EVALUATION OF COMMUNICATION STRATEGIES ADOPTED BY NIGERIA CENTRE FOR DISEASE CONTROL (NCDC) IN THE MANAGEMENT OF COVID-19 PANDEMIC IN THE FCT-ABUJA

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Abstract

This study evaluated the communication strategies employed by the Nigeria Centre for Disease Control (NCDC) in managing the COVID-19 pandemic in the Federal Capital Territory (FCT), Abuja, Nigeria. The aim of the study was to assess the communication strategies used in combating misinformation during the COVID-19 pandemic. Grounded in Protective Motivation Theory (PMT), the study utilized a qualitative survey design, collecting data via questionnaire from 371 NCDC staff across eight departments. Findings revealed that NCDC effectively used diverse channels such as town criers, radio, television, social media, and more to disseminate information and curb the spread of the virus. Mass media proved significant in countering misinformation, though challenges like poor internet connectivity, illiteracy, and conflicting government policies hindered efforts. The findings also underscored the significance of mass media in containing as well as informing citizen about curative measures of COVID-19. The study recommends multilingual messaging and improved infrastructure for future health crises.

Keywords: Communication, Crisis, COVID-19, Evaluation, Nigeria

Introduction

Information serves as the cornerstone of societal knowledge, guiding individual and collective decisions that shape health, behaviour, and progress. In an era defined by interconnectedness, information flows through myriad channels traditional media, digital platforms, interpersonal networks, and institutional sources, each vying for attention and trust (Emeka, 2021). Yet the proliferation of false, biased, or misleading information poses profound risks, distorting public understanding and undermining critical efforts to address global challenges (Ebenso & Otu, 2020). The COVID-19 pandemic starkly illustrates this duality: while accurate information has been vital to saving lives, misinformation has fuelled confusion, fear, and preventable harm. From unfounded claims linking face masks to carbon dioxide toxicity to conspiracy theories about vaccines, the consequences of distorted communication have reverberated across health systems, economies, and communities, revealing the urgent need for clarity, empathy, and strategic communication in times of crisis.

Communication, at its essence, is the bridge that connects intent to understanding. It is a dynamic, continuous process of transmitting and interpreting messages, ensuring alignment between sender and recipient (Daniel, 2016, Santas etal, 2023). Within organizational and managerial contexts, communication assumes even greater significance, serving as the lifeblood of coordination, decision-making, and action.

Effective communication adheres to core principles: clarity, brevity, timeliness, and feedback. These principles are not merely theoretical but practical necessities, particularly during emergencies where misinformation can escalate chaos. The breakdown of communication—whether through ambiguity, delay, or neglect—fuels misinformation, erodes trust, and jeopardizes public health outcomes.

According to Akinwotu (2020), the global declaration of COVID-19 as a pandemic in March 2020 marked a turning point for nations worldwide, exposing vulnerabilities in healthcare infrastructure, economic resilience, and crisis communication. Nigeria, like many countries, faced unprecedented challenges as the virus spread rapidly following its first confirmed case in February 2020. The Italian citizen who tested positive in Lagos catalysed a chain of infections, prompting lockdowns, border closures, and economic paralysis. Industries collapsed, unemployment surged, and social stability wavered under the weight of uncertainty. Amid this turmoil, the Nigeria Centre for Disease Control (NCDC) emerged as a pivotal institution, tasked with coordinating the national response to the pandemic (Ukeh, 2020). Established in 2011 and modelled after the U.S. Centers for Disease Control and Prevention, the NCDC's mandate encompasses disease surveillance, outbreak management, and public health communication—a role tested during prior crises such as the Ebola outbreak of 2014.

However, Nigeria's COVID-19 experience has underscored systemic challenges: porous borders, delayed testing, inadequate healthcare worker incentives, and fragmented coordination between federal and local authorities (Emeka, 2021). Despite deploying tools like the Surveillance and Outbreak Response Management System (SORMAS) and engaging community mobilization teams, gaps persist. Testing bottlenecks, prolonged result turnaround times, and insufficient grassroots awareness campaigns have hampered efforts to curb transmission. Moreover, the politicization of public health measures and inconsistent resource allocation have further complicated the response. These obstacles highlight the necessity of robust, adaptive communication strategies that bridge institutional authority with community trust.

