

Zika & Nepal: a far greater risk for its population than to individuals



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After World War II the Zika virus was first detected in monkeys in Uganda (near Lake Zika) and subsequently in humans in 1952. Epidemiologists confirmed outbreaks in Asia and the Pacific, America and Africa later [1]. Now the Zika virus is an epidemic in Brazil, where the 2016 Olympic Games are about to start in August this year [2].

The Zika virus is transmitted through the bite of an infected mosquito from the Aedes genus and also through sex. There is little evidence of mother to child transmission by breast feeding and all other types of transmissions including blood transfusion [2, 3]. Still more research is needed on transmission.

It is very important to know the incubation time period to do the effective treatment and prevention, but in the case of Zika virus there is no clear evidence about the time from exposure to symptoms but it may be a few days. Neurological disorders are the most serious complications of Zika virus which can lead to the death of the patient.

There are several research and interventional programmes going on in Zika risk areas. Still, the Brazilian authorities have not been able to stop the spread of the disease effectively. Something that worries a lot of scientists and academics across the globe [2, 3].

Research evidence shows that the Zika virus can cause birth defects in babies. Therefore the WHO (World Health Organization) advises that pregnant women should not travel to the Zika virus risk areas, if they have to try to take precautionary steps to avoid mosquito bites [3, 4]. Pregnant women should make their male partners (who have travelled to Zika affected areas) aware that they need to use a condom every time they have sex during the pregnancy or even not have sex during this period. Oral sex is also a mode of transmission. They should also visit immediately a doctor or other healthcare provider, if they develop a fever, joint pain, or red eyes [4, 5]. Doctors should be aware of the WHO guidance and know which test to use in pregnant women to diagnose Zika virus. They should also follow the CDC (Centre for Disease Control) criteria for management, testing, and screening of pregnant women and recommendation for counseling women of reproductive age (15-44 years). Fortunately, the key measures to help prevent the spread of the Zika virus are already a common part of Public Health and



its messages. At a societal level there is the need to spread insecticides to stop mosquitoes from breeding, at the individual level there are two key preventative measures already widely recommended for different reasons: (a) make sure you don't get bitten by mosquitoes and (b) use a condom to reduce the risk of spreading sexually transmitted infections. In the longer term there is perhaps a need for a standardized Zika virus educational intervention including counseling programme for men and women. Earlier this year UNFPA highlighted the need for informed choice around the Zika virus for women to formulate decisions regarding family planning and to shield their babies and themselves if they choose to get pregnant [5, 6].

More importantly than the above advice to travellers and the management of individual cases is the epidemiological risk of the Zika virus. One of the great fears in the global health community is that the Zika virus spreads to areas where malaria is endemic. Zika is which closely related to the Dengue fever virus and uses mosquitoes like the ones spreading Dengue fever and malaria. As the WHO put it: "Zika virus continues to spread geographically to areas where competent vectors are present" [3, 4]. Hence, Zika is a virus we do not wish to see spreading in countries where malaria is already rife.

At the moment the CDC has listed India, Bangladesh, Thailand, Malaysia, Pakistan, Maldives, Cambodia, Indonesia, the Philippines, and Vietnam as countries with endemic Zika virus [7]. Nepal should take precautionary measures to prevent a Zika outbreak as the spread of the virus to the country seems inevitable, the only uncertainty is when it will be arriving.

References

1. WHO. Zika virus. Available from: URL: <http://www.who.int/mediacentre/factsheets/zika/en/> Available on: June 2, 2016. Accessed June 5, 2016.
2. BBC News, Available from: URL: <http://www.bbc.co.uk/news/world-latin-america-36401150> Available on: 28 May 2016, Accessed on 4 June 2016.
3. WHO. Situation Report Zika Virus, Microcephaly, Guillain-Barré Syndrome. Available from: URL: http://apps.who.int/iris/bitstream/10665/208816/1/zik-asitrep_2Jun2016_eng.pdf?ua=1 Available on : 2 June 2016, Accessed on 4 June, 2016
4. CDC. Pregnant Women: How to Protect Yourself. Zika Virus. Available from: <http://www.cdc.gov/zika/pregnancy/protect-yourself.html>. Available on: May 31, 2016. Accessed on June 4, 2016.
5. CDC. Morbidity and Mortality Weekly Report (MMWR). Update: Interim Guidelines for Health Care Providers Caring for Pregnant Women and Women of Reproductive Age with Possible Zika Virus Exposure-United States.2016; 65(05);122-7. <http://www.cdc.gov/mmwr/volumes/65/wr/mm6505e2.htm>
6. The Himalayan Times. UNFPA to closely monitor Zika virus in Nepal. The Himalayan Times. Available from URL: <https://thehimalayantimes.com/kathmandu/unfpa-closely-monitoring-zika-virus-outbreak-in-nepal/> Available on Feb.5, 2016, Accessed on : June 4, 2016.
7. CDC. Zika Travel Information. Countries with Endemic Zika. Available from: <http://wwwnc.cdc.gov/travel/page/zika-travel-information> Available on: May 26, 2016. Accessed on June 4, 2016.