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Commentary

Nipha Virus Outbreak in Bangladesh! Strengthen Strategic Plans Prevents Other Emerging Diseases Pandemic in Future

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Introduction

In early 2019, The whole world face challenged of Covid-19 pandemic. In 2021, re-emergence of Zika virus outbreak and recently outbreak of Nipha virus in Bangladesh and India.

Nipah virus disease is emerging zoonosis disease also called Nipah virus encephalitis. This virus belongs to Family *Paramyxoviridae*, and genus *Henipavirus*, which is very similar to Hendra virus also called equine morbillivirus pneumonia. Nipah Virus outbreaks in pigs have been reports in Malaysia and Singapore. In 1999, First human outbreak reported in Malaysia. The name Nipha is drive from the village name where the first time this virus was isolated from infected person. In Bangladesh and India human cases continue to be occurred from 2003. (1).

Since the first identification of NiV in Malaysia way back in 1999, till date, more than 260 people have lost their lives worldwide. Currently when the world is already struggling with the COVID-19, Zika and Nipah cases make burden on the health departments and the resources. (2).

Major concern: NiV comes in group of Biosafety Level-4 pathogen with high fatality cases 40-75% (3). This virus can be transmitted from animal to human. Among humans, the virus spreads via respiratory droplet, bodily fluids (blood and urine). Incubation period is 4 to 14 days. However, an incubation period up to 45 days has been reported. Reservoir host is Fruit bat (*Pteropus medius*) (4). Symptoms of this virus is fever, headache, cough, sore throat, difficulty breathing, vomiting, drowsiness, confusion, Disorientation, confusion, Seizures and Coma. In severe cases, infection can lead to swelling of the brain (encephalitis) and potentially death. persistent convulsions and personality changes noted in survivors of Nipha viruse.

Containment of 2023 Nipah virus outbreak, Lesson learned and effective future strategies.

Current covid-19 situation, Zika and nipha viruses outbreak taught a good lesson toward to make effective strategies in future for controlling and prevention of other emerging zoonosis outbreak diseases. Needs to Prepare effective protocol, increase surveillance and monitoring, contact tracing, restriction on movement of people within the infected area, isolation of close contacts with help of proper CDC- guidelines and well-trained health worker. Make control rooms, diagnostic labs and counseling centers also helps in controlling. People from infected countries should be tested for nipha virus before travelling to other counties. In the absence of vaccine, symptomatic treatment is the only option. In Recent reported that the HeV-sG vaccine against Hendra virus can protect the African green monkeys against the lethal NiV disease seven days post-immunization (5). However, preliminary trials by National Institute of Health (NIH) and Oxford University with Nipah virus glycoprotein infused ChadOx1NiV vaccine vectors provide close to complete protective immunity in African green monkeys (6).

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Conflict of Interest

The author declare no conflict of interest.

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