Ebola Virus Disease: Readiness for the looming threat
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The world is witnessing the largest outbreak of Ebola in history with several thousand deaths reported from West African countries. The threat is knocking at the door of every country in the shrunken ‘global village’ by virtue of international travel or trade.

Ebola virus disease (EVD) is an acute, serious illness with an average fatality rate in excess of 50% in non-treated cases. Ebola is introduced into the humans through contact with infected animals. Ebola then spreads through human-to-human transmission via direct contact with the blood, secretions, organs or other body fluids of infected people or with materials contaminated with these. Humans are not infectious until they develop symptoms. Health-care workers have frequently been infected while treating patients. Burials in which mourners have direct contact with the body of the deceased person can also play a role in the transmission of Ebola.

First symptoms are the sudden onset of fever, fatigue, muscle pain, headache and sore throat followed by vomiting, diarrhoea, rash, symptoms of impaired kidney and liver function, and in some cases, both internal and external bleeding. Laboratory findings include low white blood cell, and low platelet counts and elevated liver enzymes. Confirmation is by reverse-transcription polymerase chain reaction (RT-PCR). People remain infectious as long as their blood and body fluids contain the virus (7-8 weeks).

World Health Organization (WHO) is closely monitoring the situation. A coordination center was established in Conakry, Guinea in July 2014. An initial Ebola Virus Disease Outbreak Response Plan was launched in the same month. In August 2014, an Emergency Committee was convened by the Director-General of WHO under the International Health Regulations that decided on 8th August, 2014 to declare the Ebola outbreak a Public Health Emergency of International Concern.

The WHO and partner organizations have agreed on a range of core actions to support countries unaffected by Ebola in strengthening their preparedness in the event of an outbreak. A set of tools is being proposed. One of the tools is a comprehensive checklist of core principles, standards, capacities and practices, which all countries should have or meet. Items on the checklist include infection prevention control, contact tracing, case management, surveillance, laboratory capacity, safe burial, public awareness and community engagement and national legislation and regulation to support country readiness.

WHO has issued an Ebola response roadmap on August 28, 2014 that gives an overall plan for the policymakers with respect to involvement of government, Local Political, Community, Traditional (& Religious) Leaders, National and International Technical Agencies, Academic Institutions, NGOs, Humanitarian organizations and the private sector in affected and unaffected countries.

Proper alarm should be raised so that everyone knows the grave consequences of "negligence" or "corruption". Orders passed to the ‘next in command’ will not be sufficient. The clear example is that of Nigeria; a country that has sociodemographic problems from extremists to petty corruption. This country united in the face of death and defeated the virus within 3 months with minimum casualties. There are lessons to be learnt from Nigerian model. There is a need to develop know how for establishment of “incident management system” on the pattern of Liberia and Nigeria as soon as the need arises.

The following are the major pillars of the proposed planning in unaffected countries.

Social Mobilization
Community engagement is key to successfully control outbreaks. This disease can be fully controlled if all the population is educated about signs and symptoms of an EDV infected person, notifying the health authorities, avoiding contact with an infected patient or patient’s materials, safe disposal of a person dying with a mysterious disease, identifying and isolating all contacts of that person for 21 days as major issues. Voluntary surrendering to health authorities in case of suspicion of any contact with an ebola patient or contaminated materials is the key to success.

Surveillance and Contact Tracing
All the international entry points into a country must have rehearsed protocols for the potential ‘EVD infected
patient healthy. Whitehead.12 Samples from patients are an extreme biohazard risk. Testing should only be performed in specialized laboratories who have the relevant facilities and protocols to deal with highly infectious materials. It is time now to assign specialized laboratories within shortest distance from all portals of entry into an Ebola free country. Genetic diversity and rapid sequence changes of Ebola virus necessitates that the laboratory must be aware of any new strain to ensure the continued sensitivity of RT-PCR diagnostics.

It is high time that influential health professionals persuade their governments to scramble to the challenge.

References