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HUBUNGAN KADAR KOLINESTERASE DENGAN KADAR HEMOGLOBIN PADA REMAJA DI KECAMATAN SUMOWONO

ABSTRAK

Latar Belakang: Pengaruh pestisida terhadap kadar hemoglobin yaitu dapat menyebabkan penurunan produksi hemoglobin dan meningkatnya penghancuran sel darah merah. Kecamatan Sumowono merupakan produsen bawang daun terbesar ke-2 di Kabupaten Semarang, dalam pengelolaan pertanian petani memanfaatkan pestisida. Berdasarkan data Puskesmas Sumowono tahun 2022 ditemukan sebanyak 0,043% remaja putri memiliki kadar hemoglobin tidak normal. Tujuan penelitian ini yaitu untuk mengetahui hubungan kadar kolinesterase dengan kadar hemoglobin pada remaja.

Metode: Penelitian ini merupakan analitik observasional dengan pendekatan cross-sectional. Pengambilan sampel menggunakan teknik *purposive sampling* dan diperoleh sampel sebanyak 30 remaja. Data kadar kolinesterase diperoleh dari hasil pemeriksaan kadar kolinesterase dalam darah responden yang dilakukan pemeriksaan di Balai Laboratorium Kesehatan Provinsi Jawa Tengah. Data kadar hemoglobin diperoleh dari hasil pemeriksaan kadar hemoglobin menggunakan Hb meter. Analisis yang digunakan pada penelitian ini yaitu uji korelasi Rank Spearman.

Hasil: Berdasarkan pemeriksaan kadar kolinesterase dari 30 responden hanya terdapat 1 responden dengan kadar kolinesterase tidak normal, sedangkan berdasarkan hasil pemeriksaan kadar hemoglobin dari 30 responden terdapat 3 responden dengan kadar hemoglobin tidak normal. Hasil uji korelasi Rank Spearman didapatkan hasil $p=0,119$ maka $p>0,05$.

Simpulan: Tidak ada hubungan bermakna antara kadar kolinesterase dengan kadar hemoglobin responden.

Kata Kunci: Hemoglobin, kolinesterase, pestisida, remaja

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THE CORRELATION BETWEEN CHOLINESTERASE LEVELS TO HEMOGLOBIN LEVELS IN ADOLESCENTS AT SUMOWONO

ABSTRACT

Background: *The effect of pesticides on hemoglobin levels can cause a decrease in hemoglobin production and an increase in the destruction of red blood cells. Sumowono District is the 2nd largest leek producer in Semarang Regency, in the management of farming farmers use pesticides. Based on data from the Sumowono Health Center in 2022, it was found that 0.043% young women had abnormal hemoglobin levels. The purpose of this study was to find out the corellation between cholinesterase levels to hemoglobin levels in adolescents.*

Method: *This research is an observational analytic with a cross-sectional approach. Sampling using technique purposive sampling and obtained a sample of 30 adolescents. Data on cholinesterase levels were obtained from the results examination of cholinesterase levels in the blood of respondents who were examined at the Central Java Province Health Laboratory Center. Data on hemoglobin levels were obtained from the results of examining hemoglobin levels using an Hb meter. The analysis used in this study is the Spearman Rank correlation test.*

Results: *Based on cholinesterase levels examination of 30 respondents, only 1 respondent with abnormal cholinesterase levels, while based on the results of examination of hemoglobin levels of 30 respondents, there were 3 respondents with abnormal hemoglobin levels. Spearman Rank's correlation test results obtained $p = 0.119$ then $p > 0,05$.*

Conclusion: *There is no significant corellation between cholinesterase levels to the respondent's hemoglobin level*

Keywords: Hemoglobin, cholinesterase, pesticides, teenagers