Multihazard Multisectoral Risk Communication Framework for Pakistan, 2021

Government of Pakistan
Ministry of National Health Services,
Regulations & Coordination

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Contents

Acknowledgements

The development of this holistic framework, the first of its kind, could not have been possible without the gradual progress made towards establishing best practices and protocols for risk communication over the years – especially during the COVID-19 pandemic. The multidisciplinary group of experts within the Ministry of NHSRC, provincial health departments and health development organizations who were involved in drafting risk communication guidelines, developing content and coordinating dissemination all contributed by setting up precedents which served as the foundation for this framework.

List of Abbreviations

AI	Artificial Intelligence
CSOs	Community Service Organizations
DHOs	District Health Offices
DMW	Digital Media Wing
EPI	Expanded Program on Immunization
GHSA	Global Health Security Agenda
ICRC	International Committee of the Red Cross
INGOs	International Nongovernmental Organizations
JEE	Joint External Evaluation
KAP	Knowledge Attitude and Perception
KMS	Knowledge Management System
Ministry of NHSRC	Ministry of National Health Services, Regulations and Coordination
ML	Machine Learning
MoIB	Ministry of Information and Broadcasting
NCOC	National Command and Operation Center
NDMA	National Disaster Management Authority
NEOC	National Emergency Operations Center
NGOs	Nongovernmental Organizations
NHEPRN	National Health Emergency Preparedness and Response Network
NIH	National Institute of Health
PDMAs	Provincial Disaster Management Authorities
PEMRA	Pakistan Electronic Media Regulatory Authority
PTA	Pakistan Telecom Authority
RCCE	Risk Communication and Community Engagement
TORs	Terms of Reference
UNDP	United Nations Development Program
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

Executive Summary

Pakistan remains susceptible to emergencies caused by a variety of natural hazards. There are two fundamental reasons for Pakistan's high vulnerability.

The first reason is increasingly high exposure due to rapid changes in the region such as unprecedented population growth, urbanization, deforestation, climate change, and rising human–animal proximity among others. Biological hazards, which take the form of outbreaks of communicable diseases that may evolve into epidemics or pandemics, continue to affect various parts of Pakistan. At the same time, in the past decade alone, Pakistan suffered from 16 documented geophysical and hydro-meteorological disasters including droughts, floods, landslides, earthquakes, and an unprecedented locust infestation.

The other reason for Pakistan's high vulnerability, which is also critical to this particular endeavor, is its insufficient capacity for emergency response. The most recent, comprehensive, and reliable assessment of Pakistan's capacity was completed in 2016 based on the Joint External Evaluation (JEE) of IHR Core Capacities of Pakistan. IHR refers to the International Health Regulations, which serve as a significant international legal treaty that empowers the World Health Organization (WHO) to act as the main global surveillance system to contain and respond to the international spread of diseases. The JEE tool was developed for the evaluation of national capacities by integrating the core capacities initially identified by IHR and the areas of assessment highlighted by the Global Health Security Agenda (GHSA). Pakistan volunteered for a JEE as the first country in the WHO Eastern Mediterranean Region, and the fourth globally. The JEE rated Pakistan's core capacities across 19 broad technical areas (and a total of 48 technical subcategories). On a scale of 1 (no capacity) to 5 (sustainable capacity), the five subareas of Pakistan's Risk Communication capacity scored an average of 2. In fact, none of the subareas scored beyond 3 and the foundational tenet— "risk communication systems (plans, mechanism)"—scored 1, that is, no capacity.

Without disregarding the fact that the status of Pakistan's capacity for risk communication has evolved since the JEE's report in 2016 (especially considering the unprecedented focus on risk communication efforts during the COVID-19 pandemic), it is crucial to address the gaps identified to ensure Pakistan is prepared for the next public health emergency.

This document provides the way forward for addressing those gaps. It was developed after consulting all the relevant stakeholders within the Government and development sector. Provincial departments of health were not directly consulted during this process and therefore, it is crucial to note that this framework is only a federal-level document.

The document has two main components. The first main component of the document is an in-depth situation analysis of the existing risk communication mechanism. The second is a framework for i) ensuring preparedness through institutionalization, and ii) activating campaigns during emergencies.

The situation analysis is based on the findings of the aforementioned JEE as well as subsequent developments during the COVID-19 pandemic, which prompted decision-makers to see risk communication as an undeniable necessity. It provides insights into the day-to-day workings of the existing informal risk communication infrastructure, focusing on the strengths and weaknesses of five major aspects:

1. Stakeholders' Roles and Coordination

2. Message Development

3. Dissemination Channels

4. Dynamic Listening and Rumor Management

5. Monitoring and Evaluation

Key findings from the situation analysis are as follows:

•   Stakeholders' roles and coordination saw some improvements over the course of COVID-19 risk communication campaigns but not enough to ensure consistency and institutionalization. There is a lack of clear ownership within the Government

at the federal level due to the absence of a dedicated health education section at the Ministry of National Health Services, Regulations and Coordination as well as the presence of multiple other bodies (such as the National Disaster Management Authority) with mandates that either overlap or do not cover risk communication. Health development partners also face similar issues in coordination and often end up duplicating efforts. The establishment of the Risk Communication and Community Engagement (RCCE) Task Force for COVID-19 did make progress in developing protocols for coordination and can be used as a starting point for further institutionalization.

- Message development remains an ad hoc exercise that begins after a disaster has occurred or as a reaction to negatively charged reporting in the media. Messages should be disseminated regardless of whether the threat has escalated to a full-scale emergency or not – as many disasters or emergencies in Pakistan are recurring and cyclical. Another issue is the lack of consistency in the language and terminology used in message development, suggesting a dire need for training in Social and Behavior Change Communication (SBCC) in regional languages and contexts.

- Dissemination channels can be categorized into mass media, ring back tone, and social media – each of which has its strengths and weaknesses in terms of the ease of utilizing them and their impact on the target audience.

    o   Mass media has the highest outreach of all the possible channels of dissemination but proved to be challenging due to both monetary and nonmonetary reasons. The bottlenecks have been identified and can be resolved with some interventions. Private corporations can also play a very positive role through their corporate social responsibility (CSR) programs. During the COVID-19 pandemic, several corporations supported the Government by paying for the production and broadcasting of advertisements based on the Ministry of NHSRC's guidelines.

    o   The ring back tone remains one of the most efficient ways of spreading time-sensitive, life-saving messages to the public not just once but repeatedly. Pakistan Telecom Authority (PTA) has the authority to roll out a standard ring back tone (RBT) on all calls made.

    o   The use of social media can play a significant role in creating awareness and shaping the opinions of people in Pakistan, especially those in urban areas. There are two broad ways of paid promotion on social media: direct advertisement, and influencer marketing. Over the course of the COVID-19 pandemic, the Ministry of NHSRC established strong ties with big tech companies which provide advertisement credits free of cost as part of their CSR programs.

    o   On-field engagement is most effective to target communities with little to no access to social and mass media, either due to a dearth of resources or low literacy. Unfortunately, community activities remain susceptible to duplication more than most other types of activities because CSOs often operate in silos and have little incentive to collaborate or divide up coverage of areas amongst each other.

