

## **Hubungan Kualitas Tidur dan Lemak Viseral dengan *Premenstrual Syndrome* (PMS) pada Mahasiswi Fakultas Kedokteran Universitas Diponegoro**

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### **ABSTRAK**

**Latar Belakang:** *Premenstrual syndrome* (PMS) merupakan sekumpulan gejala fisik dan emosional pada fase luteal yang diduga dipengaruhi faktor gaya hidup seperti kualitas tidur melalui regulasi melatonin, serta lemak viseral yang berperan dalam produksi hormon estrogen. Hasil penelitian hubungan kualitas tidur dengan PMS masih tidak konsisten, serta penelitian hubungan lemak viseral dengan PMS masih terbatas.

**Tujuan:** Menganalisis hubungan kualitas tidur dan lemak viseral dengan PMS pada mahasiswi Fakultas Kedokteran Universitas Diponegoro.

**Metode:** Penelitian observasional analitik dengan desain cross-sectional pada 58 mahasiswi usia 18–25 tahun. PMS diukur menggunakan *Shortened Premenstrual Assessment Form* (SPAF), kualitas tidur menggunakan *Pittsburgh Sleep Quality Index* (PSQI), dan lemak viseral diukur dengan *Bioelectrical Impedance Analysis* (BIA) InBody 970. Analisis bivariat menggunakan uji Pearson dan Spearman's rho.

**Hasil:** Sebagian besar subjek memiliki kualitas tidur buruk (62,1%), lemak viseral kategori lebih (51,7%), dan PMS derajat ringan (58,6%). Kualitas tidur berhubungan signifikan dengan PMS ( $r=0,312$ ;  $p=0,017$ ), sedangkan lemak viseral tidak berhubungan signifikan dengan PMS ( $r=0,008$ ;  $p=0,952$ ).

**Simpulan:** Kualitas tidur berhubungan signifikan dengan PMS, sedangkan lemak viseral tidak menunjukkan hubungan signifikan dengan PMS.

**Kata Kunci:** *premenstrual syndrome*, kualitas tidur, lemak viseral, pola makan, Mahasiswi

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## Association of Sleep Quality and Visceral Fat with Premenstrual Syndrome (PMS) Among Female Medical Students at Diponegoro University

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### ABSTRACT

**Background:** Premenstrual syndrome (PMS) is a group of physical and emotional symptoms during the luteal phase that may be influenced by lifestyle factors, including sleep quality through melatonin regulation and visceral fat through estrogen production. However, findings regarding the association between sleep quality and PMS remain inconsistent, while evidence on the relationship between visceral fat and PMS is limited.

**Objective:** To analyze the association between sleep quality and visceral fat with PMS among female students of the Faculty of Medicine, Diponegoro University.

**Methods:** An analytical observational study with a cross-sectional design was conducted among 58 female students aged 18–25 years. PMS was assessed using the Shortened Premenstrual Assessment Form (SPAF), sleep quality using the Pittsburgh Sleep Quality Index (PSQI), and visceral fat using Bioelectrical Impedance Analysis (BIA) with InBody 970. Bivariate analysis was conducted using Pearson and Spearman's rho tests.

**Results:** Most subjects had poor sleep quality (62.1%), elevated visceral fat (51.7%), and mild PMS (58.6%). Sleep quality was significantly associated with PMS ( $r=0.312$ ;  $p=0.017$ ), whereas visceral fat showed no significant association with PMS ( $r=0.008$ ;  $p=0.952$ ).

**Conclusion:** Sleep quality is significantly associated with PMS, whereas visceral fat was not significantly associated with PMS.

**Keywords:** Premenstrual syndrome, sleep quality, visceral fat, dietary patterns, female students

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