

HUBUNGAN ANTARA INDEKS MASSA TUBUH DAN TINGKAT AKTIVITAS FISIK DENGAN KADAR HEMOGLOBIN PADA SISWI SMAN 1 RAWALO KABUPATEN BANYUMAS

ABSTRAK

Latar Belakang: Anemia meningkat baik di dunia maupun di Indonesia. Prevalensi anemia di Indonesia meningkat dari 37% di tahun 2013 menjadi 48,9% di tahun 2018. Data Dinas Kesehatan Banyumas tahun 2014 menunjukkan bahwa terdapat 5,1% remaja putri di SMA dengan anemia. Anemia merupakan kondisi saat kadar hemoglobin dibawah nilai normalnya yaitu 11,0 g/dL. Rendahnya kadar hemoglobin menyebabkan tidak tercukupinya kebutuhan fisiologis tubuh untuk pengantaran oksigen ke otak, otot, dan jaringan penting lainnya sehingga menimbulkan daya tahan menurun, mudah lemas, lapar, konsentrasi belajar terganggu, dan produktivitas kerja rendah. Kadar hemoglobin dapat dipengaruhi berbagai faktor. Meningkatkan pengetahuan mengenai anemia penting dalam usaha untuk meningkatkan kesehatan wanita, kesehatan anak, kinerja sekolah, produktivitas dan kehamilan yang lebih baik.

Tujuan: Penelitian ini bertujuan untuk mengetahui hubungan antara indeks massa tubuh dan tingkat aktivitas fisik dengan kadar hemoglobin pada siswi SMAN 1 Rawalo Kabupaten Banyumas tahun ajaran 2023/2024.

Metode: Penelitian dilakukan secara *cross sectional* menggunakan data sekunder. Sampel berupa total sampel berjumlah 50 siswi. Indeks massa tubuh didapatkan dari pengukuran berat badan dan tinggi badan, tingkat aktivitas fisik diukur menggunakan kuesioner IPAQ, dan kadar hemoglobin diukur menggunakan metode *Point of Care Test*.

Hasil: Uji korelasi Spearman menunjukkan bahwa tidak terdapat hubungan antara indeks massa tubuh dengan kadar hemoglobin ($p=0,989$). Uji korelasi Pearson menunjukkan bahwa tidak terdapat hubungan antara tingkat aktivitas fisik dengan kadar hemoglobin ($p=0,954$).

Kesimpulan: Tidak terdapat hubungan antara indeks massa tubuh dan tingkat aktivitas fisik dengan kadar hemoglobin pada siswi SMAN 1 Rawalo Kabupaten Banyumas.

Kata Kunci: Hemoglobin, Indeks Massa Tubuh, Tingkat Aktivitas Fisik, Remaja Putri

**THE CORRELATION BETWEEN BODY MASS INDEX AND PHYSICAL
ACTIVITY LEVEL WITH HEMOGLOBIN LEVELS ON FEMALE
STUDENTS AT SMAN 1 RAWALO BANYUMAS**

ABSTRACT

Background: *The global prevalence of anemia is increasing, in Indonesia it increased from 37% in 2013 to 48,9% in 2018. Data from Banyumas Health Department in 2014 reported that there are 5,1% female adolescents with anemia. Anemia is a condition when the hemoglobin level is below the normal value of 11 g/dL. Low hemoglobin level cause the body's physiological needs for oxygen delivery to the brain, muscles and other important tissues to be inadequate, resulting in decreased endurance, weakness, hunger, impaired concentration on learning and low work productivity. Hemoglobin levels are related to various factors. Increasing knowledge about anemia becomes crucial in efforts to improve women's health, children's health, school performance, productivity and better pregnancies.*

Objective: *This study aims to determine the relationship between body mass index and physical activity levels with hemoglobin levels in female students at SMAN 1 Rawalo Banyumas for the 2023/2024 academic year.*

Methods: *The research used secondary data and was conducted cross-sectionally. The sample consisted of a total sample of 50 female students. Body mass index was obtained from measuring body weight and height, physical activity levels were measured using the IPAQ questionnaire, and hemoglobin levels were measured using the Point of Care Test method.*

Results: *Pearson's test shows that there is no correlations between physical activity levels and hemoglobin levels ($p=0,954$). Spearman's test shows that there is no correlations between body mass index and hemoglobin levels ($p=0.989$) and between physical activity levels and hemoglobin levels ($p=0.959$).*

Conclusions: *There are no correlations between body mass index and physical activity level with hemoglobin levels on female students at SMAN 1 Rawalo Banyumas.*

Keywords: *Body mass index, Physical activity level, Hemoglobin level, Female adolescents*