

Risk communication during health emergencies in Nigeria: What are its challenges?

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Abstract

Although globalization has been advantageous in facilitating the free movement of people, goods, and services, the ease of movement of cross-border pathogens has increased the risk of international public health emergencies in recent years. Risk communication is an integral part of every country's response during public health emergencies such as the coronavirus disease (COVID-19) pandemic. To effectively increase adherence to guidelines during health emergencies, it is essential to understand the impact of social, cultural, political, and environmental factors

on people's behaviours and lifestyles in any given context, as well as how these factors influence people's perception of risks. During the recent response to the COVID-19 pandemic in Nigeria, the need to comprehend these influences was pronounced, and these influences ultimately shaped risk communication in Nigeria. We have identified risk communication challenges in Nigeria based on sociocultural diversity, the complexity of the health system, the impact of social media on communications, and other contextual factors surrounding multisectoral partnerships. To achieve global health security, these challenges must be addressed in resource-constrained countries like Nigeria. In this paper, we emphasize the need to contextualize risk communication strategies in order to improve their effectiveness during health emergencies. In addition, we urge increased country commitment to a multi-hazard and multisectoral effort, deliberate investment in subnational risk communication systems, and investments in capacity building for risk communication activities.

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Introduction

Risk communication is a crucial component of emergency responses to public health threats. It is one of the eight core capacities of the International Health Regulations (IHR) designed to assist nations in implementing preventive and responsive measures to public health risks.¹

The exchange of real-time information and advice between experts and a population at risk constitutes risk communication.² It entails understanding how individuals perceive a health threat and how this perception influences their adoption of recommended health advice and interventions. The primary purpose of risk communication is to assist individuals, families, and communities in making informed decisions to protect themselves and others from health threats and their consequences.² For risk communication to be effective, the values, beliefs, perceptions, and practices of the target population must be clearly understood and taken into account.

West African nations, including Nigeria, have experienced outbreaks of infectious diseases such as Lassa fever, Ebola virus disease (EVD), monkeypox, yellow fever, and now Coronavirus disease (COVID-19) over the past few years. Insights into the response to previous outbreaks have revealed significant gaps in risk communication in the affected nations.³ The COVID-19 pandemic has underscored the need for nations to reevaluate their approach to risk communication, particularly with regard to the effective dissemination of messages during public health emer-

gencies. Clearly, risk communication activities must be tailored to the realities and resources of the target population. Nigeria, the most populous nation in Africa, is a multicultural and multiethnic nation where over 500 languages are spoken.⁴ The planning and implementation of risk communication activities are complicated by these realities. The purpose of this paper is to identify the challenges to implementing effective risk communication activities in Nigeria.

The challenges of risk communication in Nigeria

The medical system

Is the Nigerian health system ready to respond to an outbreak? Some countries are more susceptible to epidemics due to disparities in the capabilities of their health systems, which could have significant health and socioeconomic repercussions from outbreaks. A resilient health system necessitates preparedness and response capabilities – the ability to prepare for and respond to public health emergencies at all levels of the health system⁵ – under the direction of a national public health institute. Preparedness is essential for containing the spread of an outbreak and reducing the burden on the health system. Preparedness is largely the result of system-level capabilities, such as financial resources, a competent workforce, and a defined and tested preparedness plan.⁶ Effective risk communication activities are influenced by leadership and coordination, adequate funding, and available and skilled human resources.⁷ In Nigeria, the health system faces a multitude of challenges across all of its components, and health emergencies strain the already fragile system.⁸

Based on the 2019 Midterm Joint External Evaluation (JEE) of IHR core capacities, the nation's ability to prevent and respond to a disease outbreak were 41% and 46%, respectively.⁹ The Nigerian health system is plagued by ineffective leadership and coordination, inadequate funding, insufficient human resources, and unequal access to care.¹⁰ During a health emergency, it is difficult to coordinate with various actors due to the fragmentation of health service delivery. Risk communication has been identified as a deficiency in the response to health emergencies in Nigeria and other African nations, which could compromise efforts to contain outbreaks.^{11,12}

Even though the JEE score for risk communication improved from 48% in 2017 to 60% in 2019, there is still room for growth.⁹

In addition, the health information system in many low- and middle-income countries (LMICs), such as Nigeria, is plagued by insufficient health data and fragmented data collection methods.^{13,14} This indicates that health officials may wish to delay public communication until “adequate evidence” is available. During public health emergencies, the World Health Organization (WHO) promotes timely information sharing, even when information is incomplete, in order to promote transparency and gain public trust.¹² A lag in risk communication during outbreaks allows for speculation and misinformation, which may increase susceptibility to risky behaviors and undermine risk communication and community engagement efforts.

