Strategic Communication for Crisis Management in Public Health Institutions: Lessons from Nigeria and Beyond

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Abstract. Strategic communication plays a central role in public health crisis management, especially during high-impact emergencies such as the COVID-19 pandemic. This paper presents a comparative case analysis of strategic communication practices across two public health institutions: the Nigeria Centre for Disease Control (NCDC) and the U.S.-based HEAL (Health Equity Action Lab), a data-focused public health initiative committed to advancing health equity and strengthening crisis response among underserved communities. Using a qualitative content analysis of secondary data, including institutional reports, press briefings, global frameworks (WHO, CDC), and scholarly evaluations, the study explores how communication clarity, transparency, timeliness, leadership visibility, and stakeholder engagement influenced public trust and crisis responsiveness. The analysis identifies key divergences and similarities in the communication strategies employed by each institution. HEAL demonstrated high leadership visibility and message clarity but lacked robust feedback mechanisms and transparency. The NCDC demonstrated improvement over time, but was often constrained by reactive messaging and limited stakeholder inclusion. A thematic integration reveals that institutions with consistent messaging and participatory planning were better able to maintain public confidence and internal alignment. The study concludes by highlighting the consequences of weak strategic communication, including public scepticism, the spread of misinformation, and non-compliance. It proposes a cross-context framework for strengthening crisis communication in future emergencies. These findings offer actionable insights for public health leaders and policymakers in both developed and developing settings.

Keywords: Strategic communication; crisis management; public health institutions; healthcare leadership; communication effectiveness; COVID-19; mixed methods; transparency; stakeholder engagement; institutional trust.

INTRODUCTION

Background. The practice of crisis management has become a crucial component of every contemporary healthcare system, particularly in light of the increasing number and complexity of public health emergencies that institutions must address. Such crises can be viral pandemics and localised outbreaks, misinformation epidemics, and, quite simply, reducing the human element (a crash in an aeroplane, an operational error, or any other form of human failure). All challenge the resilience, adaptability, and coordination of healthcare providers and agencies addressing public health issues worldwide. The COVID-19 pandemic has specifically demonstrated that, in addition to medical responses, effective crisis management relies on robust strategic communication mechanisms to maintain clarity, transparency, and proactive engagement with various stakeholders [1]. Since health crises tend to develop in unpredictable and rapidly evolving scenarios, communication plans should address real-time informational linearity, vitality, and the credibility of verified information. Both the World

Health Organisation [2] and the Centres for Disease Control and Prevention [3] have pointed out that strategic communication should not be viewed as an accessory tool but as an essential element of operational execution strategies of responding to an adverse health event. Authors [4] believe that in the Crisis and Emergency Risk Communication (CERC) model, the timing, consistency, and credibility of messages are crucial in alleviating anxiety among the general population, providing behavioural guidance, and enhancing the restitution of institutional legitimacy. Such insights underscore the need to develop and critically analyse the strategic communication created and implemented by public health institutions in emergencies, particularly when confronted with rapidly evolving threats like COVID-19.

Although awareness of the importance of communication as a key aspect of crisis management has been increasing, public health institutions often face significant challenges in implementing effective communication policies. The most frequent ones relate to ineffective internal channels of communication, inconsistent or conflicting message distribution, failure to deliver public advisories promptly, and failure to reach vulnerable/marginalised groups [5]. These difficulties tend to result in low societal trust among the general population, a lack of coordination among the staff members, and low adherence to safety measures [1]. Such issues become even more severe during a pandemic, when information is dynamic and both healthcare providers and citizens require timely, consistent, and accurate advice. Communication breakdowns at the institutional level can reduce the effectiveness of the crisis response, slow down the decision-making process, and introduce ambiguity. Speaking specifically about HEAL, a well-known public health organisation in the United States, clear and credible communication was especially important to achieve during the COVID-19 pandemic. The inconsistent messages, slow flow of information, and inadequate stakeholder responses during the initial period of the crisis were reported, thereby highlighting weaknesses in the HEAL communication structure.

Although the significance of strategic communication in the context of a public health emergency is well understood, numerous issues persist in leadership communication within most public institutions. Such lapses can often be attributed to rigid bureaucracy, hierarchical company cultures, a general lack of official training in crisis communication, and a shortage of resources that can impede responsiveness. Institutional silos and fragmented communication systems often result in inconsistent messaging, delayed disclosures, and ineffective coordination within the institution. Moreover, the political demands and the threat of reputational loss can lead to the whitewashing of a report, resulting in reduced stakeholder engagement and erosion of public trust during crises.

