ABSTRACT

Relationship with Clinical Symptoms Detection of Blood Parasites in a Microscopic Preparations on Patients with falciparum malaria at the PHC Limboto Gorontalo Regency

Background: Malaria is still endemic in the working area Limboto Puskesmas, Kabupaten Gorontalo with still found an increased number of *Plasmodium falciparum*. From the results of several studies that have been conducted in various regions in Indonesia turned out to show clinical symptoms vary between regions. Therefore, clinical diagnosis is very important for the detection of malaria cases before confirmed by microscope.

Method: This study used an observational method using *cross-sectional* study by taking samples of capillary blood drops made thick blood smear. Characteristics and clinical symptoms of malaria patients are known from a structured questionnaire. Then the data were analyzed by descriptive statistics, bivariate (Chi-square) and multivariate (McNemar and kappa) with SPSS.

Results: 130 respondents and 91 (70%) positive blood supply to *Plasmodium falciparum*. Clinical symptoms with statistically significant bivariate Chi-square test that can be used to diagnose malaria on clinical history, namely: a history of 1-4 weeks visiting or living in endemic areas, the physical examination are: Pale (conjunctiva, nail the tongue and palms) and splenomegaly. Clinical symptoms were statistically significant multivariate analysis with McNemar test and Kappa on the complaint before the fever: Fatigue and The Other complaints for 72 hours: sweating, trembling, pale, and painful joints. Based diagnostic test and combinations test has a combined clinical symptoms is sweating, trembling and pale have specificity of 98.2% and positive predictive value 96.4%.

Conclusion: Combined Clinical symptoms was found can be used for clinical diagnosis of malaria in a person with a fever with a complaint before the fever and other complaints of fever during 72 hours in PHC Limboto, Gorontalo regency is a sweating, trembling and pale.

Keywords: Relationship, Clinical symptoms, Detection of Blood Parasites, falciparum malaria.