

Zika Virus Infection in Pregnant Women: Present Situation in Thailand

Viroj Wiwanitkit^{1,*}

¹Visiting Professor, Hainan Medical University, Hainan Sheng, China

*Corresponding author: Viroj Wiwanitkit, Visiting Professor, Hainan Medical University, Hainan Sheng, China. E-mail: wviroj@yahoo.com

Received 2016 November 01; Revised 2016 December 04; Accepted 2016 December 07.

Keywords: Zika, Pregnancy

Dear Editor,

Zika virus is an arbovirus that has just become a focused pathogen for a few years. Zika virus infection is an important concern in women health at present. Generally, Zika virus infection is an arboviral infection that can induce problems in obstetrics (1, 2). The Zika virus infection during pregnancy becomes a big concern in the present day. According to the accumulated evidence reported from tropical South America, the affected pregnant women can give birth to defective infants. The main concern is on the transplacental transmission of the pathogen from pregnant mother to her fetus in utero. The transplacental transmission can result in fetal infection and there are many pathological disorders due to infection in fetus. Mainly, the infection can result in totally unwanted permanent defect in affected fetus. The main described anomaly is the fatal microcephaly (1, 2). In severe cases, fetal death can be seen (1, 2). The pathogenesis is believed to be due to the pathology resulting from direct viral invasion to the fetus (3). It is believed that the virus can cross the placental barrier to fetus and can directly induce the cytopathology. In the 2016 Zika virus outbreak in South America, there are numerous cases of abnormal newborns born to Zika virus infected mothers (1, 2). This observation is confirmed as a result of transplacental transmission of Zika virus from infected mother to fetus in utero (1, 2). This problem leads to a great global concern.

At present, Zika virus infection is not confined within tropical America but it already occurs worldwide in both tropical and non-tropical regions (4). In Southeast Asia, the situation has just been noted (5) and the situation in this tropical region is very interesting. Here, the author assessed the official report in weekly official report of Thai center of disease control on the present situation of Zika virus infection in Thailand (data in Thai are available online at: www.ddc.moph.go.th/). The author further discusses the present situation of Zika virus infection

briefly in pregnant women in Thailand, a tropical country in Southeast Asia. Until present (October 31m 2016), Zika virus infection has already been seen in Thailand. The disease becomes a disease under surveillance and there is a local law for regulation of this new emerging disease. At present, there must be a notification to the public health office if any case of Zika virus infection is diagnosed in Thailand. All reported and indexed cases will be followed by the public health officer in each area and the clinical follow-up and progress have to be reported to the Thai CDC for collection, and a summary of the data will be weekly presented on the abovementioned website. At present, there are accumulated 33 infected pregnant women recorded in Thailand among whom 8 cases already gave birth to normal infants. There is also no report on serious clinical presentations as well as post infectious neurological complication in the indexed cases. The mild clinical nature, no clinical symptom, or only acute febrile illness without any complication can be seen in Thailand and this is similar to the reports from other Asian countries (5). Based on the data, Zika virus infection in pregnant women in Thailand usually causes no clinical problem. This can be an interesting issue for further study on the difference of clinical problems between pregnant women in Asian and those in American countries.

References

1. Marrs C, Olson G, Saade G, Hankins G, Wen T, Patel J, et al. Zika Virus and Pregnancy: A Review of the Literature and Clinical Considerations. *Am J Perinatol.* 2016;**33**(7):625-39. doi: 10.1055/s-0036-1580089. [PubMed: 26939047].
2. Weaver SC, Costa F, Garcia-Blanco MA, Ko AI, Ribeiro GS, Saade G, et al. Zika virus: History, emergence, biology, and prospects for control. *Antiviral Res.* 2016;**130**:69-80. doi: 10.1016/j.antiviral.2016.03.010. [PubMed: 26996139].
3. Wiwanitkit V. Placenta, Zika Virus Infection and Fetal Brain Abnormality. *Am J Reprod Immunol.* 2016;**76**(2):97-8. doi: 10.1111/aji.12521. [PubMed: 27207189].

4. Fajardo A, Cristina J, Moreno P. Emergence and Spreading Potential of Zika Virus. *Front Microbiol.* 2016;7:1667. doi: [10.3389/fmicb.2016.01667](https://doi.org/10.3389/fmicb.2016.01667). [PubMed: [27812357](https://pubmed.ncbi.nlm.nih.gov/27812357/)].
5. Wiwanitkit V. The current status of Zika virus in Southeast Asia. *Epidemiol Health.* 2016;38:2016026. doi: [10.4178/epih.e2016026](https://doi.org/10.4178/epih.e2016026). [PubMed: [27336445](https://pubmed.ncbi.nlm.nih.gov/27336445/)].