- Dynamic Listening and Rumor Management through machine learning and artificial intelligence-based tools was piloted by the Ministry of NHSRC as part of the risk communication activities during COVID-19. Keywords pertaining to the pandemic and the Government's latest interventions were fed to the tools and data aggregated on a weekly basis was broken down by location. Subsequently, messaging to counter rumors and address concerns can be deployed.

    o   A dedicated telephone helpline has an extremely wide reach in terms of the target population as it is a simple means of collecting information that requires neither literacy skills nor access to the internet. The Sehat Tahafuzz Helpline functioned as the most accessible form of two-way communication for the public during the COVID-19 pandemic. A messaging App chatbot is another effective platform for two-way communication, considering 106 million 3G/4G subscribers in Pakistan as of October 2021 as per PTA. As part of the COVID-19 response, a

WhatsApp Chatbot was created to answer queries about COVID-19 in seven regional languages making Pakistan one of the first countries to do so.

- Monitoring and evaluation of risk communication activities remains inconsistent. There is a reliance on self-reporting by provincial health departments, development organizations, and government programs with little to no additional checks and balances in place. Evaluating the impact of risk communication activities on KAP (Knowledge, Attitude and Perception) has been accomplished for mediums that allow two-way communication, for example, social media (through machine learning tools that provide sentiment analysis like Keyhole) and community engagement (through quantitative and qualitative in-person field surveys carried out by companies such as Gallup and IPSOS).

This risk communication framework provides guidance on five strategic areas that must be strengthened to establish a reliable infrastructure for risk communication:

1. Establishment of A Formal Risk Communication Body

2. Mapping of Stakeholders' Mandate and Geographical Presence

3. Capacity Building and Training of Human Resources

4. Acquisition of Tools for Dynamic Listening

5. Creation of a Knowledge Management System (KMS)

It is impossible to adopt a single fit-all approach for risk communication, hence this document provides an overarching framework for developing sustainable structures and replicable processes necessary to launch campaigns for multisectoral multihazard emergencies. It guides stakeholders to evaluate which platform would be most productive to utilize for each segment of the target audience before launching campaigns. Thus, this framework encourages decision-makers to invest resources in dissemination platforms according to the emergency and target audience in question.

SECTION 1:
OVERVIEW

1.1 Context and Need

Pakistan remains susceptible to emergencies caused by a variety of natural hazards. These large-scale, life-threatening natural hazards don't always manifest in the same way because they can be biological as well as geophysical or hydrometeorological. In fact, they often begin as the latter and lead to the former. Ultimately, they all have an adverse effect on public health and thus require a comprehensive response including risk communication especially in a country with a vulnerability as high as Pakistan's.

There are two fundamental reasons for Pakistan's high vulnerability to natural hazards. The first reason is increasingly high exposure due to rapid changes in the region such as unprecedented population growth, urbanization, deforestation, climate change, and rising human–animal proximity among others.

Biological hazards, which take the form of outbreaks of communicable diseases that may evolve into epidemics or pandemics, continue to affect various parts of Pakistan. Infamously, the threat of HIV outbreaks continues to linger with an outbreak in Ratodero district of Larkana, Sindh in 2019 being declared a Grade II emergency by the World Health Organization (WHO).[1] The threat of acute water diarrhea outbreaks remains prevalent and claims the lives of around 53,000 Pakistani children under the age of 5.[2] The high frequency of diarrhea outbreaks and death rates can be attributed primarily to Pakistan's vulnerability to earthquakes, floods, droughts, and internal displacement owing to conflict, which leaves hundreds of thousands of affected persons deprived of clean water. Finally, much like the rest of the world,

Pakistan has also been in the midst of the COVID-19 pandemic since February 2020.

At the same time, in the past decade alone, Pakistan suffered from 16 documented geophysical and hydro-meteorological disasters including droughts, floods, landslides, earthquakes, and an unprecedented locust infestation.[3] These incidents are, of course, in addition to the October 2005 earthquake and July 2010 floods that occurred in the previous decade and remain as some of the largest geophysical and hydro-meteorological disasters in Pakistan's history. Unlike epidemics which are instantly recognized as a threat to health, the impact of geophysical disasters on public health is not always intuitive for all segments of society. However, they do inevitably lead to the outbreak of diseases or malnutrition. For example, floods lead to stagnant water, which creates the ideal environment for the spread of water-borne diseases such as typhoid and cholera, and vector-borne diseases like malaria. Similarly, locust infestations and droughts directly threaten food supply and drastically increase the prevalence of malnutrition.

The other reason for Pakistan's high vulnerability, which is also critical to this particular endeavor, is its insufficient capacity for emergency response. The most recent, comprehensive, and reliable assessment of Pakistan's capacity was completed in 2016 based on the Joint External Evaluation (JEE) of IHR Core Capacities of Pakistan. IHR refers to the International Health Regulations, which were last revised in 2005 and serve as a significant international legal treaty that empowers the World Health Organization

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[1]   WHO EMRO (June 2019).
[2]   UNICEF (n.d.).
[3]   The Center for Excellence in Disaster Management and Humanitarian Assistance (June 2021).

(WHO) to act as the main global surveillance system. It is an instrument of international law that aims for international collaboration "to prevent, protect against, control, and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks and that avoid unnecessary interference with international traffic and trade."[4] The JEE tool was a consequence of the Global Health Security Agenda (GHSA), "a group of more than 70 countries, international organizations and nongovernment organizations, and private sector companies that have come together to achieve the vision of a world safe and secure from global health threats posed by infectious diseases."[5] The GHSA was launched in February 2014 as it was clear that, in an increasingly connected world, combatting the grave threats to public health could not possibly be the responsibility of a single actor. It was necessary to adopt a multistakeholder, multisectoral approach to strengthen the overall global capacity for preparedness and management of global health risks. Therefore, the JEE tool was developed for the evaluation of national capacities by integrating the core capacities initially identified by IHR and the areas of assessment highlighted by the GHSA.

In response to resolution EM/RC62/R.3 of the Regional Committee WHO Eastern Mediterranean to assess and monitor the implementation of the IHR (2005), Pakistan volunteered for a Joint External Evaluation as the first country in the WHO Eastern Mediterranean Region, and the fourth globally. The Joint External Evaluation rated Pakistan's core capacities across 19 broad technical areas (and a total of 48 technical subcategories). It identified several areas of concern that required immediate attention and improvement. On a scale of 1 (no capacity) to 5 (sustainable capacity), the five subareas of Pakistan's Risk Communication capacity scored an average of 2. In fact, none of the subareas scored beyond 3 and the foundational tenet— "risk communication systems (plans, mechanism)"—scored 1, that is, no capacity.[6]

Pakistan's high degree of exposure to natural hazards and the low rating assigned to its risk communication infrastructure is a cause of serious concern, considering the influential role that successful risk communication can play in emergency response. While a robust, well-staffed health care delivery infrastructure can play a pivotal role in managing the burden of an influx of patients during a public health emergency, effective risk communication actually has the potential to limit the influx at the outset through social and behavior change messaging. WHO's Strategic Framework for Emergency Preparedness captures the reason behind this notion well when it notes that, "community members are the first responders—and the first victims—of any emergency and, as such, essential members of the preparedness process".[7] Robust risk communication systems play an imperative role in containment precisely because they see community members as active actors with the power to change the course of the catastrophe they have come to face. The COVID-19 pandemic has revealed beyond a doubt that the intensity of the emergency has a direct correlation with how aware and convinced people are of taking actions necessary for their own protection, and the overall containment of the emergency.

