

INTISARI

Latar belakang : Angka kasus demam berdarah dengue (DBD) di Propinsi Jambi tahun 2014 sebanyak 1308, *incidence rate* (IR) 38,3 per 100.000 penduduk, dan *case fatality rate* (CFR) sebesar 1,2 %, IR telah memenuhi target nasional tetapi CFR belum memenuhi target. Kelurahan Mayang Mangurai adalah daerah endemis DBD dengan kasus tertinggi di Kota Jambi sejak tahun 2010 s.d 2014, hingga saat ini belum diketahui distribusi keberadaan lokasi tempat tinggal penderita, pola sebaran kasus DBD dan faktor-faktor yang menyebabkan penularan DBD.

Tujuan : Mengetahui pola sebaran kasus DBD, indikator entomologi, indikator *maya index*, ada atau tidaknya resistensi, deteksi transmisi transovarial virus dengue serta mengetahui pengetahuan, sikap dan perilaku masyarakat terhadap DBD.

Metode : Penelitian observasional deskriptif dan analitik dengan rancangan *cross sectional*. Subyek penelitian 384 responden dan sampel nyamuk *Aedes* spp. Analisis menggunakan *nearest neighbor* dan analisis bivariat dengan uji *chi-square*.

Hasil : Pola sebaran kasus DBD mengelompok dengan jarak antara kasus, terdekat 30 meter dan terjauh 158 meter. Indikator entomologi HI 41,67%, CI 10,23%, BI 52,08, dan PI 31,77, termasuk tingkat kepadatan jentik *Aedes* spp tinggi. *Maya index* katagori rendah 4,69%, sedang 95,05% dan tinggi 0,26%, sebagian besar rumah memiliki *maya index* sedang. Nyamuk *Aedes* spp telah resisten terhadap insektisida golongan piretroid dengan tingkat kematian nyamuk 10-17%, kurang dari 80%. Telah terjadi transovarial virus dengue dengan indeks transmisi transovarial 8,79%. Pengetahuan diperoleh p 0,002 PR 1,86, sikap diperoleh p 0,008 PR 1,73 dan perilaku diperoleh p <0.001 PR 2,14, ada hubungan signifikan (p<0,05) antara pengetahuan, sikap dan perilaku masyarakat yang kurang baik dengan kejadian DBD.

Kesimpulan : Pola sebaran kasus DBD mengelompok, indikator entomologi tinggi, indikator *maya index* sedang, nyamuk *Aedes* spp telah resisten, ada transmisi transovarial virus dengue pada nyamuk *Aedes* spp, serta ada hubungan signifikan antara pengetahuan, sikap dan perilaku masyarakat yang kurang baik dengan kejadian DBD, menunjukkan bahwa Kelurahan Mayang Mangurai merupakan daerah rawan dan risiko tinggi penularan DBD, keberadaan vektor memudahkan penularan penyakit sehingga daerah endemis.

Kata kunci : Indikator entomologi, resistensi *Aedes* spp, transovarial virus dengue, endemis DBD.

ABSTRACT

Background: In 2014, Dengue Hemorrhagic Fever (DHF) cases found in Jambi Province, Indonesia, were 1308 cases, with incidence rate (IR) of 38.3 per 100,000 people and case fatality rate (CFR) of 1.2%. The national target for IR has been achieved, whereas national target for CFR has not yet been achieved with aforementioned number. The village of Mayang Mangurai is an endemic area of DHF. During year 2010 to 2014, the village of Mayang Mangurai was reported to have the highest incidence of DHF among all villages in Jambi Province, Indonesia. Factors affecting DHF transmission, distribution pattern of DHF cases and DHF disease pattern in the village of Mayang Mangurai are still unknown.

Objectives: To DHF case distribution, entomological indicators, maya index indicators, presence of insecticide resistance, presence of transovarial dengue virus transmission, and to determine community knowledge, attitude, and behavior regarding DHF.

Method: The research is a descriptive observational study with cross sectional design. Research subjects were 384 respondents and *Aedes* spp. Mosquitoes. Data analysis was conducted using nearest neighbor method and bivariate analysis using chi-square test.

Results: The results showed that DHF cases were distributed in cluster pattern with closest distance of 30 m and farthest distance of 158 m. Entomological indicator results suggest that the *Aedes* spp. larval density is categorized as high density, based on HI of 41.67%, CI of 10.23%, BI of 52.08, and PI of 31.77. Low risk category maya index of 4.69%, moderate risk category maya index of 95.05%, and high risk category of 0.26% were obtained. *Aedes* spp. mosquitoes in the village of Mayang Mangurai showed resistance to pyrethroid insecticides with mosquito mortality rate of only 10-17% and transovarial dengue virus transmission has been detected with transmission index of 8.79%. The results of p-value (p), prevalence ratio (PR), and confidence interval (CI) for community knowledge were 0.002, 1.86, and 1.23-2.81 respectively. P-value, PR, and CI for community attitude were 0.008, 1.73, and 1.14-2.61 respectively, whereas p, PR, and CI for community behavior were <0.001, 2.14 and 1.43-3.21 respectively. In the study, obtained significance ratio of p-value of <0.05 with CI of 95% showed that there is an unsavory correlation between community knowledge, attitude, and behavior with the occurrence of DHF.

Conclusion: During the study conducted in the village of Mayang Mangurai, Jambi Province, Indonesia, a clustered distribution pattern of DHF cases was observed. A high entomological indicator, moderate maya index, pyrethroid resistance and transovarial dengue virus transmission in *Aedes* spp. mosquitoes have also been observed. The study also showed that there is an unsavory correlation between community knowledge, attitude, and behavior with the occurrence of DHF. The results indicate that the village of Mayang Mangurai is an endemic area of DHF and is at high risk of DHF transmission due to the presence of DHF vectors.

Keywords: Entomological indicator, *Aedes* spp. resistance, transovarial dengue virus, DHF endemic.