HUBUNGAN ANTARA KADAR KHOLINESTERASE DARAH DENGAN NYERI KEPALA PADA PETANI YANG TERPAJAN PESTISIDA DI KECAMATAN NGABLAK, KABUPATEN MAGELANG

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ABSTRAK

Petani merupakan kelompok pekerja terbesar di Indonesia. Untuk meningkatkan hasil pertanian yang optimal diterapkan berbagai teknologi termasuk pemberian pestisida. Beberapa hasil penelitian menunjukkan bahwa banyak dampak negatif dari penggunaan pestisida dalam jangka waktu lama seperti iritasi mata, dizziness, nyeri dada, iritasi kulit, diare, dan nyeri kepala. Berdasarkan uraian tersebut di atas, ingin diketahui hubungan antara kadar kholinesterase darah dengan nyeri kepala pada subjek terpajan pestisida organofosfat.

Penelitian ini bertujuan mengetahui hubungan antara kadar kholinesterase darah dengan nyeri kepala pada subjek terpajan pestisida organofosfat di Kecamatan Ngablak, Kabupaten Magelang.

Metode yang digunakan adalah penelitian potong lintang untuk mengidentifikasi hubungan antara kadar kholinesterase dengan nyeri kepala pada petani terpajan pestisida organofosfat pada bulan Oktober 2019. Total subjek penelitian yang memenuhi kriteria berjumlah 126 subjek. Hasil uji korelasi Spearman didapatkan koefisien korelasi r =0,011 dengan p =0,899, secara statistik tidak ada korelasi bermakna antara kadar kholinesterase darah dengan nyeri kepala, namun ditemukan kecenderungan petani dengan kadar kholinesterase di bawah normal mengalami nyeri kepala ≥10 kali dalam hidupnya walaupun data ini tidak signifikan (p =0,572). Analisis multivariat menunjukkan bahwa variabel yang berpengaruh signifikan terhadap nyeri kepala adalah kecemasan (p =0,003). Kesimpulan : kadar kholinesterase darah tidak memiliki hubungan yang bermakna dengan nyeri kepala pada petani yang terpajan pestisida, tetapi ditemukan kecenderungan nyeri kepala dengan frekuensi ≥10 kali dalam hidup pada petani yang memiliki kadar kholinesterase di bawah normal.

Kata kunci : kadar kholinesterase darah, nyeri kepala, pestisida
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THE RELATIONSHIP BETWEEN BLOOD CHOLINESTERASE LEVELS AND HEADACHES IN FARMERS EXPOSED TO PESTICIDES IN NGABLAK DISTRICT, MAGELANG REGENCY

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ABSTRACT

Farmers are the largest working group in Indonesia. To increase optimal agricultural yields, various technologies are applied, including the application of pesticides. Some research results show that there are many negative effects of using pesticides in the long term such as eye irritation, dizziness, chest pain, skin irritation, diarrhea, and headache. Based on the description above, the authors wanted to know the relationship between blood cholinesterase levels and headaches in subjects exposed to organophosphate pesticides in Ngablak District, Magelang Regency.

The aims of this study to determine the relationship between blood cholinesterase levels and headaches in subjects exposed to organophosphate pesticides in Ngablak District, Magelang Regency.

This method is a cross-sectional to identify the relationship between cholinesterase levels and headaches in farmers exposed to organophosphate pesticides in October 2019. The total research subjects who met the criteria were 126 subjects. The results of the Spearman correlation test showed a correlation coefficient of r = 0.011 with p = 0.899, so there was no statistically significant correlation between blood cholinesterase levels and headaches, but there was a tendency that farmers who had cholinesterase levels below normal experienced headaches ≥ 10 times in their lifetime, although this data is not significant (p=0.572). Multivariate analysis showed that the variable that had a significant effect on headache was anxiety (p = 0.003). Conclusion of this study is blood cholinesterase levels do not have a significant relationship with headaches in farmers exposed to pesticides, but there is a tendency for headaches with a frequency 10 times in life of farmers who have cholinesterase levels below normal.

Keywords **:** blood cholinesterase level, headache, pesticides
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