The NCDC's role in disseminating timely, accurate information through traditional media, digital platforms, and partnerships with informal networks has been critical to mitigating panic and fostering compliance with health protocols (Emeka, 2021). Yet the agency's effectiveness hinges on addressing systemic weaknesses: decentralizing testing infrastructure, enhancing frontline worker support, and leveraging multisectoral collaborations to amplify public health messaging. This study examines the communication strategies employed by the NCDC during the COVID-19 pandemic, evaluating their alignment with established principles of effective communication and their impact on Nigeria's public health outcomes. By analysing successes, shortcomings, and lessons learned, this inquiry seeks to inform future strategies for combating misinformation, strengthening resilience, and safeguarding communities in an increasingly complex information landscape.

In a world where misinformation spreads as swiftly as pathogens, the stakes of communication have never been higher. The lessons from Nigeria's pandemic response offer a microcosm of global challenges and opportunities to redefine how societies navigate truth, trust, and collective action in times of crisis.

Statement of the Problem

The rise of misinformation during the COVID-19 pandemic presented a profound challenge, particularly for peripheral and

developing nations such as Nigeria, where it deepened the divide between developed and developing societies. This social issue intensified the struggles of Nigeria's health sector, which lacked adequate preparation to confront the crisis, thereby endangering human lives and the prospects for sustainable living (Emeka, 2021). The pandemic disrupted the daily existence of countless individuals, bringing severe psychological, emotional, physical, and economic burdens to families across the nation. It shook the very core of Nigeria's economy, leaving small businesses shuttered and rendering survival an overwhelming struggle for many (Copenhagen Economics, 2020). On a global scale, the crisis demanded relentless efforts from the World Health Organization, which introduced the concept of a "new normal" to guide societies toward safer behaviours and limit the virus's spread.

In Nigeria, the Nigeria Centre for Disease Control took on the critical task of managing the crisis, turning to communication and media as essential tools to share strategies for prevention and adherence to COVID-19 protocols. Effective communication remains vital in addressing health risks, especially those tied to zoonotic diseases, yet misinformation often distorts how people perceive these threats (Macfarlane & Rocha, 2020). The Director-General of the World Health Organization captured this dual struggle, declaring, "We are not just fighting an epidemic; we are fighting an infodemic" (Pennycook et al., 2020). Information about the virus reached the public through traditional channels, such as radio and television, as well as unregulated platforms like WhatsApp, TikTok, Facebook, Twitter, and YouTube (Cinelli, Quattrociocchi, Galeazzi, Valensise, Brugnoli, Schmidt, Zola, Zollo, & Scala, 2020).

There were press conferences, press releases, press briefings and interviews in the mainstream media as well as the digital media where COVID-19 related topics were analysed and misconceptions cleared. Social media, in particular, became a space where falsehoods flourished, with some individuals spreading conspiracy theories, such as claims linking COVID-19 to 5G radiation (Brindha, Jayaseelan, & Kadeswara, 2020). These distortions led people to either dismiss the danger or react with undue alarm. Moreover, the frequent connection of wildlife to zoonotic diseases risks eroding public support for conservation and even inciting harm toward animals suspected as disease sources (Gandiwa, Zisadza-Gandiwa, Mango, & Jakarasi, 2014).

Research Questions

1.What are the communication strategies utilized by NCDC in combating the Covid-19 pandemic in Nigeria?

2. How effective were the communication strategies used by NCDC in the fight against Covid-19 pandemic in Nigeria?

3. What were the challenges encountered by NCDC in the management of COVID-19 in Nigeria;

Conceptual Clarifications

Communication Strategies

Communication strategies refer to the deliberate and purposeful approaches, techniques, or methods used to convey information effectively to achieve specific objectives (Griffin et al., 2020). Communication strategies are plans for communicating information related to specific issue, event, situation, or audience. They serve as the blueprints for communicating with the public, stakeholders, or even colleagues including workmates, customers, and superiors (Santas etal, 2023). These strategies involve planning and executing communication processes to engage target audiences, influence perceptions, or facilitate understanding (Sule & Ridwanullah, 2025). They encompass verbal, non-verbal, written, and visual

methods tailored to the context, audience, and purpose of communication. Daily Press Briefing is another communication strategy adopted by the NCDC in its quest to educate Nigerians on the Covid-19 pandemic.

