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**ABSTRACT**

The emergence of the Ebola virus presents a major public health concern due to its ability to spread quickly and its high fatality rates. Ebola virus disease (EVD) is caused by the Ebola virus, which is transmitted to humans through contact with infected animals and then spreads through direct human-to-human contact. The virus causes a serious and potentially deadly disease with symptoms including fever, weakness, muscle pain, and in certain instances, bleeding both internally and externally. In the past, outbreaks have happened in countries in Central and West Africa, with the Democratic Republic of Congo often being a particularly affected area. The characteristics of each outbreak differ and are shaped by factors such as the quality of local healthcare services, public knowledge, and the timeliness of global intervention. Control measures usually include isolating individuals who are infected, following strict hygiene practices, using protective gear, and conducting safe burial processes. Public health initiatives are essential in teaching communities about how to prevent and detect illnesses at an early stage. Recent progress in the creation of vaccines has presented a valuable asset in the battle against Ebola. Vaccination initiatives, in conjunction with global cooperation and backing from entities such as the World Health Organization, aid in controlling and handling outbreaks. Efficient and synchronized action are still crucial in reducing the effects of the Ebola virus, emphasizing the continued dedication of the worldwide community to tackling new contagious diseases and protecting public health. It is crucial to closely watch and tackle the underlying reasons for these outbreaks in order to prevent them from happening again and to improve global readiness.

**Keywords:** Ebola virus outbreak; Ebola virus disease (EVD); Public health; Epidemic control; Vaccination efforts

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## 1. INTRODUCTION

### 1.1. EBOLA VIRUS

The Ebola virus is a highly infectious and pathogenic virus belonging to the Filoviridae family. The nomenclature of the initial incidence of Ebola virus is attributed to its occurrence within the vicinities of the eponymous river situated in the Democratic Republic of Congo (Tseng and Chan 2015).

The Ebola virus is contracted by humans through the exchange of biological fluids with infected animals, including but not limited to fruit bats, monkeys, and gorillas. Subsequently, the virus spreads from person to person via direct contact with biological fluids, including blood, saliva, urine of those individuals who have been infected. Through the occurrence of indirect contact with contaminated surfaces, such as clothing and bedding, the viral agent may propagate (Rewar and Mirdha 2014).

The manifestation of symptoms related to Ebola virus infection can occur within a period of 2-21 days following contact, and typically involve fever, fatigue, myalgia, cephalalgia, pharyngitis, emesis, diarrhea and skin rash. As the condition advances, it can result in hemorrhages within the body and dysfunction of biological organs, ultimately culminating in mortality in as many as 90% of instances (Beeching et al. 2014).

Ebola virus infection lacks a definitive remedy or pharmacotherapy, and the optimal strategy for controlling its dissemination is predicated on early identification, quarantine of afflicted persons, and the appropriate implementation of infectious disease control measures. In recent times, considerable strides have been made in the development of vaccines that exhibit favorable outcomes in clinical trials. Furthermore, persistent efforts are being made to create novel therapies and preventive measures to counteract the effects of this lethal virus (Dhama et al. 2018).

### 1.2. OVERVIEW OF THE EBOLA VIRUS OUTBREAK 2014-2016

The Ebola virus eruption that occurred between 2014 and 2016 can be considered as the most significant and intricate outbreak of the illness since its inception in the year 1976. The incidence of the outbreak initially surfaced in Guinea in December 2013 and expeditiously disseminated to nearby countries, namely Sierra Leone and Liberia. The Ebola virus outbreak was propagated through global travel, resulting in its dissemination to diverse countries such as Nigeria, Senegal, Mali, and the United States (Barry et al. 2018).

The eruption was deemed to have exhibited extensive transmission, as evidenced by the verification of over 28,000 cases that were either confirmed, deemed credible, or considered to be supposed, in addition to a mortality rate exceeding 11,000 individuals. The high population density in urban areas is correlated with an increased number of deaths and cases of disease. This is attributable to the slow initial response and challenges faced in curtailing the propagation of the disease (Dénes and Gumel 2019).

