

## INTISARI

**Latar Belakang:** Remaja merupakan populasi beresiko untuk mengalami defisiensi besi karena adanya peningkatan kebutuhan zat gizi dalam masa pertumbuhan. Kebutuhan zat gizi remaja meningkat hingga usia pubertas. Prevalensi anemia yang tinggi di kalangan remaja akan berlanjut hingga dewasa jika tidak tertangani dengan baik. Anemia berkontribusi besar terhadap angka kematian ibu, bayi lahir prematur dan bayi dengan berat badan lahir rendah.

**Tujuan:** Mengetahui hubungan status gizi, asupan zat gizi makro dan mikro dengan kejadian anemia pada remaja putri di Kota Yogyakarta.

**Metode:** Penelitian ini merupakan penelitian survei analitik dengan desain penelitian secara potong lintang / *cross sectional*. Subjek penelitian adalah remaja putri usia 12-18 tahun di Kota Yogyakarta. Pengukuran tinggi badan, berat badan, kadar hemoglobin, MCV, MCH dan MCHC dan penilaian asupan zat gizi responden dilakukan dalam kurun waktu yang hampir bersamaan. Pengukuran kadar hemoglobin, MCV, MCH dan MCHC menggunakan alat *Hematoanalyzer KX-21* dengan metode *Sodium Lauryl Sulphate*. Asupan zat gizi diukur dengan menggunakan *Semi Quantitative-Food Frequency Questionnaire (SQ-FFQ)* tiga bulan terakhir.

**Hasil:** Prevalensi anemia remaja putri pada penelitian ini yaitu 13,13%. Pada penelitian ini tidak ada hubungan yang bermakna antara status gizi dengan anemia pada remaja putri (OR=1,68; CI=0-11,830; p=0,509). Tidak ada hubungan asupan karbohidrat (OR=2,190; CI=0,963-4,975; p=0,0618), lemak (OR=1,911; CI=0,803-4,532; p=0,146), protein (OR=1,439; CI=0,638-3,242; p=0,386) dengan anemia pada remaja putri. Tidak ada hubungan asupan vitamin A (OR=0,812; CI=0-3,4; p=1), vitamin C (OR=2,05; CI=0,862-4,86; p=0,106), asupan zat besi (OR=4,452; CI=0,577-34,30; p=0,152), asupan folat (OR=2,044, CI=0,256-16,315; p=0,5), asupan vitamin B<sub>6</sub> (OR=1,091; CI=0,467-2,544; p=0,842), asupan vitamin B<sub>12</sub> (OR=1,568; CI=0,691-3,551; p=0,287) dengan kejadian anemia pada remaja putri di Kota Yogyakarta. Tidak ada hubungan kebiasaan sarapan (OR=0,948; CI=0,412-2,176; p=0,902). Terdapat hubungan tingkat pendidikan (OR=2,577; CI=1,011-6,541, p=0,0472) dengan kejadian anemia pada remaja putri di Kota Yogyakarta.

**Kesimpulan:** Status gizi, zat gizi makro dan mikro tidak berhubungan dengan kejadian anemia pada remaja putri di Kota Yogyakarta. Asupan makan remaja putri rendah sehingga perlunya edukasi di sekolah tentang gizi seimbang dan kebiasaan sarapan. Bagi remaja perlu meningkatkan konsumsi zat besi terutama saat menstruasi dan adanya kerjasama antara pihak sekolah, dinas pendidikan dan dinas kesehatan seperti pembuatan poster tentang gizi dan makanan yang sehat di sekolah. Selain itu, aktivitas fisik remaja ditingkatkan.

**Kata Kunci:** status gizi, asupan zat gizi makro, asupan zat gizi mikro, anemia, remaja.

## ABSTRACT

**Background:** Adolescents are a population at risk for iron deficiency due to an increased need for iron in its infancy. The need for iron increases until the age of puberty. The high prevalence of anemia among adolescents will continue into adulthood if not treated properly. Anemia contributes greatly to maternal mortality, premature birth, and low birth weight infants.

**Objective:** This study is conducted to determine the correlation of nutritional status, intake of macro and micro nutrients with anemia incidence in adolescent girls of Yogyakarta City.

**Method:** This research is an analytic survey research with cross-sectional study design. The subject was adolescent girls aged 12-18 years in the city of Yogyakarta.. Measurement of body height, body weight, hemoglobin level, MCV, MCH and MCHC and assessment of respondent's nutrient intake were done in almost the same time. Measurement of hemoglobin level, MCV, MCH and MCHC were measured using Hematoanalyzer KX-21 with Sodium Lauryl Sulphate method. Nutrient intake was measured using Semi Quantitative-Food Frequency Questionnaire (SQ-FFQ) of the last three months.

**Result:** The prevalence of anemia among adolescent girls in this study was 13,13%. In this study there was no significant correlation between nutritional status and anemia in adolescent girls (OR = 1,68; CI = 0-11,830; p = 0,509); there was no significant correlation between carbohydrate intake (OR = 2,190; CI = 0.963-4,975; p = 0.0618), fat intake (OR = 1,911; CI = 0.803-4.532; p = 0.146, protein intake (OR = 1,439; CI = 0.638-3.242 p = 0.386) and anemia in adolescent girls. There was no significant correlation between vitamin A intake (OR = 0.812; CI = 0-3,4; p = 1), vitamin C intake (OR = 2.05; CI = 0.862-4; p=0,106), iron intake (OR=4,452; CI=0,577-34,30; p=0,152), folate intake (OR = 2,044, CI = 0,256-16,315; p = 0,5), vitamin intake B<sub>6</sub> (OR = 1.091; CI = 0.467-2.544; p = 0.842), vitamin B<sub>12</sub> intake (OR = 1,568; CI = 0.691-3.551; p = 0.287) with anemia in adolescent girls in Yogyakarta City. There was no correlation between breakfast habit (OR = 0,948; CI = 0,412-2,176; p = 0,902). There was correlation of education level (OR = 2,577; CI = 1,011-6,541, p = 0,0472) with anemia in adolescent girls in Yogyakarta.

**Conclusion:** Nutritional status, macro and micro nutrients are not significant with the incidence of anemia in young women in the city of Yogyakarta. The intake of adolescent girls is low, so education at schools about balance nutrition and breakfast habits is required. For adolescents, it is necessary to increase iron consumption, especially during menstruation and the collaboration between the school, the education office and the health department, such as making posters about nutrition and healthy food at schools. In addition, physical activity of adolescents is increased.

**Keywords:** nutritional status, macronutrient intake, micronutrient intake, anemia, adolescents.