

ABSTRAK

ANALISIS SPASIAL KEJADIAN INFEKSI PROTOZOA USUS PADA ANAK SEKOLAH DASAR DI WILAYAH KERJA PUSKESMAS CAMPANG RAYA KECAMATAN SUKABUMI KOTA BANDAR LAMPUNG

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Latar Belakang: Infeksi protozoa usus dapat melalui penularan secara langsung dan dipengaruhi oleh lingkungan. Analisis spasial mampu memetakan persebaran serta faktor resiko penularan infeksi protozoa usus dan menganalisis hubungannya dengan lingkungan. Penelitian ini bertujuan untuk mengetahui analisis spasial infeksi protozoa usus pada anak SD Wilayah Kerja Puskesmas Campang Raya Kecamatan Sukabumi Kota Bandar Lampung.

Metode: Desain penelitian ini merupakan penelitian cross sectional dengan teknik pengambilan sampel *proportionate stratified random sampling*. Besar sampel penelitian sebesar 106 subjek. Subjek terpilih mengisi alamat rumah tempat tinggal subjek dan mengumpulkan feses yang akan dilakukan pemeriksaan feses parasitologi dengan teknik *water-eter sedimentation*, pengamatan dibawah mikroskop dilakukan dengan direct slide dengan pewarnaan lugol dan ziehl-nielsen. Hasil data dianalisis menggunakan analisis spasial.

Hasil : Hasil laboratorium didapatkan 8 protozoa usus patogen (*Entamoeba histolytica/dispar*, dan *Blastocystis sp.*) dan 1 protozoa usus apatogen (*Entamoeba coli*). Sebaran sampel positif protozoa usus berada pada koordinat 5.4265410 LS – 5.4049800 LS dan 105.2960460 BT – 105.3352580 BT. Terdapat *buffering* pada infeksi protozoa usus khususnya dengan vektor penularan oleh lalat, tikus dan kecoak. Terbentuk *cluster* dengan *p-value* sebesar 0,005271.

Kesimpulan: Sebaran sampel positif berada pada koordinat 5.4265410 LS – 5.4049800 LS dan 105.2960460 BT – 105.3352580 BT, terdapat pola *clustering* yang signifikan.

Kata Kunci: analisis spasial, *buffering*, *clustering*, infeksi protozoa usus

ABSTRACT

SPATIAL ANALYSIS OF INTESTINAL PROTOZOA INFECTIONS AMONG ELEMENTARY SCHOOL CHILDREN IN THE WORKING AREA OF PUBLIC HEALTH CENTER CAMPANG RAYA, SUKABUMI SUB-DISTRICT, BANDAR LAMPUNG CITY

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Background: Intestinal protozoa infections can be transmitted directly and are influenced by environmental factors. Spatial analysis can map the distribution and risk factors of intestinal protozoa infections and analyze their relationship with the environment. This study aims to investigate the spatial analysis of intestinal protozoa infections among elementary school-aged children in the working area of Campang Raya Public Health Center, Sukabumi District, Bandar Lampung City.

Methods: This research employed a cross-sectional design with a proportionate stratified random sampling technique. The study involved 106 subjects. Selected subjects provided their residential addresses and stool samples, which were examined parasitologically using the water-ether sedimentation technique. Microscopic observation was conducted using direct slide examination with Lugol and Ziehl-Neelsen staining. Data analysis was performed using spatial analysis.

Results: Laboratory results identified 8 pathogenic intestinal protozoa (*Entamoeba histolytica/dispar* and *Blastocystis* sp.) and 1 non-pathogenic intestinal protozoa (*Entamoeba coli*). The distribution of positive samples was located within the coordinates 5.4265410 S – 5.4049800 S and 105.2960460 E – 105.3352580 E. Buffering was observed for intestinal protozoa infections, particularly regarding transmission vectors such as flies, rats, and cockroaches. Clusters were formed with a p-value of 0.005271.

Conclusion: The distribution of positive samples was located at coordinates 5.4265410 S – 5.4049800 S and 105.2960460 E – 105.3352580 E, with a significant clustering pattern identified.

Keywords: spatial analysis, buffering, clustering, intestinal protozoa infections