Without disregarding the fact that the status of Pakistan's capacity for risk communication has evolved since the JEE's report in 2016 (especially considering the unprecedented focus on risk communication efforts during the COVID-19 pandemic), it is crucial to address the gaps identified to ensure Pakistan is prepared for the next public health emergency. Having established that any type of disaster inevitably threatens public health, developing a multihazard multisectoral risk communication system is of utmost importance in Pakistan.

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[4]   World Health Organization Regional Office for the Eastern Mediterranean (n.d.).
[5]   Global Health Security Agenda (n.d.).
[6]   World Health Organization (2017).
[7]   World Health Organization (2016).

1.2 Process of Development

This document was developed after consulting all the relevant stakeholders within the Government and development sector at the federal level. Stakeholders consulted within the Government include vertical programs of the Ministry of National Health Services, Regulations and Coordination (hereby referred to as Ministry of NHSRC), the National Institute of Health (which is responsible for ensuring Pakistan complies with commitments made under the International Health Regulations), the National Disaster Management Authority (NDMA), and other line ministries (such as Ministry of National Food Security and Research, and Ministry of Climate Change). Simultaneously, health development partners including various United Nations agencies and international nongovernmental organizations (INGOs) were consulted as well. (The full list of stakeholders consulted has been attached as an annex).

The data on which insights in this report are based was collected in two ways. A large portion of the data was gathered organically over the course of nearly a year and half; the process began in December 2020 when the lead author took charge of the Ministry of NHSRC's COVID-19 risk communication and began liaising with the National Command and Operation Center (NCOC) on the Ministry's behalf. Therefore, conversations between relevant stakeholders during the COVID-19 pandemic, including analysis of the risk communication interventions they launched, heavily informs this document. At the same time, some critical quantitative and qualitative data was also gathered by formally interviewing concerned stakeholders specifically for the purpose of developing this document and/or kickstarting the process of institutionalizing risk communications. For instance, insights were also drawn from a two-day consultative conference organized by the National Institute of Health from September 29, 2021 to September 30, 2021. In line with COVID-19 SOPs, most formal interviews were conducted online wherever possible, especially when Pakistan faced COVID-19 waves and a subsequent spike in cases or hospitalizations.

Provincial departments of health were not directly consulted during this process and therefore, it is crucial to note that this framework is only a federal-level document. The situation analysis, however, does make references to how risk communication has been approached both at the federal and provincial levels, especially during the COVID-19 pandemic.

1.3 Scope and Objective

This document comprises two broad components:

- Situation Analysis of the existing risk communication mechanism, and

- Framework (based on the situation analysis) for:
  (a) Ensuring preparedness through institutionalization
  (b) Activating campaigns during emergencies

The JEE provided an overview of where each aspect of risk communication stood in reference to the yardstick established by IHR. However, the situation analysis in this framework provides more nuanced insights into the day-to-day workings of the existing informal risk communication units; this will allow the subsequently proposed framework to be firmly grounded in practice rather than theory. With close reference to the developments during the COVID-19 pandemic (which the JEE does not include), the situation analysis describes strengths and weaknesses of:

1. Stakeholders' Roles and Coordination

2. Message Development

3. Dissemination Channels

4. Dynamic Listening and Rumor Management

5. Monitoring and Evaluation

The situation analysis will be able to provide an in-depth context for tapping into the most fruitful resources and focusing on the best practices that have proven effective across the five aforementioned areas. Similarly, it will also provide a way to navigate frequently emerging resource constraints by sharing insights on whether they can be surmounted or not, and what alternative pathways should be explored instead.

It is impossible to adopt a single fit-all approach for risk communication in the face of all disasters. Hence,

the subsequent framework only seeks to provide an overarching framework for developing sustainable structures and replicable processes necessary to launch campaigns for multisectoral multihazard emergencies. In laying out guidelines, it remains conscious of going into the granularities only up to the point where the guidelines are replicable for all emergencies. For example, the framework does not outline which messages need to be communicated (for they would be unique to each scenario and organization) but how they should be developed: what type of theoretical frameworks must be adopted, what qualifications must be set as prerequisites for the human resources involved, and which body must authorize the final messages, etc. In a similar vein, it does not direct stakeholders to utilize a particular platform for dissemination of messages. It only outlines, based on existing evidence, which segments of the population each platform would yield for the highest reach and engagement. Thus, this framework ultimately leaves it up to decision-makers in the future to invest resources in dissemination platforms according to the emergency and target audience in question.

SECTION 2:
SITUATION ANALYSIS

As mentioned above, the Joint External Evaluation of Pakistan's IHR Core Capacities scored and provided brief qualitative assessments of the country's risk communication indicators in 2016:[8]

Indicator	Score	Conclusion
Risk Communication Systems (plans, mechanisms)	1	No capacity. No formal government risk communication arrangement exists.
Internal and Partner Communication and Coordination	2	Limited capacity. Some ad hoc communication coordination exists such as during meetings, with some partners, and/or irregular information sharing.
Public Communication	2	Limited capacity. A public communication unit or team exists; government spokesperson identified and trained; and, procedures for public communication are in place.
Communication Engagement with Affected Communities	2	Limited capacity. A community level engagement system is semiformed with mapping of existing processes, programmed, partners and stakeholders/ social mobilization, behavior change communication, and community engagement included in the national risk communication strategy in the context of health emergencies. Some key stakeholders in this domain identified at the national and immediate (provincial/regional) level.
Dynamic Listening and Rumor Management	3	Developed capacity. Routine and event-based systems for listening and rumor management exist or an ongoing system with limited or unpredictable influence on response.

The JEE report is a valuable starting point for identifying strengths and weaknesses of the current risk communication infrastructure. However, it leaves certain gaps that must be filled in order to move forward with the development of a comprehensive framework. Firstly, it does not delve into the reasons behind the status quo of each of the indicators to reveal why exactly these five risk communication indicators stand where they do. This, in turn, makes it extremely challenging to tackle individual parts acting as the bottlenecks to success. Secondly, the risk communication landscape across the country has certainly evolved over the course of the COVID-19 pandemic that reached Pakistan in February 2020 and unprecedentedly forced various stakeholders to dedicate resources to risk communication— albeit in an ad hoc manner. Thus, the following situation analysis fills these gaps by commenting on five aspects of the country's risk communication landscape that cut across the indicators identified by JEE—all informed by (but not limited to) recent developments triggered by the COVID-19 pandemic. Most importantly, it provides critical insights on both existing processes of achieving certain goals irrespective of their functionality, as well as their overall utility or potential. For example, the analysis delves both into the different pathways for rolling out campaigns for risk communication and the impact on different segments of society.

