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Letter to the Editor

The Lassa fever outbreak in Africa: Correspondence

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To the Editor

While the COVID-19 pandemic continues to wreak havoc around the world, Nigeria is dealing with a massive outbreak of Lassa fever, an acute hemorrhagic disease caused by the Lassa virus, which belongs to the arenavirus family and spreads through the contamination of food and household items such as urine or feces of infected multimammate rats [1]. Lassa fever is endemic in Africa and has been claimed to have afflicted over 2 million individuals. According to previous study, between 300,000 and 500,000 cases are detected each year, with 5000 deaths [2]. Lassa virus has a relatively long incubation period ranging from 6 to 21 days, making it one of the most commonly exported viral hemorrhagic fevers to non-endemic nations [3]. This feature piques international interest in the Lassa virus in terms of global health security. It is designated as a Biosafety Level 4 agent because of its high case fatality rate, the potential for easy dissemination via human-human contact, the severity of infectivity, lack of effective vaccinations and treatments, and spread by aerosol [4].

The Ministry of Health and Public Hygiene of Guinea announced a Lassa fever epidemic on April 22, 2022, following the laboratory confirmation of two cases from the Guéckédou prefecture in Guinea's southeast. Lassa fever is prevalent in various West African nations, including Guinea, which has historically recorded outbreaks as well as occasional occurrences [5]. According to the Nigeria Centre for Disease Control (NCDC), around 189 fatalities from Lassa fever were confirmed in the country in 2022. In addition, 63 healthcare personnel were afflicted with the illness during the fiscal year under consideration. According to the Centre's status report, confirmed cases in 2022 totaled 1,067 throughout 112 Local Government Areas and 27 states [4]. According to the study, 72% of all confirmed Lassa fever cases were reported from three states: Ondo, Edo, and Bauchi, with the remaining 23% reported from 24 states with confirmed Lassa fever cases. It was also found that Ondo State reported 33% of the 72% of verified cases, Edo 25%, and Bauchi 14% [4]. According to current data, there is a yearly outbreak of Lassa fever in West African nations, with Nigeria having the highest prevalence of occurrence. Lassa hemorrhagic fever is prevalent in Nigeria, Sierra Leone, Mali, Ghana, Benin, Togo, Guinea, and Liberia, with seasonal surges predominantly during the dry season (November to April) [5].

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The Nigeria Centre for Disease Control and Prevention improved epidemic preparation through its assistance to states in establishing Public Health Emergency Operations Centers (PHEOCs) resulted in a decline in case fatality rate in 2020. These centers were built in 23 Nigerian states to assist with sub-national infectious disease prevention, detection, and response [1].

The detection of imported cases of Lassa fever from nations linking the two endemic zones, as well as the recently confirmed cases of Lassa fever in Ghana, underline the significance of improved surveillance for Lassa fever across West Africa. In addition to the likely recurring outbreaks of illness within the region, the significant growth in transborder traffic and international travel enhances the probability of Lassa virus transmission to other zones within Africa and outside the continent. The political insecurity and insufficient resources available for the health-care delivery system that characterize West African countries may continue to be a barrier to the treatment of both new and existing severe infectious diseases in the region. Nonetheless, the provision of properly equipped infectious disease labs and research centers, as well as adequate training for health care workers and other medical personnel, would aid in the rapid investigation and treatment of highly infectious diseases such as LF, thereby preventing potential outbreaks. Ecological research targeted at detecting highly harmful viruses in distant parts of Africa have particular logistical hurdles, both physically and politically. Effective preventative control measures, vaccine development, and repurposing of existing drugs such as ribavirin and utilizing an in silico-based strategy have all been proposed as viable strategies of reducing the feared illness.

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None to declare.

Declaration of competing interest

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