma GT menggunakan metode *IFCC – Gamma-glutamyl-3-carboxy-4-nitroanilide* dengan alat TMS 30i, data yang diperoleh dianalasis korelasi dengan menggunakan SPSS. Hasil penelitian diperoleh 12 sampel memiliki nilai Gamma GT normal sedangkan 1 sampel memiliki nilai Gamma GT lebih dari normal. Hasil uji korelsi Pearson Product Moment didapatkan nilai signifikasi 0.925 (>0.05) yang menunjukkan bahwa tidak ada hubungan antara kadar Pb dengan GGT.

Kata kunci: Timbal Pb, Gamma GT, Pengendara motor

ABSTRACT

***Windu Aprina Krisna**, NIM 3212101 The Effect of Lead Exposure (Pb) on Blood GAMMA GT on Employees Who Use Two-Wheeled Motorized Vehicles at Prodia Cibubur Clinical Laboratory.*

Increased air pollution that can have a negative impact on the environment because it is polluted by vehicle fumes in the form of Lead (Pb), Nitrogen Oxide (NOx), Hydro Carbon (HC), and Carbon Monoxide (CO). The high level of Pb in the air will affect the level of Pb in the blood, one of the people who have the risk of being exposed to Pb levels in the air is people who use motorbikes in carrying out their daily activities. Lead in the air will enter the body and be distributed to organs in the body such as the kidneys, liver, brain, and bones, lead exposure can be associated with abnormal liver function. Gamma GT levels in messenger officers and laboratory employees of the Prodia Cibubur Clinic and this research is expected to help provide good information to all motorcycle riders at the Prodia Cibubur Clinical Laboratory. This research is an observational analytic study using 13 samples of employees of the Prodia Cibubur Clinical Laboratory, West Java using a two-wheeled transportation model. The examination of Pb levels using the ICP-Ms method with the Agilent 7700X device and the examination of the levels of Gamma GT using the IFCC – Gamma-glutamyl-3-carboxy-4-nitroanilide method with the TMS 30i device, the data obtained were analyzed by correlation using SPSS. The results showed that 12 samples had normal Gamma GT values, while 1 sample had more than normal Gamma GT values. The results of the Pearson Product Moment correlation test obtained a significance value of 0.925 (>0.05) which indicates that there is no relationship between Pb levels and GGT.

Keywords: Lead PB, Gamma GT, Motorcyclist