The research adopts a communication-centric perspective, as the biomedical approach to crisis response and emergency logistical arrangements is not the sole determinant of crisis outcomes in public health. Instead, the effectiveness of institutional communication, enlightenment, and coordination with stakeholders is also crucial. Communication becomes the glue that binds leadership choices, actions at the forefront, and the reception of people. In the digital age, characterised by the rapid dissemination of information and the rise of misinformation, the need for clear, consistent, and trustworthy communication from healthcare institutions is no longer optional but a crucial factor in achieving operational excellence and audience trust. Due to its orientation towards strategic communication, the study hypothesises that it can unveil how institutional trust, alignment regarding decision-making, and resilience can be formed equally in terms of framing the message as well as clinical capacity. The authors rely on the HEAL platform, an open-access US health data project that, although lacking the proper authority of a national public health agency, shares with the NCDC in Nigeria the role of providing equity-driven community health planning and crisis preparedness. The primary research question to be addressed in the study is how strategic communication has impacted the effectiveness of crisis response in two distinct scenarios within the context of public health issues: HEAL and key Nigerian organisations and actors in the health field, including the Nigeria Centre for Disease Control (NCDC). Particularly, the research examines the practices of crisis communication, specifically focusing on message clarity, transparency, and timing, as well as stakeholder engagement during recent health emergencies, such as the COVID-19 pandemic. Through a comparative analysis, this paper aims to identify the points of convergence and divergence in the communication practices employed by HEAL and Nigerian institutions. With the help of this cross-contextual lens, the study aims to determine the strategic

communication strategies employed to facilitate internal coordination, enhance trust in the government, or accelerate the response, respectively.

This paper contributes to the current discussion on public health communication by providing a case study that explores the dual frameworks of reducing communication and messages in strategic communication, leadership appearance, feedback circuits, and crisis responsiveness. Using the HEAL case as a reference and comparing it to actual practices recorded in other institutions, such as the NCDC, this paper provides a contextual insight into the future of public health emergency preparedness, both in Nigeria and beyond.

The results of this research contribute to the theoretical understanding of crisis communication in the public sector of healthcare institutions. The study examines and compares the strategic communication behaviours of HEAL in the United States and the Nigerian Centre for Disease Control (NCDC) to highlight the role institutional context, leadership exposure, and stakeholder participation play in defining the relevance of crisis communication. Nearly, the research provides practical implications that would help inform healthcare leaders and policymakers on how to mitigate the pandemic crisis's impact by promoting institutional resilience and responsiveness through improved communication infrastructure. Surrounded by an information age in which misinformation will flow as easily as contagion, developing communication infrastructures that are highly resilient and versatile is more than a choice; it is a necessity. Additionally, the comparative lessons from the given research are of worldwide significance. They can serve as useful instructions on how to prepare and respond to future pandemics, bioterrorism threats, and other mass catastrophic outbreaks. The discussion will focus on communication among leadership, healthcare professionals, communication officers, and the general public. The study employs a single-case design, which arguably permits an in-depth exploration of the context-specific practices at HEAL; however, this can hinder the generalizability of the findings to other institutions or settings. Additionally, the research utilises data collected through surveys and interviews, which are subject to participants' recollection and perception biases. However, the study will provide a sound and enlightening discussion on the importance of strategic communication in the improved management of a public health crisis.

Theoretical Frameworks. The Sinuational Crisis Communication Theory (SCCT) and Crisis and Emergency Risk Communication (CERC) model have been widely used to theorise crisis communication in the field of public health. They both provide a systematic approach to managing stakeholder trust, institutional responsibility, and the evolving expectations of the people.

The author [6] has created SCCT, and this theory focuses on consistency between the message strategy and the perceived organisational responsibility. In the HEAL scenario, SCCT can be used to understand how leaders employed corrective framing and empathetic messaging to retain trust following early messaging failure. The level of public responsibility was grave, but the communication team in HEAL stepped up publicly, alongside leadership, with timely updates following the SCCT recommendation of accommodative strategies. In comparison, a lower level of public expectations initially favoured NCDC; however, as the pandemic developed, the organisation had to face increasing criticism. SCCT can be used to explain how reputational gaps in NCDC, which were manifested through its intermittent delays or lack of transparency, became significant risks, particularly in situations where the agency was unable to clearly distinguish its responsibilities from those of state-level actors clearly.

The CDC provided CERC, a stage-based model designed to guide behaviour during dynamic emergencies. Both HEAL and NCDC can greatly benefit from CERC. The elements of maximal performance of HEAL were the initial and maintenance phases, during which the internal briefing was consistent and leadership presence was evident. Nevertheless, it had a weak feedback loop and post-crisis reflection, thus having a weak phase of resolution. The CERC model is useful in criticising the reactive response to communication that the NCDC adopted during the initial stages of the pandemic. With the NCDC progressively conforming to the RCCE practices established by WHO, the maintenance and resolution stages of its operations have become stronger. Yet, the lack of transparency in issues and stakeholder engagement was still observed.

This paper will critically assess HEAL and NCDC in terms of how they framed, conveyed, and modified their messages concerning the crisis, specifically in relation to CERC and SCCT perceptions of perceived responsibility and the adoption of a phase-based approach to crisis communications.

The frameworks complement each other in describing the strengths of institutions and the gaps in the communication system observed across various country settings.

