

HUBUNGAN MASA KERJA DAN LAMA KERJA TERHADAP KADAR TIMBAL DAN MORFOLOGI ERITROSIT

(Studi pada Pekerja Bengkel Cat Mobil di Jalan Karasak RW 02 dan 05
Kota Bandung)

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ABSTRAK

Timbal dalam darah akan menyebabkan toksik dan bersifat akumulatif. Meskipun jumlah timbal yang diserap oleh tubuh sangat sedikit namun dampaknya sangat berbahaya, salah satunya efek timbal dan sintesa hemoglobin, timbal dapat memperpendek dan menurunkan sel darah merah. Penelitian ini bertujuan untuk mengetahui hubungan antara masa kerja dan lama kerja terhadap kadar timbal pada pekerja bengkel cat mobil dan bagaimana hubungan kadar timbal terhadap gambaran morfologi eritrosit. Penelitian ini menggunakan metode deskriptif analitik, dan desain penelitian *cross sectional* yaitu mengukur kadar timbal menggunakan Spektrofotometri Serapan Atom (SSA) dan melakukan pemeriksaan Sediaan Apusan Darah Tepi (SADT) untuk melihat gambaran morfologi eritrosit, kemudian data diolah menggunakan statistik dengan uji Korelasi *Spearman*. Hasil penelitian didapatkan kadar timbal terendah $< 0,001$ dan paling tinggi $0,002 \mu\text{g/dL}$. Gambaran morfologi eritrosit pada pekerja bengkel cat mobil didapatkan hasil tidak terdapat kelainan morfologi eritrosit dalam darah, sehingga didapat kesimpulan dari penelitian ini, adalah tidak terdapat hubungan yang signifikan antara masa kerja dan lama kerja terhadap kadar timbal dengan nilai Sig. (2-tailed) = 0,910 ($p > 0,05$) dan lama kerja dengan nilai Sig.(2-tailed) $0,419 = (p > 0,05)$, dan tidak terdapat nilai signifikansi atau tidak terdapat hubungan yang signifikan antara kadar timbal dengan gambaran morfologi eritrosit pada pekerja bengkel cat mobil dengan nilai Sig. (2-tailed) tidak keluar hasil ($p > 0,05$).

Kata Kunci : Timbal, Morfologi Eritrosit, Cat Mobil

RELATIONSHIP OF SERVICE AND LONG WORKING ON LEAD LEVEL AND ERTYROSITE MORPHOLOGY

(Study on Car Paint Workshop Workers on Jalan Karasak RW 02 and 05 Bandung
City)

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ABSTRACT

Lead in the blood will be toxic and accumulative. Although the amount of lead absorbed by the body is very small, the effects are very dangerous, one of which is the effect of lead and the synthesis of hemoglobin, lead can shorten and reduce red blood cells. This study aims to determine the relationship between working period and length of work on lead levels in car paint workshop workers and how the relationship between lead levels and the morphology of erythrocytes. This study used descriptive analytic methods, and the research design was *cross sectional*, namely measuring lead levels using Atomic Absorption Spectrophotometry (AAS) and examining the Peripheral Blood Smear (SADT) to see the morphology of erythrocytes, then the data was processed using statistics using the Correlation test *Spearman*. The results showed that the lowest lead level was < 0.001 and the highest was 0.002 g/dL. The morphological description of erythrocytes in car paint workshop workers showed that there were no morphological abnormalities of erythrocytes in the blood, so the conclusion from this study was that there was no significant relationship between working period and length of work on lead levels with Sig values. (2-tailed) = 0.910 ($p > 0.05$) and duration of work with a value of Sig. (2-tailed) $0.419 = (p > 0.05)$, and there is no significant value or there is no significant relationship between lead levels with the morphological description of erythrocytes in car paint workshop workers with Sig. (2-tailed) no results ($p > 0.05$).

Keywords: Lead, Erythrocyte Morphology, Car Paint