

EDITORIAL

Zika Virus Disease (ZVD): Another viral disease outbreak



Just when we emerged from the Ebola virus disease outbreak in West Africa, we are inundated by another viral disease outbreak with possible global spread. This time, it is not from Africa but from South America and specifically from two countries namely Brazil and Colombia. The Zika virus is a mosquito-borne virus disease first discovered in 1947 among

rhesus monkeys from the Zika forest of Uganda, through a monitoring network of sylvatic yellow fever.¹

The first human cases were confirmed in 1952 from Uganda and Tanzania respectively. Since then, there have been outbreaks in various parts of Africa, the Americas, Asia and the Pacific that did not attract much attention as the current outbreak in South America. In 2013, there was a large outbreak of Zika in French Polynesia. In 2015, Brazil and Columbia (South America) and Cape Verde (West Africa) reported outbreaks. Then on 1 Feb 2016, the World Health Organisation (WHO), declared Zika virus a public health emergency of international concern.² Available data on 2 March, 2016, indicate that Brazil confirmed 641 cases of microcephaly and 139 babies with the birth defect have died since the Zika virus outbreak started in October 2015.³

What makes the current outbreak in South America unique has been the increase in Guillain-Barré syndrome, which coincided with the increase in Zika virus infections in the general population, as well as the increase in babies born with microcephaly in north east Brazil.¹ It is still early days in terms of increasing body of evidence on the possible link between the Zika virus infection in pregnant mothers and babies born with microcephaly. However, it is known that the *Aedes* species mosquitoes (*A. aegypti* and *A. albopictus*) transmit the disease, which usually bite during the mornings and late afternoons. Researchers are still trying to determine the incubation period of the disease. It is postulated that the incubation period is probably a few days. The symptoms are similar to other arbovirus infections, such as dengue fever, chikungunya and yellow fever. It presents with mild fever, headaches, skin rashes, muscle/joint pains and conjunctivitis. It appears that the “conjunctivitis” may be a distinguishing feature of this disease when compared with other arbovirus infections. The symptoms are short-lived and last 2-7 days with patients fully recovering.

Zika virus is transmitted from an infected mother to her foetus in utero and during birth. To date, there is no reported case of infants infected through breast-feeding. However, the virus spreads by unprotected heterosexual sexual contact from men who have Zika virus symptoms as the virus persists longer in semen than in blood. Between 1 Jan 2015 and 24 February 2016, the United States of America recorded 107 travel-related Zika virus diseases in twenty-six states. The three states with the highest cases were Florida (28), New York (17) and Texas (13).⁴ Obviously, the Zika virus outbreaks has introduced a new dimension to the spread of the disease beyond the mosquito bite, that is, via unprotected sexual intercourse with infected persons. On 20 February 2016, South Africa reported its first travel-related case of Zika virus disease in a Columbian businessman who visited the country.⁵

The disease is diagnosed in the serum of suspected infected patients through reverse transcriptase-polymerase chain reaction (RT-PCR). The treatment is symptomatic comprising of bed rest, adequate fluid intake and analgesics. Currently, there is no vaccine against the disease. Prevention follows the same precautions against the mosquito bite including the use of repellents and insecticides. Should travel be restricted between South Africa and Brazil or Columbia? ZVD is a mild disease and no death has been reported. However, pregnant women are advised against travelling to these countries and men with flu-like symptoms should be tested for malaria and Zika virus on return from these countries. If they test positive for ZVD, they should use condoms during sexual intercourse for a reasonable period to prevent the possible transmission of the disease. These are common sense approaches until we are fully aware of the impact of this outbreak in Brazil and Columbia.

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