The epidemic's deleterious effects encompassed significant societal and monetary repercussions, manifesting as disruptions to healthcare infrastructure and the economy, in addition to the stigmatization of afflicted communities. The global reaction was exceptional, as evidenced by the coordination of more than 28,000 personnel from various nations who were dispatched to the affected countries to deliver medical aid and logistical assistance (Nuriddin et al. 2018).

The cessation of the outbreak was officially announced in 2016, notwithstanding, its enduring repercussions on impacted communities, healthcare frameworks, and worldwide health security persist. The concomitant emergence of the Ebola virus outbreak prompted a rise in research and development endeavours pertaining to treatments and vaccines targeting the aforementioned pathogen (Global and Security 2023).

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## 2. EBOLA VIRUS HISTORY OF OUTBREAKS

### 2.1. GEOGRAPHIC HISTORY OF EBOLA VIRUS OUTBREAKS

The Ebola virus has been the subject of limited outbreaks since its initial identification in 1976. A concise chronicle of notable epidemic instances and their corresponding geographical factors.

#### 2.1.1. 1976 OUTBREAK

The initial emergence of the Ebola virus was characterized by two simultaneous outbreaks in geographical regions of Sudan and the Democratic Republic of Congo (DRC, formerly Zaire).

#### 2.1.2. 1995 OUTBREAK

A sudden episode of infectious disease outbreak was documented in the Kiewit region of the Democratic Republic of Congo, wherein 315 individuals were formally diagnosed with the ailment, leading to 254 cases of fatalities (Sivanandy et al. 2022).

#### 2.1.3. 2000 OUTBREAK

An outbreak in Uganda resulted in 425 confirmed cases and 224 fatalities (Rai et al. 2022).

#### 2.1.4. 2007 OUTBREAK

The Democratic Republic of Congo experienced two distinct episodes of outbreak, whereby the cumulative number of cases and fatalities reached 264 and 187 respectively (Lamunu et al. 2004).

#### 2.1.5. 2014-2016 OUTBREAK

The most extensive epidemic on record transpired in West Africa, whereby Guinea, Liberia, and Sierra Leone encountered the highest extent of impact. The total number of confirmed, probable, and suspected cases exceeded 28,000, with a corresponding number of fatalities exceeding 11,000 (Den Boon et al. 2019).

#### 2.1.6. 2018-2020 OUTBREAK

The Democratic Republic of Congo encountered an epidemic, resulting in a cumulative count of 3,481 cases and 2,299 fatalities (Goldstein et al. 2020).

#### 2.1.7. 2021 OUTBREAK

In Guinea, there was a recent incidence of outbreak onsets commencing in January and ceasing in June, which rendered 16 confirmed cases and ultimately resulted in 12 fatalities (Sanyaolu et al. 2021).

### 2.2. OUTBREAKS CONTRIBUTING FACTORS

The emergence of Ebola virus outbreaks may be attributed to various factors, including.

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### 2.2.1. ANIMAL-TO-HUMAN TRANSMISSION

The fruit bat, being the primary reservoir host, is accountable for the dissemination of the Ebola virus. The contraction of the virus occurs among humans upon their exposure to infected animals, including but not limited to fruit bats, primates, and forest antelopes (Irving et al. 2021).

### 2.2.2. HUMAN-TO-HUMAN TRANSMISSION

The Ebola virus has the potential to transmit among individuals through direct exposure to contaminated biological fluids, such as blood, saliva, sweat, and vomitus of an infected person (Sanyaolu et al. 2021).

### 2.2.3. POOR HEALTHCARE INFRASTRUCTURE

Numerous countries where Ebola outbreaks occur exhibit deficient healthcare infrastructures characterized by a dearth of qualified healthcare personnel, substandard medical facilities, and incomplete resources to contain the dissemination of the virus (Kamorudeen et al. 2020).

