

Why Nipah Virus is Important to Know?

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Globally, public health is significantly exposed to emerging infectious diseases (EIDs). 75% of the diseases which are emerging, are zoonotic. These diseases can be transmitted naturally between man and animal. Among these EIDs, Nipah virus (NiV) is pathogenic to pigs and humans. It is a single stranded negative sense RNA virus. The first member of this genus, *Henipavirus*, was Hendra which emerged in Australia in 1994 in horses and humans. Nipah virus is second member of this genus. It belongs to the family *Paramyxoviridae*. This virus was named after a village Sungai Nipah in Negeri Sembilan, Malaysia, from where the first case of Nipah virus was registered. The first outbreak was reported in Malaysia in 1998 to 1999, causing respiratory disease in pigs. Additionally, it caused five successive outbreaks between 2001 to 2005 in Bangladesh. Nipah virus had two genetic lineages. These are, NiV-MY (NiV Malaysia) and NiV BD (NiV Bangladesh). The spread of this disease occurred through Malaysian peninsula due to the transportation of infected animals between fruit farms from north to south and into Singapore. The prime symptoms were recorded as headache, fever, vomiting, loss of consciousness and altered mental state. There were also asymptomatic cases registered in humans. In humans, the incubation period of Nipah virus normally ranges from 4 days to 60 days. It caused 105 deaths in humans out of 256 affected cases as well as the culling of more than one million pigs. There have been consistent reports of clusters of cases in humans in India and Bangladesh. The main host of Nipah virus was fruit bats generally known as flying foxes. There is not a proper treatment available for NiV rather preventive measure are defined to reduce the spread i.e., to prevent animals to eat fruits contaminated by bats through establishing farms away from fruit trees which attract bats, farms must not be overcrowded, sap consumption should be avoided, and livestock animals should be vaccinated. Though it arose as a new virus 21 years before, instigating mortality as well as mobility in animals and humans. Also, it destroyed industry of farming of pigs in Malaysia. Moreover, NiV continues its attacks in India and Bangladesh. The spread of the host *Pteropus* bats containing Nipah virus is vast across the world. So, its occurrence in new places has significant potential. Regardless of our commitment to of effective vaccine development, the other facts including ecology, biology and epidemiology of NiV remain unidentified. Our ability to cure the disease and to prevent spillovers will not improve until we better understand the basics of Nipah virus [1-3].

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