Strategic Communication in Public Health. In a public health organisation, strategic communication can be defined as the deliberate application of communication tools to meet the organisational objectives, especially in high-stakes scenarios, to overcome a health crisis. It involves the process used to design, convey, and assess messages intended to inform, persuade, or influence the behaviour of affected stakeholders during times of crisis. Strategic communication is crucial in the study of crisis management, as it helps reduce panic among the population, clarifies the institution's intentions, and reinforces health-protective practices [7]. There are four main dimensions, which are consistently stratified across all the literature: clarity, transparency, timeliness, and stakeholder inclusion. Effective communication involves ensuring that messages are clear, concise, and free from jargon. When it comes to communication during times of crisis, the accuracy of words may be tantamount to obedience or misunderstanding. For example, the mixed messages presented in the initial information about COVID-19 led to confusion and a belligerent attitude [1]. Transparency is associated with the level of openness that an institution exhibits, where it discloses uncertainties, limitations, and corrections of mistakes. It has been found that effective and transparent communication fosters confidence in people within society, despite the uncertainty of the results [4]. Timeliness refers to the speed at which information is distributed. The effectiveness of rumours and misinformation can be enhanced by delayed or reactive communication, as well as proactive updates, which can contribute to the public's relief and the credibility of an institution. Finally, stakeholder inclusion focuses on the inclusion of diverse community members, including patients, frontline workers, civil society, and media outlets, in framing and providing messages. Relational trust develops through two-way communication, enabling feedback processes at both ends, and institutions can adjust their message in response to the audience's prevailing view, thereby establishing relational trust.

The dimensions are interrelated. To illustrate, a message communicated promptly but not clearly might not have the desired effect, whereas clear communication that is disrespectful of the stakeholders' views might seem out of touch. Consequently, there is a need for integrated communication approaches within the context of public health institutions that strike a balance between these two notions to effectively handle health emergencies.

Leadership Communication During Crises. The significance of leadership in crisis communication is particularly evident in the context of public health, where a combination of uncertainty, fear, and urgency prevails. The qualities of credibility, empathy, decisiveness, and consistency displayed by good crisis leaders facilitate team spirit and the legitimacy of messages [8]. During high-stress situations, such as those brought about by the COVID-19 pandemic, leadership communications are not only seen as a means of teaching, but they are also a way to provide psychological safety and closeness. According to [9], health leaders who practised dialogue that was both transparent and empathetic in response to the pandemic achieved better results in terms of retaining staff motivation and unifying the institutional response.

The trust of the public usually depends on whether the communication of leadership is perceived as authentic and reliable. The disruption itself presents an opportunity for leaders to be meaning makers, navigating complex scientific research and new policy directions to provide actionable advice to both internal employees and external stakeholders. Their presence and speech have a profound impact on the perceptions of readiness and compassion within an institution. For instance, the ability of health leaders to provide regular briefings to society throughout the pandemic was linked to higher rates of societal trust and adherence in various states across the United States [1]. Moreover, leadership communication must extend beyond top-to-bottom announcements to provide channels for listening to feedback and responding to it, thereby reflecting the concept of adaptive leadership in uncertain situations. This active role underscores the importance of being a decision-maker, as well as the leader's role as a relational communicator, builder of trust, coordinator of action, and exemplar of resilience.

Previous Studies on COVID-19 and Health Emergencies. A growing body of empirical research has examined communication strategies deployed during COVID-19 and other public health emergencies. These studies often highlight the consequences of fragmented messaging, the spread of

misinformation, and public scepticism. For example, a survey by [1] conducted during the early phase of COVID-19 revealed that inconsistent government communication led to decreased public trust and varied adoption of protective behaviours. Similarly, media audits of CDC and NIH briefings revealed that clarity, tone, and message framing had a significant impact on public reception and media amplification [10]. In the United States, communication practices among public health agencies during the COVID-19 pandemic varied significantly. Authors [10] noted that inconsistent messaging from federal agencies, such as the CDC and NIH, created public confusion and undermined trust. At the state level, leadership communication was found to influence vaccine uptake and adherence to safety measures [11]. Authors [12], through a mixed-methods study of US public health workers, emphasised the importance of internal communication in building institutional trust. These findings underscore the critical role of leadership clarity, feedback loops, and localised message framing in crisis outcomes, particularly within decentralised healthcare systems like that of the US.

Several case studies of local health departments in the United States have emphasised the importance of tailoring communication to specific populations. For instance, authors [11] conducted interviews with health communication officers. They found that community engagement strategies such as town halls and partnerships with religious leaders were instrumental in reaching minority communities with vaccine information. Additionally, research from the Johns Hopkins Bloomberg School of Public Health applied mixed methods to examine staff alignment and internal communication during the early pandemic response, identifying trust in leadership and message accessibility as key factors in success [13]. While methodologies vary, ranging from quantitative surveys and sentiment analyses to in-depth interviews and ethnographic observation, most studies converge on the conclusion that effective communication is as critical as clinical intervention. They also emphasise that failures in communication infrastructure, particularly in the initial stages of a crisis, can have lasting repercussions on institutional credibility and public health outcomes.

Despite the richness of existing scholarship, key gaps remain in the literature on strategic communication during public health crises. Much of the research focuses either on top-down public messaging or high-level federal guidance, with limited attention paid to the internal communication dynamics of mid-level or regional institutions. Studies that comprehensively examine both leadership strategies and staff perceptions within a single organisational setting are rare, especially in the US context. Furthermore, few integrate the SCCT and CERC frameworks within a mixed-methods design that reflects the real-time complexity of crisis decision-making. This study addresses those gaps by focusing on HEAL, a mid-tier US institution, and evaluating its internal and external communication strategies across multiple data sources and stakeholder levels.