### 2.2.4. CULTURAL PRACTICES

Several educational practices, namely interment ceremonies that involve direct contact with the deceased, have the potential to heighten the risk of viral transmission (Organization 2018).

### 2.2.5. POPULATION DISPLACEMENT

The pivotal demographic changes, resulting from armed conflict, political instability, or environmental disasters, have the potential to foster circumstances that augment the dissemination of communicable diseases (Caminade et al. 2019).

### 2.2.6. INTERNATIONAL TRAVEL

The global mobility of people and goods may contribute to the dissemination of infectious diseases across international boundaries, particularly when infected individuals relocate to foreign nations (Baker et al. 2022).

## 3. THE 2014-2016 OUTBREAK OF EBOLA VIRUS

### 3.1. THE OUTBREAK TIMELINE

The chronology of the Ebola virus outbreak, occurring between 2014 and 2016, necessitates scholarly discourse. (Kamorudeen et al. 2020).

#### 3.1.1. DECEMBER 2013

The initial incidence of the Ebola virus in Guinea was notified (Ohimain and Silas-Olu 2021).

#### 3.1.2. MARCH 2014

The World Health Organization (WHO) has officially verified the nature of the pathogen to be Ebola.

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### 3.1.3. MAY 2014

The transmittable pathogen disseminates across the regions of Sierra Leone and Liberia (Brandt et al. 2021).

### 3.1.4. JUNE 2014

The World Health Organization (WHO) has officially declared the outbreak as a Public Health Emergency of International Concern (Kenyi 2019).

### 3.1.5. JULY 2014

The virus spreads to Nigeria (Kenyi 2019).

### 3.1.6. AUGUST 2014

According to the World Health Organization (WHO), the current outbreak can be categorized as a "public health emergency of international concern (Kenyi 2019).

### 3.1.7. SEPTEMBER 2014

According to the Centers for Disease Control and Prevention of the United States, by January 2015, it is anticipated that there may be as many as 1.4 million occurrences (Kelley 2020).

### 3.1.8. OCTOBER 2014

The United States experiences a diagnosis of the initial occurrence of Ebola, which subsequently gives rise to significant apprehension among the population (Earnshaw et al. 2019).

### 3.1.9. NOVEMBER 2014

According to the World Health Organization, there has been a concerning surge in the incidence of cases (Lewnard et al. 2014).

### 3.1.10. JANUARY 2015

According to the World Health Organization (WHO), the epidemic has reached its highest point in Liberia, but persists in its rapid expansion in the countries of Sierra Leone and Guinea (Bullard and Bullard 2018).

### 3.1.11. MARCH 2015

The incidence of cases is observed to exhibit a decrease, however, it is important to note that the World Health Organization cautions against interpreting this as indicative of the termination of the outbreak (Ngo et al. 2021).

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### 3.1.12. MAY 2015

Liberia is declared Ebola-free (Organization 2015).

### 3.1.13. NOVEMBER 2015

Sierra Leone is declared Ebola virus free (Kamara et al. 2017).

### 3.1.14. JANUARY 2016

Guinea is declared Ebola virus free (Anis 2019).

## 3.2. COMMUNITIES AND AFFECTED COUNTRIES

The principal focus of this study is on three West African nations, namely Guinea, Liberia, and Sierra Leone. Individuals have been impacted by the Ebola virus pandemic that occurred between 2014 and 2016. Moreover, a limited number of cases were reported in Nigeria, Mali, Senegal, Spain, the United Kingdom, and the United States. The outbreak had a disproportionate impact on specific societies situated within these nations. One illustration of this phenomenon is the heightened susceptibility of healthcare providers to contracting the virus due to their close proximity to infected patients. The conventional interment procedures that necessitate intimate physical proximity with the deceased individual, have also played a role in the propagation of the virus (Wendelboe et al. 2018).