New media: a Pandora's box?

What effect does new media have on risk communication? Communication and media technologies have advanced over the past decade, with the use of digital technology via the internet progressively increasing.² The internet enables real-time communication because information dissemination is “a click away.” Experts and authorities utilize this communication channel to rapidly disseminate information to key stakeholders by utilizing social media platforms and live broadcasts. In contrast, citizens utilize

these platforms as one of several channels to respond to/communicate with authorities. During a health emergency, prompt, precise, and intuitive media reporting by experts and authorities can aid the containment of an outbreak by disseminating information and encouraging positive behavior among the target population.

Despite the benefits of the internet and social media platforms, unrestricted use enables unverified information to be disseminated in real-time. In Nigeria, a significant amount of effort is devoted to debunking false information on social media and other conventional media platforms, with a particular emphasis

on directing citizens to official channels for accurate information. During the COVID-19 pandemic, partnerships with social media platforms such as Facebook, Instagram, and Twitter as well as technology companies such as Google assisted in directing citizens to credible information. Nonetheless, there is still room for the rapid dissemination of potentially false and anxiety-inducing information from unofficial channels during a public health emergency. During the Ebola outbreak, misinformation and myths spread, and the same is occurring during the ongoing COVID-19 pandemic.^{15,16} Contradictory and erroneous information can fuel outrage, confusion, an increase in risky behaviors, and mistrust, which can slow or impede an epidemic's containment.

Media sensationalism

What are the top stories? An editorial style that attracts readers through the sensationalism of headlines, encourages biased opinions of events that may manipulate the truth and result in controversy, appeals to emotions with the intent to mislead, and omits certain facts. This occurred during recent epidemics in Nigeria.^{17,18} Sensationalized coverage of an infectious disease outbreak in traditional and social media can heighten the public's perception of the disease's danger.¹⁹

Sensationalist press reports, facts, or evidence that lack accurate and sound advice and are intended to grab the reader's attention are unethical practices that can heighten public anxiety and mislead policymakers. This presents a difficulty for risk communication, as contradictory information from authorities and journalists undermines the public's trust in authorities. This makes it challenging for individuals to adopt suggested behavioral practices.

Funding for risk communication

How much is allocated for risk communication in the budget? In many nations, including Nigeria, there are competing health sector and non-health sector priorities for the nation's limited resources. There are insufficient discussions regarding policies and strategies for both the long-term funding of health systems and health security, as well as a distinct and sustained budget for risk communication.³

During the COVID-19 response in Nigeria, significant efforts were made to mobilize resources to address this health emergency. Yet, funding for risk communication activities at the national and subnational levels in Nigeria remains inadequate.²⁰ Globalization, zoonoses, and environmental changes define the 21st century, and epidemics are not far off.²¹ Priority must be given to budgeting for risk communication during health emergencies.

Reaching the underserved

Are certain individuals left behind during risk communication? In recent years, the mobile industry in LMICs has experienced significant growth in digital inclusion.²² The dissemination of public information by health authorities is increasingly facili-

tated by digital technology. In LMICs, however, 15% of adults do not own a mobile phone and 45% do not have internet access.²³ The majority of those without mobile phone access are women, elderly, illiterate, and rural residents.¹⁷ Less than half (45%) of Nigerians with disabilities have access to a mobile phone, according to a survey on mobile phone ownership among this population.¹⁸ People with disabilities are approximately 10% less likely to own a mobile phone than those without disabilities.²⁴

During public health emergencies, marginalized and vulnerable populations, including children, women, and people with disabilities, have disproportionate access to information compared to the rest of the population.²⁵ Interventions in risk communication and community engagement should reach all members of the target population. Community-based organizations (CBOs) should be involved in the selection of risk communication interventions and their dissemination channels, which should take into account all community members. A comprehensive approach to risk communication will increase the target population's reach, acceptability of advice, and adoption of positive behavioral change.

