Faal paru pada polisi lalu lintas Polres Metropolitan Tangerang Kota dan faktor-faktor yang mempengaruhinya = PULMONARY FUNCTION TEST IN TRAFFIC POLICE PERSONEL AND THEIR INFLUENCING FACTOR IN TANGERANG

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Abstrak

Pendahuluan: Perkembangan kota Tangerang menyebabkan perkembangan lalu lintas di jalan raya. Perkembangan jumlah kendaraan meningkatkan pajanan polusi udara seperti debu, asap dan zat polutan lain hasil pembakaran mesin kendaraan berpengaruh terhadap faal paru orang-orang yang berada di jalanan terutama pada polisi lalulintas yang sedang bekerja. Penelitian ini dilakukan untuk menilai pajanan zat polutan terhadap nilai faal paru seseorang. Penelitian ini menilai usia, Indeks Massa Tubuh (IMT), nilai faal paru, kebiasaan merokok, masa tugas, dan pemakaian masker pelindung.
Metode: Dilakukan survei pada 112 anggota polisi lalu lintas yang bertugas di lapangan. Nilai faal paru di dapatkan dengan spirometri, kadar CO dengan CO meter, pemeriksaan fisis, foto toraks dan wawancara kuesioner. Indeks pencemaran dengan survei kualitas udara.
Hasil : Penurunan faal paru pada 17% polisi lalu lintas. Penurunan nilai faal paru ini meliputi restriksi ringan 13% dan obtruksi ringan 4%. Seluruh foto toraks normal. Delapan puluh satu persen polisi mempunyai berat badan lebih atau obese, 60,7% perokok aktif dan 63 persen mempunyai kebiasaan penggunaan masker yang buruk.
Kesimpulan: Kelompok umur mempunyai hubungan yang bermakna terhadap faal paru polisi lalu lintas. Tidak ada hubungan yang bermakna antara kebiasaan merokok, pemakaian masker , kadar CO dan gangguan faal paru.
.....Introduction: The city of Tangerang has develop into big city. The government has built a new street to anticipating the raising amount of the vehicle.The street became busy street. The fumes, chemical and particles present in the emission are reported to be damaging of these people especially traffic policemen. Since there were no data available on the pulmonary fuction test (PFT) of Traffic Police personel in Tangerang, this study was taken up to assess the effect of air pollution to the PFT. The measurement were recorded in age, body weight, height, Forced Vital Capacity, Forced Expiratory Volume in first second, gender, smoking habit, Body Mass Index (BMI), year of duty, chest x ray and mask.
Method: We evaluated 112 traffic police personel.Subject of this study were interviewed to identify the clinical sign. Physical examination, pulmonary function test, chest x ray, measurement CO level by using CO smoker analyzer and air pollutant level were done. Result: Nineteen from 112 police personel have decrease of PFT. Fourteen (13%) police was indicated mild restriction to the lung expansion and 5 (4%) police mild obstruction. Total Suspended Particle (TSP) was 478,8 ug/Nm3 higher than normal limit 230 ug/Nm3. Weight and height were measure to calculate the Body Mass Index (BMI), we found that most of police personel have overweight and obese. Sixty percent of police were active smoker. All of the X ray in normal limit.
Conclusion: There was decrease in PFT in 19% of police personel. These indicate mild restriction and mild obstruction. There are significant correlation between age and PFT. There was no significant correlation

between smoking habit, protection mask, CO level, level of air pollution, year of duty and pulmonary function test.