Furthermore, the virus exerts a significant influence on pre-existing vulnerable demographic groups, such as impoverished individuals, females and minors, and those facing restricted healthcare accessibility. The COVID-19 pandemic has resulted in a disruption of healthcare facilities, which has inadvertently affected individuals suffering from other illnesses, including malaria and tuberculosis (Sivanandy et al. 2022).

The epidemic resulted in significant societal and economic repercussions within the impacted nations, encompassing loss of life, diminished healthcare accessibility, fluctuating economic stability, and marginalization of combatants (Anis 2019).

## 3.3. THE PERSONNEL IMPACT ON HEALTHCARE SYSTEMS

The Ebola virus outbreak that occurred between 2014 and 2016 had a remarkable effect on healthcare systems and medical personnel in the countries that were severely affected (Kamorudeen et al. 2020).

### 3.3.1. OVERWHELMING OF HEALTHCARE SYSTEMS

The sudden and widespread occurrence of the outbreak imposed considerable strain on healthcare facilities that were already suffering from inadequate capacities. This resulted in a dearth of essential amenities such as hospital beds, medical apparatus, and qualified healthcare personnel (Otu et al. 2018).

### 3.3.2. INFECTION OF HEALTHCARE WORKERS

Healthcare workers are significantly more susceptible to contracting the virus owing to their proximity to infected patients. During the Ebola virus epidemic, a significant number of healthcare professionals suffered from infection and ultimately succumbed to the disease (Aruna et al. 2019).

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### 3.3.3. DISRUPTION OF ROUTINE HEALTHCARE SERVICES

The diversion of resources towards the management of the Ebola outbreak caused disruption to typical healthcare services, resulting in a decrease in the provision of immunization services, maternal and child health services, as well as treatments for other conditions including malaria and tuberculosis (Shet et al. 2022).

### 3.3.4. FEAR AND STIGMATIZATION OF HEALTHCARE WORKERS

As a result of the elevated likelihood of contracting the Ebola virus, healthcare personnel were stigmatized and subjected to unfavorable treatment by their respective communities (James et al. 2019).

### 3.3.5. MENTAL HEALTH IMPACT ON HEALTHCARE WORKERS

During the outbreak, healthcare professionals incurred significant levels of tension, nervousness and exhaustion resulting in enduring implications for their psychological well-being (Chigwedere et al. 2021).

### 3.3.6. STRENGTHENING OF HEALTHCARE SYSTEMS

Despite the existing obstacles, the current outbreak affords an opportunity to nations with lofty aspirations to reinforce their healthcare infrastructure and elevate their readiness for prospective epidemics (Buseh et al. 2015).

## 3.4. AID EFFORTS AND INTERNATIONAL RESPONSE

The Ebola virus outbreak that occurred within the West African region between 2014 and 2016 prompted a globally-coordinated response involving a multitude of governmental bodies, non-governmental organizations and other pertinent stakeholders. The response endeavor involved a multifaceted approach that integrated the provision of fiscal assistance, deployment of healthcare personnel, the delivery of medical provisions and gear, as well as the delivery of research backing (Yerger et al. 2020).

## 3.5. THE IMPORTANCE OF INTERNATIONAL RESPONSES AND AID DETERMINATIONS

### 3.5.1. HEALTHCARE WORKERS

Numerous international organizations such as the World Health Organization and Médecins Sans Frontières dispatched medical personnel to the affected regions for the purpose of assisting in the Ebola containment efforts. The United States government dispatched military personnel to provide support for the response operations (Ahmed et al. 2022).

### 3.5.2. MEDICAL SUPPLIES AND EQUIPMENT

International entities and donor nations furnished medical provisions and equipment, comprising of personal protective gear, medical enclosures and laboratory supplies (Huber et al. 2018).

### 3.5.3. RESEARCH SUPPORT

International organizations and contributing countries have endeavored to advance research efforts pertaining to the development of vaccines and treatments for the Ebola virus (Graham 2019).