Furthermore, existing research often underrepresents mid-tier health institutions that do not operate at the federal level but serve critical roles in public health response. Case studies focused on institutions like HEAL can yield nuanced insights into the practical challenges and strategic decisions faced at the operational level. By employing a mixed-methods design and focusing on a single public health institution, the present study aims to fill this gap and contribute a grounded, multidimensional understanding of strategic communication in real-world crisis scenarios. The reviewed literature underscores the pivotal role of strategic communication in public health crisis management. Theoretical models such as SCCT and CERC offer valuable but incomplete perspectives on how institutions should navigate emergencies. Empirical studies reveal the importance of clarity, transparency, timeliness, and leadership in influencing public trust and institutional resilience. However, there remains a need for integrative, institution-focused case studies that explore internal communication strategies through both qualitative and quantitative lenses. By examining HEAL's strategic communication during recent health crises, this study seeks to address these gaps and offer practical, evidence-based insights for enhancing crisis communication in public health institutions.

METHODOLOGY

Research Design. In this research, the qualitative content analysis approach was employed to analyse publicly distributed institutional materials, media briefings, communication strategies, and reports on data sharing on the NCDC and HEAL websites. The sampling method used was purposive, whereby the sources were chosen based on

their status, specifically those directly related to the COVID-19 crisis communication.

Significant variables to be taken into account included the clarity of messages, the visibility of leaders, transparency, stakeholder involvement, and timely responses. Thematic coding as a deductive framework was also utilised with the help of the SCCT and CERC models.

The inclusion criteria included documents that 1) were produced by NCDC, HEAL, WHO or CDC; 2) directly dealt with the issue of COVID-19 communication or preparedness; 3) were publicly available. They omitted internal communication, purely clinical reports, and summary duties.

HEAL was chosen not as an authority on scale in the United States but as a community-based, open-access public health platform across the United States that fulfils an equivalent equity-focused communication purpose to NCDC in terms of digital infrastructure and facilitated citizen engagement.

Study Settings and Scope. This study focuses on two public health institutions operating in different geopolitical contexts:

HEAL played a visible role during the US COVID-19 response. Documents analysed include institutional announcements, internal response protocols (where publicly available), press releases, interviews quoted in major media outlets (e.g., The New York Times, CNN), and relevant academic case studies [10, 12].

NCDC and Nigerian Institutions: In the Nigerian context, the study draws on the Nigeria Centre for Disease Control's official documents (situation reports, press statements), state-level response guidelines, reports from international agencies (WHO Nigeria), and Nigerian-focused academic evaluations [14, 15].

The study timeframe spans 2019 to 2024**,** encompassing the onset, escalation, and institutional learning phases of the COVID-19 pandemic. Particular attention is paid to communication mechanisms related to outbreak alerts, leadership briefings, risk framing, misinformation control, and two-way engagement with frontline staff and the general public.

Data Sources and Sampling Logic. This research used purposive documentary sampling to select materials that directly addressed crisis communication practices during health emergencies. Data were drawn from the following categories:

Institutional Reports: NCDC COVID-19 Situation Reports (2020–2022); HEAL press briefings and communication memos; CDC Crisis and Emergency Risk Communication Guidelines [3]; WHO Emergency Risk Communication (ERC) Policy and Practice Reports [2, 5].

Academic literature: [1] – on public risk perception; [10] – on media framing during COVID-19; [12] – on institutional trust and communication; [8] – on leadership in crisis communication.

Media Coverage and Commentary: CNN, Reuters, Premium Times Nigeria, and The Guardian (Nigeria) for direct quotations from health officials and communication failures or successes during key moments.

The selection of NCDC documents was driven by their authoritative role in guiding national COVID-19 communication. WHO's global frameworks, such as the ERC and RCCE guidelines, served as international standards. NCDC materials, such as press releases, protocols, and risk communication strategies, provided direct insight into Nigeria's national response. Similarly, HEAL's press statements, internal memos (where publicly available), and third-party analyses allowed for a grounded understanding of communication challenges within a mid-tier US public health institution. Source inclusion was based on credibility, relevance to crisis communication, and public availability.

Documents were selected based on their publication date (2019–2024), institutional credibility, direct relevance to crisis communication, and availability in the public domain. The selection process was iterative, with new sources added as themes emerged during analysis.

Data Analysis Procedures. All documents were analysed using thematic content analysis, following [16] six-step model:

Familiarisation – reading and re-reading documents for immersion;

Initial coding – generating open codes related to communication variables (e.g., message clarity, leadership tone, transparency);

Theme generation – clustering codes into broader themes (e.g., visibility vs. credibility gaps; stakeholder exclusion);

Reviewing themes – checking consistency across both case contexts;

Defining themes – labelling and finalising core categories;

Narrative synthesis – comparing thematic findings between HEAL and NCDC using illustrative quotations and summaries.

