ABSTRACT

Predictive Indicators of Diphtheria Incidence in Surabaya City

In East Java trend diphtheria cases form year to year always increase, 5 cases in 2003, 15 cases in 2004, 51 cases in 2005, 44 cases in 2006, 86 cases in 2007, 78 cases in 2008, 140 cases in 2009, and 2010 306 cases. The purpose of this study is making indicators predictive for incidence diphtheria in the Surabaya City those are status of diphtheria immunization, age, number of family, gender, mobility, place density, humidity of room, natural lighting, and natural ventilation. The design of the research study is case control. Subjects were children aged < 10 years who suffered from diphtheria recorded in Dinas Kesehatan Kota Surabaya period March 2011 till March 2012. Determination of the sample is by simple random sampling. Sample size for the case is 64 individuals and 128 for control. Data collected through interviews with individuals who underwent examination to obtain the characteristic and the environment. Secondary data collected from Dinas Kesehatan Kota Surabaya. Bivariat analysis result shows the influence of diphtheria in Surabaya City is the immunization status (OR = 3.765, p=0.038), Number of family (OR=2.151, p = 0.035), Density of room (OR=1.771, p = 0.101), Humidity of the room (OR=1.582, p = 0.149). On multivarariat tests the most influence variable is immunization status (OR=4.454, p = 1.494), density of room (OR=2.078, p= 0.732), humidity of the room (OR=1.906, p=0.645). The most dominant variable is the immunization status. The recommendation from this study to Dinas Kesehatan Kota Surabaya is to increase immunization and also improving the quality of home environment.

Keywords : diphtheria, indicator predictive, immunization status