



**UNIVERSITAS ANDALAS**

**STUDI EKOLOGI HUBUNGAN FAKTOR *HOST* DAN *ENVIRONMENT*  
DENGAN KEJADIAN TUBERKULOSIS PADA ANAK  
DI PROVINSI SUMATERA BARAT  
TAHUN 2020-2023**

Oleh :

**SASKIA FAIRUZ FERNANDO**

**No. BP. 2011212062**



**FAKULTAS KESEHATAN MASYARAKAT**

**UNIVERSITAS ANDALAS**

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**Saskia Fairuz Fernando, No. BP 2011212062**

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xi + 104 halaman, 7 tabel, 24 gambar, 6 lampiran

**ABSTRAK**

**Tujuan Penelitian**

Penelitian ini bertujuan untuk mengetahui hubungan faktor *host* (cakupan imunisasi BCG dan persentase balita gizi buruk) dan *environment* (persentase penduduk miskin, kepadatan penduduk, dan rasio ketersediaan puskesmas) terhadap TB anak di Provinsi Sumatera Barat tahun 2020-2023.

**Metode**

Penelitian menggunakan desain studi ekologi. Data bersumber dari Dinas Kesehatan Provinsi Sumatera Barat (kasus TB anak, cakupan imunisasi BCG, dan persentase balita gizi buruk) dan BPS Provinsi Sumatera Barat (persentase penduduk miskin, kepadatan penduduk, dan rasio ketersediaan puskesmas). Hasil penelitian disajikan dalam tabel distribusi frekuensi, pemetaan kasus, tabel uji korelasi, *scatter plot*, dan hasil model multivariat.

**Hasil**

Hasil penelitian menunjukkan peningkatan kasus tuberkulosis anak tertinggi pada tahun 2022. Hasil bivariat menunjukkan cakupan imunisasi BCG ( $p=0,030$ ), persentase balita gizi buruk ( $p=0,001$ ), persentase penduduk miskin ( $p=0,001$ ), dan kepadatan penduduk ( $p=0,001$ ) berhubungan dengan tuberkulosis anak. namun rasio ketersediaan puskesmas ( $p=0,160$ ) tidak berhubungan. Hasil multivariat menunjukkan persentase balita gizi buruk paling berpengaruh terhadap tuberkulosis anak ( $p=0,001$ ).

**Kesimpulan**

Persentase balita gizi buruk paling berpengaruh terhadap tuberkulosis anak. Disarankan kepada Dinas Kesehatan Provinsi untuk meningkatkan status gizi anak guna menurunkan prevalensi TB pada anak.

**Daftar Pustaka** : 71 (2006-2024)

**Kata Kunci** : Anak, Ekologi, *Environment*, *Host*, Tuberkulosis

**FACULTY OF PUBLIC HEALTH**

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**Saskia Fairuz Fernando, No. BP 2011212062**

**ECOLOGICAL STUDY OF THE RELATIONSHIP BETWEEN HOST AND ENVIRONMENTAL FACTORS WITH THE INCIDENCE OF TUBERCULOSIS IN CHILDREN IN WEST SUMATERA PROVINCE 2020-2023**

xi + 104 pages, 7 tables, 24 pictures, 6 appendices

**ABSTRACT**

**Objective**

This study aims to determine the relationship between host (BCG immunization coverage and percentage of malnourished toddlers) and environment (percentage of poor population, population density, and availability ratio of community health centers) factors on childhood TB in West Sumatra Province in 2020-2023.

**Method**

The research used an ecological study design. Data were sourced from the West Sumatra Provincial Health Department (child TB cases, BCG immunization coverage, and percentage of malnourished children under five) and West Sumatra Provincial BPS (percentage of poor population, population density, and availability ratio of community health centers). The results are presented in frequency distribution tables, case mapping, correlation test tables, scatter plots, and multivariate model results.

**Result**

The results showed the highest increase in childhood tuberculosis cases in 2022. Bivariate results showed BCG immunization coverage ( $p=0.030$ ), percentage of malnourished children under five ( $p=0.001$ ), percentage of poor population ( $p=0.001$ ), and population density ( $p=0.001$ ) were associated with childhood tuberculosis, but the availability ratio of health centers ( $p=0.160$ ) was not. Multivariate results showed that the percentage of malnourished children under five was most influential on childhood tuberculosis ( $p=0.001$ ).

**Conclusion**

The percentage of malnourished children was most influential in childhood tuberculosis. It is recommended that the Provincial Health Department will improve the nutritional status of children to reduce the prevalence of TB in children.

**References** : 71 (2006-2024)

**Keyword** : Child, Ecology, Environment, Host, Tuberculosis