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[8]   World Health Organization (2017).

2.1 Stakeholders' Roles and Coordination

In order to formulate a robust framework that can be used in the future, it is imperative to identify the existing stakeholders, analyze their recent contributions, and review their capacity for coordination.

Postdevolution Federal and Provincial Roles and Responsibilities

At the federal level, the defunct Ministry of Health had an extensive "Health Education" section which supported the communication endeavors of the Ministry of Health and attached and subordinate departments. After the 18th Amendment to the Constitution of Pakistan, the concurrent list was abolished and the subject of health was devolved to the provinces. The Ministry of Health, along with its constituent wings, which included the Health Education section, were thus also abolished. Since then, the Health Education section is yet to be revived. As a result, individual vertical programs under the Ministry of NHSRC have budgetary provisions for risk communication activities but these activities are conducted in isolation and not coordinated with the wider health system in line with international best practices. Irrespective of these inconsistencies, the Ministry of NHSRC and National Institute of Health (being responsible for IHR reporting), are working in conjunction with provinces to ensure compliance.

In the case of emergencies, the National Health Emergency Preparedness and Response Network (NHEPRN) is the attached body of the Ministry of NHSRC that has the mandate to review threats to public health and strategize a response. At the same time and at the same (federal) level, the National Disaster Management Authority (NDMA) is the lead agency for disaster management at large excluding the health aspect. The National Disaster Management Act of 2010 mandates that NDMA draft guidelines, arrange resources, and provide support to affected areas as the federal or provincial authorities may determine during emergencies. The NDMA has historically done a commendable job of fulfilling these responsibilities; it has rescued affected persons, restored transport networks, and delivered necessities during disasters. However, these interventions are largely logistical and NDMA's mandate does not include risk communication.

At the provincial level, provincial health departments have the mandate to utilize their funding and other resources for executing risk communication activities. However, due to devolution, provincial health departments have no obligation to replicate efforts of the federal Ministry of NHSRC—a fact that makes close cooperation across the health sections all the more important in ensuring consistency of messaging. As of now, provincial health departments develop their own key messages for risk communication as per their requirement and need. Such independent initiatives result in messages that are discordant, influenced by the respective provincial context and not in line with international best practices.

Much like the structure at the federal level, the Provincial Disaster Management Authorities (PDMAs) also operate in parallel with the provincial health departments and act as the lead agencies for disaster management at large (that is, management of aspects outside of public health, which does not lie in their purview). The Center for Excellence in Disaster Management notes that "many smaller-scale disasters remain within the remit of their respective district or provincial authorities as they do not rise to the level of requiring federal or international attention"[9], and therefore the PDMA takes the lead as opposed to the NDMA. As is the case with the NDMA, the PDMAs are yet to consistently take ownership of risk communication during emergencies, prompting other stakeholders to intervene on an ad hoc basis.

Partner Organizations

There are three categories of partner organizations that support the Government's service delivery across all federating units:

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[9]   The Center for Excellence in Disaster Management and Humanitarian Assistance (June 2021).

1. International Financial Institutions and Health Development Partners, for example, World Bank, Asian Development Bank, Bill & Melinda Gates Foundation, United States Agency for International Development, Foreign Commonwealth & Development Office, etc.

2. United Nations' agencies, for example, World Health Organization (WHO), United Nations Children's Fund (UNICEF), United Nations Development Program (UNDP), United Nations Population Fund (UNFPA), etc.

3. Community service organizations (CSOs) including local nongovernmental organizations (NGOs) concentrating on smaller communities in specific regions on particular areas of human development, and international nongovernmental organizations (INGOs) with broader agendas.

Across all categories and federating units, there is a serious lack of coordination between partner organizations, at least as far as activities pertaining to risk communication are concerned. This results from the lack of a uniform unit or structure at federal and provincial levels. For instance, till date, there is no repository that identifies all active partners, their scope of work, and maps out their presence across the country. The availability of such a repository would constitute a valuable database that could provide a bird's eye view of which communities can be targeted with awareness campaigns, and highlight any gaps in coverage. Moreover, when operational plans are developed by the Government, roles and responsibilities as well as funding requirements are not clearly defined. As a result, there is duplication of efforts and resources. Thus, certain communities are not targeted at all while others receive an overload of messages (that may actually trigger resistance instead of acceptance). Such leakages and some of the steps taken to mitigate them successfully and unsuccessfully are summarized in the case study below.

Case Study: Coordination for Risk Communication during COVID-19

In the absence of a robust emergency risk communication system that assigns clear leadership and ownership, and in the face of the most unprecedented threat to public health, the Ministry of NHSRC reacted by notifying a Risk Communication and Community Engagement (RCCE) Task Force on March 6, 2020. The purpose of the task force was to create awareness regarding the spread of COVID-19 based on the latest findings, which, of course, kept evolving over the course of the pandemic; it sought to coordinate efforts from message development to dissemination. The following TORs were announced in the official notification of the task force issued by the Director General Health's office:

Role of the Risk Communication Taskforce	
Convene and Coordinate	Convene weekly/ad hoc meetings to coordinate risk communication initiatives from planning, strategy development, capacity building, implementation, and monitoring for synchronization of activities in line with the National Action/Response Plan developed for COVID-19.
Strategic Communication Preparedness Plan	Oversight in development of a preparedness plan that guides the work of the Ministry.
Resources and Tools	Support and guide the development of risk and preventive communication and health education resources/tools for public outreach that can be adapted at provincial/area level.
Support in Implementation	Guide the provincial teams in implementation, monitoring, and reporting of communication interventions.
Knowledge Management	Oversee and guide on available data sources and share with all stakeholders. Provide technical support in knowledge management on COVID-19 for Pakistan and other countries having a similar context.

The task force comprised representatives from the following Government entities and health development partners at the federal level:

- Ministry of NHSRC

- Expanded Program on Immunization (EPI)

- National Emergency Operations Center (NEOC)

- National Institute of Health (NIH)

- World Health Organization (WHO)

- United Nation's Children Fund (UNICEF)

- United Nations Development Program (UNDP)

- International Committee of the Red Cross (ICRC)

The membership of the task force remained fluid and more partners joined in as responding to COVID-19 became a priority, even though they were not formally notified initially. Similar RCCE Task Forces were established at the provincial level with the intention that they would liaise with the federal RCCE Task Force.

