

ABSTRAK

Wildah Afani Harahap : Hubungan Status Gizi Dan Asupan Zat Besi Serta Vitamin C Dengan Kadar Hemoglobin Pada Remaja Putri Di SMA Negeri 11 Medan.

Berdasarkan data Riskesdas, prevalensi anemia pada remaja putri tahun 2013 sebesar 37,1% mengalami peningkatan pada tahun 2018 menjadi sebesar 48,9%. Prevalensi anemia di Sumatera Utara pada tahun 2018 yaitu mencapai angka kisaran 15% - 39%. Angka prevalensi anemia yang tinggi menyatakan bahwa anemia masih menjadi salah satu masalah gizi yang muncul pada populasi masyarakat di Sumatera Utara. Penelitian ini bertujuan untuk mengetahui: (1) Karakteristik responden yaitu usia responden, pendidikan ayah dan ibu, pekerjaan ayah dan ibu, pendapatan ayah dan ibu, uang saku responden, besaran keluarga, riwayat konsumsi TTD, siklus menstruasi, dan durasi menstruasi. (2) Status gizi remaja putri. (3) Asupan zat besi remaja putri. (4) Asupan vitamin C remaja putri. (5) Kadar hemoglobin remaja putri. (6) Hubungan status gizi dan asupan zat besi serta vitamin C dengan kadar hemoglobin pada remaja putri. Penelitian dilakukan di SMA Negeri 11 Medan dengan populasi seluruh remaja putri di kelas XI dengan jumlah 215 populasi. Teknik pengambilan sampel dilakukan dengan cara *proportional sampling* dengan jumlah 68 sampel. Desain penelitian *cross sectional*. Teknik pengumpulan data menggunakan pengukuran IMT/U, pengisian kuesioner, dan pemeriksaan kadar hemoglobin. Teknik analisis data menggunakan deskriptif data uji korelasi *rank spearman* dan *analisis regresi linier berganda*.

Hasil penelitian yang dilakukan menunjukkan bahwa terdapat hubungan status gizi ($p=0,005$), asupan zat besi ($p=0,000$), asupan vitamin C ($p=0,000$) dengan kadar hemoglobin. Berdasarkan hasil analisis regresi *linier berganda* yang dilakukan, didapatkan hasil kadar hemoglobin : $10,804+(0,280 \times \text{status gizi})+(0,082 \times \text{asupan zat besi})+(0,004 \times \text{asupan vitamin C})$. Setiap kenaikan 1 kg/m^2 status gizi akan meningkatkan kadar hemoglobin remaja putri sebesar 0,280 g/dl, setiap kenaikan 1 mg asupan zat besi akan meningkatkan kadar hemoglobin sebesar 0,082 g/dl dan setiap penambahan 1 mg asupan vitamin C akan meningkatkan kadar hemoglobin remaja putri sebesar 0,004 g/dl. Kesimpulannya terdapat hubungan yang positif dan signifikan antara status gizi, asupan zat besi, dan vitamin C dengan kadar hemoglobin yang berarti apabila semakin baik status gizi, asupan zat besi dan asupan vitamin C maka akan membaik pula kadar hemoglobin pada remaja putri di SMA Negeri 11 Medan.

ABSTRACT

Wildah Afani Harahap : Relationship between Nutritional Status and Intake of Iron and Vitamin C with Hemoglobin Levels in Young Girls at SMA Negeri 11 Medan

Based on Riskesdas data, the prevalence of anemia in adolescent girls in 2013 was 37.1%, which increased in 2018 to 48.9%. The prevalence of anemia in North Sumatra in 2018 reached a range of 15% - 39%. The high prevalence of anemia suggests that anemia is still one of the nutritional problems that arise in the population in North Sumatra. This study aims to determine: (1) Characteristics of respondents, namely age of respondents, education of father and mother, occupation of father and mother, income of father and mother, pocket money of respondents, family size, history of TTD consumption, menstrual cycle, and duration of menstruation. (2) Nutritional status of adolescent girls. (3) Iron intake of adolescent girls. (4) Vitamin C intake of adolescent girls. (5) Hemoglobin level of adolescent girls. (6) The relationship between nutritional status and iron and vitamin C intake with hemoglobin levels in adolescent girls. The study was conducted at SMA Negeri 11 Medan with a population of all adolescent girls in class XI with a total population of 215. The sampling technique was done by proportional sampling with a total of 68 samples. Cross sectional research design. Data collection techniques using IMT / U measurements, filling out questionnaires, and checking hemoglobin levels. Data analysis techniques using descriptive data spearman rank correlation test and multiple linear regression analysis.

The results showed that there was a relationship between nutritional status ($p=0.005$), iron intake ($p=0.000$), vitamin C intake ($p=0.000$) with hemoglobin levels. Based on the results of multiple linear regression analysis conducted, the results obtained hemoglobin levels: $10.804+(0.280 \times \text{nutritional status})+(0.082 \times \text{iron intake})+(0.004 \times \text{vitamin C intake})$. Every 1 kg/m² increase in nutritional status will increase the hemoglobin level of adolescent girls by 0.280 g/dl, every 1 mg increase in iron intake will increase hemoglobin level by 0.082 g/dl and every 1 mg increase in vitamin C intake will increase hemoglobin level of adolescent girls by 0.004 g/dl. In conclusion, there is a positive and significant relationship between nutritional status, iron intake, and vitamin C with hemoglobin levels, which means that the better the nutritional status, iron intake and vitamin C intake, the better the hemoglobin levels in adolescent girls at SMA Negeri 11 Medan