

INTISARI

Endrila Nova Victoria . NIM.1203087. Profil Logam Berat Timbal dan Tekanan Darah dalam Rambut Pekerja Ojek *Online* di Surakarta.

Timbal adalah logam berat yang terjadi secara alami . Jumlah timbal di alam meningkat dengan meningkatnya aktivitas manusia di beberapa bidang seperti pertambangan, penggalian, peleburan, penggunaan bahan bakar dan bidang penggunaan lainnya. Rambut adalah bahan yang dapat mudah untuk dikumpulkan dan diawetkan sebagai sampel, sebagai upaya mendiagnosis penyakit dan tanda adanya polutan di lingkungan. Tekanan darah merupakan tekanan yang ditimbulkan pada dinding arteri ketika darah tersebut dipompa oleh jantung ke seluruh tubuh. Semakin tinggi tekanan darah maka semakin keras jantung itu bekerja. Tujuan penelitian ini untuk mengetahui profil kadar timbal dan tekanan darah dalam rambut pekerja ojek online di Surakarta.

Jenis penelitian adalah deskriptif dengan desain penelitian *cross-sectional*. Teknik sampling *quota sampling* sebanyak 10 responden. Penelitian dilakukan di Balai Kesehatan Laboratorium dan Kalibrasi Dinas Kesehatan Daerah Istimewa Yogyakarta menggunakan Spektrofotometer Serapan Atom pada bulan Februari-April 2023.

Hasil penelitian didapatkan rata-rata kadar timbal dalam rambut sebanyak 10 responden yang didapatkan tekanan darah 130/100 mmHg sebanyak 2 responden (20%) dengan kadar timbal yaitu 0,3191 $\mu\text{g/g}$ dan 4,5903 $\mu\text{g/g}$, sedangkan berusia < 30 tahun sebanyak 4 responden (40%) dengan kadar timbal rata-rata 1,065575 $\mu\text{g/g}$, sedangkan yang berusia > 30 tahun sebanyak 6 responden (60%) dengan kadar timbal rata-rata 1,606950 $\mu\text{g/g}$.

Kesimpulan penelitian pemeriksaan kadar timbal dan tekanan darah dalam rambut pekerja ojek online di surakarta di peroleh hasil normal dengan nilai ambang batas yaitu < 10 $\mu\text{g/g}$ menurut KEMENKES, sehingga dapat disimpulkan tidak terdapat kadar timbal dalam rambut pekerja ojek online di Surakarta.

Kata kunci : Driver ojek online, Tekanan darah, Timbal

ABSTRACT

Endrila Nova Victoria. NIM.1203087 . Profile of Heavy Metal Lead and Blood Pressure in The Hair of Online Driver in Surakarta.

Lead is a heavy metal that occurs naturally. The amount of lead in nature increases with increasing human activity in several fields such as mining, quarrying, smelting, fuel use and other fields of use. Hair is a material that can be easily collected and preserved as a sample, as a means of diagnosing disease and a sign of environmental pollutants. Blood pressure is the pressure exerted on the walls of the arteries when the blood is pumped by the heart throughout the body. The higher the blood pressure, the harder the heart works. The purpose of this study was to determine the profile of lead levels and blood pressure in the hair of online motorcycle taxi workers in Surakarta.

This type of research is descriptive with a cross-sectional research design. The sampling technique of quota sampling is 10 respondents. The research was conducted at the Yogyakarta Special Region Health Office Laboratory and Calibration using an Atomic Absorption Spectrophotometer in February-April 2023.

The results showed that the average lead level in the hair of 10 respondents obtained blood pressure of 130/100 mmHg for 2 respondents (20%) with lead levels of 0.3191 $\mu\text{g/g}$ and 4.5903 $\mu\text{g/g}$, while those aged < 30 years were 4 respondents (40%) with an average lead level of 1.065575 $\mu\text{g/g}$, while those aged > 30 years were 6 respondents (60%) with an average lead level of 1.606950 $\mu\text{g/g}$.

The conclusion of the study of examining lead levels and blood pressure in the hair of online motorcycle taxi workers in Surakarta obtained normal results with a threshold value of < 10 $\mu\text{g/g}$ according to the Ministry of Health, so that it can be concluded that there were no lead levels in the hair of online motorcycle taxi workers in Surakarta.

Key words : Blood pressure, Lead, online motorcycle taxi drivers