## 4. EBOLA VIRUS TRANSMISSION AND SYMPTOMS

### 4.1. TRANSMITTED EBOLA VIRUS

The transmission of the Ebola virus primarily occurs via direct contact with the biological fluids released by an individual or animal who has been infected. The virus has been detected within various biological fluids, including blood, saliva, vomit, feces, urine, sweat, semen, and breast milk, among individuals affected by the illness. The virus possesses the capacity to endure on various surfaces and materials that have come into contact with the biological secretions of an individual infected with the pathogen (de La Vega et al. 2018).

### 4.2. THE TRANSMISSION OF THE VIRUS CAN OCCUR THROUGH THE FOLLOWING MODALITIES

#### 4.2.1. DIRECT CONTACT

Exposure to the various biological fluids of an individual experiencing an illness, facilitated by compromised integumentary barriers or epithelial linings, such as those found in the ocular, nasal, or oral cavities (Mehtar and Bearman 2018).

#### 4.2.2. CONTACT WITH CONTAMINATED OBJECTS

The transmissible nature of the Ebola virus arises from its capacity to disseminate via direct contact with surfaces or substances that have been contaminated with biological fluids of an infected individual. Such substances encompass various implements, not exclusively limited to needles, syringes, and medical equipment (Hasan et al. 2019).

#### 4.2.3. CONTACT WITH INFECTED ANIMALS

Smartly paraphrased: The Ebola virus is transmitted to humans through contact with infected animals such as fruit bats, monkeys, and apes. This event can happen when infected animals are hunted or handled with the intention of being consumed (Caron et al. 2018).

#### 4.2.4. PERSON-TO-PERSON TRANSMISSION

The virus can be passed from one person to another through close contact, such as taking care of or living with an infected individual (Jacob et al. 2020).

It is crucial to emphasize that the Ebola virus is not transmitted through the air, consumption of contaminated food or water, and is less easily spread compared to certain other contagious diseases (Rewar and Mirdha 2014).

Preventing the spread of Ebola virus requires following the right infection control practices, such as using protective gear, sanitizing surfaces and equipment and maintaining strict hand hygiene protocols (Brown 2019).



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### 4.3. PREVENTION AND CONTROL METHOD OF EBOLA VIRUS

The strategy for controlling and reducing the spread of Ebola involves a comprehensive approach that includes various measures and actions at both the individual and public health level (Jacob et al. 2020).

#### 4.3.1. EDUCATION AND AWARENESS

Education campaigns present a promising opportunity to educate the general public about the transmission patterns and symptoms of Ebola virus disease (EVD), as well as emphasizing preventive measures to stop the contagion from spreading (Ajilore 2017).

#### 4.3.2. PERSONAL PROTECTIVE EQUIPMENT

People in charge of taking care of or being in contact with infected individuals, along with healthcare staff, are strongly recommended to use personal protective gear like gloves, gowns, masks, and goggles (Phan et al. 2019).

#### 4.3.3. INFECTION CONTROL MEASURES

By implementing rigorous hand hygiene practices and comprehensive disinfection procedures for surfaces and equipment, effective infection control measures can successfully prevent the spread of viral pathogens (Mankadi et al. 2020).

#### 4.3.4. CONTACT TRACING

Effectively identifying and monitoring individuals who have come into contact with infected individuals can play a vital role in reducing the spread of the contagion (Sareen et al. 2018).

#### 4.3.5. QUARANTINE AND ISOLATION

People who have acquired an infection should be isolated and given medical attention in healthcare facilities. Moreover, people who have not been protected against the mentioned infection should be separated for a specific time period in order to observe any signs of symptoms (Meyer et al. 2018).

#### 4.3.6. SAFE BURIAL PRACTICES

Adhering to proper burial practices, such as using gloves and disinfectants when handling the bodies of infected individuals, can effectively reduce the spread of the pathogen (Boulter and Vasa 2018).

#### 4.3.7. VACCINATION

The field of vaccination and its advancements have resulted in the creation of successful preventative strategies against Ebola virus infection that have undergone rigorous testing and confirmation. In outbreak situations, these vaccines have proven to be highly effective and have been successfully used (Venkatraman et al. 2018).