SWOT Analysis of COVID-19 RCCE Task Force

Strengths

- Monetary support for interventions on urgent basis
- Consensus on technical guidance
- Multiplatform dynamic listening
- One government approach

Weaknesses

- Poor monitoring and evaluation
- Lack of accountability and ownership
- Poor leadership and coordination
- Insufficient representation of stakeholders
- Poor understanding of Government rules of business

Opportunities

- Formalization of a multihazard multisectoral risk communication unit
- Mapping of all stakeholders' presence and mandate
- Allocation and institutionalization of risk communication budget

Threats

- Vast range of unengaged risk communication stakeholders in the country (private sector)
- Unmonitored media, especially social media
- Disregard for the importance of risk communication across non health stakeholders

The task force saw some success in the first few months of its notification. Members contributed enthusiastically by utilizing the funds available to develop content based o n messaging mutually agreed upon by WHO, the Ministry of NHSRC, and the National Command and Operation Center (NCOC), which was established solely to coordinate the national response to the COVID-19 pandemic.

Development agencies supported the production and dissemination of advertisements on television, radio, and social media, which incorporated public service messages by celebrities as well as jingles that appealed to children. They also funded the development of a WhatsApp chatbot and the expansion of the National

Emergency Operation Center's *Sehat Tahafuzz* 1166 Helpline (discussed below) to include communication regarding COVID-19. Simultaneously, member organizations also kickstarted dynamic listening through social media sentiment analysis as well as Knowledge, Attitude and Practice (KAP) surveys in the field, which provided valuable insights on the evolution (or lack thereof) of peoples' behavior.

Gradually, the RCCE Task Force became far less functional and productive, succumbing to the same fate as other ad hoc efforts at organization. Firstly, even when partners were actively contributing to the COVID-19 awareness campaign, there was little attention devoted to tracking the progress made by

each partner in terms of disseminating the messages and covering communities across Islamabad Capital Territory, let alone across Pakistan. As discussed earlier, this lack of a bird's eye view can be attributed to the absence of a repository that maps out the presence of development partners across the country, and utilizing it to track activities conducted. Another reason contributing to the lack of insight on progress made was a loose, merely symbolic affiliation with the provincial stakeholders leading risk communication in their respective regions.

Secondly, there were no strict commitments regarding duration of membership, and this allowed many partner organizations to exit the task force with little to no accountability. Some partners exited the task force or became passive members when their budgets dedicated to COVID-19 risk communication activities were used up or priorities changed.

Thirdly, there was a dearth of consistent leadership and ownership of the task force by the Government, specifically the Ministry of NHSRC, which launched the task force in the first place. The glaringly obvious reason was that there was no dedicated and permanent human resource at the Ministry of NHSRC that had any expertise in health communications. The task force was being supervised by a health communications expert who served on a donor-funded contractual position shared between the Ministry of NHSRC and EPI.

Finally, it also became apparent that the representation of Government entities was insufficient in the RCCE Task Force. COVID-19 certainly began as a public health crisis but ultimately adversely affected all aspects of life including movement and livelihood —a fact that is often true for almost all emergencies and disasters. Therefore, a plethora of Government entities were involved in the response, and even represented at the National Command and Operation Center (NCOC) but they were not taken in the loop as far as risk communication activities were concerned. Such an exclusion during the COVID-19 risk communication response was a symptom and continuation of a problem that occurred in nearly all other emergencies in the past as well. The Ministry of Information and Broadcasting (MoIB), Digital Media Wing (DMW), Pakistan Telecom Authority (PTA), and Pakistan

Electronic Media Regulatory Authority (PEMRA) are some of the bodies dedicated to communication at large that must have a seat at the table where decisions regarding emergency risk communication are made. Moreover, associations of health care workers, such as Pakistan Medical Association, and Pakistan Nursing Association, must also be involved to ensure that messages trickle down to the grassroots level through health care workers who are at the forefront of interacting with communities affected by disasters.

2.2 Message Development

The development of messages for risk communication has so far remained an ad hoc exercise that only begins after a disaster has occurred or as a reaction to negatively charged reporting in the media. However, the majority of disasters or emergencies in Pakistan are recurring and cyclical, for example, floods, dengue outbreaks and smog, etc., and are therefore predictable enough for the Government to plan in advance. For instance, there have been dengue fever outbreaks of varying degrees in several parts of the country during the same season over the last decade. Yet, there is no evidence of consistent risk communication from the Government prior to the onset of the season when the risk of the outbreak begins increasing. Awareness drives are launched only after an outbreak has been declared and the health care system is already under pressure. Instead, messages should be disseminated regardless of whether the threat has escalated to a full-scale emergency or not. Institutions such as schools and workplaces as well as mass media platforms ought to reinforce habits that improve safety round the year.

Another glaring issue is that of lack of consistency in the language and terminology used in the development of messages. This is due to the fact that message development is supported by and based on the work of development partners, the vast amount of public health literature that exists in English, and messages that are primarily prepared in English. Such messages reach and resonate with a relatively small segment of the population compared to messages in Urdu or other regional languages. Studies have shown that messages in national or local languages outperform those in English in terms of engagement and retention by the community. Furthermore, it is also a fact that messages for print and electronic media are usually

developed in English and subsequently translated into national or local languages, which often leads to key messages being lost in translation. Language is not only influenced by but also reflects sociocultural practices and beliefs. Hence, a lot of the messages which tend to encapsulate Western values remain somewhat devoid of the nuances of the local culture. Therefore, there is a dire need for training in Social and Behavior Change Communication (SBCC) in Urdu and regional languages that are rooted in the local context of different communities prone to disaster.

2.3 Dissemination Channels

Mass Media: Television, Print and Radio

Mass media has the highest outreach of all the possible channels of dissemination; and within mass media, radio has the highest reach in Pakistan while print has the lowest in comparison. Using Government funds to roll out engaging, behavior-change inducing campaigns via mass media is challenging due to four reasons.

First, there is a lack of coordination between various government stakeholders who can be engaged for risk communication and community engagement such as Ministry of Information and Broadcasting (MoIB), Pakistan Telecom Authority (PTA), Pakistan Electronic Media Regulatory Authority, public hospitals, and public academic institutions.

Second, there is a severe lack of funding allocated to media campaigns in all ministries as they are deemed too expensive and considered a waste of resources—a result of an overall misunderstanding of the potential of well-structured and compelling advertisements that seek social and behavioral change.

Third, even when funding is allocated for risk communication, as was the case during the COVID-19 pandemic, stringent governmental rules and regulations make it difficult to utilize the funding efficiently and achieve the best possible return on investment.

Fourth, stakeholders' limited understanding of the pertinent rules and regulations of departments other than those that they themselves are a part of also

prevents them from executing projects efficiently.

The issue described below in detail illustrates how the four aforementioned factors have complicated the process of rolling out engaging television campaigns and how those bottlenecks can possibly be resolved.

Many Government authorized agencies are adept at developing advertisements for private corporations and brands with little to no expertise in social and behavior change communication for public health emergencies. The messaging or media campaigns they develop do not serve the purpose well and end up merely dictating guidelines as opposed to truly addressing the concerns of the public or influencing levers that determine behavior. Hence, there is a need to revisit Government regulations and advocate for special stipulations in the case of risk communication during emergencies. Furthermore, the modalities to engage area-specific media firms have to be devised.

