OPINION EDITORIAL

Communication for Synergetic Coordination: A Strategy to Increase Uganda's Infectious Disease Preparedness and Response

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INTRODUCTION

The last decade witnessed several occurrences of emerging and re-emerging infectious diseases (ID) worldwide including untold hardship to a number of countries on the African continent. Uganda is a prime example, with its fair share of frequent ID epidemics in the previous decade. Located in the east-central part of the African continent, Uganda is home to approximately 44 million people, with a steady annual growth rate of 3.61% [1]. Uganda's recurring ID outbreaks include previous episodes of Hepatitis E, pneumonic plague, measles, meningitis, and rubella, as well as Ebola Virus Disease (EVD) [2]. EVD's case-fatality rate of approximately 50% [2,3], categorizes it as an ID lethal enough to gain national attention. There is increasing evidence that attributes Uganda's continuous episodes of ID outbreaks to its low life expectancy of 58.5 years in the past 20 years as well as several poor socio-economic and health indices [1].

Despite poor health and socio-economic outcomes, there appears to be solace in Uganda's effort to improve its ID preparedness against future outbreaks. In a recent report, Uganda was categorized as a 'more prepared' country according to the Global Health Security Index (GHSI) report [5].The report rated Uganda as 63rd amongst 196 countries in the world and third on the African continent, after South Africa and Kenya [5]. Uganda's score in the rapid response dimension of the index was 18.1 points higher than the global average; an achievement that can be reflected in how they have promptly responded to EVD outbreaks. Similarly, the World Health Organization (WHO) reported that Uganda's overall Ebola preparedness level had increased from 53% to 84% between 2018 and 2019 [6]. A number of these successes can be attributed to Uganda's rapid response strategies, which include developing national response plans, emergency response operations, risk communications, and travel restrictions [5]. Furthermore, according to the WHO, the key areas where notable improvements in ID control have been made include: emergency coordination, surveillance, case management, safe and dignified burial practices, improved laboratory capacity, risk communication and community engagement, operational logistics, and vaccinations [3,7-9].

Nonetheless, despite Uganda's success in addressing past EVD outbreaks, other IDs—such as cholera, typhoid, and HIV still represent a significant threat to their national public health [10,11]. Studies have demonstrated that applying a fragmented, rather than synergistic, approach in addressing ID outbreaks oftentimes diminishes the efficacy of disease control efforts [18]. For instance, the

National Cholera Task Force (NTF) suffered from weak leadership and poor coordination of interventions to address the drivers of cholera [12,13]. These challenges diminished the impact of their cholera control programs, even though they had adopted the country's successful EVD approach.

This has necessitated the need for a more streamlined, coordinated approach [13]. A key question that stakeholders involved in the Ugandan ID response need to consider is: how can the successes of Uganda's EVD response be effectively replicated to strengthen its national response to diseases still posing a public health threat in Uganda? This paper argues that effective communication, as a key strategy to foster synergy, can improve Uganda's ID preparedness, especially when combined with established strategies from their EVD response approach.

POLICY RECOMMENDATIONS

Increasing synergistic communication between task forces has the potential to leverage current resources to improve Uganda's ID response. Integrated stakeholder communication will enable the early detection and control of all IDs. The key stakeholders to include during ID outbreaks are the Ugandan ID response teams, the Ugandan Ministry of Health (MoH), and local healthcare workers.

There is compelling evidence to demonstrate that poor communication contributes to: insufficient personnel deployment, poor coordination between healthcare workers during Public Health Emergency of International Concern (PHEIC), and improper implementation of infection control practices within the health system [14]. Similarly, inefficient communication and coordination amongst district authorities, health workers, public health emergency operations centers, and Points of Entry (PoEs) can further complicate Uganda's future ID response [15]. In line with the WHO's building blocks of health systems strategy, without properly established communication channels and governance, future ID outbreaks may develop into uncontrollable PHEICs with far-reaching consequences that can potentially extend beyond national borders [16]. Ario et al. also highlights that the responsible bodies for emergency preparedness are mostly led by international organizations, causing inefficiencies amongst local healthcare providers [17]. Despite successful progress in Uganda's disease surveillance, reporting, investigation, and analysis, Masiira et al. and Nakiire et al. [10,18] identified that opportunities still exist to improve coordination in Uganda's ID approach.

Strengthening communication between affiliated stakeholders during EVD outbreaks was instrumental in increasing Uganda's ID preparedness levels from 53% to 84%, and should be adapted in other ID response scenarios [6]. Therefore, reforms to enhance the capacity of the Ugandan ID stakeholders to take on more prominent roles in ensuring effective communication amongst key stakeholders, will not only improve synergy during PHEICs, but also improve ID response outcomes. This approach has the potential to address Uganda's long-standing problem of responding to other ID outbreaks, as well as improve their national ID preparedness. Stakeholders should also be empowered to coordinate Uganda's ID detection and control activities such as: standardizing ID surveillance, data management and protocols amongst all stakeholders, facilitating communication of possible outbreaks between lower and upper decision-making levels, and ensuring the equitable distribution of personnel and resources to hot spots during ID outbreaks. Nevertheless, stakeholders should not exclude working and learning from foreign organizations who come with valuable experience in ID control. Expectedly, the implementation of this policy may yield the desired outcomes that the country seeks to achieve in preventing and controlling all future IDs.

CONCLUSION

In conclusion, based on increasing evidence that demonstrates that Uganda's current ID efforts are obstructed by siloed communication systems, this paper proposes that assigning the key task of improving communication to coordinate stakeholder efforts will foster synergy and improve

Ugandan ID response outcomes for all future outbreaks by leveraging the efficient use of available resources.

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