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Demographic and Clinical Characteristics of Hospitalized Dengue Patients of Foreign Nationals Travelers Admitted to the Hospital for Tropical Diseases in Bangkok, Thailand (2016–2023)

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Abstract

Thailand, a popular travel destination, is endemic to dengue and is frequently reported as the origin of travel-related dengue among returned travelers. However, data on dengue cases among international travelers requiring hospitalization in Thailand remain limited. This retrospective cross-sectional study reviewed past medical records and conducted a descriptive statistical analysis to assess the demographic and clinical characteristics of dengue-infected foreign patients admitted to the Hospital for Tropical Diseases in Bangkok from 2016 to 2023. A total of 568 cases were included. The peak of dengue cases was observed in 2018 and 2023, aligning with dengue outbreak years in Thailand. Most patients were the adult age group (87.0%), with a median age of 27.0 years. The patients were primarily from neighboring countries such as Myanmar (50.7%), Laos (18.8%), Cambodia (9.5%), and Vietnam (4.8%). The most common reason for travel was employment as migrant workers (84.3%), while tourism accounted for 4.1% of the cases. Based on the 2009 WHO dengue classification, the majority of patients were diagnosed with dengue with warning signs (56.3%), followed by dengue without warning signs (40.5%) and severe dengue (3.2%). Hemorrhage was the most frequently observed complication. The median hospital stay was 3.0 days (range: 1–21 days). One fatal case (0.2%) was recorded in 2018. Although findings from a single site may not be fully generalizable to all international travelers in Thailand, they offer insights into hospitalized dengue cases among foreign patients, highlighting demographics, travel purposes, and clinical patterns, with implications for public health strategies, travel medicine, and case management.

Keywords: dengue, travelers, hospitalization, tropical diseases, Thailand