**POLITEKNIK KESEHATAN TANJUNGKARANG**
**JURUSAN TEKNOLOGI LABORATORIUM MEDIS**
**PROGRAM SARJANA TERAPAN**
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Rifa' Aqilah

**Hubungan Kadar Timbal (Pb) Terhadap Indeks Eritrosit pada Wanita Usia Produktif Pulau Pasaran Teluk Betung Kota Bandar Lampung**

xv + 42 halaman, 3 tabel, 5 gambar, dan 19 lampiran

## ABSTRAK

Timbal adalah logam berat berbahaya dan beracun serta dapat terakumulasi dalam sedimen dan biota laut. Salah satu dampak paparan timbal (Pb) terhadap kesehatan dapat memengaruhi sistem hematologi dengan cara mengganggu sintesis heme, kemudian memperpendek umur sel darah merah (eritrosit) serta menyebabkan anemia. Tujuan penelitian untuk mengetahui hubungan kadar timbal (Pb) terhadap indeks eritrosit pada wanita usia produktif Pulau Pasaran Teluk Betung Kota Bandar Lampung. Jenis penelitian adalah analitik, desain penelitian *cross sectional.* Analisa data menggunakan korelasi *Spearman's Rank.* Penelitian dilakukan pada tanggal 14-22 Mei 2024. Sampel penelitian ini berjumlah 30 responden dengan menggunakan metode *purposive sampling*. Penelitian dilakukan pemeriksaan indeks eritrosit menggunakan *hematology analyzer* dan pemeriksaan kadar timbal (Pb) menggunakan *ICP-OES*. Hasil analisis bivariat hubungan kadar timbal (Pb) terhadap indeks eritrosit pada wanita usia produktif Pulau Pasaran Teluk Betung Kota Bandar Lampung didapatkan *p-value* kadar timbal (Pb) dengan nilai MCV 0,6349, kadar timbal (Pb) dengan nilai MCH *p-value* 0,2728, dan kadar timbal (Pb) dengan nilai MCHC *p-value* 0,5885. Dapat disimpulkan bahwa tidak terdapat hubungan kadar timbal (Pb) terhadap indeks eritrosit pada wanita usia produktif Pulau Pasaran Teluk Betung Kota Bandar Lampung karena *p-value* > 0,05

Kata Kunci: Timbal (Pb), Indeks Eritrosit, Wanita Usia Produktif
Daftar Bacaan: 54 (1994-2024)

**TANJUNGKARANG HEALTH POLYTECHNIC**
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Rifa' Aqilah

**Relationship between Lead (Pb) Levels and Erythrocyte Index in Women of Productive Age, Pasaran Island, Teluk Betung, Bandar Lampung City**

xv + 42 pages, 3 tables, 5 figures, and 19 appendices

## ABSTRACT

Lead is a dangerous and toxic heavy metal and can accumulate in sediments and marine biota. One of the impacts of exposure to lead (Pb) on health is that it can affect the hematological system by interfering with heme synthesis, thereby shortening the lifespan of red blood cells (erythrocytes) and causing anemia. The aim of the research was to determine the relationship between lead (Pb) levels and the erythrocyte index in women of productive age on Pasaran Island, Teluk Betung, Bandar Lampung City. The type of research is analytical, cross sectional research design. Data analysis used Spearman's Rank correlation. The research was conducted on 14-22 May 2024. The research sample consisted of 30 respondents using the purposive sampling method. The research carried out examination of the erythrocyte index using a hematology analyzer and examination of lead (Pb) levels using ICP-OES. The results of the bivariate analysis of the relationship between lead (Pb) levels and the erythrocyte index in women of productive age on Pasaran Island, Teluk Betung, Bandar Lampung City, showed a p-value of lead (Pb) levels with an MCV value of 0.6349, lead (Pb) levels with an MCH p-value 0.2728, and lead (Pb) levels with an MCHC p-value of 0.5885. It can be concluded that there is no relationship between lead (Pb) levels and the erythrocyte index in women of productive age on Pasaran Island, Teluk Betung, Bandar Lampung City because the p-value is > 0.05

Keywords: Lead (Pb), Erythrocyte Index, Women of Productive Age
Reading List: 54 (1994-2024)