

ABSTRAK

HUBUNGAN KECUKUPAN ZAT BESI HEME, NON HEME, DAN TANIN, SERTA KEKURANGAN ENERGI KRONIK (KEK) DENGAN KEJADIAN ANEMIA PADA REMAJA PUTRI

(Studi di SMP Negeri 6 Purwokerto)

Latar Belakang: Remaja putri merupakan kelompok yang rentan mengalami anemia. Faktor risiko terjadinya anemia pada remaja putri diantaranya adalah defisiensi asupan zat besi, konsumsi faktor penghambat penyerapan zat besi, dan KEK. Penelitian ini bertujuan untuk mengetahui hubungan kecukupan zat besi heme, non heme, dan tanin, serta KEK dengan kejadian anemia pada remaja putri di SMP Negeri 6 Purwokerto.

Metodologi: Penelitian menggunakan desain *cross sectional* dengan 70 sampel yang diperoleh dengan teknik *cluster random sampling*. Penelitian dilaksanakan bulan Mei 2024 pada remaja putri di SMP Negeri 6 Purwokerto. Data asupan zat besi heme, non heme, dan tanin diambil dengan SQ-FFQ, kejadian KEK diketahui melalui pengukuran LiLA, dan kejadian anemia diketahui melalui pengukuran kadar hemoglobin menggunakan *Sejoy HB-101*. Analisis bivariat menggunakan *Fisher Exact test*.

Hasil Penelitian: Sebanyak 98,6% responden memiliki asupan zat besi heme kurang, 84,3% memiliki asupan zat besi non heme cukup, 81,4% memiliki asupan tanin berlebih, 4,29% mengalami KEK, dan 70% mengalami anemia. Tidak terdapat hubungan antara kecukupan zat besi heme ($p>0,05$) dan KEK ($p>0,05$) dengan kejadian anemia serta terdapat hubungan antara kecukupan zat besi non heme ($p<0,05$) dan tanin ($p<0,05$) dengan kejadian anemia.

Kesimpulan: Tidak terdapat hubungan antara kecukupan zat besi heme dan KEK dengan kejadian anemia, namun terdapat hubungan antara kecukupan zat besi non heme dan tanin dengan kejadian anemia.

Kata Kunci: anemia, heme, KEK, non heme, tanin

ABSTRACT

THE RELATIONSHIP OF ADEQUACY OF HEME IRON, NON-HEME IRON, AND TANIN, AS WELL AS CHRONIC ENERGY DEFICIENCY (CED) WITH THE INCIDENT OF ANEMIA IN ADOLESCENT GIRLS

(Study at SMP Negeri 6 Purwokerto)

Background: Adolescent girls are a vulnerable group for experiencing anemia. Risk factors for anemia in adolescent girls include deficiencies in iron intake, consumption of substances that inhibit iron absorption, and CED. This study aimed to determine the relationship between the adequacy of heme iron, non-heme iron, and tannins, as well as CED, with the incidence of anemia among adolescent girls at SMP Negeri 6 Purwokerto.

Methods: The study used a cross-sectional design with 70 samples obtained by cluster random sampling technique. The study was conducted in May 2024 on adolescent girls at SMP Negeri 6 Purwokerto. Data on heme, non heme, and tannin iron intake were taken with SQ-FFQ, while CED was assessed through LiLA measurements, and anemia incidence was determined by measuring hemoglobin level with Sejoy HB-101. Bivariate analysis used Fisher Exact test.

Results: A total of 98.6% of respondents had insufficient heme iron intake, 84.3% had sufficient non-heme iron intake, 81.4% had excessive tannin intake, 4.29% had CED, and 70% had anemia. There was no relationship between heme iron adequacy ($p>0.05$) and CED ($p>0.05$) with the incidence of anemia, while there was a relationship between non-heme iron adequacy ($p<0.05$) and tannin adequacy ($p<0.05$) with the incidence of anemia.

Conclusion: There was no relationship between sufficient heme iron adequacy and CED with the incidence of anemia. However, there were a significant relationship between sufficient non-heme iron adequacy and tannin adequacy with the incidence of anemia.

Keywords: anemia, heme, CED, non heme, tannin