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RELATIONSHIPS BETWEEN PHYSICAL ENVIRONMENT AND COMMUNITY BEHAVIOR WITH INCIDENCE OF DENGUE HEMORRHAGIC FEVER IN MA'RANG, PANGKEP

ABSTRACT

Background: Dengue hemorrhagic fever (DHF) is a disease with a high morbidity rate worldwide. WHO data estimates that there are 2.5-3 billion people at risk of developing this disease. In Indonesia, it is estimated that 19.96 cases per 100,000 population experience this disease each year. It is suspected that the physical environment, namely rainfall and air temperature, as well as prevention behavior in the community are factors that influence the incidence of dengue hemorrhagic fever.

Objective: To determine the relationship between physical environmental factors and community behavior factors with the incidence of dengue hemorrhagic fever.

Method: Observational analytic with cross sectional design in Ma'rang District, Pangkep Regency involving 49 respondents. Rainfall and air temperature data were obtained from BMKG Region IV Makassar, the incidence of dengue fever

was obtained from the Ma'rang Health Center, and data on community behavior were obtained from filling out questionnaires. Data analysis used the Spearman correlation test.

Results: There were 8 cases in the period September 2019 - September 2020 (the highest was in March 2020 with 3 cases). There is a relationship between rainfall and the incidence of DHF (p value = 0.047; p <0.05). Meanwhile, there was no relationship between air temperature and the incidence of DHF (p value = 0.282; p> 0.05). The majority of people have moderate levels of dengue transmission prevention behavior. There is no relationship between community behavior factors and the incidence of DHF (p value = 0.467; p> 0.05).

Conclusion: There is a relationship with moderate strength levels between rainfall and the incidence of DHF. There is no relationship between air temperature and behavioral factors with the incidence of DHF.

Keywords: dengue hemorrhagic fever; environmental factor; preventive behaviour