

FACTORS ASSOCIATED WITH FALCIPARUM MALARIA IN LEMBATA, EAST NUSA TENGGARA

Rafael Paun

School of Health Polytechnics, Ministry of Health, Kupang

ABSTRACT

Background: Lembata district, East Nusa Tenggara, is a malaria endemic area. In 2016, as many as 27,976 clinical suspect cases were reported. As many as 6,562 malaria cases were confirmed, of which 444 were *Plasmodium falciparum* cases, 6,116 were *Plasmodium vivax* cases, and 2 mixed cases. Annual Parasite Incidence (API) was 46.60 new cases per thousand populations. This study aimed to determine the factors associated with *Falciparum* malaria in Lembata, East Nusa Tenggara.

Subjects and Method: This was a case control study carried out in Lembata, East Nusa Tenggara. A sample of 226 people was selected for this study, consisting of 113 *Falciparum* malaria cases and 113 controls. The dependent variable was *Falciparum* malaria. The independent variables were age, fever, convulsion, and diarrhea. Malaria case was diagnosed by anamnesis, clinical and laboratory examinations. The other data were collected by questionnaire, interview, and observation. The data were analyzed by a multiple logistic regression.

Results: *Falciparum* malaria was associated with younger age (OR= 2.88; 95% CI= 1.47 to 5.07; $p < 0.001$), high fever (OR= 5.88; 95% CI= 4.21 to 7.45; $p = 0.001$), convulsion (OR= 4.90; 95% CI= 2.09 to 7.63; $p < 0.001$), and diarrhea (OR= 3.76; 95% CI= 1.16 to 8.75; $p = 0.023$).

Conclusion: *Falciparum* malaria is associated with younger age, high fever, convulsion, and diarrhea.

Keywords: malaria, *Falciparum*, fever, convulsion, diarrhea

Correspondence:

Rafael Paun. School of Health Polytechnics, Ministry of Health, Kupang, Jl. Piet A. Tallo, Kupang, East Nusa Tenggara. Email: rafpun012@gmail.com.
Mobile: 081339334949