

**KAJIAN EPIDEMIOLOGI LYSSAVIRUS
PADA KALONG (*Pteropus vampyrus*) DAN RISIKONYA
PADA KESEHATAN MASYARAKAT DI KABUPATEN GARUT**

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Intisari

Lyssavirus telah banyak ditemukan pada kelelawar (termasuk kalong) sehingga kontak antara hewan ini dan manusia berpotensi menularkan agen penyebab rabies. Penelitian ini ditujukan untuk mendeteksi *lyssavirus* pada kalong di dalam cagar alam Leuweung Sancang dan menganalisis risiko penularannya ke hewan lain dan penduduk di sekitarnya. Survei melalui wawancara menggunakan kuesioner terhadap 150 responden di sekitar cagar alam dilakukan untuk mengidentifikasi berbagai kontak antara kalong, hewan lain, dan manusia. Tingkat pengetahuan, sikap, dan praktik (KAP) penduduk mengenai kalong dan rabies juga diukur secara bersamaan. Sampel otak dan ulas oral dari 142 kalong dari cagar alam diperiksa dengan metode *nested*-PCR untuk mendeteksi *lyssavirus*. Data dianalisis secara deskriptif, analisis jalur dan uji *Chi-square* untuk mengetahui perbedaan diantara kedua radius area tempat tinggal responden. Hasil penelitian menunjukkan bahwa menurut responden, kalong dari cagar alam sering ada di sekitar (93,3%) atau masuk ke dalam (52,0%) daerah pemukiman penduduk pada malam hari untuk mencari sumber makanan, terutama pada saat musim buah (87,0%). Kontak antara kalong dengan manusia sering terjadi (34,0%) di dalam pemukiman karena kalong sering diburu dan ditangkap (92,2%), diusir (35,3%), dan dimakan (7,8%). Mayoritas penduduk (95,1%) tidak pernah menggunakan alat pelindung diri (APD) saat berkontak dengan kalong. Kontak antara kalong dan manusia tidak berbeda ($p=0,144$) antara penduduk di dalam area radius <1 km dengan area 1-10 km. Sebagian besar penduduk di sekitar cagar alam memiliki tingkat pengetahuan bernilai cukup (48,0%), sikap yang ragu-ragu (50,7%) dan praktik yang buruk (91,0%) mengenai kalong dan rabies. Tidak ada perbedaan tingkat pengetahuan ($p=0,199$), sikap ($p=0,127$) dan praktik ($p=0,266$) pada penduduk di dalam kedua area radius. Analisis jalur menunjukkan praktik masyarakat paling besar dipengaruhi secara langsung oleh tingkat pendidikan (0,092) dan pengetahuan (0,028) serta secara tidak langsung oleh pendidikan (0,001). Pemeriksaan terhadap sampel otak dan ulas oral kalong dengan metode *nested*-PCR menunjukkan hasil keseluruhan sampel (100%) negatif terhadap *lyssavirus* dari keseluruhan genotipe. Kesimpulan dari penelitian ini adalah meskipun pada kalong tidak ditemukan adanya *lyssavirus*, akan tetapi berbagai kontak dan kurang baiknya tingkat KAP masyarakat menunjukkan bahwa risiko potensial penularan penyakit dari kalong relatif tinggi.

Kata kunci: kalong, kontak, survei KAP, rabies, *lyssavirus*

EPIDEMIOLOGY STUDY OF LYSSAVIRUS ON FLYING FOXES (*Pteropus vampyrus*) AND THE RISKS TO COMMUNITY HEALTH IN GARUT DISTRICT

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Abstract

Lyssaviruses has been widely found in bats (including flying foxes) so that contact between these animals and humans had a potential risk for transmitting this rabies-causing agent. This study aimed to detect lyssavirus in the flying foxes inside the nature reserve of Leuweung Sancang and to analyze the risk of transmission to other animals and the surrounding population. Surveys through interviews using a questionnaire of 150 respondents around the nature reserve area were conducted to identify contacts between the flying foxes, other animals, and humans. The level of knowledge, attitude, and practice (KAP) of the population on the flying foxes and rabies were also measured simultaneously. Brain and oral swab samples from 142 flying foxes inside the nature reserves area were tested by the nested-PCR method to detect the lyssavirus. Data were analyzed descriptively with the percentages, path analysis and Chi-square test to know the difference between the two radius areas of respondent's residence. The results showed that according to the respondents, the flying foxes of the nature reserve area were often around (93.3%) or entered into (52.0%) residential areas at night to search for food sources, especially during the fruit season (87, 0%). The contacts between the flying foxes and the residents often occurred (34.0%) in the residential area because the flying foxes were often hunted and captured (92.2%), expelled (35.3%), and eaten (7.8%) by the residents. The majority of the residents (95.1%) had never used any personal protective equipment (PPE) when contacting with the flying foxes. The contact between the flying foxes and the residents was no different ($p = 0.144$) between the residents within the radius area <1 km and the area of 1-10 km. Most of the residents around the nature reserve area had a sufficient level of knowledge (48.0%), neutral attitude (50.7%) and bad practice (91.0%) about the flying foxes and rabies. There was no difference in the level of knowledge ($p = 0.199$), attitude ($p=0.127$) and practice ($p=0.266$) in the residents within both radius areas. Path analysis showed that community-practice has been influenced most directly by education (0.092) and knowledge (0.028) levels and indirectly by education (0.001). Brain and oral swab samples tested with nested-PCR method showed that the overall sample (100%) was negative against lyssavirus of all the genotype. Conclusions from this study, although there were no lyssaviruses found in the flying foxes, however, the various contacts and poor levels of the public KAP showed that the potential risk of disease transmission from the flying foxes was relatively high.

Keywords: flying foxes, contacts, KAP survey, rabies, lyssavirus