Theoretical Framework

This study is hinged on the Protective Motivation Theory (OMT). The Protection Motivation Theory was developed by Rogers in 1975, is one of the scholars' theories to explain risk perception (Rogers, 1975; Rogers & Prentice-Dunn, 1997). It is somewhat similar to the Health belief theory as it connects fear, risk and behaviour change. This theory showcases a person's likelihood to protect himself due to the anticipation of adverse outcomes. According to Shaw (2012), The Protection motivation theory modifies the Health Belief theory founded by R.W. Rogers in 1975 (Wong *et al*., 2016). However, the theory was initially based on Richard Lazarus work on how people act and cope during stressful situations (Zimmer-Gembeck & Skinner, 2016). Richard Lazarus stated that people are different in their sensitivity and vulnerability to specific events and respond differently. People consider the severity of an event, their vulnerability, and the benefits of undertaking protective actions before deciding to expose themselves to risk.

Generally, PMT assumes that there is a connection between public risk perception and protective action (Westcott, Ronan, Bambrick, & Taylor, 2017). Shereen (2020) found that enhancing risk perception and perceived severity significantly affects intentional and behavioural change toward safety. According to the protection motivation theory, public awareness of risk and personal protective equipment is linked. For instance, public awareness of deaths and the number of COVID-19 infected cases tend to induce public concern and motivation for self-protection and the use of protective tools to prevent risk. Shaw (2012) noted that PMT is deployed to emphasize safety campaigns, and messages resulting from PMT were based on raising awareness of risk exposure consequences and that being motivated to protect oneself requires adequate risk perception.

In applying PMT theory to the study on evaluation of communication strategies adopted by NCDC in managing covid-19 crisis, public motivation to protect themselves and indulge in preventive behaviours is dependent on perceived risk to the virus based on information gathered via the media or agency communication on COVID19. Therefore, public participation in risk preventative behaviours is dependent on their motivation to protect themselves from threats such as natural disasters. Janmaimool (2017) states that; this decision is made based on two results which are: (1) threat appraisal and (2) coping appraisal. Threat appraisal involves a process people use to appraise the level of threat or risk they are exposed to, which involves assessing vulnerability.

Thus, information and knowledge gathered on the Coronavirus can help an individual determine their level of vulnerability. Based on this theory's principles, how these messages are crafted can also induce individuals perceived severity and perceived vulnerability. The second, coping appraisal, states that the appraisal of an individual's capability to carry out risk preventative behaviours influences protection motivation. Therefore, how individuals perceive their ability to perform preventive behaviours will influence response to recommended risk preventative behaviours. This implies that how individuals perceive their capacity to carry out NCDC recommended COVID-19 preventive behaviour will largely determine if they would adhere. Hence, public perception of the risk of infection of the COVID-19 and ability to engage in preventive behaviour is inadvertently linked to the nature of the

information they access about the Coronavirus.

Review of Empirical Studies

Following the global outbreak of the COVID-19 pandemic in 2019 and its subsequent arrival in Nigeria via Lagos in February 2020, researchers from medical and academic institutions worldwide have focused on raising awareness about the disease. These efforts aim to educate populations on strategies to curb its spread, prevent infection, and develop lasting solutions. Numerous studies have emerged to safeguard humanity and eradicate the virus from society. This review examines key empirical studies, comparing their objectives, findings, and theoretical frameworks with the current study titled Evaluation of Communication Strategies Adopted by the Nigeria Centre for Disease Control (NCDC) in the Management of the COVID-19 Pandemic in the FCT-Abuja, which adopts the Protective Motivation Theory (PMT).

