

ABSTRAK

Manusia bisa terkena paparan timbal lewat beragam proses, di antaranya asap kendaraan bermotor dan proses industri berupa percetakan buku, daur ulang baterai, industri senjata, industri pipa yang mengandung timbal, pengecatan, pembuatan kapal, dan peleburan timbal dan pembakarannya, serta sebagainya. Fungsi organ tubuh seperti sistem hati, endokrin, dan gastrointestinal telah terbukti dipengaruhi oleh timbal. Penelitian ini bertujuan mengetahui hubungan antara kadar timbal dalam rambut terhadap gangguan fungsi hati pada petugas kebersihan jalan kota Surabaya Timur. Jenis penelitian ini berupa penelitian korelasional yang ditujukan dalam rangka mengetahui hubungan beberapa variabel yang menggunakan kegiatan pengumpulan data dengan metode survei dan pemeriksaan laboratorium. Pemeriksaan darah dilakukan pada 30 petugas kebersihan jalan kota surabaya timur dengan teknik *purposive sampling*. Hasil data dianalisis menggunakan SPSS, ditemukan bahwa tidak berdistribusi normal. Pemeriksaan kadar albumin, kadar protein total dan kadar timbal pada rambut petugas kebersihan jalan kota surabaya timur. Uji statistik dilakukan dengan uji korelasi *Spearman*, dimana ini memperlihatkan bahwa tidak ada hubungan signifikan antara kadar albumin kadar protein total dan kadar timbal pada rambut ($p = 0,00$ dan $p = 0,00$). Penelitian ini memiliki kesimpulan yaitu, tidak ada hubungan antara kadar albumin kadar total protein dan kadar timbal pada rambut petugas kebersihan jalan kota surabaya timur.

Kata Kunci : Kadar albumin, Kadar total protein, Kadar timbal pada rambut

ABSTRACT

Humans can be exposed to lead through various processes such as exposure to motor vehicle fumes, industrial processes such as lead smelting and burning, shipbuilding, painting, lead-containing pipe industries, battery recycling, weapons industry, book printing, and others. The function of body organs such as the liver, endocrine, and gastrointestinal systems has been shown to be affected by lead. The aim of this research is to determine the relationship between lead levels in hair and liver function disorders in street cleaners in the city of East Surabaya. The type of research used is this research using correlational research, namely research to determine the relationship between two variables using data collection activities using survey methods and laboratory examinations. Blood tests were carried out on 30 street cleaners in the city of East Surabaya using a purposive sampling technique. The data results were analyzed using SPSS, it was found that they were not normally distributed. Examination of albumin levels, total protein levels and lead levels in the hair of street cleaners in the city of East Surabaya. Statistical tests carried out using the Spearman correlation test showed that there was no significant relationship between albumin levels, total protein levels and lead levels in hair ($p = 0.00$ and $p = 0.00$). The conclusion of this research is that there is no relationship between albumin levels, total protein levels and lead levels in the hair of street cleaners in the city of East Surabaya.

Keywords: Albumin levels, total protein levels, lead levels in hair