

# Zika and Its Preparedness in Nepalese Scenario

**Bishnu Prasad Upadhy<sup>1</sup>, Rajani Malla<sup>1</sup>, Krishna Das Manandhar<sup>1</sup>, Birendra Prasad Gupta<sup>2\*</sup>, Anurag Adhikari<sup>2</sup>, Ramanuj Rauniyar<sup>3</sup>, Chirik Shova Tamarkar<sup>4</sup>, Bimlesh Kumar Jha<sup>5</sup> and Roshan Kurmi<sup>6</sup>**

<sup>1</sup>Virology Unit, Central Department of Biotechnology, Tribhuvan University, Nepal

<sup>2</sup>Asian Institute of Technology and Management, Purbanchal University, Nepal

<sup>3</sup>Everest School of Applied Science, Nepal

<sup>4</sup>Institute of Science and Technology, Tribhuvan University, Nepal

<sup>5</sup>National Public Health Laboratory, Nepal

<sup>6</sup>Bhawani Hospital, Nepal

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## \*Corresponding author

Birendra Prasad Gupta, Virology Unit, Central Department of Biotechnology, Tribhuvan University, Nepal, Email: birendraphd@gmail.com

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## Letter to the Editor

### Case Detail

Zika virus came to known to public in 1947, when it was first isolated from a Rhesus monkey from Uganda [1-3]. Due to its unremitting spread in past decade, zika virus created havoc and gained its recognition as one of the prominent threat in public health across the globe [4-7]. In the March of 2015, Brazil confirmed its first zika infection. Following the zika cases, country had to face erupted increment in microcephaly cases [8]. In next nine month span, the cases of microcephaly increased from 150 cases to 400. After observing this trend, PAHO (Pan American Health Organization) issued an epidemiological alert on December 1<sup>st</sup> 2015, warning a suspected link between Zika and microcephaly [9].

After the discovery of Zika from Uganda in 1947, some initial infections in 50s and 60s were reported in South Asian plains, as in India [10], Malaysia [10,11], Thailand, Vietnam [11], and the Philippines [12], but not any notable outbreaks were reported during the period. However, sporadic cases with specified acute illness had been reported in South East Asia, as in Cambodia [5] and Thailand [4]. The etiological agent was closely related to ZIKV Asian lineage with Micronesia [4,6,13,14]. Indian subcontinent has no case report of Zika virus till date; however the chances of getting one can't be dismissed [15]. Whenever new infections in Indian plains occur, the probability of their way in to Nepal remains very high. Indo-Nepal boarder is porous because of socio-economic and mutual cultural relationship in between two countries, providing relatively easy condition for disease transfer either by human or by any other means. Nepal already has reported some big localized flavivirus epidemic as well sporadic outbreak due to open border to India at South [16-20]. Dengue virus outbreak being the recent one in 2013 [18].

The government of Nepal has its state of art national public health laboratory with the facility of BSL 3, which was recently initiated to work on highly infectious agents of risk group III. The preparedness for Zika and its allies has been already initiated since early of 2015. The specialized team from the National Public Health Laboratory has optimized the routine diagnosis along with the rapid response team in standby for the epidemics, if happens. The laboratory is equipped with RT PCR, virus isolation, antigenic characterization and nucleic acid sequencing facility to be conducted in WHO guided protocol, thus easing the molecular diagnosis of Zika in suspected patients. The dengue cases from the 2013 outbreak have also been processed in this laboratory thus making it competent enough to study another flavivirus.

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