

Resurgence of the Ebola Virus in the Democratic Republic of Congo: A Perspective

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Letter to the Editor

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Dear Editor

Ebola virus (EBOV) is a negative-stranded RNA virus of the Filoviridae family. Due to the EBOV's early onset of severe hemorrhagic disease and its high level of contagiousness, it is 1 of the filoviruses that has received the most attention globally. This virus was found in the first known outbreak of EBOV disease (EVD) in the village of Yambuku in the Democratic Republic of the Congo (DRC) in 1976 and the disease's name, Ebola, comes from the African river where it was discovered for the first time in 1976. Since then, it has been responsible for outbreaks of varying sizes in several western and equatorial African nations. Since 1976, there have been 14 EBOV outbreaks in the DRC, with 6 of those outbreaks occurring after 2018. Recently, the DRC's Ministry of Health (MoH) reported that a new laboratory-confirmed case of EVD has been identified in a 46-y-old woman living in the city of Beni, in the province of North Kivu, and after that 181 new cases have been detected, suggesting a resurgence of the EBOV in the DRC.^{1,2}

The virus can be transferred from person to person after coming into association with contaminated fluids, which helps them spread in underdeveloped areas. The African fruit bat, *Rousettus aegyptiacus*, is thought to be the virus' natural reservoir and can spread the disease to monkeys, apes, and animals such as antelopes that live in forest land. Humans inhabiting forest land, consuming these infectious animals, and touching dead bodies are all seen as risk factors linked to cultural and religious practices that make it difficult to suppress outbreaks in these locations.³

The symptoms of the EVD include fever, arthralgia, extreme fatigue, and hemorrhagic symptoms, all of which can lead to life-threatening situations including shock, organ malfunction, and death.³ Click or tap here to enter text. Mortality in the early stages of the infection is thought to be adversely impacted by a young age, sex, and pregnancy.⁴ Click or tap here to enter text. Although EVD has a high mortality rate, some individuals may survive and, in some situations, acquire long-term conditions that may resemble those of autoimmune or inflammatory diseases such as systemic lupus erythematosus, rheumatoid arthritis, uveitis, and spondyloarthritis. It is important to mention that, even after recovering from EBOV infection, individuals carry a risk of transmission to others since the virus persists in some body fluids, such as semen, for extended periods.⁵

The country's health-care system can be under more strain as a result of the co-occurrence of the EBOV outbreak and coronavirus disease 2019 (COVID-19), primarily because resources allocated to EBOV response programs can be used to support the COVID-19 infection. Adopting multidisciplinary strategies, such as prevention, vaccination camps, and education, enhancing diagnosis and management procedures, and encouraging cleanliness and social distance norms are crucial to overcoming the difficulties associated with combating both these viruses together.⁶ The MoH of the DRC has started taking action to contain and stop the outbreak. Investigations are being conducted, including determining the origin of infection, determining exposure risks in the various hospital departments, and enhancing infection prevention and control (IPC) protocols at the facility.¹

Plasma has traditionally been given as part of EBOV infection care. However, there is a significant risk of spreading blood-borne diseases with this treatment, particularly in rural parts of Africa with inadequate access to health care.⁷ Antiviral therapy has been effective in prolonging survival and decreasing viral load in this condition, particularly when Favipiravir is used.⁸ Additionally, Chimeric and humanized monoclonal antibodies have recently been available as alternatives for treating EBOV illness.

Early detection of EBOV cases by active surveillance as well as halting the disease's development and transmission are all part of its prevention. The establishment of a barrier of protection against infected bodily secretions and other procedures such as proper burial rituals are crucial tactics in the early prevention of the illness.⁹ The World Health Organization (WHO) advises taking preventative measures to lessen the spread of the EBOV infection to humans, such as reducing the chance of human-to-animal transmission by contracting a disease from diseased monkeys, apes, or bats by coming into contact with them or by eating their raw meat; reducing the likelihood of human-to-human disease transmission by avoiding direct or close contact with those exhibiting EBOV symptoms, especially their bodily fluids; continue educating and

re-educating health professionals about early EVD diagnosis, isolation, and management; prepare for immunization and provide access to monoclonal antibodies that are unique to the disease to treat confirmed cases.¹

Although potential vaccines have demonstrated good immunogenicity and safety, more research is necessary to confirm their effectiveness as the first line of defense against the spread of existing outbreaks and the emergence of future ones. The resurgence of EVD in the DRC is a significant public health problem, and the nation's capacity to recover, get prepared, and handle epidemics is still lacking.

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Ethics statement. The present study includes printed and published information; therefore, formal ethical clearance was not applicable to this study.

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