## 5. ECONOMIC IMPACTS OF THE EBOLA VIRUS OUTBREAK

### 5.1. EFFECTS ON AFFECTED COMMUNITIES

Outbreaks of Ebola can have a significant effect on the welfare of individuals affected by the disease. The stigmatization and discrimination of people who are infected or vulnerable to COVID-19 arise as a consequence of the ongoing pandemic. Social exclusion can arise from contagious illnesses, leading the afflicted individuals and their loved ones to experience discrimination and alienation. Ostracism has the potential to induce social isolation, resulting in reduced availability of resources for recuperation (Cénat et al. 2021).

#### 5.1.1. ECONOMIC IMPACTS

People who are infected might have reduced efficiency in their work, which can cause financial issues and lower profits. Organizations might face obstacles in their activities due to concerns about the spread of disease, limited movement, and disrupted supply chains (Brooks et al. 2020).

#### 5.1.2. MENTAL HEALTH IMPACTS

Experiencing the Ebola virus disease or living in an area affected by an epidemic can lead to feelings of fear, emotional strain, and post-traumatic stress disorder (Bah et al. 2020).

#### 5.1.3. DISRUPTION OF HEALTH SERVICES

The spread of the disease might lead to an excessive burden on healthcare workers and facilities, leading to disturbances in regular healthcare services and causing delays in treating other health conditions (Madhav et al. 2018).

In order to accurately record the effects of the Ebola Virus Disease (EVD), it is essential to actively include the affected communities in response endeavors and promote their active participation and backing in these endeavors. Community involvement and assistance greatly contribute to reducing the adverse impacts of EVD outbreaks. The efficient management of the situation relies on key factors such as offering precise and prompt information about the outbreak, involving public figures and medical experts in the response efforts, and recognizing the economic and social consequences of the outbreak (Organization 2018).

It is essential to combat stigmatization and discrimination by accurately representing Ebola Virus Disease (EVD) in a positive and inclusive way, dispelling misconceptions and myths, and treating those affected and their families with dignity and compassion. Efforts like these play a vital role in establishing an atmosphere that promotes comprehension and facilitates successful public health interventions (James et al. 2019).

## 5.2. ECONOMIC IMPACT ON COUNTRIES

EVD outbreaks can have significant economic impacts on affected nations. The phenomenon can have both immediate and long-lasting effects, potentially impacting several sectors of the economy including healthcare, agriculture, transportation, and commerce (Gatiso et al. 2018).

### 5.2.1. HEALTHCARE COSTS

The financial ramifications connected to addressing an outbreak of Ebola Virus Disease (EVD) can have a significant impact. These expenses may include costs associated with patient healthcare, the

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establishment of isolation and treatment facilities, and the preparation and mobilization of medical personnel (Huber et al. 2018).

### 5.2.2. DISRUPTIONS IN ECONOMIC ACTIVITY

The apprehension pertaining to the propagation of a contagious ailment can potentially result in a decrease in economic operations, such as a reduction in travel, employment hurdles, and compromised productivity owing to illness or the apprehension of infection (Dramé et al. 2021).

### 5.2.3. ECONOMIC LOSSES IN THE AGRICULTURAL SECTOR

The depletion of human capital as a result of illness or demise may exert a significant influence on the agricultural sector, resulting in probable food insecurity and subsequent financial repercussions (Huber et al. 2018).

### 5.2.4. NEGATIVE IMPACT ON SMALL AND MEDIUM-SIZED ENTERPRISES

Small and medium-sized enterprises (SMEs), which serve as the backbone of numerous economies, are susceptible to significant adverse effects resulting from an outbreak of the Ebola virus disease (EVD). These effects may manifest in the form of diminished demand for their commodities or services, disruptions in their supply chains, and constrained access to credit (Leone 2019).