Collaborations for capacity building in risk communication

Who do we collaborate with? In a country's risk communication efforts, bilateral or multilateral collaborations aimed at enhancing the health communications capacity of health workers and health communicators are crucial. The World Health Organization's (WHO) infodemic management training on the use of practical tools for rumour monitoring, fact-checking and verification, and measures to reduce the spread of misinformation is a commendable partnership in this regard. It is a project supported by the Africa Centre for Disease Control (CDC), the United States CDC, and the Risk Communication and Community Engagement (RCCE) collective service.²⁶

The risk communication and community engagement (RCCE) response to the COVID-19 pandemic at the national level in Nigeria involves extensive collaboration between governments and non-state actors from within and outside the country. The risk communication pillar of the COVID-19 Emergency Operations Centre (EOC) adopted a four-pronged approach to stakeholder engagement. This strategy entails: (1) developing sector-specific guidelines for RCCE, (2) providing various Ministries, Departments, and Agencies (MDAs) with the required technical support to develop and implement their guidelines, (3) sharing weekly message priorities with various MDAs to adapt and disseminate through their channels, (4) collecting feedback from all MDAs on their activities.

At the subnational level in Nigeria, the response of the RCCE to the COVID-19 pandemic is hampered by insufficient collaboration and coordination between the various organizations involved. The 2019 report of the country-led midterm JEE of IHR core capacities identified the absence of a robust coordination structure as one of the obstacles to effective subnational risk communication activities.⁹ This restricts the capacity to optimize available resources and often results in the dissemination of inconsistent messages to the public from various organizations; these are obstacles to achieving risk communication objectives.

Inter-country and intra-country collaborations facilitate the exchange of ideas and experiences between national and subnational stakeholders. There is a need to improve community engagement efforts by strengthening subnational collaborations.²⁷ Additionally, efforts should be made to increase the capacity of grassroots organizations for risk communication.

Health journalist capacity

Can health journalists fulfill their responsibilities during health emergencies? During health emergencies, health journalists play a crucial role in the dissemination of information to the public. During the 2014-2015 Ebola outbreak in Sierra Leone, the significance of capacity building among health journalists was evident. As a result of capacity-building sessions, health journalists in Sierra Leone transformed from sceptical monitors at the outbreak's onset to collaborative instructors at its conclusion.²⁸ These training sessions contributed to the efficacy of the risk communication activities carried out during the outbreak in the country.

According to reports, Nigerian health journalists lack the knowledge necessary to accurately and effectively disseminate health information.²⁹ An evaluation of Nigerian media coverage of the COVID-19 pandemic revealed unsatisfactory information designed to drive health policies and programs aimed at containing the pandemic before and after the index case.³⁰⁻³² Health journalists play a crucial role in health promotion and education, and the identified gaps indicate a need for enhanced capacity building among health reporters and the broader media community. In addition to combating misinformation during public health emergencies, capacity building for journalists and other risk communication stakeholders could ensure the timely and accurate dissemination of pertinent information to the public.

Government mistrust

Who is the speaker? The reality is that the effectiveness of the majority of measures for managing public health emergencies depends on public compliance.³¹ This necessitates that the public not only have faith in the information they are receiving, but also in the authorities that provide this information and their decision-making processes. Individuals are more likely to follow the advice of trustworthy individuals. Maintaining confidence in the government or relevant authorities is a concern for risk communication during public health emergencies.²⁵

Over time, reports have revealed a substantial distrust and lack of accountability between Nigerians and their government. In 2016, the lack of trust in the health sector was identified as one of the primary causes of the Lassa fever outbreak in the country.³³ In 2020, a substantial proportion of Nigerians did not have faith in the government's response to the COVID-19 pandemic, according to an evaluation of public opinion.³² Nigerians' lingering mistrust of the government must be addressed if they are to adhere to public health advisories. The expert, health authority, or messenger must be perceived as trustworthy and credible for risk communication to be effective.

Conclusions

A highlight of the 21st century has been globalization, which has increased mobility and made travel more convenient. As the incidence of emerging and re-emerging infectious diseases continues to rise, globalisation has increased the risk of infectious diseases spreading across international borders, putting countries at greater risk of epidemics and pandemic-prone diseases. Risk communication during public health emergencies in Nigeria can be quite complex; therefore, a strategic approach is required to effectively communicate risk in various settings.

For risk communication to be effective, the health system's capabilities must be substantially enhanced. This will establish the leadership and coordination structures required for the planning and execution of risk communication activities. Essential is a com-

prehensive understanding of the values, beliefs, opinions, and practices of the target population. To increase reach and community engagement, all members of the target population, including the marginalized and vulnerable, should be considered when selecting risk communication interventions and disseminating information. To increase the efficacy of risk communication interventions, adequate budgetary allocations should be made for capacity building and collaboration between risk communication stakeholders and implementers.

