

**ANALISIS KADAR TNF- $\alpha$  DAN IL-4 PADA ORANG DEWASA  
DENGANINFEKSI SOIL TRANSMITTED HELMINTHS DI KELURAHAN  
PASIE NAN TIGO KECAMATAN KOTO TANGAH KOTA PADANG**

**TESIS**



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## **Analisis Kadar TNF- α Dan IL-4 Dengan Infeksi *Soil Transmitted Helminths* pada Orang Dewasa Di Kelurahan Pasie Nan Tigo Tahun**

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### **ABSTRAK**

Penyakit infeksi cacing usus, disebabkan oleh *Soil Transmitted Helminths* (STH). Infeksi kecacingan tergolong penyakit *Neglected Disease* yaitu infeksi yang kurang diperhatikan dan merupakan penyakit bersifat kronis, jarang menimbulkan gejala klinis yang jelas dan dampak yang ditimbulkannya baru terlihat dalam jangka panjang. Tujuan penelitian ini Mengetahui analisis kadar TNF- $\alpha$  dan IL-4 dengan infeksi *Soil Transmitted Helminth* spada orang dewasa.

Penelitian ini menggunakan desain *Case Control*, dilaksanakan diwilayah Kerja Puskesmas Lubuk Buaya, pada Kelurahan Pasie Nan Tigo, Kecamatan Koto Tangah, Kota Padang dan Pemeriksaan feses dilakukan di Laboratorium Parasitologi Fakultas Kedokteran Universitas Andalas dan pemeriksaan sampel darah dilakukan di Laboratorium Kesehatan Daerah (Labkesda) Provinsi Sumatera Barat dengan menggunakan metode pemeriksaan Kato katz. Populasi penelitian adalah laki-laki dan perempuan dewasa yang berusia 20-60 tahun sebanyak 48 orang. Data dilakukan dengan uji *t-independent* ( $p<0,05$ ) dianggap terdapat hubungan bermakna secara statistik.

Hasil penelitian menunjukan terdapat perbedaan bermakna kadar TNF- $\alpha$  pada orang dewasa kelompok terinfeksi STH dan kontrol sehat dengan  $p$  value = 0,000 dan terdapat perbedaan bermakna kadar IL-4 pada orang dewasa kelompok terinfeksi STH dengan  $p$  value = 0,000.

Kesimpulan penelitian ini Terdapat perbedaan kadar TNF- $\alpha$  lebih rendah pada orang terinfeksi STH dari pada kontrol sehat dan IL-4 lebih tinggi pada orang terinfeksi STH dari pada kontorl sehat pada orang dewasa.

Kata kunci : STH, TNF- $\alpha$ , IL-4

**Analysis of TNF- $\alpha$  and IL-4 levels with Soil Transmitted Helminth infection in adults in Pasie Nan Tigo Village**

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**ABSTRACT**

Intestinal worm infection, caused by soil transmitted helminths (STH). Worms infection is classified as a neglected disease, which is an infection that is neglected and is a chronic disease, rarely causes clear clinical symptoms and its effects can only be seen in the long term. The purpose of this study was to analyze the levels of TNF- $\alpha$  and IL-4 with soil transmitted helminth infections in adults.

This study used a case control design, carried out in the working area of the Lubuk Buaya Health Center, in Pasie Nan Tigo Village, Koto Tangah District, Padang City and fecal examination was carried out at the Parasitology Laboratory, Faculty of Medicine, Andalas University and blood samples were examined at the Regional Health Laboratory (Labkesda). West Sumatra Province by using the Kato Katz examination method. The study population was 48 adult men and women aged 20-60 years. Data was performed using independent t-test ( $p<0.05$ ) and it was considered that there was a statistically significant relationship.

The results showed that there was a significant difference in TNF- $\alpha$  levels in adults in the STH-infected group and in healthy controls with  $p$  value = 0,000 and there was a significant difference in IL-4 levels in adults in the STH-infected group with  $p$  value = 0,000.

Conclusion of this study There is a difference in TNF-  $\alpha$  levels in STH infected people than healthy control and higher IL-4 in STH infected people than healthy control in adults.

Key words: STH, TNF- $\alpha$ , IL-4

