

## Chapter 7

# Emergence of the Ebola Virus Disease in West Africa

**Samir Dervisevic**

*Norfolk and Norwich University Hospital and University of East Anglia, UK*

### **ABSTRACT**

*This chapter gives an overview on the recent outbreak of Ebola Virus Disease in West Africa which has lasted for over seventeen months. The Ebola virus has been implicated as a causative agent of viral haemorrhagic fever occurring in Central Africa over the last thirty-nine years. However, the Ebola virus has not previously been recognised as an endemic virus causing outbreaks of viral illness in West Africa. The start of what was to become the largest Ebola virus disease (EVD) outbreak in known history was first reported to the World Health Organization (WHO) on the 23rd of March 2014 and since then it has transformed into an unprecedented and severe epidemic affecting the three countries of West Africa (Guinea, Liberia and Sierra Leone). The emergence of this lethal virus in a setting of profound poverty, a dysfunctional public-health and a weak government infrastructure alarmed the wider world and caused dread from an uncontrollable spread.*

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## **INTRODUCTION**

An emerging infectious agent is defined as a causative agent of a new or previously unrecognised infectious disease in a defined population. The Ebola virus has been implicated as a causative agent of viral haemorrhagic fever occurring in Central Africa over the last thirty-nine years (Baize et al., 2014). People living in West Africa have certainly been familiar with outbreaks of another zoonotic virus causing an acute viral illness: Lassa virus. However, the Ebola virus has not previously been recognised as an endemic virus causing outbreaks of viral illness in West Africa.

The start of what was to become the largest Ebola virus disease (EVD) outbreak in known history was first reported to the World Health Organization (WHO) on the 23<sup>rd</sup> of March 2014 and since then it has transformed into an unprecedented and severe epidemic affecting the three countries of West Africa (Guinea, Liberia and Sierra Leone) and lasting for seventeen months (Baize et al., 2014). The name of the causative agent, Ebola, has for a long time instilled fear and anxiety, not just in the endemic areas of Africa, hardest hit by this virus, but also around the world. Since the start of the epidemic, people's awareness of the impact of the Ebola virus infection became even more acute as it became obvious that the virus could be spread by air travel. The emergence of this lethal virus in a setting of profound poverty, a dysfunctional public-health system and a weak government infrastructure alarmed the wider world and caused dread from an uncontrollable spread. Mankind witnessed a multitude of human losses, orphaned and abandoned children, uncollected bodies lying on the roads, infected patients wandering outside medical compounds searching for food, decimated medical and nursing staff and social disruption. The emergence of the Ebola virus disease in the low-income countries of West Africa has demonstrated the limitation of the unsupported local efforts, largely reactive, to contain the epidemic. Yet, the initial world response could be summarised in one word: delay.

Unlike previous outbreaks of Ebola in Africa, this epidemic had spread along the roads, reaching villages, towns and the crowded slums of the capitals of all three countries (Baize et al., 2014). Cases of the Ebola virus disease were reported in other countries outside the affected area and with the global movement of people and workforce, there was a real possibility of global spread. During the first half of 2015, the epidemic had spread much faster than the response from the international community. Once the effective surveillance and development of containment systems were put in place, the number of new cases started to drop. Towards the end of 2015, the number of new cases became very low; however even after declaring all three countries Ebola free, sporadic cases still occurred demonstrating the unpredictability of the virus.

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