WHO declares Zika virus a “public health emergency”

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4 February 2016

At an emergency meeting on Monday, the World Health Organization (WHO) declared the Zika virus outbreak to be a “public health emergency of international concern.” The disease has spread rapidly through the Americas since the first case was reported in Brazil in May 2015 and is suspected of causing a spike in particular type of birth defects and neurological disorders.

The WHO called the emergency meeting in order to assess the “appropriate level of international concern,” and to avoid a repeat of the 2014 Ebola outbreak where the organization was criticized by experts for its slow response.

More than 23 countries or territories have experienced local transmission of the Zika virus, and ten of them are listed by the European Centers for Disease Control as “experiencing a rapidly evolving Zika virus epidemic with an increasing or widespread transmission.”

Between 500,000 and 1.5 million people are believed to be infected with the virus in Brazil, while Colombia’s National Health Institute reported over 20,000 cases as of last Saturday. A WHO scientist estimated there could be up to 4 million cases over the coming year.

The disease has the potential to become a truly global epidemic as it is mainly transmitted by the *Aedes Aegypti* mosquito, which is found in tropical and subtropical regions throughout the world. Thailand reported a case of local transmission of the virus last Tuesday as the first case outside the Americas in the current outbreak.

In addition to mosquitos, the virus has been sexually transmitted with the first reported case in this outbreak occurring in Dallas, Texas, and found in samples of the blood and urine of people who have been infected pointing to potential vectors the virus might use to spread during winter months when mosquitos are inactive.

One of the difficulties in detecting the virus, is that the majority of people infected exhibit no symptoms, and never seek medical attention. Roughly one in four of those infected show minor symptoms, the most common of which are mild fever, skin rash, conjunctivitis, muscle or joint pain, and general malaise. Symptoms appear 2-7 days after infection.

What makes the current Zika outbreak alarming is its apparent association with microcephaly in fetuses and the development of Guillain-Barré syndrome in adults. Microcephaly is a rare congenital condition where a child is born with an abnormally small head and its rate of occurrence has risen alongside Zika infections in Brazil.

The hardest hit regions in Brazil are the impoverished, northeastern states of Pernambuco, Bahia, and Paraíba. Pernambuco reported 141 cases of microcephaly in 2015, in comparison to the average of 10 per year between 2010 and 2014. The Health Department in Paraíba reported an incidence rate of 114 per 10,000 live births, more than one percent of all births.

Similarly, there has been a marked increase in the incidence of the rare Guillain-Barré syndrome (GBS) particularly in El Salvador. The syndrome is a form of rapid-onset muscle weakness caused by damage to the nervous system. GBS can be fatal if the weakness extends into the breathing muscles. Between December 1 2015 and January 6 2016, El Salvador reported 46 cases of the syndrome. This is roughly 10 times the country’s normal rate.

El Salvador reported nearly 4,000 cases of Zika virus between November and the end of December 2015, and

out of the 22 GBS patients whose information was available, 12 of them had a fever and rash (one of the symptoms of Zika virus) in the 15 days before the onset of GBS symptoms.

There is not yet conclusive evidence that either GBS or microcephaly are caused by the Zika virus, but the concurrent rise of both alongside the Zika epidemic formed a key component of the WHO's decision to declare the outbreak a health emergency.

In comparison to other viruses, little is known about the Zika virus. Like other mosquito-born viruses it is deeply connected with poverty and there has been little commercial interest in studying the disease or working on a vaccine.

The *A. aegypti* mosquito which spreads the disease is also responsible for the spread of dengue and chikungunya, and relies on conditions synonymous with poverty to spread disease. The mosquito thrives in small bodies of water near humans, like those commonly used to store water in areas without a public water system. Moreover the disease transmission can be effectively contained through relatively simple methods.

According to the Center for Disease Control which reported on the potential for an outbreak in the United States: "other mosquito-spread infections like malaria and dengue used to be widespread. Better housing construction, regular use of air conditioning, use of window screens and door screens and state and local mosquito control efforts helped to eliminate these ongoing outbreaks from the mainland."

The Zika virus was able to spread so rapidly in Latin America because of the lack of these basic forms of infrastructure. The spread of the disease has been further aided by increasing international travel that can spread little known local diseases into populations that have no historic resistance to them.

The Zika virus itself was first described in 1947 when it was isolated from a rhesus monkey in the Zika forest of Uganda. The first cases among humans were then confirmed in 1960 in Nigeria. It remained a relatively unknown disease until very recently when an epidemic on Yap, Micronesia infected 73 percent of the population. French Polynesia later suffered an outbreak in 2013. The first case of the Zika virus in the Americas was recorded in February of 2014 on Easter Island.

The mosquito that spreads Zika itself originated in Africa and has come to range over most of the tropical and subtropical world. Much like the Ebola virus, Zika fever has been known to science for the better part of a century but almost no progress has been made in creating a vaccine or other treatment because there is very little money to be made in treating the populations traditionally affected, rural Africans in desperately poor countries.

It is not known when the virus first entered Brazil, but it was apparently able to spread in the poorer Northeastern states of Brazil unnoticed for an extended period due to poor health screening.

Unlike the Ebola virus, which the US government believed could be weaponized and so was researched as part of bioterrorism, the Zika virus has been subject to very limited scientific research. In the Thomson Reuters Derwent World Patents, there are just 30 mentions of Zika in patents, as opposed to 1,034 for Ebola. There have only been 108 high-profile academic papers on Zika since 2001 but more than 4,000 for Ebola.

While several high profile drug companies have announced they will start work on a Zika virus vaccine, there is no reason to expect rapid results. The first vaccine for the related dengue virus, which is transmitted by the same mosquito, was approved last December after 20 years of work.

Without quality health care and screening, combined with internationally coordinated medical research into possible pandemic causes before they break out, the world will increasingly be confronted with the rapid transition of obscure, local diseases into world-spanning health crises. This is impossible under the capitalist system, which divides the globe into competing nation states and puts private profit over human need.