Kajian kadar Testosteron dan Cortisol dalam Darah pada polisi lalu lintas (terpajan Polutan) dengan polisi yang bertugas di kantor (tidak terpajan Polutan) DKI Jakarta tahun 2012 = Study of Testosterone and Cortisol levels in Blood the traffic police (exposed to Pollutants) with the police serving in the office (not exposed to Pollutantsa) Jakarta 2012

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Abstrak

Penelitian ini bertujuan untuk menjelaskan kadar testosteron dan cortisol dalam darah akibat pajanan polutan di udara serta mengetahui faktor-faktor apa saja yang mempengaruhinya.Jenis penelitian ini bersifat deskriptif analitik, metode cross sectional dengan analisis kuantitatif. Sampel penelitian adalah polisi lalu lintas (terpajan polutan) dan polisi yang bertugas di kantor (tidak terpajan polutan) DKI Jakarta, dengan besar sampel 30 polisi lalul intas dan 30 polisi yang bertugas di kantor. Data yang diperoleh selanjutnya diolah secara statistik menggunakan chisquare test.

Berdasarkan hasil penelitian, nilai rata-rata kadar testosteron dalam darah antara polisi lalu lintas (terpajan polutan) lebih tinggi yaitu 516,5133 dibandingkan nilai rata-rata kadar testosteron dalam darah pada polisi yang bertugas di kantor (tidak terpajan polutan) yaitu 472,77.Nilai rata-rata kadar cortisol dalam darah pada polisi lalu lintas (terpajan polutan) lebih tinggi yaitu 10,8883 dibandingkan nilai rata-rata kadar cortisol dalam darah pada polisi yang bertugas di kantor (tidak terpajan polutan) yaitu 10,5607.

Tidak ada hubungan yang signifikan antara variabel riwayat merokok, usia, jarak rumah ketempat kerja, jenis kendaraan yang digunakan indek smassa tubuh dengan kadar testosteron dan cortisol dengan nilai P.Value > 0,05. Meskipun tidak ada hubungan yang signifikan namun perlu dilakukan tindakan pencegahan berupa pengukuran kadar polutan di udara dan medical check-up untuk mengurangi dampak gangguan fungsi reproduksi jika terpajan polutan dalam waktu yang cukup lama.

.....This study aimed to describe levels of testosterone and cortisol in the blood due to exposure to pollutants in the air and to know what factors that influence it. This type of research is descriptive analytic, cross sectional methode with a quantitative analysis. The samples were traffic policemen (exposed to pollutants) and police on duty at the office (not exposed to pollutants) in Jakarta, with a large sample of 30 traffic policemen and 30 police on duty at the office. The data obtained were then processed statistically using the chisquare test.

Based on the results of the study, the mean testosterone levels in the blood between the traffic policemen (exposed to pollutants) is 516.5133 which is higher than the average levels of testosterone in the blood to the police on duty at the office (not exposed to pollutants) which is 472.77. The average value of cortisol levels in the blood at the traffic policemen (exposed to pollutants) is higher which is 10.8883 compared to the average levels of cortisol in the blood at the police on duty at the office (not exposed to pollutants) which is 10.5607.

There was no significant association between smoking history variables, age, distance from home to the workplace, type of vehicle used by the body mass index levels of testosterone and cortisol with P.Value value> 0.05. Although there is no significant relationship but precautions need to be done in the form of measured levels of pollutants in the air and medical check-up to reduce the impact ofreproductive

dysfunction when exposed to pollutants in a long time.