Oyeranti and Sokeye (2020) historicized the outbreak and spread of COVID-19 in Nigeria, providing a statistical and geographical analysis of confirmed cases. Their objective was to document the pandemic's trajectory, offering a foundational understanding of its epidemiology. Similarly, the Nigeria Centre for Disease Control (NCDC, 2020) focused on creating awareness and promoting preventive strategies to control the pandemic's spread in Nigeria. Adesegun et al. (2020) complemented these efforts by providing detailed insights into the disease's characteristics, enhancing public understanding. Iyorza and Ojorgu (2020) investigated change communication approaches in media campaigns addressing rising COVID-19 cases, aligning with NCDC's awareness and prevention goals. These studies share the current study's emphasis on communication as a tool for managing the pandemic, though they lack an explicit theoretical framework like PMT, which the current study uses to evaluate how threat and coping appraisals influence behaviour.

Brunson et al. (2021) explored public perceptions and acceptance of COVID-19 vaccines, a shift from earlier awareness-focused studies. Badu (2020) and Cortegiani (2020) examined the virus's nature and impact on African populations, with specifically assessing chloroquine's effectiveness. These studies aimed to identify mitigation measures, differing from the current study's focus on communication strategies but overlapping in their intent to protect public health. Lauer, Grantz, Bi, Jones, Zheng, Meredith, & Lessler (2020) investigated incubation periods of respiratory viruses, including COVID-19, to inform treatment strategies. While their medical focus diverges from the current study's communication lens, their findings support the need for timely interventions, a principle PMT underscores through efficacy perceptions.

Olu-Abiodun, Abiodun, and Okafor (2022) assessed vaccine acceptance and hesitancy among Nigerians and health workers, respectively. Both studies identified predictors of non-acceptance, such as mistrust and misinformation, aligning with the current study's interest in how communication influences behaviour. PMT's focus on threat perception and coping efficacy directly relates to these findings, as effective communication can address hesitancy by enhancing perceived self-efficacy and response efficacy.

Venkatashiva and Gupta (2020) emphasized effective communication's role during the COVID-19 infodemic, using survey methods to highlight its impact on vulnerable groups. They proposed a framework integrating sociocultural, economic, and psychological factors, resonating with PMT's emphasis on

understanding motivations for protective behaviour. Gregory and Hyunsuh (2021) analyzed communication's role across COVID-19 prevention phases, adopting an ecological perspective. Their findings on the need for tailored, credible messaging to combat misinformation align with the current study's evaluation of NCDC's strategies and PMT's focus on perceived threat and coping responses.

Studies on non-pharmaceutical interventions (NPIs) provide further context. Hunter, Colón-González, Brainard, & Rushton (2021) found no added benefit in closing all non-essential businesses compared to partial closures, while Brauner (2021) reported a dose-response effect, with closing high-risk businesses reducing the reproduction number by 31% and most non-essential ones by 40%. Liu, Morgenstern, Kelly, Lowe & Jit (2021) supported these findings, noting limited efficacy in banning gatherings over 1,000. Pozo-Martin, Weishaar, Cristea, Hanefeld, Bahr, Schaade, & Busse (2021) highlights workplace closures' effectiveness, with Pozo-Martin et al. noting enhanced outcomes when mandating masks universally. Koh (2021) suggested partial lockdowns suffice early on, contrasting with Wibbens (2021), who found higher NPI intensity generally more effective, though socioeconomic costs must be weighed. Stokes, Turner, Anselmi, orciano, & Hone (2021) linkes stricter measures to reduced mortality.

Timing of NPI implementation also emerged as critical. Koh (2021) and Chaudhry (2020), associated early action with better outcomes, while Pozo-Martin et al. (2021) found no delay effect in OECD countries. Piovani Christodoulou, Hadjidemetriou, Pantavou, Zaza, Bagos, & Nikolopoulos (2021) consistently linked early NPIs like school closures and travel bans to reduced mortality, reinforcing PMT's emphasis on timely communication to enhance perceived efficacy.

