

ABSTRACT

Anaysis of Environmental and Behavioral Risk Factors on The Incidence of Leptospirosis in Gresik Regency.

Leptospirosis is one of the emerging infectious diseases that caused by **leptospira** bacteria and spread through animal to human (is also called by zoonosis). Gresik Regency was categorized as area with endemic leptospirosis. Objective: to analyze environmental risk factors and behavioral factors that affect the occurance of the disease in Gresik Regency and to know the presence of leptospira agent within mice urine.

Method used: case control study. The number of samples were as many as 51 samples, including case group with 17 samples and control group with 34 samples. Case was patients that undertaken medical treatment in Ibnu Sina Hospital, Gresik, that recorded within medical record for period January 2011 up to April 2012. Control was neighbors of those patients who shared the same occupation and had their residents at > 200 meters away from the patients' residents. Statistical test used was multivariate logistic regression test and descriptive test.

The result: variable of ditch condition with $p = 0.025$, Odds Ratio (OR) = 7.501; variable of the home environment condition with $p = 0.012$, Odds Ratio (OR) = 7.068; variable of footwear usage habit with $p = 0.015$ and Odds Ratio (OR) = 10.284. These mean that the ditch condition and the condition of home environment were insufficient and disusing footwear habit was a risk factor to the presence of leptospirosis. The presence of agent leptospira was then found in the mice urine within patients' houses.

Suggestions given in order to prevent the occurance of leptospirosis in Gresik Regency is to increase the house and ditch cleanliness, to accustom with the usage of footwear, to keep the cleanliness of pens, to deracinate the presence of mice using rodenticide, to process lake water to be adequately clean water and to increase the role Puskesmas (Health Center) in the leptospirosis controlling.

Keywords: leptospirosis, environmental factors and behavioral factors, leptospira agent