## Ebola Virus

Ebola Virus is one of the deadliest that spread from person to person through the fluid and skin touch with the infected person. It is caused by Ebola virus Diseases (EDV) which are not as contagious as a common cold. It is a rare disease that kills and explode the cell of an infected person. It ultimately damages the organs and the immune system. It reduces the bold clotting cells in the infected body. It causes body aches, bleeding outside and inside of the body, diarrhea, Fever, vomiting, and sore throat (Ref-XY7Z9A). This disease was known as Ebola hemorrhagic fever, but later on, it is known as Ebola Virus Disease.

The international outbreak of the Ebola virus is in 2014-2016. Initially, the first cases were reported in 1976 in South Sudan and Yambuku, DRC. It occurred near the Ebola River thus, it got its name from it. The largest outbreak of Ebola started from Guinea and spread across Liberia and Sierra Leona. The WHO declared outbreaks of Ebola in West Africa on March 23, 2014 (CDC, 2020). It spreads later on in seven other countries such as Mali, Italy, Senegal, Spain, Nigeria, the United States, and the United Kingdom.

In the United States, the Ebola virus appeared on September 30, 2014. This case was identified after the diagnosis of the infected person who traveled to Texas from West Africa (Ref-DJ49F2). On March 11, 2015, the United Kingdom had its first case on one military worker who flew to Royal Free Hospital in London for treatment from West Africa. Similarly, on May 12, 2015, the first case of Ebola appeared in Italy on health care workers. A traveler from West Africa brought Ebola to Mali on May 13, 2015. On August 5, 2014, two patients were evacuated from Liberia and transferred to Spain which was the first case of Ebola in Spain.

Epidemiological determinants and risk factors related to the Ebola virus are when an individual contacts the infected person without PPE. The first case of an Ebola patient showed the symptoms like fever, black stool, and vomiting. It was assumed that the causes of Ebola due to the direct contact with wild animals like bats. Later on, it was confirmed that its causative agent was filovirus. After narrowing diagnose, it was confirmed that the agent was Zaire species. It is the deadliest species of the Ebola family. Because of illiteracy in West Africa, 15-49 aged women and men from the same group, and children were at high risk. The traditional healer, midwives, and medical staff were also at high risk. Similarly, not wearing PPE within 3 feet of the infected person and exposure to the skin are also the major risks factors (Ref-A1B2C3). Even contact with the dead body of an Ebola-infected person without PPE is one of the major risks factors.

The route of transmission of Ebola viruses is the direct and repeated contact with the infected person. The viruses are transmitted from the touch, body fluids, and exposure of skin to the infected person. The body fluids such as semen, blood, sweat, urine, diarrhea, the vomit of infected person are the cause of the transmission of Ebola. Similarly. Using contaminated objects such as clothes, utensils, medical equipment, and so on is the route of transmission of Ebola. Even the survivors of Ebola are not fully cleared from the virus. It remains in the inner eyes, central nervous system, and cerebrospinal fluid of survivors (Ref-AB12CD). The virus also remains on dry places, counter knobs, and doorknobs for several hours thus, these are also the possible factors of transmission.