

Marburg virus amidst COVID-19 pandemic in Guinea: Fighting within the looming cases

Dear Editor,

There is a current report from the healthcare officials in Guinea dated 9 August 2021 on a case of Marburg virus disease confirmed in the southern Gueckedou prefecture.¹ The reported case of Marburg virus disease is one of the first cases to be confirmed in Guinea and West Africa. Marburg virus disease is a very deadly disease, with common presenting complaint of hemorrhagic fever.¹

However, the Marburg virus is in the same family as the virus that unleashed the Ebola virus. In addition, the Ebola virus was recently recorded in Guinea on 14 February 2021 and was declared on 19 June 2021.²

Different analyses have been done on the confirmed patient, and it was reported that the Guinea National Haemorrhagic fever laboratory in collaboration with the Institut Pasteur in Senegal, further authenticated that the patient tested positive for Marburg virus.¹ However, the demographic location where the Ebola outbreak was detected was where Marburg was confirmed again. Marburg virus spreads to people through fruit bats and transmits among humans via direct contact with body fluids of affected individuals, surfaces and materials.¹

Marburg virus starts with high fever, headache and fatigue. Therefore, many infected people have severe hemorrhagic symptoms within seven days. The mortality rates ranged from 24% to 88% in the past outbreak, depending on the case management.²

Moreover, looking at the current situation of COVID-19 that has been in the worst state in Africa, according to a report by Africa WHO on 19 August 2021, Africa has been highly affected by the delta variants which had impacted 29 countries. This increase in the delta variants of COVID-19 in Africa has resulted in a 2% increase in the COVID-19 deaths since the last week of July which accounts for 6400 death cases.³

The situation of COVID-19 makes Africa account for 4% of the world COVID-19 mortality of around 4.2 million cases.⁴ According to the current statistics, there are more than 49,817 new cases of COVID-19 as of 19 August 2021.⁴ Guinea's COVID-19 confirmed cases is 28,647, 308 deaths and 26,023 recovered as of 21 August 2021.⁵

Observing the deadly nature of COVID-19 pandemic, the current outbreak of the Marburg virus in Guinea could be more deadly and dangerous to contain for the healthcare system in the Guinea Republic. However, COVID-19 and Marburg virus have similar symptoms which is hard for healthcare professionals to differentiate if there is no adequate disease surveillance and medical testing equipment. Since there are no currently approved vaccines that can be used to treat the Marburg virus, it makes the virus more dangerous to handle for the healthcare system.

To some extent, there have been some attention and response in the form of a rapid investigation action to respond to COVID-19 and Marburg virus by healthcare professionals in Guinea. The effort is to stop the further spread of the Marburg virus to avoid grappling with two looming cases that are, COVID-19 and Marburg virus. The Guinea healthcare professionals and system are responding and working to implement a rapid response based on their experience and knowledge from how they handled and responded to the Ebola outbreak excellently that makes the country struggle with the two cases at a time.^{2,8}

Part of the efforts put in place is contact tracing of those who have been in contact with the patient that confirmed the case. The healthcare system is trying its best to engage the public through awareness, mobilization, sensitization, and support to stop the further spread of the Marburg virus.

The healthcare authorities of Guinea have sought the support of more than 10 WHO experts to help with the outbreak investigation and help to support the country with rapid emergency response and improvement in disease surveillance and testing.^{1,8} Guinea Republic have improved their border disease surveillance to enhance rapid detection and confirmation of the virus within their neighbouring countries and other distant Countries; This is possible through the rapid lesson and implementation from the Ebola response to attend to Marburg virus.^{2,8}

There is some confirmation from the World Health Organization that Marburg spreads through human-to-human transmission via direct contact (through broken skin or mucous membranes) with the blood, secretions, organs or other body fluids of infected people, and with surfaces and materials (e.g., bedding, clothing) contaminated with these fluids.⁶ Therefore, there will be an increase in morbidity if the virus is not well handled. This will thereby affect the healthcare facilities as the virus is contagious, thus it will require isolation as well as an increase in healthcare personnel. If the healthcare system can reflect on the COVID-19 pandemic, the healthcare system will realize the increase of awareness of understaffing issues in majority of the hospitals in the country. Guinea might have a problem combating the virus as it is categorized as a developing country with low technology advancement. Thus, the probability of them establishing new ways of combating the virus as it mutates is greatly low, a PMC article stated "Marburg virus (MARV) causes disease with a high case fatality rate, and there are no approved vaccines or therapies".⁷

With no vaccination, there is need for policy makers to team up with health professionals to devise appropriate safety and prevention protocols to curb the spread of the disease, as well as contain the existing situation of the outbreak. These safety protocols must be strictly enforced by the appropriate authorities to achieve the desired effect. The country should make a concerted effort to mobilize, both at national and international levels, the necessary logistics, medical essentials and other essential resources to combat the disease.

Health professionals should be given extra incentives as a form of motivation to enable them to put in extra effort and time during the outbreak. There is also the need to improve surveillance programs across the country, particularly around the borders and the hotspot areas. Guinea and countries at risk should heighten their epidemic preparedness and response systems. Policy makers should work hand-in-hand with health and immigration officials to screen people arriving and departing the country at the various ports and borders. Illegal entrants should be pursued and screened as some of the ways of checking the spread of the disease.

Since the outbreak of Marburg virus may have a significant impact on the international community, Guinea and any other country should call on the international community for assistance. Multilateral organizations such the World Health Organization (WHO), the World Bank, the International Monetary Fund (IMF) and others should be called upon for assistance in the provision of the necessary resources, since the affected nation may not have all the needed resources to fight the disease.

Sensitization and other public health programs should be enhanced during the outbreak through the use of traditional mass media such as radio, newspapers, television, billboards among others should be embarked on. Social media and other modern technologies in information dissemination should also be employed. Community engagement by health professionals in educating people about the disease, particularly those in high – risk areas would make a positive impact.

Innovative and effective health promotion should be carried to the hinterlands, deprived communities, educational institutions, marketplaces, faith organizations such as churches and mosques; workplaces and many others, by public health professionals.

Due to the potential dire impact of Marburg Virus on the world, the international community should step up efforts to assist Guinea and any affected countries to combat the disease with all the urgency it deserves. The world should not relent in its efforts to check the spread of the disease before it causes such devastating havoc as COVID-19 and Ebola have done.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

ETHICS STATEMENT

There is no ethical approval.

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DATA AVAILABILITY STATEMENT

There is no data available.

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