Research Methodology

The study was carried out in Abuja, which is the Federal Capital Territory. This area was chosen because of the multi-ethnic groups residing in the city. Also, the city houses the headquarters of the Nigeria Centre for Disease Control and most of the isolation centres in the country at the wake of the deadly virus in the country. The study adopts the social survey research design. According the Human Resource Department of NCDC, the population of the study comprises staff of NCDC which stands at 500. The instrument for data collection adopted by the researcher are the questionnaire. The sample size of the study is 400. However, upon return 371 questionnaire were found usable. This was determined using Yamane (1967) statistics. The NCDC currently operates through eight (8) departments. These include: Public Health, Laboratory Services, Health Emergency Preparedness and Response, Planning, Research and Statistics, Surveillance and Epidemiology, Administration and Human Resources, Finance and Accounts, Subnational Support Department and Special Duties Department.

The study employed the simple random sample to randomly select subset of the population. In this sampling method, each member of the population had an exactly equal chance of being selected. The sample units were chosen on the basis of the judgemental (Purposive Sampling technique) of the researcher. In doing so, the researcher selected twelve (10) respondents from the 8 Department of NCDC which are Public Health, Laboratory Services, Health Emergency Preparedness and Response, Planning, Research and Statistics, Surveillance and Epidemiology, Administration and Human Resources, Finance and Accounts, Special Duties Department.

Table 1: Demographic Characteristics of Respondents

Demographic Variable	Category	Frequency	Percentage (%)
Age (Years)	18–25	77	20.8
	26–32	79	21.3
	33–39	88	23.7
	40 and above	127	34.2
Subtotal		371	100.0
Sex	Male	211	56.9
	Female	160	43.1
Subtotal		371	100.0
Marital Status	Single	94	25.4
	Married	150	40.4
	Widow/Widower	64	17.3
	Separated	38	10.2
	Divorced	25	6.7
Subtotal		371	100.0
Educational Attainment	GCE/WASSCE/SSCE	60	16.4
	GCE A-Level/NCE/ND	69	18.6
	HND/BSC	194	52.3
	MSC and above	48	12.7
Subtotal		**371**	**100.0**

Source: Field Survey, November 2024

The age distribution shows that respondents aged 40 and above constitute the largest group (34.2%), indicating a predominantly older population in the sampled area. The sex distribution reveals a male majority (56.9%) compared to females (43.1%), attributed to easier access to male respondents in departments such as Public Health, Laboratory Services, and others. Marital status data indicates that the majority of respondents are married (40.4%), followed by single individuals

(25.4%). Educational attainment shows that the majority hold HND/BSC qualifications (52.3%), reflecting a relatively high level of education among respondents.

Communication Strategies Adopted by NCDC in Managing the Covid-19 Crisis in Federal Capital Territory (FCT)

Table 7: Determine the communication strategies utilized by NCDC in combating Covid-19 pandemic in the FCT. What communication strategies were utilized by NCDC

Communication strategies utilized by NCDC	Frequency	Percentage (%)
Town Criers	22	5.9
Open market	19	5.1
Age grades	27	7.3
Masquerade outing	14	3.8
Mass Media	45	12.1
Mobile	39	10.5
Digital	55	14.8
NCDC Call Centre	23	6.2
Daily Press Briefing	44	11.9
Media Engagements and Chats	43	11.6
Print Media	30	8.1
Social and Community Mobilization	10	2.7
Total	**371**	**100**

Source: Field Survey, November 2024

Table 7 reflects the communication strategies utilized by NCDC 5.9 percent affirming that town criers were utilized in managing covid-19 crisis in the FCT and 5.1 percent held that open markets campaigns was a vital communication strategy in the management of covid-19 also, 14.8 percent of respondents gave the highest affirmation that mass media served as a potent tool in information dissemination and the consequent containment of covid-19 crisis in the FCT.

