ABSTRAK

Aticobhita Castrowijno Pramono
HUBUNGAN IKLIM DENGAN *INCIDENCE RATE* DEMAM BERDARAH *DENGUE* DI KABUPATEN MALANG TAHUN 2022-2024
xv + 69 Halaman + 8 Tabel + 8 Lampiran

Demam Berdarah *Dengue* (DBD) merupakan penyakit menular yang menjadi masalah kesehatan masyarakat di wilayah tropis dan dipengaruhi oleh faktor iklim seperti suhu udara, curah hujan, kelembaban, dan kecepatan angin. Kabupaten Malang mencatat 1.018 kasus DBD dengan *incidence rate* sebesar 38,2 per 100.000 penduduk tahun 2023. Penelitian ini bertujuan mengetahui hubungan antara faktor iklim dan *incidence rate* DBD di Kabupaten Malang selama periode 2022-2024.

Metode penelitian yang digunakan adalah analitik kuantitatif dengan studi ekologi. Variabel bebas meliputi suhu udara, curah hujan, kelembaban, dan kecepatan angin, berdasarkan data bulanan dari Badan Meteorologi, Klimatologi, dan Geofisika (BMKG) selama 2022-2024. Variabel terikat adalah *incidence rate* DBD, berdasarkan data bulanan dari Dinas Kesehatan Kabupaten Malang selama 2022-2024. Data iklim dan data *incidence rate* DBD diambil dari data sekunder dari Dinas Kesehatan Kabupaten Malang dan BMKG dengan dokumentasi dari catatan laporan. Analisis menggunakan uji korelasi *Spearman*.

Hasil penelitian menunjukkan rata-rata *incidence rate* selama tahun 2022-2024 sebesar 6,57 per 100.000 penduduk. Rata-rata iklim di Kabupaten Malang tahun 2022-2024 mencakup suhu udara 26,3°C, curah hujan 6,93 mm, kelembaban udara 77,96%, dan kecepatan angin 1,38 m/s. Suhu udara memiliki hubungan signifikan dengan *incidence rate* DBD ($p = 0,032$), curah hujan, kelembaban, dan kecepatan angin tidak ada hubungan yang signifikan ($p > 0,05$).

Suhu udara digunakan sebagai indikator dalam sistem peringatan dini DBD. Suhu tinggi perlu ditetapkan sebagai prioritas waktu untuk pelaksanaan kegiatan pengendalian, seperti edukasi masyarakat, dan Pemberantasan Sarang Nyamuk (PSN) secara intensif.

Kata kunci : Demam Berdarah *Dengue*, Iklim, *Incidence Rate*
Daftar bacaan : 16 buku (2016–2024), 44 jurnal/artikel ilmiah (2021–2025)

ABSTRACT

Aticobhita Castrowijno Pramono
THE RELATIONSHIP BETWEEN CLIMATE AND DENGUE FEVER INCIDENCE RATE IN MALANG REGENCY IN 2022-2024
xv + 69 *Pages* + 8 *Tables* + 8 *Appendices*

Dengue Hemorrhagic Fever (DHF) was an infectious disease that posed a public health problem in tropical regions and was influenced by climatic factors such as air temperature, rainfall, humidity, and wind speed. Malang Regency recorded 1,018 DHF cases with an incidence rate of 38.2 per 100,000 population in 2023. This study aimed to determine the relationship between climatic factors and the incidence rate of DHF in Malang Regency during the 2022–2024 period.

The research used a quantitative analytic method with an ecological study design. The independent analyzedles included air temperature, rainfall, humidity, and wind speed, based on monthly data from the Meteorology, Climatology, and Geophysics Agency for the years 2022–2024. The dependent variable was the incidence rate of DHF, obtained from monthly data reported by the Malang District Health Office for the same period. Both climate data and DHF incidence data were collected as secondary data through documentation of official reports. The data were analyzed using Spearman's correlation test.

The results showed that the average incidence rate during 2022–2024 was 6.57 per 100,000 population. The average climatic conditions in Malang Regency for the same period included an air temperature of 26.3°C, rainfall of 6.93 mm, humidity of 77.96%, and wind speed of 1.38 m/s. Air temperature had a significant relationship with the incidence rate of DHF ($p = 0.032$), rainfall, humidity, and wind speed had no significant relationship ($p > 0.05$).

Air temperature was recommended to be used as an indicator in the early warning system for dengue fever. High temperatures need to be designated as priority periods for implementation of control activities, such as community education and intensive mosquito breeding site eradication (PSN).

Keywords : Dengue Hemorrhagic Fever, Climate, Incidence Rate.
References : 16 books (2016 - 2024), 44 journal/articles (2021-2025)