Bearing these challenges in mind, an alternative method available was the provision in the PEMRA law stipulating private television channels to dedicate a certain duration of airtime to public service messages. Accordingly, messages of good quality (in terms of relevance to social and behavior change communication) were developed with the support of health development partners. These advertisements were aired free of cost on multiple private television channels. Although it was a welcome development, it is important to be cognizant of the fact that private television channels have no incentive to air these free-of-cost public service messages on prime time and so, their reach remained extremely limited. However, Government funding can only be utilized for prime time airing by paying those agencies which are already on the Government roster. Thus, any material produced by agencies not suitably registered cannot be aired using Government funding. Therefore, in future, it is crucial that any health development partner that commits to paying for the production of advertisements also allocates funding for broadcasting them in order to ensure the best utilization of resources.

Private corporations can also play a very positive role through their corporate social responsibility (CSR) programs that allocate resources specifically for the

good of the public. The mechanism for engaging private sector CSR platforms for supplementing and enhancing communication is a useful adjunct to the Government's own communication plans. However, this would require a well-structured approach to engage a number of line ministries to incentivize and institutionalize such a mechanism. During the COVID-19 pandemic, several corporations ranging from telecom companies to fast-moving consumer goods companies supported the Government by paying for the production and broadcasting of advertisements based on the Ministry of NHSRC's guidelines.

Ring Back Tone (RBT)

The ring back tone remains one of the most efficient ways of spreading time-sensitive, life-saving messages to the public not just once but repeatedly. This can be a useful modality not only for responding to nationwide emergencies but also for a number of different population level communication activities even when there is no emergency (for example, breast cancer awareness).

Pakistan Telecom Authority (PTA) has the authority to roll out a standard ring back tone (RBT) on all calls made. The efficiency of this mechanism can be judged by the fact that it reaches a hundred percent of the target audience. According to PTA, there are 187 million cellular subscribers in Pakistan as of October 2021 which amounts to about 82 percent of the total population of the country.[10] Departments of the Government can formally request PTA to roll out a ring back tone and are mandated to pay for the service. However, by-laws of PTA include a stipulation for disseminating public service messages via ring back tones free of cost during times of emergency. For example, at least 12 unique ring back tones have been rolled out since the start of the COVID-19 pandemic upon the request of the Ministry of NHSRC.

Social Media

The use of social media can play a significant role in creating awareness and shaping the opinions of people in Pakistan, especially those in urban areas. This is because of the high potential for virality on social media platforms and current evidence that suggests that the origin of most sensational, fake news can be traced back to social media. Moreover, the growth rate of social media users in Pakistan is very high, which implies that the segment of population that can be targeted through such platforms would continue to expand over the years. According to DataReportal, there were 46 million social media users in Pakistan in January 2021, which is equal to about 20 percent of the population, and indicated a 24 percent increase in number since 2020.[11] Other estimates fall within this ballpark and hence, confirm the rapid pace at which social media is gaining influence.

There are two broad ways of paid promotion on social media: direct advertisement, and influencer marketing. At the time of writing this report, Government funding could not be used for advertisement on social media as there were no laws in place by MoIB for regulating the practice. Therefore, only funding from partner organizations was used to purchase advertisement credits or pay influencers.

Over the course of the COVID-19 pandemic, the Ministry of NHSRC established strong ties with big tech companies such as Facebook and Google which provide advertisement credits free of cost as part of their CSR programs. For example, Facebook provided advertisement credits to the Ministry of NHSRC and the Digital Media Wing (Ministry of Information and Broadcasting) for several Facebook and Instagram advertisement campaigns pertaining to the COVID-19 vaccination drive in Pakistan. Facebook also waived off the fee for setting up a WhatsApp chatbot that answered queries regarding COVID-19 (the "COVID-19 WhatsApp Chatbot").

[10]   Pakistan Telecom Authority (n.d.).
[11]   Kemp, S. K. (February 2021).

Community Engagement (on-field)

On-field engagement is most effective to target communities with little to no access to social and mass media, either due to a dearth of resources or low literacy. The key stakeholders that make the highest levels of impact in this domain are District Health Offices (DHOs), community health workers, and community service organizations (CSOs). Community activities remain susceptible to duplication more than most other types of activities because CSOs often operate in silos and have little incentive to collaborate or divide up coverage of areas amongst each other. As mentioned above, in the case of partners, there is no repository that maps the presence of CSOs by district and mandate; building one would be a game changer not just for planning at the federal level but also for coordination by the DHO at the union or tehsil level in the provinces.

2.4 Dynamic Listening and Rumor Management

Reliance on Analog Methods for Mass Media Monitoring

The mechanism for monitoring mass media and compiling reports is still manual in Government departments. This practice is far from time-efficient but nonetheless allows stakeholders to get a pulse on the reporting on ongoing emergencies and even reach out to specific media outlets to clarify any misinformation. It is certainly not effective for acquiring data on viewership trends by type of audience that could be analyzed and used for developing more targeted campaigns.

Use of Artificial Intelligence (AI) and Machine Learning (ML) for Social Media Monitoring

As described above, the number of social media users in Pakistan is growing at a rapid rate and information posted on social media platforms is susceptible to virality. Social media platforms not only incorporate digital news outlets but also create an equal opportunity and conducive environment for the public to share its opinions on current affairs. This makes social media platforms extremely rich sources of data on the public's knowledge, attitude and perception (KAP)—access to which can inform Government interventions. Machine learning and artificial intelligence-based tools make it possible to categorize and interpret the vast amount of data extrapolated from social media, which is impossible to do manually.

The use of such tools was piloted by the Ministry of NHSRC as part of the risk communication activities during COVID-19. Keywords pertaining to the pandemic and the Government's latest interventions can be fed to the tool and data aggregated on a weekly basis, broken down by location. Such practices would allow ministries to flag fake news as well as legitimate concerns of the public immediately. Subsequently, messaging to counter rumors and address concerns can be deployed.

These tools are offered by the corporate sector and private companies and therefore, funds would need to be allocated for utilizing this modality.

Dedicated Helplines for Two-way Communication

A dedicated telephone helpline has an extremely wide reach in terms of the target population as it is a simple means of collecting information that requires neither literacy skills nor access to the internet.

The Sehat Tahafuzz Helpline functioned as the most accessible form of two-way communication for the public during the COVID-19 pandemic. It was initially launched by the National Emergency Operation Center (NEOC) for the Polio Eradication Program to address queries regarding Polio immunization and other routine childhood immunizations. This helpline then underwent significant capacity enhancement to begin addressing queries regarding the novel coronavirus in February 2020. The Ministry of NHSRC and NEOC, with the support of partners, expanded the staff and trained them specifically to assuage the public's concerns regarding COVID-19. In fact, owing to the frequently evolving information about COVID-19, the staff are regularly retrained till date; the most extensive additional training was completed prior to the launch of Pakistan's COVID-19 vaccination drive. Thus, the

human resource available is comfortable with and has the capacity for absorbing new information in a short span of time and communicating it to the public during an emergency. This type of infrastructure and human resource makes helplines such as Sehat Tahafuzz valuable assets that could be utilized for other disasters as well as health communication outside of emergencies.

