

Ebola virus disease: The current global health crisis

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Ebola virus belongs to the same family *Filoviridae*. Ebola virus has a single-stranded non-segmented negative-sense RNA, sharing certain similarities with rhabdoviruses as well as paramyxoviruses regarding genome organization and replication mechanisms [1].

Although there are currently no clear indicators regarding the source of Ebola virus, fruit bats of the Pteropodidae family are considered the natural host of the virus, which is also thought to transmit through wild primate animals (monkeys, gorillas, chimpanzees and forest antelopes). Then, Ebola virus spreads through human-to-human transmission via direct contact with the blood, secretions, organs or other bodily fluids of infected people (the most infectious body fluids are blood, feces, and vomit), and with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids. Ebola virus can also be spread through direct contact with skin of a patient, or through contact with contaminated surfaces and objects [1,2].

Undoubtedly, Ebola epidemic in 2014 is the biggest epidemic of this virus, so far, since multiple countries in the West-Africa have been feigned. On August 8, 2014, WHO declared the present West Africa Ebola outbreak as a public health emergency of international concern. Consequently, public health partnerships between the involved countries are expected to be expanded, and the national response systems will be in effect. Beginning in Guinea in December 2013, the present outbreak spread to Sierra Leone and Liberia, and is now the largest outbreak in history. By November 16, 2014, there were 15145 cases (suspected and confirmed diagnoses) and 5420 deaths, representing a 38% fatality rate. By country, Liberia experienced 7069 cases and 2964 deaths, Sierra Leone 6073 cases and 1250 deaths and Guinea 1971 cases and 1192 deaths. The current outbreak highlights the importance of infection prevention and control efforts. Health care workers (HCWs) and nosocomial acquired have represented a considerable proportion of all cases. Unfortunately, HCWs represented 10% of all cases-fatality [3].

The basic principles for EVD-case management are early recognition and isolation of cases, use of personal protective equipment (PPE), and the provision of supportive medical care to reduce mortality. Therefore, the updated WHO guidelines are aimed at a range of clinicians, both specialist and non-specialist to establish a systematic approach to comprehensive clinical management of EVD cases [4,5].

The key message for healthcare professionals is to take a travel history from all patients with fever and perform a more specific risk assessment for patients returning from areas endemic for EVD, according to the recently updated guidance. All frontline hospital doctors and managers also make sure they can answer "yes" to the following questions: have you considered that someone with viral haemorrhagic fever could present to your facility? Do you have a local protocol? If so, can you and your staff find it? And, lastly, have you adequately trained your staff in the use of personal protective equipment? If not, now is the time to do so [6].

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