

The Rwanda National Ebola Preparedness Exercise and Response Strategies

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INTRODUCTION

Since 2018 to date, regional and global health communities are being challenged by the Ebola virus disease (EVD) outbreak in the Democratic Republic of Congo (DRC) [1, 2].

After almost a year, since the current EVD outbreak started, there is no sign that can predict when this outbreak will be controlled. On 19 July 2019, WHO declared a Public Health Emergency of International Concern (PHEIC) with risk for regional spread including Rwanda [3].

To control any outbreak and specifically for EVD, the existence of health system strength is paramount. This is the foundation for enabling the surveillance and response strategies to reduce morbidity and mortality due to EVD. Inadequate health system jeopardises the entire mechanism of response. This was demonstrated through the first ever Ebola virus disease outbreak in West African region from 2014 to 2016 where more than 11,000 lives were lost over 28,000 identified cases across Sierra Leone, Liberia and Guinea. A reoccurring outbreak was also reported in the DRC in the years 2017 and 2018 [3,4].

Based on this experience and in consideration of the current DRC outbreak geographical proximity, Rwanda has increased control on cross border population movement. In addition, Rwanda has developed a preparedness strategy based on a scenario of cross-border importation.

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This report highlights some of Rwanda's EVD key capabilities achieved in preparedness and prevention strategies as per August 2019.

COORDINATION

To ensure capacities and capabilities are strengthened, a strong multisectoral coordination platform was established for information sharing and fund mobilization. Strategic documents were developed including Ebola preparedness plans, 72 hours Ebola response plan that supplemented the existing Rwanda epidemic preparedness and

response plan. Other mini toolkits for management of public health emergencies of national and international concern were developed to support both the central and district response.

Operating procedures for Ebola were developed to prevent scattered information and ensure we operate with the same standards and language.

A guiding principle model was adopted to ensure the success of preparedness, which forecasts the success of response, the governance being the corner stone (Figure 1).

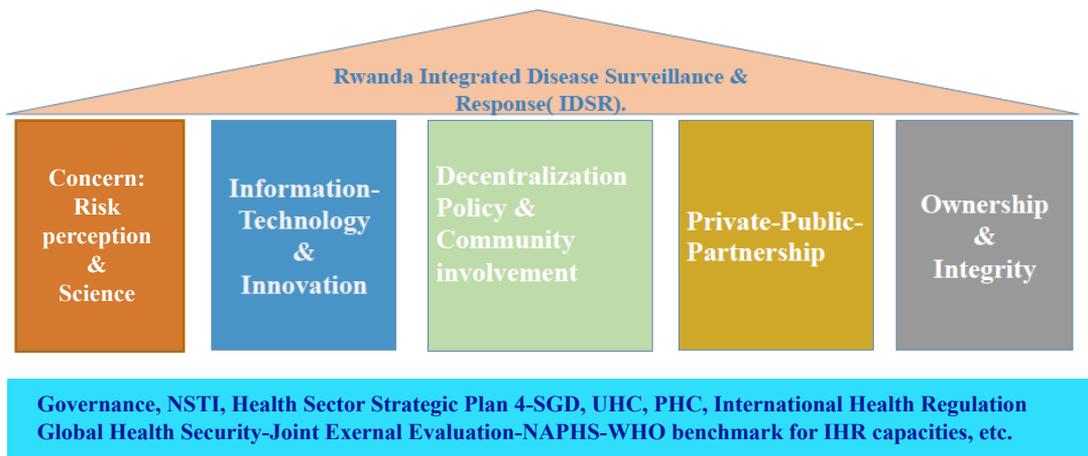


Figure 1: Rwanda Epidemic Surveillance & Response Guiding Principles

PREVENTION STRATEGIES

Being aware that every public health threat, including Ebola, starts in a household and therefore should end in the same household. To this end, the earlier you get the information the earlier a response can be triggered.

Rwanda invested in massive simultaneous community awareness, mobilization for engagement through adequately adapted, developed and selectively validated materials for community information education and communication (IEC) on EVD. These were disseminated using all existent channels and mechanism such as television and radio programs, street billboards, borders, civil society umbrellas, private sectors, academia and other mass gatherings where some include sessions with questions and answers sessions and winners awards [3].

