Dengue fever in Saudi Arabia: A review of environmental and population factors impacting emergence and spread

Kholood Altassan
University of Washington, USA

Dengue fever (DF) is the most important mosquito transmitted viral disease that causes a large economic and disease burden in many parts of the world. Most DF research focuses on Latin America and Asia, where burdens are highest. There is a critical need for studies in other regions where DF is an important public health problem but less well characterized. The first documented case of DF in Saudi Arabia occurred in 1993. After a decade of sporadic outbreaks, the disease was declared endemic in 2004 and this designation persists. Climate, socio demographic factors and increasing urbanization impact the spread of DF in Saudi Arabia as in other areas. However, DF transmission in Saudi Arabia is also affected by several unique factors, including large numbers of migrant workers and religious pilgrims from other dengue endemic areas across the Middle East, North Africa, and Asia. Important knowledge gaps include: understanding the role of climatic factors as drivers of DF in Saudi Arabia and understanding the role of foreign workers and pilgrims in the original and continuous importation of dengue virus. Filling these gaps would improve health system preparedness.

k.k.altassan@gmail.com