ABSTRACT

The Risk Factors of Cattle Farmers' Leptospirosis in Plateu of Ngrayun, Ponorogo

Leptospirosis is a zoonotic disease caused by leptospira bacteria and transmitted to human through contact with animal's urine and contaminated environment. The cases had appeared since 2010 in Ponorogo and the outbreak happened in 2011. One of the cases was in Ngrayun. Ngrayun is a plateau area which is supposed to have a small risk of leptospirosis case because it usually occurs in the lowlands. As matter of fact a phenomenon occurred that most number of cases happened in Ngrayun. The aim of this study was to analyze risk factors related to leptospirosis incidence in Ngrayun in 2013. The risk factors abalyzed were, physical environment, biological environment, farmer's characteristics, cattle's characteristics, conditions of the cowshed and farmer's behaviour. This research was an explanatory research with observational method using case control design. The subjects were 10 cases and 30 controls recruted with inclusion criteria. Diagnosis of cattle's leptospirosis was based on blood examination by IgG ELISA. The data were analyzed in univariate, bivariate and multivariate tests using logistic regression. The results with multivariate test of this research found the potential risk factors leptospirosis cases against the cattle farmers in Plateau Ngrayun, Ponorogo were the cattle's leptospirosis (p value=0.016; OR= 24.15; CI 95%=1.83-319.50) and behaviour using footwear outdoors (p value=0,016; OR= 33,90; CI 95%=1,94-591,40). The conclusion was cattle's leptospirosis and behaviour using footwear against cattle farmers letospirosis. It is suggested that cattle farmers to keep healthy their livestock with vaccine of leptospirosis every 6 month and apply using footwear outdoors especially when they are in the chowshed. Thereby, cattle farmers could prevent themselves from leptospirosis transmission through their cattle.

Key Words: Risk Factors, Leptospirosis, Plateu