Validity and Trustworthiness. To ensure validity and rigour, the study adopted the following strategies:

Triangulation of sources: Data were drawn from multiple types of sources (institutional, academic, media) to reduce bias and improve reliability.

Peer-reviewed references: Only empirically validated studies and official organisational reports were cited to establish credibility.

Transparency of process: The inclusion criteria, timeframe, and scope of documents were clearly defined and documented.

Reflexivity: The researcher remained conscious of contextual differences between the US and Nigerian systems, avoiding overgeneralisation.

Although the use of secondary data limits the ability to validate firsthand perceptions, the triangulated nature of the sources spanning internal reports, public briefings, and international health agency assessments supports the analytical trustworthiness of the study.

Ethical Considerations. As this study did not involve human participants or primary data collection, it did not require institutional review board (IRB) approval or informed consent procedures. All documents used were publicly available and legally accessible at the time of analysis. The study adheres to ethical standards for responsible citation, accurate representation, and contextual sensitivity, particularly when analysing crisis communication in vulnerable health systems.

RESULTS AND DISCUSSION

Quantitative Findings. Data were collected via an online survey designed to assess perceptions of the institution's communication effectiveness during a recent health crisis. The survey measured six key variables related to strategic communication: communication clarity, transparency, timeliness, feedback mechanisms, perceived leadership credibility, and trust in crisis response. Respondents rated each item on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The summary of results is presented in Table 1 below.

Table 1 – Perceived Communication Effectiveness Scores at HEAL (N = 112)

Communication Variable	Mean Score	Standard Deviation
Communication Clarity	4.2	0.7
Transparency	3.4	1.0
Timeliness	3.9	0.8
Feedback Mechanisms	3.5	0.9
Perceived Leadership Credibility	4.1	0.6
Trust in Crisis Response	3.8	0.7

As shown in Table 1 above, communication clarity received the highest mean score (M = 4.2, SD = 0.7), indicating that most employees found messages to be generally understandable and precise. Perceived leadership credibility (M = 4.1, SD = 0.6) also scored favorably, indicating that HEAL's leadership was considered trustworthy and competent during the crisis. In contrast, transparency yielded the lowest mean score (M = 3.4, SD = 1.0), indicating a potential communication gap in the openness and consistency with which information was disclosed. Feedback mechanisms (M = 3.5, SD = 0.9) and trust in crisis response (M = 3.8, SD = 0.7) were rated moderately, suggesting room for improvement in both upward communication and general confidence in institutional decision-making.
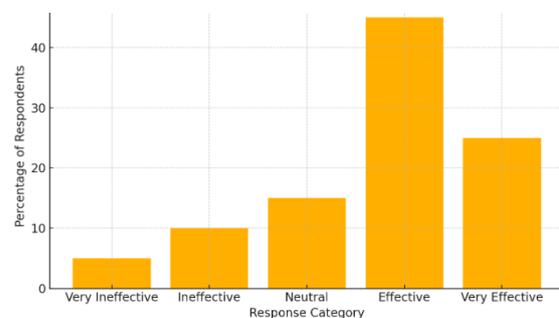

Figure 1 – Overall Perception of Leadership Communication Effectiveness at HEAL

Figure 1 above illustrates overall perceptions of leadership communication effectiveness. A total of 70% of respondents online rated communication as either "Effective" or "Very Effective," while 15% remained neutral and another 15% expressed dissatisfaction ("Ineffective" or "Very Ineffective"). These findings suggest a generally positive perception of HEAL's communication performance, albeit with specific dimensions such as transparency and feedback requiring strategic reinforcement.

Qualitative Insights. Thematic analysis revealed four dominant themes that offer deeper insight into the institution's communication practices during the health crisis.

Leadership Clarity and Visibility was the first theme, which appeared in every interview. The participants observed that frequent changes and visible positioning of executive leaders in situations like town halls or emergency briefings helped them remain calm and focused. One of the clinical directors commented, "When the Chief Medical Officer came out and went through the new protocols in the morning, it helped us feel assured that there was a person at the helm of the ship." The theme highlighted the benefits of top-down messaging, as well as the notion that visibility alone is insufficient without clarity.

The second theme, Feedback Culture, addressed issues such as the lack of two-way communication among employees. Although the updates were regular to staff, most of the interviewees believed that there was little opportunity to be heard or to seek answers. One of the communication officers told me that we had a good output of information, but the feedback mechanism was minimal. I do not feel that we listened to what real-time frontline workers needed." This unveiled a systemic weakness of horizontal-based systems, specifically in bottom-up communication.

The third theme, "Trust Gaps and Misinformation Challenges," focused on the internal and external effects of mixed message delivery. They reported scenarios in which a changing set of instructions or the conflicting announcements created confusion in people and personnel. One of us would say something, and the state health department would speak afterwards. A senior nurse commented that it was difficult to build trust. This highlights the limitations of biomedical breadth on the one hand and the challenge of communicating institutional messaging to the general population, particularly in fast-moving crises.

