OPINION EDITORIAL

Proposing a Proactive Risk Communication Approach to Improve Brazil's Infectious Disease Outbreak Preparedness

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INTRODUCTION

Brazil is the largest country in Latin America, with a population of over 208 million people [1] and with a rapidly growing economy it is set to become a global economic power by 2050 [2]. Brazil's 1988 constitution recognized citizens' rights to universal health coverage (UHC) [3], which resulted in the government implementing innovative strategies to ensure that every citizen had access to healthcare services. Such strategies included increasing the number of primary care facilities which resulted in an increase in the number of primary care consultations per individual [4]. Similarly, the government's commitments to ensure public health security prompted the creation of the National Health System (Sustema Único de Saúde (SUS), which enabled the incorporation of a Digital Health Strategy (e-Health or digiSUS), whose focus was to "expedite care, and improve the flow of information to support decision making in health" [5]. The 2019 Global Health Security Index (GHSI) report places Brazil as the 22nd country in the world and the first amongst the 33 Latin American and Caribbean countries in their infectious disease outbreak preparedness [6]; validating the government's commitment to ensure public health security. Brazil's infectious disease preparedness enabled the country to address several infectious disease outbreaks, including the Zika virus outbreak.

GAPS IN RISK COMMUNICATION

However, while the Brazilian public health agencies were praised for their proactive response during the 2015 Zika virus outbreak, there is growing evidence that suggests the existence of gaps in the communication of risks associated with public health emergencies [7]. Even though Brazil's approach to developing a social media and mobile communication channel for emergency risk communication (ERC) [8] appears laudable, this strategy does not explicitly address communication methods with frontline healthcare workers. Furthermore, though there are calls for Brazil to incorporate timely press releases into their emergency communication strategies [9], as general apathies towards risk communication still exist during public health emergencies. Brazil's GHSI ranking of zero on the "communications with healthcare workers during a public health emergency" [6] scale also gives credence to the need to review current communication strategies amongst health workers in order to guard against a poor response in the event of an infectious disease outbreak. The gap has the potential to increase the risk of infectious disease transmission and occupational accidents by 20% for Brazilian healthcare workers [10,11], especially during a crisis scenario such as an Ebola virus disease outbreak. Therefore, this paper proposes a proactive risk communication approach as a strategy to improve communication flow from frontline health

workers to the different decision-making levels in the event of an infectious disease outbreak.

Effective risk communication is an integral component of any emergency response; it is the real-time exchange of information between experts, community leaders, officials, and the people who are at risk [12]. One benefit of this strategy can be seen during public health emergencies, where effective risk communication allows those who are at greatest risk to understand and adopt protective behaviours [11] in a manner that can significantly reduce morbidity and mortality on a large scale. It also ensures that authorities and experts listen to and address public concerns, especially when it is evidently relevant, trusted, acceptable, and useable [12] to drive an infectious disease response.

PROPOSED STRATEGY

The proposed risk communication strategy involves the Brazilian government setting up strategic communication hubs at different levels within the country's infectious disease response ladder. These hubs should be active real-time communication networks, established and maintained to manage risk communication amongst frontline health workers, the community, and the key decision-makers in the event of a public health emergency. The communication hub should also take advantage of the strong links between community surveillance systems and primary healthcare clinics to establish a functional communication channel that feeds real-time information to the different decision-making levels in their infectious disease management structure. To ensure ownership and sustainability, the communication hubs should be for the people and managed by the people. In this way, the contributions they make towards providing real-time information is accepted as a valued contribution in the event of an outbreak. The government can also take advantage of technological advancements by integrating risk management and communication within the country's e-Health framework. This approach will accelerate the transmission of information through electronic channels, allowing frontline healthcare workers to act in a quick and efficient manner in the event of a public health emergency. By strengthening the relationship between public healthcare workers and the community, the transmission of information will be more precise [13], productive, and preparatory.

Countries, where these strategies have proven to be effective, include India and Canada. Despite India and Brazil being identified as nations projected to have major economic influence by 2050 [2], India's "communications with healthcare workers during a public health emergency" score of 100 sets it apart from Brazil [3]. India's utilization of a two-way communication strategy between public health officials and healthcare workers during public health emergencies, including engagement of the public and private sectors [14], appears to be a silver bullet in their infectious disease preparedness approach. The approach includes having control rooms at the national and state levels and incorporating satellite hubs that support real-time communications between all emergency services [14]. Canada initially lacked an effective communication strategy as healthcare workers identified deficiencies in "explaining when and why standards of care change during disaster response" [15]. Subsequently, Canada incorporated the Health Notices System (HNS), which mimics the two-way communication system in India [16]. This system has contributed to Canada's 100% GHSI score today.

CONCLUSION

In summary, Brazil's need to improve its risk communication strategy amongst healthcare workers, especially frontline workers, requires the design of a strategy to address key gaps. These workers should be recognized as a credible source of information [17], whose inputs in the decision-making process can halt the spread of an infectious disease outbreak. Brazil can adopt other countries' methods, such as India and Canada, who have trusted communication strategies that integrate risk communication into their e-Health strategy; this has the potential to improve the flow of communication between public health officials, healthcare workers, and Brazilian communities.

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