The Efforts to Implement a Malaria Elimination Strategy in The Highly Endemic Malaria Region of Papua Province, Indonesia

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In 2023, Indonesia's Ministry of Health reported that nearly 75% of districts and cities in the country were free from malaria transmission, meaning 90% of the population lived in malaria-free zones.1 However, Papua Province, which accounts for only 1.5% of Indonesia's population, continues to contribute over 90% of the national malaria cases, with more than 16,000 reported cases in 2023.[2]

Indonesia has recently completed a malaria vaccine trial, the IDSPZV1, which included the PfSPZ Vaccine and PfSPZ-CVac (CQ), conducted among soldiers deployed to Papua Province, New Guinea, for 10 months. These soldiers were from a battalion located in a malaria-free area in Bangkinang, Riau Province. The results of this clinical trial will be reported separately, but this significant development could offer a potential solution to reduce the risk of malaria infection, particularly among travelers, such as domestic tourists or soldiers visiting Papua.[3]

This edition highlights the recent findings from a malaria study conducted in Iwaka District, Mimika, Papua, which revealed that nearly half of the patients presenting with fever at the district hospital were diagnosed with malaria (N=863 patients). The authors explored various factors, including the prevalence of malaria, patient characteristics, history of malaria exposure, housing and environmental conditions, as well as malaria prevention measures among the study participants.[4,5]

In addition to uncomplicated malaria infections, severe malaria cases remain a significant issue, contributing to high mortality rates. Nainggolan et al.6 investigated the role of host factors, particularly ABO blood groups, in the likelihood of developing severe malaria.

Understanding the dynamics of disease prevalence, risk factors related to both the host and the environment, along with the potential availability of vaccines, chemoprevention, and other preventive measures, are crucial to achieving zero malaria in the island of New Guinea, Papua Province.

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