

ABSTRAK

Latar Belakang: Usia menarche dan gangguan menstruasi pada remaja perempuan merupakan indikator penting kesehatan reproduksi yang dipengaruhi interaksi faktor biologis, perilaku, dan lingkungan. Masa remaja adalah periode maturasi neuroendokrin sehingga fungsi reproduksi masih dalam proses pematangan dan rentan terhadap ketidakaturan siklus. Kota Yogyakarta dilaporkan memiliki prevalensi menarche dini tertinggi ketiga di Indonesia (7,5%), namun determinan spesifik pada populasi remaja di wilayah ini belum banyak diteliti secara komprehensif.

Metode: Penelitian ini bertujuan menganalisis hubungan riwayat usia menarche ibu serta faktor sosiodemografi dan ekonomi dengan kejadian menarche dini, serta hubungan usia menarche, status gizi, pola makan, aktivitas fisik, stres psikososial, dan faktor sosial ekonomi dengan gangguan menstruasi. Studi cross-sectional dilaksanakan Oktober–November 2025 setelah memperoleh persetujuan etik. Sampel terdiri dari 120 remaja putri kelas X–XII (usia 15–18 tahun) yang dipilih secara purposive dari SMA/SMK di lima wilayah Kota Yogyakarta. Data dikumpulkan melalui kuesioner MEDI-Q, FFQ, IPAQ, dan SDQ, serta pengukuran antropometri. Analisis menggunakan IBM SPSS versi 27.

Hasil: Sebanyak 7,5% responden mengalami menarche dini dan 81,7% melaporkan gangguan menstruasi. Tidak terdapat hubungan signifikan antara riwayat usia menarche ibu, faktor sosiodemografi, maupun ekonomi dengan menarche dini ($p > 0,05$). Tidak ada variabel yang berhubungan signifikan dengan gangguan menstruasi, meskipun usia menarche menunjukkan kecenderungan risiko ($OR = 4,13$; $p = 0,06$). Mayoritas responden memiliki paparan makanan ultra-proses sangat tinggi (99,2%).

Diskusi: Gangguan menstruasi kemungkinan lebih dipengaruhi ketidakstabilan hormonal remaja. Edukasi gizi, aktivitas fisik, kesehatan mental, dan deteksi dini tetap diperlukan di sekolah.

Kata kunci: menarche dini, gangguan menstruasi, stres psikososial, status gizi, pola makan.

ABSTRACT

Background: Age at menarche and menstrual disorders among adolescent girls are important indicators of reproductive health influenced by interactions among biological, behavioral, and environmental factors. Adolescence is a period of neuroendocrine maturation during which reproductive function is still developing and vulnerable to cycle irregularities. Yogyakarta City has been reported to have the third-highest prevalence of early menarche in Indonesia (7.5%); however, specific determinants among adolescents in this region have not been comprehensively investigated.

Methods: This study aimed to analyze the association between maternal age at menarche and sociodemographic and economic factors with early menarche, as well as the relationship between age at menarche, nutritional status, dietary patterns, physical activity, psychosocial stress, and socioeconomic factors with menstrual disorders. A cross-sectional study was conducted from October to November 2025 after ethical approval was obtained. The sample consisted of 120 female students in grades X–XII (aged 15–18 years) selected purposively from senior high schools and vocational schools across five districts of Yogyakarta City. Data were collected using structured questionnaires (MEDI-Q, FFQ, IPAQ, and SDQ) and anthropometric measurements. Data were analyzed using IBM SPSS version 27.

Results: A total of 7.5% of respondents experienced early menarche, and 81.7% reported menstrual disorders. No significant associations were found between maternal age at menarche, sociodemographic, or economic factors and early menarche ($p > 0.05$). Similarly, no variables were significantly associated with menstrual disorders, although age at menarche showed a tendency toward increased risk ($OR = 4.13$; $p = 0.06$). Most respondents had very high exposure to ultra-processed foods (99.2%).

Discussion: Menstrual disorders in adolescents may be more strongly influenced by hormonal instability during maturation. Nevertheless, nutrition education, physical activity promotion, mental health support, and early detection in schools remain essential.

Keywords: early menarche, menstrual disorders, psychosocial stress, nutritional status, dietary patterns.