

## Hubungan kadar timbal dalam darah terhadap kejadian hipertensi pada polisi yang bertugas di jalan = Relation of Blood Lead levels with hypertension among traffic police assigned on the road

Mirza Fajar Wicaksono, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20341053&lokasi=lokal>

---

### Abstrak

Indonesia saat ini masih menggunakan bensin bertimbal dengan tingkat pencemaran timbal di udara tinggi. Jakarta Barat merupakan wilayah di DKI Jakarta yang paling padat dilalui kendaraan bermotor. Tujuan penelitian ini adalah diketahuinya hubungan kadar timbal di dalam darah terhadap terjadinya hipertensi pada polisi yang bekerja di jalan dan faktor-faktor lain, seperti obesitas, riwayat keluarga hipertensi, kebiasaan merokok, konsumsi kopi, perilaku memakai masker dan olahraga dengan terjadinya hipertensi.

Metode penelitian: Penelitian ini dilakukan di wilayah kerja polsek Jakarta Barat. Populasi penelitian adalah polisi yang bekerja di jalan. Disain penelitian adalah studi Cross Sectional, dengan analisis kasus kontrol, 30 kasus dan 60 kontrol diikutsertakan dalam penelitian ini. Kasus diperoleh dengan cara consecutive sampling. Pengumpulan data dilakukan dengan cara wawancara, pengukuran berat badan, pengukuran tinggi badan, pengukuran tekanan darah dan analisis kadar timbal dalam darah.

Hasil penelitian: Rerata kadar timbal di dalam darah adalah 19.83 pg/dl, dengan nilai median 18.80 pg/dl. Terdapat hubungan yang signifikan antara faktor obesitas (OR = 5,1) riwayat keluarga hipertensi (OR=17,68) dan kadar Pb dalam darah (OR=4,5) dengan kejadian hipertensi.

Kesimpulan dan Saran: Ada pengaruh kadar timbal di dalam darah, dengan kejadian hipertensi. Saran yang diajukan adalah melakukan pemeriksaan kadar timbal dalam darah minimal sekali setahun, termasuk melakukan upaya penurunan pajanan timbal, dan menumamkan berat badan polisi yang bekerja di jalan.

.....The Background and The Objectives: Most of the cities in Indonesia are still using lead gases, which causes high lead level pollution. West Jakarta is one of the areas that high burden of motor vehicles and is among the worst polluted area in Jakarta city. The aim of this study is to identify the relation of blood lead levels and hypertension among traffic police and other related factors such as obesity, family history of hypertension, smoking, consumption of coffee, use of mask as protection and physical exercise.

The Research Method: This research was carried out in the work territory Sector Police West Jakarta. The research population was traffic police assigned on the road. A cross sectional study design was used with case control analysis. Sixty cases and 30 controls were recruited for this study. Cases were recruited consecutively. Data was collected by interviews, physical examination and measuring blood lead level.

Results of the Research: The average the blood lead level was 19,83 ug/dl, with a median of 18,80 pg/dl. Statistical analysis showed significant relation between hypertension and obesity (OR=5, 1), family of hypertension (OR=17,68) and blood lead level (OR=6,5).

The Conclusion and the Recommendation: A significant relationship was found between blood lead level and hypertension incident. Police with the blood lead level 3 18,80 pg/dL had a risk almost of 6,5 times higher to get hypertension. It is recommended that blood lead level should be measured at least once a year and reduce police weight that worked in the road.