Since the Sehat Tahaffuz Helpline records complaints made by callers and also collects information such as gender, age, and location, it aggregates and analyzes data to reveal the most pressing concerns or misconceptions across various demographics. This data contributed immensely to the Ministry of NHSRC's dynamic listening and informed both risk communication as well as policy making.

While such an accessible two-way mechanism of communication can have an immensely positive impact on risk communication and the overall management of a disaster, it comes at a hefty monetary cost. So far, the entire Sehat Tahafuzz Helpline infrastructure is funded by the coalition of donors that support the NEOC and Pakistan Polio Eradication Program with a limit on the time duration for which donors can continue to support it. Thus, it is of utmost importance to assess the Government's options for retaining the infrastructure in a sustainable manner and allocating even more funding to allow for the helpline to be used for communication.

Messaging App Chatbots for Multisectoral Multihazard Utilization

A messaging App chatbot has immense potential for creating awareness quickly and managing rumors, especially considering that there are already 106 million 3G/4G subscribers in Pakistan as of October 2021 as per PTA. Messages can be sent and received by subscribers at no additional cost (other than the data subscription).

As part of the COVID-19 response, the Ministry of NHSRC launched the COVID-19 WhatsApp Chatbot to answer queries about COVID-19 in seven languages (English, Urdu, Punjabi, Pashto, Sindhi, Balochi, and Kashmiri), making Pakistan one of the first countries to do so. It was another effective platform for two-way

communication because it also aggregated data that revealed the most frequently asked questions (albeit in not as much qualitative detail as the helpline can), allowing the Government to integrate answers to those concerns across all avenues of communication (press releases, press briefings, flyers, etc.).

However, the COVID-19 WhatsApp Chatbot abruptly stopped working in October 2020, seven months after its launch, precisely because it had been launched in haste without ensuring its financial sustainability and relying on the temporary, gratis support offered by Facebook and the Business Service Provider in question.

At the time of writing this report, efforts are underway to relaunch the WhatsApp Chatbot in a manner that ensures longevity and adaptability to risk communication in the face of other disasters.

2.5 Monitoring and Evaluation

Monitoring refers to tracking the progress of the risk communication activities agreed upon and being conducted by different stakeholders. As of now, there is a reliance on self-reporting by provincial health departments, development organizations, and government programs with little to no additional checks and balances in place. Moreover, reporting is restricted to district/city level but the aforementioned mapping of stakeholders can enhance its application to tehsil level or union council.

Evaluation refers to both the impact of risk communication activities on the behavior or perception of the target audience itself, and on the metrics that measure the scale of the emergency at large.

Evaluating the impact of risk communication activities on KAP (Knowledge, Attitude and Perception) is possible and has been accomplished for mediums that allow two-way communication, for example, social media (through machine learning tools that provide sentiment analysis like Keyhole), and community engagement (through quantitative and qualitative in-person field surveys carried out by companies such as Gallup and IPSOS).

SECTION 3A:
FRAMEWORK FOR PREPAREDNESS AND INSTITUTIONALIZATION

3A.1 Objective

- The objective is to share information with affected communities in a timely manner so they can understand and act upon it to protect themselves. Thus, they may minimize harm not only to themselves but others as well by adopting behavioral change enabled through effective communication within their sociocultural contexts.

- The first five steps in the overall twelve-prong framework pertain to laying the infrastructure for sustainable risk communication units. They provide guidance on how such units can be equipped with the necessary technical, financial, and human resources, as well as on how critical partnerships and baseline operational modalities can be established. These interventions are designed to be undertaken as soon as possible regardless of whether there is an ongoing emergency or not. Ideally, these actions should be taken in "peace time" so resources can be allocated towards enacting sustainable change in a timely manner as opposed to responding to the needs of the emergency with knee-jerk reactions.

- The framework stems from a people centric approach. It seeks to ensure equitable access to information and resources that can protect people from threats to public health so that even the most vulnerable, marginalized communities remain safe. Most importantly, it sets out to establish a sustainable mechanism that will eradicate the culture of ad hoc, reactionary measures and also make sure that Pakistan meets its international commitments.

3A.2 Guiding Principles

The following principles guide the approach to establishing a robust, sustainable risk communication infrastructure in Pakistan:

- Risk communication requires immediate support from and prioritization by the highest authorities within the Government.

- Risk communication must be strategized on a national level and implemented at a local level.

- Risk communication must be spearheaded by the Government but involve global development partners, private corporations, media, and communities.

- Risk communication requires listening and constant iteration.

- Risk communication requires capacity building as well as monitoring and evaluation.

3A.3 Step-by-Step Breakdown of Institutionalization Process

Steps	Action
Establish a Formal Risk Communication Body	A. Identify relevant Government bodies (including provinces), donor organizations, and Development Intergovernmental Organizations for inclusion into a federal-level Risk Communication and Community Engagement Unit
	B. Develop and notify a federal-level Risk Communication and Community Engagement Unit with defined terms of reference (TORs)
	C. Estimate annual baseline monetary requirements and allocation of resources

Steps	Action
Map Stakeholders' Mandate and Geographical Presence	A. Map out the geographical presence of all health development partners, CSOs, NGOs, and INGOs across Pakistan
	B. Identify the target audience, and summarize the mandate and capacity of each of these stakeholders
Conduct Capacity Building and Training of Human Resources	A. Allocate a budget and create sanctioned positions to recruit a dedicated team of risk communication experts with the required skill sets within the Ministry and departments of health
	B. Organize capacity building programs for key members of the federal-level Risk Communication and Community Engagement Unit enabling them to develop campaigns based on Social and Behavior Change Communication (SBCC) principles in line with global best practices but rooted in the sociocultural context of Pakistan
	C. Develop a pool of master trainers in the country who can transfer skills and principles for campaign development to the key stakeholders at the federal and provincial level
	D. Develop hazard-specific manuals and SOPs for various tiers of health care workers on community engagement
Acquire Tools for Dynamic Listening	A. Allocate resources for the purchase of subscriptions to machine learning-based tools for social and digital media sentiment analysis (such as Keyhole)
	B. Strengthen existing partnerships with big tech corporations behind the most popular social media platforms to secure free-of-cost advertisement credits that can promote critical messages round the year, and establish mechanisms for flagging and removing (where possible) misinformation regarding public health
	C. Allocate resources for the expansion of existing helplines and their sustainability (including hiring additional staff, covering overheads of the headquarters, and ensuring capacity building)
	D. Launch a financially viable messaging App (chatbot) for risk communication that can send push notifications and address queries regarding at least two major threats to public health in at least seven languages (English, Urdu, Punjabi, Pashto, Sindhi, Balochi, and Kashmiri). Incorporate information regarding other frequently occurring disasters and prolonged threats to public health in subsequent phases
Create a Knowledge Management System (KMS)	A. Design a user-friendly knowledge management system (KMS) that can accommodate and act as a repository for: I. Message boards (technical guidelines and copy for campaigns) II. Finalized content (infographics, DVCs, TVCs, flyers, etc.) III. Stakeholder mapping (by geographical presence and mandate)
	B. Develop protocols that outline the process of submitting, vetting, and approving material before it can be uploaded to the KMS along with protocols to dictate how material available there can be used by stakeholders
	C. Allocate resources to ensure that the KMS can be hosted on a Government-approved server with sufficient space on the cloud for storing all data
	D. Launch KMS and make it completely accessible for relevant federal-, provincial-, and district -level authorities so they can utilize existing content in the face of an emergency as per the protocols for use mentioned above (in "B"); provide public access to "message boards" so citizens can benefit from the guidelines and any other external partners, such as private corporations with CSR programs, may use the message boards to develop new content for various platforms without violating any copyrights

