

ABSTRACT

THE RELATIONSHIP BETWEEN THE DEGREE OF SOIL TRANSMITTED HELMINTH (STH) INFECTION AND HEMOGLOBIN LEVELS AND BLOOD GLUCOSE IN STUDENT IN ELEMENTARY SCHOOL STATE 4 OF KARANG ANYAR JATI AGUNG DISTRICT LAMPUNG SELATAN REGENCY

By

Luthfi Aulia Oktofani

Background : The number of STH infections in Indonesia is still high, especially in children in the tropics. Based on data from the Indonesian Ministry of Health in 2006, helminth infections for all ages reached 40-60% and the prevalence of helminthiasis in South Lampung was 62% in 2015. STH infection can disrupt the growth process and the learning process.

Method : This study used a cross sectional method. The study sample was taken by the total sampling method of 67 people from Elementary School State 4 of Karang Anyar. Hemoglobin examination was carried out using the sian-methemoglobin method and glucose examination using the photometric method (GOD PAP). Stool examination using the Kato-katz method. The bivariate analysis used was Kruskal-Wallis for the relationship of the degree of STH infection with hemoglobin level and One Way Anova to the relationship of the degree of STH infection with blood glucose.

Result : The prevalence of STH infection is 56.7%, with details of mild infections as much as 26.9% and moderate infections as much as 29.9% and no severe infections. The average hemoglobin level was 12.124 ± 0.844 g/dL. The average blood glucose level was 76.45 ± 12.746 mg / dL.

Conclusion : There was no statistically significant relationship between the degree of STH infection and the rate of hemoglobin ($p = 0.438$). There was no statistically significant relationship between the degree of STH infection and blood glucose level ($p = 0.377$).

Keywords: Anemia, blood glucose, haemoglobin, STH infection.

ABSTRAK

HUBUNGAN DERAJAT INFEKSI *SOIL TRANSMITTED HELMINTH* (STH) DENGAN KADAR HEMOGLOBIN DAN GLUKOSA DARAH PADA SISWA DI SEKOLAH DASAR NEGERI 4 KARANG ANYAR KECAMATAN JATI AGUNG KABUPATEN LAMPUNG SELATAN

Oleh

Luthfi Aulia Oktofani

Latar Belakang : Angka infeksi STH di Indonesia masih tinggi, terutama menyerang anak-anak di wilayah tropis. Berdasarkan data Kemenkes RI pada tahun 2006 infeksi kecacingan untuk semua umur mencapai 40-60% dan prevalensi angka kecacingan di Lampung Selatan sebesar 62% pada tahun 2015. Infeksi STH dapat mengganggu proses pertumbuhan serta proses pembelajaran.

Metode : Penelitian ini menggunakan metode *cross sectional*. Sampel penelitian diambil dengan metode *Total sampling* sebanyak 67 orang dari Sekolah Dasar Negeri 4 Karang Anyar. Pemeriksaan hemoglobin dilakukan dengan metode sian-methemoglobin dan pemeriksaan glukosa dengan metode fotometris (GOD PAP). Pemeriksaan feses menggunakan metode Kato-katz. Analisis bivariat yang digunakan adalah *Kruskal-Wallis* untuk hubungan derajat infeksi STH dengan kadar hemoglobin dan *One Way Anova* untuk hubungan derajat infeksi STH dengan glukosa darah.

Hasil : Prevalensi infeksi STH sebesar 56,7%, dengan rincian infeksi ringan sebanyak 26,9% dan infeksi sedang sebanyak 29,9% dan tidak didapatkan infeksi berat. Rata-rata kadar hemoglobin sebesar $12,124 \pm 0,844$ g/dL. Rata-rata kadar glukosa darah sebesar $76,45 \pm 12,746$ mg/dL.

Kesimpulan : Tidak terdapat hubungan yang bermakna secara statistik antara derajat infeksi STH dengan kadar hemoglobin ($p = 0,438$). Tidak terdapat hubungan yang bermakna secara statistik antara derajat infeksi STH dengan kadar glukosa darah ($p = 0,377$).

Kata Kunci: Anemia, glukosa darah, hemoglobin, infeksi STH.