Stakeholder Inclusion in Communication Planning was the fourth theme, based on perceptions that strategic messaging decisions were centralised, and operational departments or community liaisons offered little input. Although there was a reliable communications team at HEAL, the staff were eager to participate more in devising their messages. According to one administrative lead, we were not always consulted in cases where messages directly affected our departments. This implies that there is a need to have more participatory communication designs that empower both internal and external stakeholders.

Integration of Mixed Methods Results. The combination of quantitative and qualitative results yields a more comprehensive understanding of HEAL's strategic communication practice. These two sources of data will agree on the area of feedback mechanisms. Online surveys yielded medium feedback scores (M = 3.5), and online interviews confirmed that employees perceived the communication as predominantly one-way. This fusion consolidates the understanding that two-way communication at HEAL has been underdeveloped.

The other area of congruence is in the field of leadership credibility. Quantitative ratings (M = 4.1) and qualitative feedback demonstrated that leaders not only demonstrated the attributes of being trustworthy and communicative but also conveyed these qualities through their appearance during the crisis. There was, however, a notable difference in the level of trust in the crisis response dimension. Although the survey data yielded a relatively high rating (M = 3.8), the encompassing power of scepticism, especially in situations where institutional messages clashed with external guidance, was revealed in the interview narratives. This implies that, despite staff having confidence in the internal HEAL team, the overall trust in the crisis response was weaker than indicated by survey responses.

The last area of discrepancy was in the participation of the stakeholders. Although the survey was not employed to measure inclusion in communication planning directly, the qualitative data mentioned it as one of the recurring issues. The difference highlights the importance of qualitative considerations in discovering themes that cannot be presented in structured survey questions. A summary of the integration of findings is presented in Table 2 below.

Interpretation of Key Findings. Although the research is based on the Nigerian experience, referencing US frameworks and worldwide best practices enables the identification of existing gaps and the resources available to improve strategic communication. The experiences of other models, such as the CDC CERC framework and SCCT, can be instructive in advancing Nigeria's health communication systems.

Table 2 – Mixed Methods Integration Matrix

Strategic Communication Theme	Quantitative Support	Qualitative Support	Interpretation
Leadership Credibility	High mean score (4.1)	Strong positive theme	Convergent finding
Communication Clarity	Highest score (4.2)	Confirmed in narratives	Convergent finding
Feedback Mechanisms	Moderate score (3.5)	Seen as a systemic gap	Convergent finding
Trust in Crisis Response	Moderately high (3.8)	Mixed narratives	Divergent finding
Transparency	Lowest mean score (3.4)	Cited in the misinformation theme	Convergent finding
Stakeholder Inclusion	Not directly assessed	Major concern in interviews	Divergent theme (emergent only in qualitative data)

Communication issues in the case of HEAL reflect challenges determined in other American institutions (public health care) during the pandemic of COVID-19. For example, the CDC has been publicly criticised due to the misalignment of communication and frequent changes and revisions of guidelines, which have subsequently eroded trust and compliance [10]. In the same regard, NIH had a shortcoming in terms of the specific message framing of stakeholders and interagency coordination. These commonalities highlight institutional communications in the systemic space and reinforce the generalizability of the lessons from HEAL to the national context, particularly in terms of its relationship with the national health infrastructure. The results of this paper demonstrate the diversity of strategic communication in public health crisis management, as illustrated by the case of HEAL. The combination of quantitative and qualitative results reveals that clarity of communication and credibility of leadership are among the institution's greatest strengths. However, the lack of transparency, feedback systems, and stakeholder engagement are areas that require improvement. These trends correlate in multiple aspects with accepted conceptual models, most notably the Crisis and Emergency Risk Communication (CERC) model and Situational Crisis Communication Theory (SCCT).

The clarity of communication and visible leadership on crisis briefings by HEAL instantly connects to the first and maintenance phase of the CERC model, which promotes the need to ensure

that information disseminated is clear and actionable in reducing the level of uncertainty and retaining citizens' confidence [4]. Similarly, this implies that leaders have high credibility perceptions, which align with the SCCT postulation that effective communication should be in tandem with how people apportion or attribute responsibility [6]. The comparably high trust ratings of HEAL imply that it did not experience the reputational damage that could have resulted from ineffective leaders who failed to fulfil their role as crisis managers effectively.

Nevertheless, the institution's poorer performance in terms of transparency and responsiveness to feedback reveals notable drawbacks that both frameworks warn against. As CERC suggests, the lack of disclosure of uncertainties or responding to feedback by adjusting messages threatens the legitimacy of the institutions, and the risks of misinformation are heightened [4].

This was reflected in communication by HEAL, which lacked consistency and involved limited interaction with stakeholders, thus creating internal discord and confusion among the general population at times. Such results are reflected in the observation of other recent empirical works on COVID-19 communication, which show that ambiguous or dynamic health guidelines may have detrimental effects on trust and adherence to safety practices [1].

Besides, although leadership communication is effective and frequent, the fact that stakeholders were not involved in the process of planning message content goes against the best practices of participatory communication, which emphasise the necessity to consider the input of both community and staff to make the messages more relevant and accessible [10]. The analysis, therefore, affirms that although top-down communication is effective in initiating a crisis, it needs to be supplemented by horizontal and bottom-up channels to maintain institutional credibility throughout the crisis lifecycle.

