

The Correlation of Environmental Risk Factors with Malaria at Tasikmalaya District, 2013

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Abstract : Background: Malaria disease was widespread in many countries, both tropical and sub-tropical. Tasikmalaya is a region that experienced an increase in malaria cases over the last 5 years and highest in 2013, a total of 168 positive cases of malaria. Tasikmalaya region consists of coastal and mountain areas, it has a potential place for Anopheles mosquito breeding, i.e swamp, lagoon, and rice fields. The purpose of this study was to determine the correlation of environmental risk factors with the incidence of malaria in Tasikmalaya. Methods: The design of the study is case control study with 140 samples in 5 sub-district (Cineam, Cikatomas, Cipatujah, Salopa, and Jatiwaras). This study examines the environmental factors that influence the incidence of malaria in Tasikmalaya District in 2013. The research used 14 variables: individual characteristics (education, knowledge, occupation) and environmental risk factors (mobility to endemic areas, use mosquito nets, use of wire gauze at home, use mosquito repellent, repellent use, the presence of a large animal in a cage, breeding place, the presence of larvae, temperature and humidity chamber). Results: Results demonstrated an association between occupation (0.22; 0.10-0.47), the mobility of the population to the endemic areas (37.4; 14.29-98.18), the presence of larvae (5.26; 1.41-19.74), and the room temperature with optimum temperature for mosquito breeding is 25-30°C (3.25; 1.62- 6.50). Conclusion: The dominant factor affecting the spread of malaria in Tasikmalaya is the mobility of the population to endemic areas. The results of the study suggest migration survey conducted activity and health promotion for preventive efforts against malaria in malaria-endemic areas, and to encourage people to behave healthy life by freeing environment of mosquito larvae and protect themselves from mosquito bites.

Keywords : Environmental risk factors, malaria, correlation, Anopheles

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