

Letter to the Editor

Zika Virus Disease: New Pandemic?

In 2009, the World Health Organization (WHO) declared the first pandemic of the 21st century. Influenza A(H1N1) alerted the whole world about possible disastrous new pandemic, like that occurred in 1918 with the Spanish Flu Pandemic. Fortunately, the pandemic had a very low mortality rate, and only affected special groups like pregnant women and patients with morbid obesity.

In December 2013, the WHO declared a new epidemic in 3 African countries. Ebola Hemorrhagic Disease affected 7 African countries with 11,315 deaths of 28,632 declared patients. Sporadic imported cases were reported in 4 occidental countries. The first case infected outside Africa was declared in Spain. Another 2 cases were infected in USA. The 3 cases were healthcare workers. The outbreak in West Africa was declared to have ended in Sierra Leone on November 7, 2015.

Human Zika Virus Disease was discovered in Uganda in 1952. The virus is transmitted by the mosquito *Aedes aegypti*, endemic in Africa. The incubation period is not confirmed yet, but it ranges from 3 to 7 days. Symptoms of Zika Virus Disease last from 3 to 7 days. The most frequent symptoms are fever, headache, rash, arthralgia, and conjunctivitis. The clinical picture of Zika Virus Disease is quite similar to that of Flu. Complications include microcephaly and Guillain-Barre syndrome.

Over the last 20 years, Zika Virus Disease has been extended to other continents like Americas, Asia and Pacific Islands.

In October 2013, an outbreak of Zika Virus Disease was declared in the French Polynesia with 32,000 cases.

In October 2015, another outbreak was reported in Brazil. This outbreak was associated with many cases of microcephaly in infants.

The outbreak extended to Columbia and till date more than 13,500 cases have been reported. On February 1, 2016, the WHO declared Zika virus a public health emergency of international concern.

Aedes aegypti mosquito is now endemic in many countries, especially in South America and USA. Since 2005, *Aedes aegypti* is endemic in Madeira, Portugal.

Of note, *Aedes aegypti* could transmit Yellow Fever, Dengue Fever and Chikungunya Fever. Many South American countries have started to fumigate to end with *Aedes aegypti*.

We are facing a new pandemic with more questions than answers.

Why now? *Aedes aegypti* is endemic in many South American countries since many years. The same occurs with Zika Virus Disease.

What is the explanation for cases of microcephaly in infants? Zika Virus Disease is endemic in many countries and microcephaly was not reported before.

Could we end with *Aedes aegypti* using insecticides? *Aedes aegypti* live in Earth millions of years before human beings.

Is fumigation safe? Many insecticides are known to be carcinogenic.

Safe insecticides approved by the WHO are more expensive than old carcinogenic insecticides. Could developing countries of South America pay the costs of safe insecticides approved by the WHO?

What type of antenatal care should be applied for pregnant women in South America?

Should we apply a special screening for Zika Virus Disease in pregnant women?

How could we manage pregnant women with positive Zika Virus Infection?

How could we help families with infants with microcephaly?

Is Zika Virus Disease a new sexually transmitted disease?

Could breastfeeding transmit Zika virus?

Should we screen blood for Zika virus in all blood transfusion banks?

Should we expect new cases of Guillain-Barre syndrome?

Will Guillain-Barre syndrome be the new crippling disease of the 21st Century?

Many questions are needed to be answered to face the new possible pandemic. The WHO should lead a plan to avoid the spread and complications of this possible pandemic.

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