

ABSTRACT
DIFFERENCE OF PARASITEMIA OF ASYMPTOMATIC AND
SYMPTOMATIC MALARIA IN FORMER MIGRANT WORKERS IN
DONGKO SUBDISTRICT TRENGGALEK DISTRICT
EAST JAVA PROVINCE

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Background: The people of Trenggalek usually accustomed to work outside Java island where malaria is endemic. Their conditions were infected with malaria upon they returning to the district and contributed to the increased of malaria with imported malaria. The patients who showed clinical symptoms of malaria is called symptomatic malaria patients. After their recovery, when they were examined microscopically showed the malaria parasite on their blood smears without showing clinical symptoms, and called asymptomatic malaria carrier.

Objective: To determine the difference of parasitemia of asymptomatic and symptomatic malaria in former migrant workers in research area.

Materials and Methods: The samples were giemsa-stained of thick blood smears of migrant workers who have recovered from malaria without clinical symptoms and symptomatic malaria patients who hospitalized at Puskesmas Pandean those positive with *Rapid Detection Test*. Samples obtained from Arwati et al (2012), Nurdianto et al (2014) and Puskesmas Pandean (2016). Data were analyzed descriptively and analytically. Parasitemia was defined as the number of parasites per μl at blood.

Result: Asymptomatic malaria carrier were 15 samples and symptomatic malaria were 4 samples. Microscopic examination of symptomatic samples did not find any parasite. Fisher exact test p-value (1-tail) was 0.07478. The species of *P. falciparum* and *P. vivax* were dominantly infect the asymptomatic malaria carrier.

Conclusion: There was difference of parasitemia between asymptomatic and symptomatic malaria in former migrant workers. The number of parasites in asymptomatic malaria patients was at range of 120 to 4.840 parasite/ μl blood. No parasite was found in symptomatic malaria patients. This condition may caused by *sequestration* phenomenon, treatment, over diagnosis, submicroscopic malaria and slow growth of parasite.

Keywords: Parasitemia, former migrant workers, asymptomatic malaria, symptomatic malaria.