



Surveillance report of rabies transmitting animal bite case at Sulianti Saroso Infectious Diseases Hospital in 2015-2018

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Abstract

Rabies is an infectious acute disease in the central nervous system (brain) caused by the rabies virus. It is transmitted through mucosal exposure to infected animals, such as rabid dogs, cats, apes/monkeys and sometimes other species. Dogs were the most common rabies-transmitting animals in Indonesia, followed by cats and apes/monkeys. To support rabies-free program in Indonesia by 2020, rabies surveillance is needed to find out the distribution and cases enhancement. The aim of this study is to provide a comprehensive picture of rabies-transmitting animals bite cases during 2015-2018 at Sulianti Saroso Infectious Disease Hospital. This report used the passive and active surveillance method by retrieving data from emergency installation unit register book and hospital data system. The results showed that the rabies-transmitting animals bite cases from 2015 to 2018 has increased while for VAR used has decreased. By age, most cases occur at 20-64 years, both men and women. Most types of rabies-transmitting animals were dogs. The biggest patient domicile is from the North Jakarta area. From 2015-2018, the number of cases of rabies-transmitting animals bites cases increased and the use of VAR decreased.

Human animal-bite injuries are a serious public health problem due to associated risk for rabies virus exposure. Animal-bite injuries especially dog bites are useful indicators for assessing the risk of rabies virus transmission and need for rabies post exposure prophylaxis (PEP). Understanding the epidemiology and surveillance of animal bites and rabies post-exposure prophylaxis is critical in implementing Kenya's national rabies elimination strategy. We aimed to describe the incidence of human animal-bite injuries, patient/biting animal characteristics, uptake of rabies PEP and factors associated with animal bite incidents.

We reviewed animal bite records from outpatient and anti-rabies vaccine (ARV) registers of 17 health facilities from five counties. An animal bite was defined as an entry of an animal bite of the class mammal including humans in registers in a person of any age from

January 2011 to December 2016. We collected demographic and information on PEP uptake. We calculated descriptive statistics, odds ratios (OR) and 95% confidence interval (CI) to examine factors associated with being an animal bite case-patient. We also calculated incidence of animal bites using health facility catchment population for year 2016 as the denominator.

Preventing dog bites would most effectively reduce bite injuries by improving public health education among children below 15 years, encouraging early PEP initiation and completion, development and implementation of responsible dog ownership and animal behaviour educational programmes as well as improving human and veterinary health linkages

Rabies is a viral disease that is transmitted to humans via animal contact and is therefore classified as a zoonotic disease. Rabies has the largest impact on Asian and African populations and causes an estimated 59,000 deaths every year worldwide.

Dog bites are the most common source of rabies transmission and human deaths as a result of the disease. Young children are particularly likely to come into contact with the rabies virus as a result of contact with infected animals.

A vaccination against rabies is available to be administered following a suspected exposure to the virus, such as after an animal bite. Since the initial introduction of the vaccine, the number of rabies deaths has continued to decrease each year. Throughout the world, more than 15 million people are vaccinated after being bitten by animals suspected to carry the rabies virus, which is expected to save hundreds of thousands of lives every year.

Biography:

Jamiatul Hoer has expertise in surveillance and research in epidemiology field. He has completed his Bachelor of Public Health and worked at Sulianti Saroso Infectious Diseases Hospital as an Epidemiology Staff at Directorate of Infectious and Communicable Diseases Research.