

ABSTRACT

Background: The number of dengue hemorrhagic fever (DHF) cases in Jambi City has been increasing annually. In 2024, Paal V Public Health Center recorded 66 cases, ranking second highest in the city. For the past three years, Paal V has consistently been among the top three health centers with the highest number of cases. This study aims to identify the relationship between knowledge level, preventive measures, water storage, waste management systems, and the presence of mosquito larvae with DHF incidence in the working area of Paal V Public Health Center in 2025.

Methods: This study used a case-control design with 62 samples, consisting of 31 cases and 31 controls. Data analysis was conducted using the Chi-Square test.

Results: The findings showed that preventive measures ($p = 0.000$; OR = 0.022), water storage ($p = 0.000$; OR = 23.143), waste management systems ($p = 0.000$; OR = 0.037), and the presence of mosquito larvae ($p = 0.000$; OR = 48.533) were significantly associated with DHF incidence. However, no significant relationship was found between knowledge level and DHF incidence ($p = 0.772$; OR = 0.713).

Conclusion: Environmental factors such as water storage, waste management systems, and the presence of mosquito larvae are strongly correlated with DHF incidence, whereas knowledge level does not significantly influence it.

Keywords: DHF, Host, Environment, *Aedes aegypti*.

ABSTRAK

Latar Belakang: Jumlah kasus DBD di Kota Jambi terus meningkat setiap tahun. Puskesmas Paal V mencatat 66 kasus pada 2024, menempati peringkat kedua tertinggi di kota ini. Selama tiga tahun terakhir, Puskesmas Paal V selalu berada di tiga besar dengan kasus terbanyak. Penelitian ini bertujuan mengidentifikasi hubungan antara tingkat pengetahuan, tindakan pencegahan, tempat penampungan air, sistem pengelolaan sampah, dan keberadaan jentik nyamuk dengan kejadian DBD di wilayah kerja Puskesmas Paal V pada 2025.

Metode: Penelitian ini menggunakan desain *Case Control* dengan 62 sampel, terdiri dari 31 kasus dan 31 kontrol. Analisis dilakukan menggunakan uji *Chi-Square*.

Hasil: Penelitian menunjukkan bahwa tindakan pencegahan ($p = 0,000$; OR = 0,022), tempat penampungan air ($p = 0,000$; OR = 23,143), sistem pengelolaan sampah ($p = 0,000$; OR = 0,037), dan keberadaan jentik nyamuk ($p = 0,000$; OR = 48,533) ada hubungan dengan kejadian DBD. Namun, tidak ditemukan hubungan antara tingkat pengetahuan dengan kejadian DBD ($p = 0,772$; OR = 0,713).

Kesimpulan: Ada Hubungan antara tindakan pencegahan DBD, tempat penampungan air, sistem pengelolaan sampah, dan keberadaan jentik nyamuk dengan kejadian DBD. Tidak ada hubungan antara pengetahuan dengan kejadian DBD di wilayah kerja Puskesmas Paal V Kota Jambi Tahun 2025.

Kata Kunci: DBD, Host, Lingkungan, *Aedes aegypti*.