EDITORIAL

DENGUE FEVER AS AN EMERGING HEALTH CONCERN IN ETHIOPIA

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Dengue, which can be caused by the dengue virus infections, is the most rapidly spreading mosquito-borne viral disease worldwide. The virus is transmitted through the bites of *Aedes* mosquitoes which breed in small bodies of fresh water, most commonly in various containers around homes. There are four different dengue virus serotypes, and infection with one serotype gives little immune protection against the other types. After an incubation of 8-10 days, a mild and usually self-limited flu-like illness develops. Current scientific evidence shows that sequential infection increases the risk for the severe form of the infection with bleedings, leading to dengue hemorrhagic fever (DHF) or the dengue shock syndrome (DSS). It is a complex disease with various clinical presentations which often go unrecognized or misdiagnosed as other common fever-causing tropical diseases.

Dengue represents a major global public health concern; it is estimated that 390 million dengue infections occur every year, and it is endemic in more than 100 countries across the Americas, East Mediterranean, Western Pacific, Africa, Southeast Asia and Europe. In the present decade, it has spread into new countries it did not exist earlier. The spread is expected to increase due to factors, such as population growth, climate change, and increased urbanization with sub-standard housing, irregular water supply, and poor environmental sanitation. Together with the rising mobility of both vectors and the human population all over the world, further spread from endemic areas to many previously unaffected regions is anticipated as a major challenge to health care services worldwide. Dengue will remain the most important mosquito-borne viral disease, primarily in the tropical and subtropical regions, mostly in urban areas where vectors are widespread, and high population density facilitates transmission.

In Africa, dengue has been reported in 34 countries, mostly in Eastern Africa. In countries bordering Ethiopia, such as Sudan, Eritrea, Kenya and Djibouti, dengue has been often reported. A possible threat of dengue outbreak was first reported from Dire Dawa, Ethiopia, in 2013, following which 11,409 suspected cases were noted in just four months. A study at Metema and Humera hospitals, northwest Ethiopia, from 2016-2017, for the first time reported that dengue virus-infected infebrile patients visited the two hospitals.

The occurrence of dengue in north and eastern parts of Ethiopia suggests that physicians consider the possibility of dengue virus infection when examining patients presenting with febrile illnesses and that preventive and control strategies be also designed to combat the virus in the country. As no vaccine is available for dengue currently, the prevention or reduction of the transmission of the virus entirely depends on the control of the *Aedes* mosquito vector or the interruption of the human-vector contact. Moreover, early laboratory diagnosis of dengue the virus is important for the proper management and prevention of complications, like DHF/DSS.

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