Knowing that hand-washing reduces huge numbers of pathogens transmission through hand shaking, hand-washing basins were constructed to the key ports of entry on borders between Rwanda and DRC. This is becoming a national movement at many hospitality and other buildings (Figure 2).



Figure 2: Hand wash facilities at DRC-Rwanda land crossing border (Rubavu).

WORK FORCE DEVELOPMENT AND SAFETY

Availing adequate work force for preparedness and response as well as for skills transmission was key. In partnership with different stakeholders, a standard training modules's package was developed, adapted and validated. Trainings of trainers were conducted and intense training plans were developed. To ensure and measure the progress and identifying remaining areas for improvement, simulation exercises and drills have been conducted.

Over 23,657 were trained from community health care workers, red-cross volunteers, army and police officers, medical doctors, nurses, laboratory technicians, psychologists and other infection prevention and control experts [6].

Laboratory capacity was enhanced to ensure timely sample collection, testing and confirmation. [3, 5, 7].

Through the Rwanda Biomedical Center, the government of Rwanda with support from WHO also offered an extended access protocol for Ebola vaccination (Figure 3). The approach was not on a mass population vaccination campaign spectrum, but rather targeted frontline health care providers and EVD prospective responders [9, 10].

Around 3000 health care worker front-liners were vaccinated using the compassionate MERCK vaccine against Zaire Ebola virus (ZEBOV).



Figure 3: A Rwandan being vaccinated against Ebola virus (photo by *New Times*, Published on 20 August 2019).

CASE MANAGEMENT

Case management is one of the critical value points within the Ebola management chain. To ensure prevention of nosocomial transmission and reduce mortality. Adequate and adapted isolations

at hospitals and Ebola treatment centre are key. The process to construct isolations at hospitals is on-going and Ebola Treatment Centres (ETCs) were also identified and renovated in Rugerero Sector, Rubavu District to manage Ebola cases in a case it is confirmed in the country [2] (Figure 4a, 4b). A burial site was also availed to ensure safe and dignified burial.



Figure 4a, 4b: EVD Emergency Treatment Centres (ETCs), Sector, Rubavu District

Rwanda remains on high alert for Ebola outbreak. In May 2019, 25 countries among the APORA VII Conference visited Rugerero Emergency Treatment Center (ETC) located near DRC border Rugerero Sector, Rubavu District; and the delegation appreciated the preparedness and preventive measures adopted.

Simulations were demonstrated to show how Rwanda is prepared in terms of EVD prevention and first case management. Among the delegation, WHO Regional Office delegate Dr. Thierno Balde, based in Brazzaville Republic of Congo, was present and appreciations were expressed on the level of preparedness and the rapid response that teams can show in case of EVD outbreak (Figure 5a, 5b).



Figure 5a, 5b: Prevention and response strategies demonstrated in simulations at Rugegero Treatment Center.

PUBLIC HEALTH DIPLOMACY

Knowing that no single entity, sector or country can preempt to solve such a complex public health threat like Ebola, partnership with local, regional, and bilateral collaborations is inevitable.

Rwanda hosted one cross-border meeting under WHO on 6th August 2019, where a joint cross-border DRC-Rwanda was signed in Rubavu district and was followed by an action plan that allows both countries to prevent and control the common EVD threats. DRC and Rwanda respective Ministers of health presented the joint project to Dr. Tedros Adhanom Ghebreyesus, the WHO Director General and to Dr. M. Moeti, the WHO Director for African Region during a recent high level meeting at Brazzaville-Congo.



Figure 6: Meeting of DRC and Rwanda ministers of health Dr Pierre Kangudia Mbayi and Dr Diane Gashumba with WHO Director General Dr Tedros Adhanom Ghebreyesus.

CONCLUSION

Rwanda has achieved a lot for EVD preparedness and response as assessed by the WHO joint mission assessment report. As the world is embracing the Health For All strategy, EVD preparedness cannot afford to leave any body behind. Building a resilient preparedness for response is based on governance, and existing system under which the preparedness and response operate.

As declared by Dr Tedros Adhanom Ghebreyesus “Fixing the roof before the next rain, invest in preparedness”.

Rwanda will continue building the sustainable health security resilience by ensuring the assessed gaps (JEE) are stepping up.

A national action plan for health security is finalized for dissemination and implementation.

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