

THE DIFFERENCE SUM OF LEUCOCYTES AS PHISIC ACTIVITIES TO BECAK DRIVER ON YOGYAKARTA

ABSTRACT

The human body has an ability to fight almost all of organism or toxin that tend to destroy network and organ body. The ability is called as an imun. There are two kind of imunity, that are inherent imunity and achieved imunity which will not available until body attackted by some bactery that cause toxin, often needed for some weeks or months to construct it. The becak driver has phisic activities as continuously, will get an exercise and has adaptation from the condition and it will be body imunity system better than before like increasing of leucocytes that we called as white blood cell. It is a key for imunologic activity.

The objectives on this research is to know about effect of becak driver's phisic activities toward examination result for sum of white blood cell. This research conducted by comparing sum of leucocytes becak driver and control sample that as a group with activities not heavy, that are staffs and students of UMY. The research subject suit with some criterias like health as phisic and non phisic, they have work for more than 6 months. The research subject has sum of 30 people with group of ages as 20 – 45 years old. The differences examination for sum of leucocytes (sample) of becak driver and non becak driver (control) conducted by pair t-test method.

The research result show that there is significant difference ($p=0,004$) between sum of leucocytes of becak driver (sample) and non becak driver (control). The becak driver has white blood cell more than control sample, that are 8,558 per mm^3 than 7,355 per mm^3 .

PERBEDAAN JUMLAH LEUKOSIT AKIBAT AKTIVITAS FISIK PADA TUKANG BECAK DI WILAYAH YOGYAKARTA

INTISARI

Tubuh manusia mempunyai kemampuan untuk melawan hampir semua jenis organisme atau toksin yang cenderung merusak jaringan dan organ tubuh. Kemampuan tersebut disebut imunitas. Terdapat dua macam imunitas, imunitas bawaan dan imunitas didapat, yang tidak timbul sampai tubuh pertama kali diserang oleh bakteri yang menyebabkan penyakit atau toksin, seringkali membutuhkan berminggu-minggu atau berbulan-bulan untuk membentuknya. Pekerja penarik becak melakukan aktivitas fisik secara rutin, mengalami paparan secara terus-menerus berupa *exercise*, mengayuh becak akan mengalami adaptasi dari kondisi tersebut dan tentunya akan menjadikan sistem imunitas tubuh menjadi lebih baik seperti kenaikan jumlah leukosit kita kenal dengan sel darah putih, merupakan kunci aktivitas imunologik.

Tujuan dalam penelitian ini adalah untuk mengetahui pengaruh aktivitas fisik tukang becak terhadap hasil pemeriksaan jumlah sel darah putih. Penelitian dilakukan dengan membandingkan jumlah leukosit tukang becak dan sampel kontrol yang merupakan kelompok dengan aktivitas fisik tidak berat yaitu karyawan dan mahasiswa UMY. Subyek penelitian diharapkan memenuhi beberapa kriteria yang mencakup : sehat jasmani dan rohani, dan telah bekerja setidaknya lebih dari 6 bulan. Subyek penelitian sejumlah 30 orang dengan kelompok umur 20-45 tahun. Pengujian ada tidaknya perbedaan jumlah leukosit tukang becak (sampel) dan non tukang becak (kontrol) dilakukan dengan metode *pair-t-test*

Hasil yang didapat dalam penelitian ini adalah terdapat perbedaan yang signifikan ($p : 0,004$) antara jumlah leukosit tukang becak (sampel) dan non tukang becak (kontrol). Seldarah putih tukang becak lebih tinggi (8.558 sel per mm³) dibandingkan dengan jumlah sel darah putih sampel kontrol (7.355 sel per mm³).