Table 9: Responses of the effectiveness of the communication strategies used by NCDC in the fight against Covid-19 pandemic in the FCT

How effective was radio in the fight against Covid-19 pandemic in the FCT	**Frequency**	**Percentage (%)**
Very effective	290	78.5
Effective	76	20.5
Not effective	5	1.3
Undecided	**371**	**100**
Total		

Source: Field Survey, November 2024

Table 9 shows78.5 percent of respondents agree that there is a connection between radio and the fight against misinformation and covid-19 crisis in the FCT. This is because, it was indicated that most residents of the FCT had access to radio and television.

Table 11: Responses on the challenges encountered by NCDC in the management of COVID-19

Options	**Frequency**	**Percentage (%)**
Lack of resources	95	25.6
Lack of technical expertise	99	26.7
High population density	97	26.1
Lack of proper awareness about the disease	80	21.6
Total	**371**	**100**

Source: Field Survey, November 2024

In table 11, indicates the respondent's views of challenges encountered by NCDC in the management of COVID-19 crisis. Result shows a total of 26.7 percent of respondents revealing that lack of technical expertise was one of the challenges. Other challenges included, population density, lack of proper awareness about COVID-19, and and lack of adequate health care facilities among others.

Discussion of Findings

The study examined communication strategies employed by the Nigeria Centre for Disease Control (NCDC) to combat the COVID-19 pandemic in the Federal Capital Territory (FCT), based on questionnaire and in-depth interview (IDI) data analyzed through frequencies, percentages, and qualitative insights. Key findings align with the study's objectives, highlighting the effectiveness and challenges of these strategies.

Mass media, including social media platforms (WhatsApp, Facebook, TikTok), television, and print media, were pivotal in disseminating COVID-19 information and containing the crisis in the FCT. IDI responses confirmed the use of both traditional (e.g., town criers, community mobilization) and modern communication channels, as supported by Ottah and Umar (2016), who noted the persistence of traditional communication methods in Nigeria. Okon (2022) emphasized the media's role in informing, educating, and shaping public opinion responsibly through print, electronic, and social platforms.

The study found that mass media significantly countered misinformation and curbed COVID-19 spread, with 83.6% of respondents acknowledging radio's role due to its widespread accessibility in the FCT. However, social media platforms like WhatsApp and Facebook, lacking editorial gatekeeping, contributed to misinformation, as Oberiri (2016) observed, due to unfiltered content dissemination. Traditional media (radio, television), adhering to journalistic ethics, were more effective in providing credible information. The study found that most of the communication strategies employed by NCDC in communicating information about the pandemic were quite effective. This finding demonstrates the pivotal role of the mass media in providing adequate and accurate information to members of the society during emergency situation.

Applying media perception theory, selective exposure, attention, perception, and retention explain varied public interpretations and negative attitudes toward NCDC's efforts, as individuals selectively engaged with media content, often leading to conspiracy theories. Radio and television were the most patronized channels for COVID-19 information.

In regards to the challenges encountered by NCDC in its quest to contain the pandemic, problems such as lack of resources, population density, illiteracy, misinformation, and inadequate healthcare facilities were some of the challenges they faced in carrying out their duties. Poverty and vulnerability, as noted by Akinwotu (2020) and WHO (2020a), rendered preventive measures like lockdowns unfeasible, with many residents prioritizing survival over compliance due to hunger risks (Ukeh, 2020).

Conclusion

The study was able to demonstrates the significant role of communication strategies in managing Covid-19 by NCDC during the pandemic in Nigeria. The study concludes that communication strategies that were deployed by NCDC to contain the pandemic were to a great extent effective in educating and creating awareness about the disease. Despite the huge success recorded by NCDC in containing the disease, problems of population density and lack of expertise constituted a major challenge. In view of the foregoing, the study provides the following recommendations in order to effectively tackle future outbreak.

Recommendations

Based on the findings, the following recommendations are made:

i. The National Orientation Agency (NOA) should be prompt in providing information on their platforms in regards to future outbreaks of diseases so that people should not be misinformed by false information especially on social media.

ii. Government should invest heavily on infrastructural facilities so that NCDC should be provided with all they need to respond to future outbreaks.

iii. NCDC should partner with media agencies to in order to provide a better coordinated response to health emergencies in regards to media sensitization. This will ensure that they cover a wide range of issues related to information dissemination.

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