

ABSTRACT

The Mapping of Geographical Information System (GIS) Environment And Spread of Malaria in The District Of North Bengkulu

Malaria is an acute or chronic infectious disease caused by Plasmodium is characterized by recurrent fever, chills, sweating, weakness, anemia, and hepatosplenomegaly. Transmission of malaria is strongly influenced by the interrelated relationship between the host (humans and Anopheles mosquito), agent (Plasmodium) and the environment (physical environment, chemical, biological and social). The research objective is to create a mapping geographical information system (GIS) environment and the spread of malaria for malaria control in North Bengkulu Bengkulu province.

This type of research is observational with cross sectional design. The samples used were malaria patients were based on microscopic results obtained from the data Puskesmas and Puskesmas Housing Air Bintunan North Bengkulu Regency Year 2014 and are willing to become research respondents. Primary data obtained from interviews using a questionnaire covering the characteristics Respondents Respondents cultural and social environment, observation by observation sheet covering natural and built environment (breeding places), and perform measurements including topography and climatology (the natural environment, and home-made respondents) and mapping home incidence of malaria by GPS Garmin 62S.

Results of this research is the Anopheles mosquito Breeding places artificially include an 42.42%, 37.88% gutters, 15.15% puddle of water used to trace the vehicle and 1.52% respectively rice paddies, puddles former cattle trail and Regions River flow. While the Anopheles mosquito breeding places naturally include 37.5% puddle naturally, 20.83% of small rivers and streams, and 4.17% puddles on the tree. Social and cultural environment in the majority of forest plantations and 66.7% have a habit of going out at night, do not have the habit of sleeping outdoors at night, 88.1% no mobilization, 64.3% use mosquito nets, 90 , 5% did not put up wire netting on the ventilation, 69.0% did not use mosquito reject, 64.3% did not have a big cattle, 97.6% found the support of health-care facilities are good and 97.6% thought that the lack of efforts of health workers the prevention of malaria. Level density between the incidence of malaria in the plantations has clumped pattern (cluster).

Keywords : Mapping and Spread of Malaria