Table 3 – Comparative Strategic Communication Practices – HEAL vs. NCDC

Communication Dimension	HEAL (US.)	NCDC (Nigeria)
Clarity of Messaging	High; consistent internal updates	Moderate; improved over time
Leadership Visibility	Strong, frequent town halls and briefings	Variable; occasional public briefings

Communication Dimension	HEAL (US.)	NCDC (Nigeria)
Timeliness	Improved after early delays	Often reactive; lagged during outbreak spikes
Feedback Mechanisms	Weak; limited two-way staff input	Minimal; largely centralised communication
Transparency	Partial; filtered early-stage information	Limited; delays in data disclosure
Stakeholder Engagement	Low inclusion in planning	Limited civil society or frontline feedback

The consequences of weak strategic communication during health emergencies are real, affecting the effectiveness of the institutions involved and compliance. HEAL and NCDC had loopholes in their feedback channels, disparities in transparency, and a top-down approach to controlling messages, causing bewilderment among employees and distrust among the general public. Misinformation and rumours tend to take root when institutions are passive in combating uncertainty or involve stakeholders in the message design process. Such weaknesses were especially apparent in the initial stages of the COVID-19 pandemic, when both institutions failed to deliver consistent, believable, and responsive messaging that would have diminished the population's intentions to adhere to safety measures and compromised confidence in governmental actions.

Implications for Leadership and Practice. The study's findings offer valuable insights into leadership and communication practices within public health institutions. On the one hand, the leadership competency displayed in this case, with its visible and legitimate presence, underscores the need for healthcare executives to adopt proactive and transparent communication strategies as a key component of emergency management. Whenever leaders are regularly visible, caring, and truthful, it is possible to maximise trust at the institutional level and staff morale, despite uncertainty [8]. This necessitates capacity building, which equips leaders with crisis communication skills, including media relations, situational messaging, and psychological first aid.

Second, the identified weaknesses in the feedback systems highlight the need to develop stronger and more inclusive communication systems. Crisis response planners must incorporate frontline loops into the emergency communication proce-

dure, ensuring that messages are based on the dynamic realities encountered by various departments. This may include adopting digital mediums to provide real-time feedback, conducting internal surveys at regular intervals in the event of a crisis, or co-designing messages when participating in the process. These strategies are particularly important for institutions in low- and middle-income countries (LMICs), such as Nigeria, where resource constraints may necessitate more nimble, community-focused communication approaches.

Third, transparency frameworks need to be enhanced in the public health institutes. The emergency, however, when revealed, no matter how little the transparency, breeds resilience, as it helps communities and staff make informed decisions in reference to changing risks. Crisis communication teams need to be trained to acknowledge their uncertainty without compromising authority, a delicate process that can be addressed through effective message framing and regular communication.

Table 4 − Strategic Communication Framework for Public Health Crisis Management

Communication Element	Key Challenge at HEAL	Recommended Strategy
Transparency	Incomplete or delayed disclosures	Real-time updates, pre-approved messaging templates
Feedback Mechanisms	Limited two-way staff engagement	Digital feedback portals, anonymous internal surveys
Stakeholder Inclusion	Centralised planning only	Participatory message design, department-level consultations
Timeliness	Delay in early crisis communication	Pre-crisis simulation drills, tiered alert systems
Leadership Visibility	Strong but uneven across units	Routine town halls, decentralised leadership spokespersons

This framework synthesises the critical findings from HEAL and aligns them with practical strategies that other public health institutions can adopt. It emphasises the integration of inclusive structures, proactive planning, and leadership adaptability as cornerstones of resilient crisis communication.

Contributions to Communication and Crisis Management Theory. This paper is also significant as it adds to the cumulative knowledge about crisis communication by supporting and further developing the main theoretical concepts. The finding indicates the applicability of the stage-based approach embodied in the CERC model, specifically its demand to be prepared without crisis, to engage constantly, and to reflect on the crisis in hindsight. The established presence of weak feedback and the exclusion of stakeholders at the maintenance stage further refutes the model's reliance on long-term involvement [4].

Moreover, these results suggest an overlap between SCCT and certain leadership theories, such as Transformational Leadership and the Leader-Member Exchange (LMX). The favourable view of leadership credibility at HEAL is associated with qualities typically associated with transformational leadership, including visibility, empathy, and stability in communication, which foster loyalty and alignment in the face of disruption [17]. Equally, a lack of connections between leadership messages and employee responses signifies possible failures in the LMX associations, where understanding the exchange of trust and unrestricted communication is crucial for effectively overcoming the crisis.

Notably, the mixed methods, institution-specific design of this qualitative study contributes to the body of knowledge with a methodological contribution in the form of bridging theory and real-world contexts. Although numerous crisis communication studies are theoretical in their approach or focus on communications to the general population, this study includes the responses of staff and leaders within the same context of the present organisation. In the process, it highlights the inter-relation meeting point between the internal dynamics of communication and the effectiveness of external response to a crisis. This aspect has not been adequately captured in the literature on crisis communication.