The country is also fighting an infodemic in addition to an epidemic. Efforts to combat an outbreak could be jeopardized by media sensationalism and the propagation of myths and misinformation, so it is necessary to take steps to prevent their spread. During public health emergencies, timely and accurate reporting of information will help reduce the spread of misinformation and increase public trust in health authorities. There is an urgent need for dedicated funding for crisis risk communication. Overcoming challenges in risk communication in settings with limited resources, such as Nigeria, is a difficult but essential objective for achieving local and global health security. This requires a concerted effort and sustained investment in risk communication capacity building, particularly in Nigeria.

References

- World Health Organisation. International Health Regulations implementation: Ensuring effective responses to public health emergencies: strengthening risk communication capacities of national systems [Internet]. 2012 [cited 2020 Nov 3]. Available from: https://www.who.int/ihr/about/07_risk_communication.pdf
- World Health Organisation. General information on risk communication [Internet]. WHO. World Health Organisation; 2020 [cited 2020 Aug 6]. Available from: <https://www.who.int/risk-communication/background/en/>
- World Health Organisation. Communicating risk in public health emergencies: a WHO guideline for emergency risk communication (ERC) policy and practice. Geneva, Switzerland: World Health Organisation; 2017.
- Fatumo S, Ebenezer TE, Ekenna C, Isewon I, Ahmad U, Adetunji C, et al. The Nigerian Bioinformatics and Genomics Network (NBGN): a collaborative platform to advance bioinformatics and genomics in Nigeria. *Glob Health Epidemiol Genom* [Internet]. 2020 Jul 15 [cited 2020 Aug 17];5. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7372179/>
- Centers for Disease Control and Prevention. Public Health Emergency Preparedness and Response Capabilities [Internet]. 2019 [cited 2021 Jan 13]. Available from: https://www.cdc.gov/cpr/readiness/00_docs/CDC_PreparednessResponseCapabilities_October2018_Final_508.pdf
- Moore S, Mawji A, Shiell A, Noseworthy T. Public health preparedness: a systems-level approach. *J Epidemiol Community Health*. 2007 Apr;61(4):282–6.
- Jha A, Lin L, Short SM, Argentini G, Gamhewage G, Savoia E. Integrating emergency risk communication (ERC) into the public health system response: Systematic review of literature to aid formulation of the 2017 WHO Guideline for ERC policy and practice. *PLOS ONE* [Internet]. 2018 Oct 31 [cited 2020 Nov 27];13(10):e0205555. Available from: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0205555>
- Adeloye D, David RA, Olaogun AA, Auta A, Adesokan A, Gadanya M, et al. Health workforce and governance: the crisis in Nigeria. *Human Resources for Health* [Internet]. 2017 May 12 [cited 2020 Aug 27];15(1):32. Available from: <https://doi.org/10.1186/s12960-017-0205-4>
- Nigeria Centre for Disease Control. Country-led Midterm Joint External Evaluation of IHR Core Capacities [Internet]. 2020 [cited 2021 Jan 13]. Available from: https://ncdc.gov.ng/themes/common/docs/protocols/119_1581414518.pdf
- Welcome MO. The Nigerian health care system: Need for integrating adequate medical intelligence and surveillance systems. *J Pharm Bioallied Sci* [Internet]. 2011 [cited 2020 Nov 27];3(4):470–8. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3249694/>
- Chiakaan G, Oruonye ED. Towards Overcoming Challenges of Risk Communication on Covid-19 Pandemic in Nigeria. *Jalingo Journal of Social and Management Sciences* [Internet]. 2020 Dec [cited 2020 Nov 27];3(1). Available from: https://www.researchgate.net/publication/346108522_Towards_Overcoming_Challenges_of_Risk_Communication_on_Towards_Overcoming_Challenges_of_Risk_Communication_on_Covid-19_Pandemic_in_Nigeria
- World Health Organisation. Risk communication is a public health intervention: Countries in Africa prepare for outbreak response [Internet]. WHO. World Health Organisation; 2017 [cited 2020 Aug 7]. Available from: <http://www.who.int/risk-communication/outbreak-response-workshop/en/>
- McGrail K, Black C. Access to data in health information systems. *Bulletin of the World Health Organisation* [Internet]. 2005 [cited 2020 Aug 7];83(8):561–640. Available from: <https://www.who.int/bulletin/volumes/83/8/editorial20805html/en/>
- Meribole EC, Makinde OA, Oyemakinde A, Oyediran KA, Atobatele A, Fadeyibi FA, et al. The Nigerian health information system policy review of 2014: the need, content, expectations and progress. *Health Info Libr J*. 2018 Dec;35(4):285–97.
- Toppenberg-Pejcic D, Noyes J, Allen T, Alexander N, Vanderford M, Gamhewage G. Emergency Risk Communication: Lessons Learned from a Rapid Review of Recent Gray Literature on Ebola, Zika, and Yellow Fever. *Health Communication* [Internet]. 2019 Mar 21 [cited 2020 Aug 10];34(4):437–55. Available from: <https://www.tandfonline.com/doi/10.1080/10410236.2017.1405488>
- World Bank Group. Digital Dividends [Internet]. International Bank for Reconstruction and Development / The World Bank; 2016. Available from: <http://documents1.worldbank.org/curated/en/961621467994698644/pdf/102724-WDR-WDR2016Overview-ENGLISH-WebResBox-394840B-OUO-9.pdf>
- Rowntree O, Bahia K, Croxson H, Delaporte A, Meyer M, Shanahan M, et al. The Mobile Gender Gap Report 2019 [Internet]. GSMA; 2019 [cited 2020 Aug 10]. Available from: <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/02/GSMA-The-Mobile-Gender-Gap-Report-2019.pdf>
- Leonard Cheshire. Disability Data Review: A collation and analysis of disability data from 40 countries [Internet]. 2020 [cited 2020 Nov 3]. Available from: https://www.disabilitydataportal.com/fileadmin/uploads/lcdp/Documents/report-web_version.pdf
- UN Women, Translators without Borders. COVID-19: How to include marginalized and vulnerable people in risk communication and community engagement [Internet]. 2020 [cited 2020 Aug 10]. Available from:

- https://www.iom.int/sites/default/files/our_work/covid-19_communityengagement_130320.pdf
20. World Health Organisation. 1st WHO Infodemic Management training [Internet]. 2020 [cited 2020 Nov 3]. Available from: <https://www.who.int/news/item/30-10-2020-start-of-1st-who-infodemic-management-training>
 21. Ochu CL, Akande OW, Ihekweazu V, Kaduru C, Akomolafe O, Egwuenu A, et al. Responding to a Pandemic through Social and Behaviour Change Communication: Nigeria's Experience. Health Security [Internet]. 2020 Dec 18 [cited 2020 Dec 22];hs.2020.0151. Available from: <https://www.liebertpub.com/doi/10.1089/hs.2020.0151>
 22. Winters M, Nordenstedt H, Alvesson HM. Reporting in a health emergency: The roles of Sierra Leonean journalists during the 2014-2015 Ebola outbreak. PLOS Neglected Tropical Diseases [Internet]. 2020 May 21 [cited 2020 Aug 10];14(5):e0008256. Available from: <https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0008256>
 23. Onyeji E. Journalists discuss challenges of health reporting in Nigeria. 2019 May 22 [cited 2021 Jan 13]; Available from: <https://www.premiumtimesng.com/health/health-news/331121-journalists-discuss-challenges-of-health-reporting-in-nigeria.html>
 24. Stears Business. Nigerians do not trust Government [Internet]. 2018 [cited 2020 Nov 3]. Available from: </article/nigerians-do-not-trust-government>
 25. Chatham House. Nigeria's Political Leaders Need to Win Trust to Tackle COVID-19 [Internet]. Chatham House. 2020 [cited 2020 Aug 3]. Available from: <https://www.chathamhouse.org/expert/comment/nigeria-s-political-leaders-need-win-trust-tackle-covid-19>
 26. Partnership for Evidence-Based, Response to COVID-19. Finding the Balance: Public Health and Social Measures in Nigeria [Internet]. 2020 [cited 2020 Nov 3]. Available from: <https://preventepidemics.org/wp-content/uploads/2020/09/09082020-nigeria.pdf>
 27. Ihekweazu C. Lack of trust in health sector: the underlying cause of the large Lassa Fever outbreak in Nigeria [Internet]. Nigeria Health Watch. 2016 [cited 2020 Nov 3]. Available from: <https://nigeriahealthwatch.com/lack-of-trust-in-health-sector-the-underlying-cause-of-the-large-lassa-fever-outbreak-in-nigeria/>

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