SECTION 3B:
FRAMEWORK FOR ACTIVATING CAMPAIGNS DURING EMERGENCIES

3B.1 Objective

This section describes in detail steps that should be taken in response to or in anticipation of an emergency. The following steps certainly cannot be implemented in isolation and should be reviewed in tandem with the five strategic areas described earlier that need to be built upon for the institutionalization of a risk communication mechanism. This will create the financial, legal and administrative conditions necessary for launching structured, evidence-based and trackable risk communication campaigns tailored to the next emergency in a timely and cost-efficient manner.

Thus, the following steps are meant to be followed each time any region in the country is faced with a public health emergency in order to launch a unique, context-specific risk communication response.

3B.2 Guiding Principles

The following principles guide the approach to responding to a particular disaster with comprehensive risk communication:

- Risk communication must be tailor-made for specific audiences as opposed to being executed with a one-size-fits-all approach

- Risk communication is multifaceted and requires several stakeholders to take ownership of different aspects

- Risk communication for any threat must be based on Social and Behavior Change Communication theories

3B.3 Step-by-Step Breakdown of Response

Steps	Action
Identify Nature of Risk and Target Audience	A. Assess the nature of the threat and its potential for expansion over time by seeking guidance from the body leading the overall emergency response
	B. Identify the segment of the population affected by or at risk of being affected by the emergency, and note the salient features of this demographic (geographic presence, age, gender, ethnicity, etc.)
Convene Stakeholders and Delegate Responsibilities	A. Convene a meeting of all members of the federal level Risk Communication and Community Engagement Unit
	B. Brief all stakeholders on the nature, potential, and those affected of the emergency, and share the goals of the body leading the overall emergency response
	C. Brainstorm and agree on specific targets for risk communication which are in line with the larger goals of the overall emergency response
	D. Develop an operational plan with a list of various types of interventions and the baseline funding required to execute them
	E. Delegate the execution of activities to specific stakeholders by utilizing the existing database that maps out stakeholders by mandate, capacity, and geographical presence
	F. Reach a consensus on intervals and mechanism for reviewing progress of interventions agreed upon in the operational plan

Steps	Action
Develop and Disseminate Messages	A. Develop messages based on Social and Behavior Change Communication (SBCC) theories under the leadership of human resource trained in the methodology, ensuring that all four levels of influence recognized by the Social Ecological Model are considered: ○ Individual ○ Relationships ○ Community ○ Society
	B. Share key messages with master trainers at the federal and provincial level who can then further train health care workers and key opinion leaders (KOLs) at the grassroots level who interact with affected persons on a regular basis
	C. Determine which mediums (for example, on-ground community engagement, vs. broadcast media) and type of content (for example, audio-visual vs. text-heavy, or Urdu vs. Pashto) would be most efficient for influencing the target audience's behavior
	D. Produce and disseminate engaging content that integrates the finalized key messages in a format deemed most efficient for influencing the target audience's behavior
Monitor Progress of Stakeholders	A. Conduct progress reviews for all interventions and stakeholders involved at regular intervals as per the mechanism agreed upon
	B. Solve any bottlenecks by making changes to the planned intervention that may help adapt with the reality on the ground.
Initiate Dynamic Listening	A. Gather data on ongoing conversations and/or feedback from the public regarding the emergency by monitoring mass media, social media, and queries on two-way feedback mechanisms such as helplines and chatbots
	B. Take notice of any misconceptions or concerns arising due to lack of awareness or the prevalence of fake news
	C. Convene all stakeholders involved to develop and disseminate messaging that addresses those misconceptions; ensure the messaging is integrated with all content developed in the future as well
Evaluate Impact on KAP and Overall Scale of Emergency	A. Design and execute surveys through community engagement, social media and/or telephone to evaluate the impact of interventions on KAP
	B. Collect baseline data on metrics used to gauge the overall scale of the emergency (for example, number of infections, hospitalizations, or fatalities) before certain risk communication interventions and compare them with data aggregated after those interventions
	C. Account for the factors that could not be kept consistent over the course of the emergency, as multilayered interventions (related or unrelated to risk communication)
	D. Document the evaluation and extrapolate learnings that could be used to improve the operational plan going forward
Collate Content and Key Findings	A. Collate all content produced and disseminated as part of the risk communication interventions during the emergency
	B. Draft assessments of the performance of various content utilizing relevant findings from dynamic listening tools and the evaluation exercise
	C. Upload all content along with their assessments to the Knowledge Management System (as per protocols established earlier), and notify all stakeholders at the federal and provincial levels that the material is available for use whenever the need arises

SECTION 4:
WAY FORWARD

Ultimately, Pakistan's emergency preparedness infrastructure requires a national level framework for risk communication developed with the consensus of stakeholders in the provinces and other federating units as well. This federal level framework should serve as the basis for a provincial consultation in order to develop that national framework.

At the same time, costed risk communication operational plans customized to the ground realities of the region should be developed by provincial governments as well. It is critical that they integrate a multisectoral approach, which is the backbone of this federal level document as well.

Finally, all stakeholders must make it a priority to advocate for investment of resources in risk communication. They must help establish strong relationships between risk communication units and public health emergency response centers such that the former is indispensable to the latter. Stakeholders should use their insights and existing evidence to convince leaders at all levels of governance that risk communication is not a mere exercise in "advertisement" or "marketing". It is, in fact, an endeavor that has the potential to safeguard arguably the most precious, irreplaceable asset in this world: life.

LIST OF STAKEHOLDERS CONSULTED

The full list of Government stakeholders consulted for the development of this framework is as follows:

- Central Health Establishment
- Directorate of Malaria Control
- Expanded Program for Immunization
- Maternal, Newborn and Child Health Program
- Ministry of Climate Change
- Ministry of Health Services, Regulations and Coordination
- Ministry of National Food Security and Research
- National AIDS Control Program
- National Disaster Management Authority
- National Emergency Operations Center
- National Health Emergency Preparedness and Response Network
- National Institute of Health
- National TB Control Program
- Polio Eradication Program

The full list of nongovernment stakeholders (health development partners) consulted for the development of this framework is as follows:

- Foreign, Commonwealth and Development Office
- Japan International Cooperation Agency
- Kreditanstalt für Wiederaufbau
- United Nations Children's Fund
- United Nations Development Program
- United Nations Population Fund
- World Bank
- World Health Organization

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