This study has several limitations despite its contributions. First, the study's single-case design limits the applicability of its results outside the HEAL institutional context. Despite the granular, contextual details the case offers, the overall trends in other institutions or locations have not been studied. Multi-site comparative research may also be useful in future research to determine cross-institutional patterns and differences.

Second, the use of surveys and interviews based on self-reported data creates the risk of biased responses. Social desirability or lack of accuracy in recollection might have influenced the participants, especially since they participated in post-crisis research. In subsequent studies, objectivity may be enhanced by the use of real-time observation methods or media audits.

Third, the study's temporal scope, which emphasises past crisis experiences (particularly COVID-19), limits its ability to identify dynamic trends in communication or emergent digital practices anticipated since the post-pandemic period. The longitudinal designs would enable one to track the adaptations of communication across multiple crisis stages, thereby enhancing theoretical robustness.

Finally, although the mixed methods approach enhances knowledge, limitations regarding the size and depth of the sample, especially in the qualitative aspect, might have limited the identification of more subtle insights. Recruiting more and different interviewees may reveal other dynamics in an organisation that affect the performance of strategic communication.

CONCLUSIONS

The research highlights the importance of strategic communication in responding optimally to health issues during crises. Based on the analysis of the strategies introduced by the NCDC of Nigeria and HEAL in the US, this study reveals that the clarity of messages, leadership presence, and regular communication with the public are key factors in generating public trust and adherence to their requests. The results can provide practical implications not only for enhancing the resilience of institutions in Nigeria but also for nurturing the communication structures within US public health programs, particularly those serving vulnerable populations. Moreover, the findings also have wider implications for global health systems, which suggest that transparent and equity-driven communication should be at the centre stage of pandemic preparedness across the globe.

To be truly prepared for future health emergencies, policymakers and public institutions should prioritise continuous investment in enhanced communication infrastructure, including multilingual digital platforms, two-way community communication channels, and large-capacity data-sharing platforms that can respond in real-time.

The approach to strategic communication should change, especially in terms of viewing it as a peripheral role, but rather as a crucial component of public health systems in both developing and developed countries.

In the case of the HEAL, the findings serve as a reinforcement for implementing an improved internal communication architecture, which involves defining better feedback to enable a two-way flow of information between leadership and frontline personnel. The deployment of a culture of responsiveness to feedback would not only enhance operational alignment but also create psychological safety among employees. Additionally, establishing clear communication channels is crucial to minimise confusion and ensure efficient emergency response, which can be facilitated by digital platforms that guarantee the timely transfer of updated information. Regular training on crisis message delivery, audience segmentation, and transparency protocols should be institutionalised to ensure that all communication staff and departmental heads are well-prepared for future crises.

Moreover, both US institutions and global public health agencies should adopt the Unified Crisis Communication Preparedness Framework (UCCPF) to unify readiness measures across health systems. Such a framework would incorporate strategic communication audits into national emergency preparedness plans, require pre-crisis simulations that include communication scenarios, and facilitate a cross-institutional exchange of learning among nations. International health organisations, such as WHO, and regional organisations, including CDC Africa and PAHO, can contribute to a universal library of best practices, case studies, and culturally sensitive messaging templates. Making such systems institutional will help nations handle public opinion more effectively, combat misinformation, and coordinate their messages in the event of transnational health crises.

In terms of policy, the findings of this study suggest that integrating strategic communication as a system should be implemented across national health emergency systems. Policymakers must ensure that structured communication plans are integrated into every aspect of all public health institutions; this should be a condition for obtaining an emergency preparedness certification. National training of healthcare leaders should include elements of communication training, particularly in risk disclosure, empathy, and intercultural messaging. Additionally, more funds and technical resources should be allocated to enhance communication infrastructures, including data visualisation software and multilingual messaging systems, as well as media coordination departments, particularly in public sector bodies that are sometimes hindered by resource limitations in their responsiveness rates.

In terms of future research, several pathways emerge from the study's limitations and insights. Longitudinal studies are necessary to evaluate how strategic communication strategies evolve across various phases of a crisis, particularly in response to feedback and shifting public sentiment. Comparative multi-site studies across diverse health institutions, both geographically and institutionally, would offer more generalisable conclusions and identify context-specific best practices. Additionally, future research should explore the integration of technological tools such as artificial intelligence, real-time data dashboards, and sentiment analysis software in evaluating and optimising communication effectiveness. Such innovations could enable more dynamic, data-driven communication strategies that better respond to the complexity of modern public health emergencies.

The study of HEAL's communication practices provides critical lessons for institutional preparedness and crisis leadership. Strategic communication must be proactive, participatory, and transparent to not only manage emergencies effectively but also to sustain long-term trust in public health systems. Looking ahead, the insights from HEAL's communication practices have the potential to inform the design and implementation of leadership training programs across US public health institutions. By embedding principles of transparency, participatory communication, and adaptive messaging into leadership development curricula, agencies such as the CDC, NIH, and state health departments can build a new generation of crisis-ready leaders. These leaders would be equipped not only with technical expertise but also with the relational communication skills necessary to sustain trust, ensure operational alignment, and respond effectively in fast-evolving public health emergencies.

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