Editorial

Zika - Global Concern

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Zika virus disease (Zika) caused by Zika virus, spread to people primarily through the bite of an infected *Aedes* mosquito. The most common symptoms of Zika are fever, rash, joint pain, and conjunctivitis. The illness is usually mild with symptoms lasting for several days to a week after being bitten by an infected mosquito. People usually don't get sick enough to go to the hospital, and they very rarely die of Zika. For this reason, many people might not realize they have been infected. Once a person has been infected, he is likely to be protected from future infections. (1)

Zika Virus was first discovered in 1947 and is named after the Zika forest in Uganda. In 1952, the first human cases of Zika were detected and since then, outbreaks of Zika have been reported in tropical Africa, Southeast Asia, and the Pacific Islands. Zika outbreaks have probably occurred in many locations. Before 2007, about 14 cases of Zika had been documented, although other cases were likely to have occurred and were not reported. Because the symptoms of Zika are similar to those of many other diseases, so many cases may not have been recognized. (2)

In May 2015, the Pan American Health Organization (PAHO) issued an alert regarding the first confirmed Zika virus infection in Brazil. On Feb 1, 2016, the World Health Organization (WHO) declared Zika virus a public health emergency of international concern (PHEIC). Local transmission has been reported in many other countries and territories. Zika virus likely will continue to spread to new areas. (3)

Zika is transmitted from pregnant women to the fetus ("vertical transmission"), and causes microcephaly and other severe brain anomalies in infants born of women infected with the virus. Zika infections in adults can result in Guillain-Barré syndrome. Prior to this outbreak, Zika was considered a mild infection, as most Zika virus infections are asymptomatic, making it difficult to determine precise estimates of the number of cases. (4)

The virus is spread mainly by the *Aedes aegypti* mosquito, which is commonly found throughout the tropical and subtropical Americas. It can also be spread by the *Aedes albopictus* mosquito, which is distributed in North America. Sexual transmission of the Zika virus is also possible. ⁽⁵⁾

The specific event that brought the virus to Brazil was uncertain until March 2016. Brazilian researchers have suggested that the Zika virus arrived during the 2014 FIFA World Cup tournament. Confirmed cases have been reported in 35 countries or territories in South America, North America, and the Caribbean, as well as 13 in the western Pacific and one in Africa. Many countries with no cases of mosquito transmission have reported travel-related Zika cases, people who moved or came home from a Zika-affected region before they showed symptoms. ⁽⁶⁾

Saudi Arabia has been taking preventive measures against the Zika virus, as it fast becoming a global concern. "Mosquitoes in "Jazan" region of Saudi Arabia spread the rift valley fever, while in "Jeddah" spread dengue fever, which has been brought under control, the environment in the two regions is not conducive for Zika mosquitoes as there are no swamps where they can breed. Ministry of health has alerted the quarantine departments at all entry points to monitor the incoming passengers. Saudi diplomatic missions abroad, especially those in South and Central America are advised to take precautions against travelers from there. The ministry has already distributed pamphlets and literature on the virus and its preventive measures. (7)

In Saudi Arabia, in response to the global Zika scare, the Ministry of Health tested 853 pregnant women in Jeddah in one month, while the Ministry of Agriculture has increased its efforts to combat the spread of mosquitoes that transmit the deadly virus. All 853 pregnant women have been tested so far and all of them tested negative. The Kingdom has not yet recorded any case of Zika infection, but should be careful and take the necessary measures to intensify anti-mosquito precautions. (8)

Prevention & treatment:

Prevention and control depend on reducing mosquitoes through source reduction (removal and modification of breeding sites) and reducing contact between mosquitoes and people by using insect

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repellent; wearing clothes that cover as much of the body as possible; using physical barriers such as screens, closed doors and windows; and sleeping under mosquito nets.

Zika virus is diagnosed through PCR (polymerase chain reaction) and virus isolation from blood samples. Zika virus disease is usually relatively mild and requires no specific treatment. People infected with Zika virus are advised to get plenty of rest, drink enough fluids and treat pain and fever with common medicines. If symptoms worsen, they should seek medical care and advice. There is currently no vaccine available. (9)

Advice to travelers

- 1. All travelers going to the affected areas are advised to take individual protective measures to avoid mosquito bites.
- 2. Travelers, suffering from immune disorders or severe chronic illnesses, are advised to consult their doctor before travelling.
- 3. Pregnant women who plan to travel to Zika-affected areas, are advised to discuss their travel plans with their healthcare providers and to consider postponing their travel.
- 4. Saudi citizens, who live in Zika-affected areas, are advised to take individual protective measures to avoid mosquito bites. These measures should be applied particularly by pregnant women living in areas with increasing or widespread transmission.
- 5. Individual protective measures to prevent mosquito bites should be applied all day long, especially during mid-morning and late afternoon to dusk, which are the periods of highest mosquito activity. (10)

WHO Response:

The World Health Organization (WHO) is supporting countries to control Zika virus disease (ZVD) through the following: (11)

- 1. Strengthening surveillance.
- 2. Building the capacity of laboratories to detect the virus.
- 3. Working with countries to eliminate mosquito populations.
- 4. Preparing recommendations for the clinical care and monitoring of persons infected with Zika virus.
- 5. Defining and supporting priority areas of research into Zika virus disease and possible complications.

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