

A Preliminary Study on The Risk Factors for Imported Malaria, Taiwan, 2006–2016

Yi-Feng Lan*, Song-En Huang, Chu-Tzu Chen,
Yu-Min Chou, Ching-Hui Yang

Abstract

The development of international travel has made it difficult to avoid the risk of imported malaria in Taiwan. Imported malaria may cause secondary local transmission, which could lead to the re-establishment of endemic malaria, undermining the achievement of malaria elimination in Taiwan. Therefore, the purpose of this study is to analyze the imported malaria case-related data, to provide deeper understanding of the risk associated with imported malaria cases in Taiwan and to formulate policies for the prevention and control of malaria.

We collected data including sex, age, nationality, malaria species, travel purpose and country visited for each imported malaria case reported to the Taiwan National Notifiable Disease Surveillance System during 2006 to 2016 and carried out descriptive analysis. Furthermore, we combined the data of malaria species detected and travel purpose with the data of country visited to find risks associated with acquiring malaria while traveling abroad.

Division of Acute Infectious Diseases,
Centers for Disease Control, Ministry
of Health and Welfare, Taiwan
DOI: 10.6525/TEB.201807_34(14).0001

Corresponding author: Yi-Feng Lan*
E-mail: yifeng424@cdc.gov.tw
Received: Nov. 02, 2017
Accepted: Mar. 09, 2018

Of the 172 imported malaria cases reported during 2006 to 2016, we found that Taiwanese entrepreneurs and people dispatched overseas to Africa and Southeast Asia might be the main source of imported malaria cases. Also, the predominant malaria species of imported malaria cases from Africa was *Plasmodium falciparum*, whereas from Southeast Asia was *Plasmodium vivax*. As a result, we recommend strengthening health education regarding use of chemoprophylaxis and personal protective measures for all travelers, especially Taiwanese entrepreneurs and people dispatched overseas to Africa and Southeast Asia, to effectively prevent the importation of malaria.

Finally, we can apply the method of this study to other imported vector-borne diseases for formulating epidemic prevention and control policies.

Keywords: Malaria, imported case, geography, travel purpose, chemoprophylaxis