

ABSTRACT

ASSOCIATION BETWEEN EXCESSIVE INTAKE OF CAFFEINE AND ADDED SUGARS AND PRIMARY DYSMENORRHEA AMONG FEMALE STUDENTS AT THE UNIVERSITY OF LAMPUNG

By

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Background: Dysmenorrhea is a common gynecological issue among women of reproductive age, often linked to hormonal imbalances and increased prostaglandin levels that cause menstrual pain. Excessive caffeine and added sugar intake have been suggested as possible factors influencing the severity of primary dysmenorrhea. The purpose of this study was to determine the relationship between excessive caffeine and added sugar intake and the occurrence of primary dysmenorrhea among female students at the University of Lampung.

Methods: This analytic cross-sectional study was conducted among 172 female students of the University of Lampung, selected by multistage random sampling from the Faculties of Medicine and Law. Data on caffeine and added sugar intake were collected using a structured 2x24-hour food recall method and categorized into low, moderate, and high consumption levels. Dysmenorrhea severity was assessed using a Visual Analog Scale and analyzed with chi-square tests for associations.

Results: Most participants had low caffeine intake (54.1%) and moderate added sugar intake (54.7%). Dysmenorrhea was reported in 80.2% of respondents, with severity distributed as mild (33.7%), moderate (30.8%), and severe (15.7%). Significant associations were found between higher caffeine intake and increased dysmenorrhea severity ($p < 0.001$), as well as between added sugar consumption and dysmenorrhea severity ($p < 0.001$).

Conclusion: Excessive consumption of caffeine and added sugars is significantly associated with higher severity of primary dysmenorrhea among female university students. Health education and lifestyle interventions focusing on limiting caffeine and sugar intake are recommended to manage dysmenorrhea symptoms.

Keywords: added sugar, caffeine intake, cross-sectional study, female students, primary dysmenorrhea

ABSTRAK

HUBUNGAN ASUPAN KAFEIN DAN GULA TAMBAHAN BERLEBIH DENGAN *DYSMENORRHEA* PRIMER PADA MAHASISWI DI UNIVERSITAS LAMPUNG

Oleh

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Latar Belakang: Dysmenorrhea merupakan masalah ginekologis yang umum terjadi pada wanita usia reproduktif, terkait dengan ketidakseimbangan hormonal dan peningkatan kadar prostaglandin yang menyebabkan nyeri haid. Konsumsi kafein dan gula tambahan berlebih diduga berperan dalam memperberat gejala dysmenorrhea primer. Tujuan penelitian ini adalah untuk mengetahui hubungan antara asupan kafein dan gula tambahan berlebih dengan kejadian dysmenorrhea primer pada mahasiswa Universitas Lampung.

Metode: Penelitian analitik dengan desain cross-sectional ini melibatkan 172 mahasiswa Universitas Lampung yang dipilih dengan multistage random sampling dari Fakultas Kedokteran dan Fakultas Hukum. Data asupan kafein dan gula tambahan dikumpulkan melalui food recall terstruktur 2x24 jam dan dikategorikan dalam tiga tingkat konsumsi. Derajat dysmenorrhea diukur dengan Skala Analog Visual dan dianalisis menggunakan uji chi-square untuk menguji hubungan.

Hasil: Sebagian besar peserta memiliki asupan kafein rendah (54,1%) dan asupan gula tambahan sedang (54,7%). Dysmenorrhea dilaporkan pada 80,2% responden dengan distribusi ringan (33,7%), sedang (30,8%), dan berat (15,7%). Ditemukan hubungan bermakna antara asupan kafein yang tinggi dengan peningkatan derajat dysmenorrhea ($p < 0,001$) serta antara asupan gula tambahan dengan derajat dysmenorrhea ($p < 0,001$).

Simpulan: Konsumsi kafein dan gula tambahan yang berlebihan berhubungan signifikan dengan peningkatan derajat dysmenorrhea primer pada mahasiswa perempuan. Edukasi kesehatan dan intervensi gaya hidup yang menekankan pembatasan konsumsi kafein dan gula perlu dilakukan untuk mengelola gejala dysmenorrhea.

Kata Kunci: asupan kafein, dysmenorrhea primer, gula tambahan, mahasiswa, studi cross-sectional.