Kebiasaan Minum pada Pilot Sipil di Indonesia dan Hubungannya dengan Hiperurisemia = Water Intake of Civil Pilots in Indonesia and Its Relationship With Hyperuricemia

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Abstrak

Latar Belakang : Hiperurisemia pada pilot dapat meningkatkan risiko terjadinya inkapasitasi baik akibat penyakit sendi, batu, maupun jantung. Hiperurisemia dapat disebabkan berbagai faktor seperti jenis makanan, jumlah volume cairan yang dikonsumsi, kebiasaan aktivitas fisik, dan paparan dari lingkungan penerbangan. Data menunjukkan bahwa pada populasi pekerja rata-rata memiliki kebiasaan konsumsi cairan sebanyak 1882 ml/hari. Angka ini masih di bawah nilai kebutuhan cairan harian yang direkomendasikan yaitu sekitar 2000 ml/hari. Tujuan dari penelitian ini adalah untuk mengetahui hubungan kebiasaan minum, tipe penerbangan, kebiasaan makan buah dan sayur, serta aktivitas fisik dengan hiperurisemia pada pilot sipil di Indonesia.

Metode : Penelitian menggunakan metode potong lintang dari pengisian kuesioner dan rekam medis pilot sipil di Balai Kesehatan Penerbangan, Jakarta yang melakukan pemeriksaan 6-10 Juni 2022. Data yang dikumpulkan dari kuesioner meliputi: usia, ras, jenis kelamin, lisensi, berat badan, tinggi badan, tipe penerbangan, kebiasaan makan buah dan sayur, dan aktivitas fisik. Data kebiasaan minum secara khusus dikumpulkan menggunakan kuesioner 7 days fluid record. Dari rekam medis data yang didapat berupa kadar asam urat. Hiperurisemia adalah konsentrasi urat plasma lebih dari 6,8 mg/dl. Pengolahan data menggunakan aplikasi IBM® SPSS® Statistics Version 22.

Hasil : Dari 141 pilot yang melakukan pemeriksaan kesehatan dan setuju untuk ikut dalam penelitian, sebanyak 23 tidak merespon ketika dihubungi dan sebanyak 33 orang masuk dalam kriteria drop out sehingga jumlah sampel penelitian menjadi 85 pilot. Karakteristik pilot yang didapat dalam penelitian ini sebanyak 56,5% berusia diatas 30 tahun, 63,5% memiliki kategori indeks massa tubuh obesitas, dan 49,4% memiliki tipe penerbangan short haul. Sebanyak 54,1% memiliki kadar asam urat tinggi (hiperurisemia) dan 45,9% memiliki kadar asam urat normal. Data menunjukkan bahwa kebiasaan minum pilot sipil di Indonesia rata-rata berada di angka 2246,10 ml per hari dengan rata-rata jumlah konsumsi air putihnya berada di angka 1910,49 ml per hari. Sebanyak 98,8% responden memiliki kebiasaan makan buah dan sayur yang kurang dari yang direkomendasikan. Sebanyak 71,8% responden memiliki aktivitas fisik inaktif. Dari hasil analisa statistik tidak ditemukan adanya faktor risiko yang diteliti yang berhubungan dengan peningkatan risiko terjadinya hiperurisemia.

Kesimpulan : Karakteristik pilot yang ditemukan sebagian besar berusia di atas 30 tahun, memiliki indeks massa tubuh obesitas, dan memiliki tipe penerbangan short haul. Prevalensi hiperurisemia pada pilot sipil ditemukan sebesar 54,1%. Sebanyak 54,1% pilot sipil di Indonesia sudah memiliki kebiasaan minum yang baik sesuai rekomendasi (2000 ml per hari). Pilot sipil di Indonesia belum memiliki kebiasaan makan buah dan sayur yang baik sesuai rekomendasi. Pilot sipil di Indonesia masih banyak yang memiliki aktivitas fisik

kategori inaktif daripada yang aktif. Kecenderungan hiperurisemia ditemukan pada sampel yang kebiasaan minumnya kurang dari yang direkomendasikan (59%), memiliki tipe penerbangan long haul (81,8%), memiliki kebiasaan makan buah dan sayurnya kurang dari yang direkomendasikan (54,8%), dan yang memiliki aktivitas fisik aktif (71,4%).
.....Background : Hyperuricemia in pilots can increase the risk of incapacity due to joint, stone, and heart disease. Hyperuricemia can be caused by various factors such as the type of food, the amount of fluid volume consumed, physical activity habits, and exposure from the flight environment. Data shows that the working population has an average of 1882 ml/ day of fluid consumption. This figure is still below the recommended daily fluid requirement value of about 2000 ml / day. The purpose of this study was to determine the relationship between drinking habits, flight types, fruit and vegetable eating habits, as well as physical activity with hyperuricemia in civilian pilots in Indonesia.

Methods : The study used the cross-section method from filling out questionnaires and medical records of civilian pilots at the Aviation Health Center, Jakarta, which conducted an examination from June 6-10, 2022. The data collected from the questionnaire included: age, race, gender, license, weight, height, flight type, fruit and vegetable eating habits, and physical activity. Drinking habits data were specifically collected using a 7 days fluid record questionnaire. From the medical record, the data obtained is in the form of uric acid levels. Hyperuricemia is a plasma urate concentration of more than 6,8 mg/dl. Data processing using IBM® SPSS® Statistics Version 22 applications.

Results : From the 141 pilots who conducted medical examinations and agreed to participate in the study, 23 did not respond when contacted and 33 people were included in the drop out criteria, bringing the number of study samples to 85 pilots. The characteristics of the pilots obtained in this study were 56.5% over the age of 30 years, 63.5% had an obese body mass index category, and 49.4% had a short haul flight type. About 54.1% had high uric acid levels (hyperuricemia) and 45.9% had normal uric acid levels. Data shows that the drinking habits of civilian pilots in Indonesia are on average at 2,246.10 ml per day with the average amount of water consumption at 1,910.49 ml per day. About 98.8% of respondents have the habit of eating fruits and vegetables that are less than recommended. It was also found that 71.8% of respondents had inactive physical activity. From the results of statistical analysis, it was not found that there were risk factors studied were associated with an increased risk of hyperuricemia.

Conclusion : The characteristics of the pilots found were mostly over 30 years old, had an obese body mass index, and had a short haul flight type. The prevalence of hyperuricemia in civilian pilots was found to be 54.1%. As many as 54.1% of civilian pilots in Indonesia already have good drinking habits according to recommendations (2000 ml per day). Civilian pilots in Indonesia do not yet have the habit of eating good fruits and vegetables as recommended. Civil Pilots in Indonesia still have more inactive category physical activity than active ones. A tendency to hyperuricemia was found in samples whose drinking habits were less than recommended (59%), having a long haul flight type (81.8%). have the habit of eating fruits and vegetables less than recommended (54.8%), and those with active physical activity (71.4%).