

## **Editorial:**

### **Zika virus: alarming!!!**

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Zika, a mosquito-borne flavivirus was identified in Uganda in 1947 in monkeys. From 1960s to 1980s, the zika viral diseases have been recorded in different parts of the world like Asia, Americas, Africa and the Pacific. Spreading of this viral disease has been observed in more than 60 countries and territories. Brazil has reported the relationship between ZIKV (zika virus) infection with Guillain-Barré syndrome and microcephaly in 2015. ZIKV has been confirmed in Malaysia and affected areas are Sabah, Johor, Selangor, Sarawak, and the Federal Territories of Kuala Lumpur and Putrajaya. Up to December, 2016, 8 cases in Malaysia and 458 cases in Singapore have been reported.

Transmission of the virus occurs during the daytime by biting of infected female *Aedes aegypti* and *Aedes albopictus* mosquitoes which are active from dawn to dusk. However, ZIKV can be transmitted by other *Aedes* genus. The other mode of transmission is sexual transmission as there is present of virus in the semen. The incubation period of ZIKV infections are variable with symptoms usually develop within 3 to 12 days after the mosquito bite as in dengue and chikungunya. Symptoms are usually fever, conjunctivitis (red eyes), muscle and joint pain, malaise, headache, pruritus and itching skin rashes. These symptoms last for 2 to 7 days. Fever is short-termed or absent and often of low-grade whereas pruritus is the second most common symptoms presented in the confirmed cases. ZIKV infections are suspected by the symptoms and recent travel history. The viral infections are diagnosed through detection of ZIKV RNA in blood, urine, and other body fluids by reverse transcriptase – polymerase chain reaction (RT-PCR) assay. Molecular methods become front line in diagnosis because ZIKV is closely related to dengue virus with consequent difficulties in differentiation of zika and dengue due to cross-reactivity in serological assays. Treatments for ZIKV infections are symptomatic like antipyretic for fever, plenty of fluid and adequate rest. The alarming sequelae for the viral infections are Guillain-Barré syndrome and some of the neurological disorders. The complications are more problematic if a pregnant woman is infected because the virus infection can cause microcephaly and ocular lesions in neonates born to the infected woman. Moreover, the study in Brazil during 2015 indicated the commonly affected population is females of age group 15-49.

ZIKV generally causes mild disease and four of five infected persons are asymptomatic. Despite of the fact prevention is better than cure, there is no preventive medicine for this viral infection. Development of a vaccine against zika is still in trial in drug companies. Protection against mosquito bites is an important measure to prevent ZIKV infection. Pregnant women need to practise strict mosquito

precautions. Pregnant women should have safe sexual practice by means of proper using of condom during the sex with her partner who is working, living or studying in the infected areas or abstinence throughout the pregnancy. Infected men also have to practise safer sex through the correct and consistent use of condoms or abstain from sexual intercourse for at least six months after recovery because ZIKV is present in semen longer than vaginal fluids, urine, and blood.

Public awareness is necessary to control the vector (*Aedes* mosquitoes). The *Aedes* mosquito has the black and white stripes on its body and can be easily identified. Their breeding places are clean and stagnant water. Checking and removal of stagnant water in the houses should be regularly done to prevent their breeding. Using mosquito nets and mosquito repellents are the other measures important to be practised.

## REFERENCES

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