ABSTRACT

Leptospirosis is a zoonotic disease caused by Leptospira bacteria and transmitted to humans through contact with the urine of animals and contaminated environments. The existence of stagnant water around the house as leptospirosis disease transmission lines occur when the stagnant water contaminated by urine or pet mice infected with the bacteria Leptospira. In 2011, Yogyakarta was ranked the highest in the incidence of leptospirosis in Indonesia. The purpose of this study was to determine the puddle as risk factors of leptospirosis in the city of Yogyakarta.

This research uses the analytical method observational case-control study design. The number of respondents in this study a total of 120 respondents, with the criteria of 60 respondents as case and 60 respondents as a control. Cases were patients with leptospirosis were reported in Yogyakarta City Health Department in 2011-2013, while the controls were neighbors of patients who meet the criteria (maching) with case included age, gender, and occupation. Data were collected by means of interviews using questionnaires to survey respondents. Then the data were analyzed with SPSS 15.0 using univariate and bivariate using chi-square.

Based on bivariate analysis results obtained p <0.05, with Odd Ratio = 3.667 and 95% confidence interval = 1.238 to 10.863. This suggests that the presence of stagnant water around the house causes a person stricken with leptospirosis by 3,667 times compared with no puddles around the house. It can be concluded that the puddle as risk factors for the incidence of leptospirosis in the City of Yogyakarta.

Keywords: *Fever, Leptospira, Flood*