

**ANALISIS AUTOKORELASI SPASIAL DAN DETERMINAN
MULTIDIMENSI DISPARITAS STUNTING BALITA DI
PROVINSI SUMATERA BARAT TAHUN 2024**

TESIS

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xiii + 101 halaman, 21 tabel, 27 gambar, 6 lampiran

ABSTRAK

Tujuan Penelitian

Stunting masih menjadi masalah kesehatan masyarakat di Provinsi Sumatera Barat dengan prevalensi yang bervariasi antar kabupaten/kota. Variasi tersebut mengindikasikan adanya heterogenitas spasial, sehingga diperlukan pendekatan spasial untuk mengidentifikasi pola persebaran dan variasi pengaruh determinan stunting di setiap kabupaten/kota. Penelitian ini bertujuan menganalisis autokorelasi spasial dan determinan multidimensi disparitas stunting balita di Provinsi Sumatera Barat tahun 2024.

Metode

Penelitian ini menggunakan desain studi ekologi pada 19 kabupaten/kota di Provinsi Sumatera Barat, dan menggunakan data sekunder tahun 2024. Variabel dependen adalah prevalensi stunting balita, sedangkan variabel independen meliputi KEK pada ibu hamil, BBLR, diare, pneumonia, cakupan imunisasi dasar lengkap, akses sanitasi layak, akses air minum layak, kepadatan penduduk, dan kemiskinan. Analisis dilakukan secara deskriptif, dilanjutkan dengan Indeks Moran, LISA, dan GWR.

Hasil

Prevalensi stunting balita di Provinsi Sumatera Barat menunjukkan disparitas antar kabupaten/kota. Analisis Indeks Moran menghasilkan nilai Moran's I sebesar $-0,245$ ($p < 0,05$), yang menunjukkan pola persebaran menyebar (*dispersed*). Analisis LISA menunjukkan bahwa sebagian besar kabupaten/kota tidak membentuk kluster spasial yang signifikan dan didominasi oleh pola *Low-Low* serta *High-Low*. Pemodelan GWR mampu menjelaskan 70,75% variasi stunting dan menunjukkan bahwa pengaruh determinan berbeda pada setiap kabupaten/kota. KEK pada ibu hamil merupakan determinan yang paling dominan, sedangkan akses sanitasi layak berpengaruh signifikan pada beberapa wilayah.

Kesimpulan

Disparitas stunting balita di Provinsi Sumatera Barat menunjukkan heterogenitas spasial, dengan pola persebaran menyebar dan pengaruh determinan yang berbeda antarwilayah. Pendekatan spasial melalui Indeks Moran, LISA, dan GWR dapat mendukung penetapan prioritas wilayah serta penyusunan intervensi penurunan stunting yang lebih spesifik sesuai karakteristik daerah.

Daftar Pustaka 92 (2007-2026)

Kata Kunci : Stunting Balita, Determinan Multidimensi, Autokorelasi Spasial, *Geographical Weighted Regression*

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**SPATIAL AUTOCORRELATION ANALYSIS AND MULTIDIMENSIONAL
DETERMINANTS OF STUNTING DISPARITIES AMONG CHILDREN UNDER FIVE IN
WEST SUMATRA PROVINCE IN 2024**

xiii + 101 pages, 21 tables, 27 figures, 6 appendices

ABSTRACT

Background

Stunting remains a major public health problem in West Sumatra Province, with marked disparities in prevalence across districts and municipalities. This variation indicates spatial heterogeneity, highlighting the need for a spatial approach to identify the distribution patterns of stunting and the spatial variation in its determinants across districts and municipalities. This study aimed to analyze the spatial autocorrelation and multidimensional determinants of disparities in under-five stunting across West Sumatra Province in 2024.

Methods

This study used an ecological study with secondary data from 19 districts and municipalities in West Sumatra Province in 2024. The study examined the prevalence of under-five stunting in relation to maternal chronic energy deficiency (CED), low birth weight (LBW), diarrhea, pneumonia, complete basic immunization coverage, access to improved sanitation, access to safe drinking water, population density, and poverty. Data were analyzed using descriptive statistics, Moran's I, LISA, and GWR.

Results

The prevalence of stunting among children under five years in West Sumatra Province varied across districts and municipalities. Moran's I analysis showed a Moran's I value of -0.245 ($p < 0.05$), indicating a dispersed spatial pattern. LISA analysis showed that most districts and municipalities did not form significant spatial clusters and were predominantly characterized by Low-Low and High-Low patterns. The GWR model explained 70.75% of the variation in stunting prevalence and demonstrated spatial variation in the effects of the determinants across districts and municipalities. Maternal chronic energy deficiency (CED) was the most influential determinant, while access to improved sanitation was significantly associated with stunting in several districts and municipalities.

Conclusion

The disparities in stunting among children under five years across West Sumatra Province indicate spatial heterogeneity, with differences in the effects of the determinants across districts and municipalities. Spatial analysis using Moran's I, LISA, and GWR supports area-specific priority setting and the development of targeted interventions based on local characteristics.

References: 92 (2007-2026)

Keywords : Stunting Prevalence, Multidimensional Determinants, Spatial Autocorrelation, Geographically Weighted Regression