### 5.2.5. INCREASED PUBLIC DEBT

Governments may necessitate financial borrowing to finance the response to an Ebola Virus Disease (EVD) outbreak, potentially leading to amplified public accountability (Ali et al. 2022).

It is imperative that governments and international organizations extend their support to nations affected by an EVD outbreak in order to mitigate the consequential economic burdens. The provision of assistance to persons and enterprises impacted by recent occurrences in the form of monetary aid, specialized assistance for healthcare infrastructure, and contributions towards entities and subdivisions within the economic sector may be encompassed within the scope of actions undertaken (Shin et al. 2018).

## 5.3. IMPACT ON GLOBAL HEALTH

The emergence of outbreaks of Ebola virus disease (EVD) has profound implications for global health security, emphasizing the need for meticulous preparation and intervention strategies (Keita et al. 2023).

### 5.3.1. HIGHLIGHTING THE IMPORTANCE OF PREPAREDNESS

The occurrence of Ebola virus disease (EVD) outbreaks has underscored the significance of ensuring well-preparedness measures for infectious disease outbreaks, not only in the countries affected but also on a global scale. The necessity for robust healthcare systems, proficient inquiry, and prompt reaction capabilities has been accentuated by them (Kodish et al. 2019).

### 5.3.2. TESTING GLOBAL HEALTH FRAMEWORKS

The Ebola Virus Disease epidemics have validated the operationalization of international health frameworks, including the International Health Regulations and the Global Health Security Agenda. The

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authors have noted gaps in preparedness and response, along with the imperative for enhanced coordination and cooperation among national governments and international organizations (Sell 2020).

### 5.3.3. MOBILIZING INTERNATIONAL RESOURCES

The occurrences of Ebola Virus Disease (EVD) outbreaks have engendered consequential financial and logistical backing from international entities to countries afflicted by this affliction. These advancements have also resulted in amplified cost savings in the domain of research and development pertinent to identifying, formulating and treating EVD and various other communicable ailments (Ali et al. 2022).

### 5.3.4. ADDRESSING GLOBAL HEALTH INEQUITIES

The emergence of Ebola Virus Disease outbreaks has brought to light the prevalent disparities in global health care, underscoring the necessity for increased commitment towards healthcare systems and infrastructure in low- and middle-income countries. Additionally, there is a pressing need to address the underlying social determinants of health (Rugarabamu et al. 2020).

### 5.3.5. RAISING AWARENESS ABOUT EMERGING INFECTIOUS DISEASES

The occurrence of Ebola Virus Disease outbreaks has augmented the awareness of the general public regarding the emergence of infectious diseases and their potential consequences on the safety of global health. This has subsequently resulted in a surge of encouragement and resources for global health initiatives (Kraemer et al. 2019).

Outbreaks of Ebola Virus Disease have exerted noteworthy effects on the security and readiness of global health, thereby emphasizing the necessity for sustained investments in health systems and infrastructure, as well as enhanced collaboration and coordination among nations and international organizations (Alonge et al. 2019).

## 6. CONCLUSION

Ebola outbreaks need robust healthcare systems and swift action to protect global health. The International Health Regulations and GHSA frameworks are under test. This analysis focuses on epidemic readiness and cooperation. This helps nations with money and teaching. It boosts funding for EVD and other contagious diseases research. Ebola outbreaks reveal healthcare inequality in poor nations. Awareness boosts global healthcare endeavors. Ebola outbreaks focus on global health, reducing inequalities, and fostering collaboration. Prepare for future diseases. Efficient resource distribution and capacity planning are crucial in disease outbreak prevention. Improve healthcare systems, workforce, medication access, technology, and disease prevention response capabilities. Disease management relies on politics, finance, and tech. Global collaboration is crucial for preventing outbreaks. Sharing info, expertise, resources, and healthcare aid is vital to prevent disease outbreaks. This includes diagnosis, vaccines, treatment, and social health. Global health security requires collaboration and expertise utilization. Public support and political assurance are vital for promoting enlightenment.

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