HUBUNGAN ANTARA ASUPAN KAFEIN, KUALITAS TIDUR DAN STATUS GIZI DENGAN TEKANAN DARAH

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ABSTRAK

Latar belakang: Pada negara berkembang kategori usia 20-24 tahun banyak mengalami tekanan darah tinggi, 9,4% laki-laki dan 8,9% perempuan. Di Indonesia kejadian tekanan darah tinggi ≥18 tahun adalah 25,8%. Tekanan darah pada mahasiswa dapat dipengaruhi oleh asupan kafein, kualitas tidur dan status gizi.

Tujuan: Penelitian ini bertujuan untuk mengetahui hubungan antara asupan kafein, kualitas tidur dan status gizi dengan tekanan darah.

Metode: Penelitian dilakukan pada mahasiswa STT Wastukancana dengan desain penelitian *cross sectional* dan 82 subjek penelitian yang dipilih secara *simple random sampling*. Asupan kafein diukur dengan menggunakan FFQ semi kuantitatif, kualitas tidur diukur dengan kuesioner PSQI, status gizi diukur dengan IMT, tekanan darah diukur dengan alat *sphygnomanometer digital*. Hubungan masing-masing variabel bebas dengan tekanan darah sistolik di uji dengan *pearson product momment*. Hubungan masing-masing variabel bebas dengan tekanan darah diastolik di uji dengan *rank spearman*. Hubungan variabel bebas secara bersamaan dengan tekanan darah sistolik di uji dengan regresi linear ganda.

Hasil: Subjek memiliki tekanan darah sistolik tinggi (61%) dan tekanan darah diastolik tinggi (74,4%). Asupan kafein, kualitas tidur dan status gizi masing-masing memiliki hubungan dengan tekanan darah sistolik dan tekanan darah diastolik. Faktor-faktor yang berpengaruh meningkatkan tekanan darah sistolik adalah asupan kafein (*B*=0,12; *p*=0,004), kualitas tidur (*B*=1,36; *p*=0,001) dan status gizi (*B*=1,25; *p*=0,001). Buruknya kualitas tidur subjek pada penelitian ini dapat disebabkan oleh adanya gangguan-gangguan baik saat sebelum tertidur ataupun pada saat tidur.

Simpulan: Tekanan darah tinggi dapat dipengaruhi oleh faktor-faktor seperti, asupan kafein, kualitas tidur dan status gizi.

Kata kunci: Asupan kafein, Kualitas tidur, Status Gizi, Tekanan darah

THE RELATIONSHIP BETWEEN CAFFEINE INTAKE, SLEEP QUALITY AND NUTRITIONAL STATUS ON BLOOD PRESSURE

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ABSTRACT

Background: In developing countries, the age category 20-24 years is the highest age category of high blood pressure, 9.4% male and 8.9% female. In Indonesia the incidence of high blood pressure ≥18 years was 25.8%. Blood pressure in students can be affected by caffeine intake, sleep quality and nutritional status.

Objective: This study aims to determine the relationship between caffeine intake, sleep quality and nutritional status with blood pressure.

Methods: This research was conducted at STT Wastukancana students using cross sectional research design and 82 subjects were selected by simple random sampling. Caffeine intake was measured using a semi-quantitative FFQ, sleep quality was measured by the PSQI questionnaire, nutritional status was measured by BMI, blood pressure was measured with a digital sphygnomanometer. The relationship of each independent variable with systolic blood pressure was tested with Pearson product moment. The relationship of each independent variable with diastolic blood pressure was tested by rank spearman. The relationship of independent variables together with systolic blood pressure was tested by multiple linear regression.

Results: Subjects had high systolic blood pressure (61%) and high diastolic blood pressure (74.4%). Caffeine intake, sleep quality and nutritional status each have a relationship with systolic blood pressure and diastolic blood pressure. In the multiple linear regression test, caffeine intake (B=0,12; p=0,004), sleep quality (B=1,36; p=0,001) and nutritional status (B=1,25; p=0,001) were independent contributors of high systolic blood pressure. The poor quality of sleep subjects in this study can be caused by disturbances both before sleeping and during sleep.

Conclusion: High blood pressure can be affected by factors such as caffeine intake, sleep quality and nutritional status.

Keyword: Caffeine intake, Sleep quality, Nutritional status, Blood Pressure.