

INFORMATION DISSEMINATION CHANNELS BY PUBLIC LIBRARIES FOR CONTROL OF PANDEMICS IN NORTH-CENTRAL, NIGERIA

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Abstract

This study examined the information dissemination channels adopted by public libraries for control of pandemics in North-Central Nigeria and the extent to which such information is disseminated. Using a descriptive survey research design, data was gathered from 301 public librarians across six states (Benue, Kogi, Nasarawa, Plateau, Niger, and Kwara) through an observation checklist and the "Public Libraries and Pandemic Information Dissemination Questionnaire (PLPIDQ)". Descriptive statistics, including frequency counts, percentages, mean, and standard deviation, were used for data analysis. The findings revealed that traditional channels such as informational brochures and posters (58.2%) as well as newspapers and magazines (55.5%) were the major channels adopted by public libraries for disseminating pandemic-related information, while digital channels such as library websites, virtual events, mobile applications, online resource guides, and virtual reference services were largely not adopted. The study further found that the extent to which public libraries disseminated information for control of pandemics in North-Central Nigeria was low, with a cluster mean of 2.24. The study concluded that public libraries in the region relied more on traditional dissemination channels than digital platforms and that the overall level of information dissemination for pandemic control was low and it was recommended that improved adoption of digital communication channels, increased funding for information

and communication technology facilities, regular training of librarians in digital information dissemination, stronger collaboration with relevant health and media agencies, and the use of inclusive communication strategies to enhance pandemic information dissemination by public libraries.

Keywords: Public Libraries, Pandemic information dissemination, North-Central Nigeria, COVID-19, digital communication

Introduction

In an increasingly interconnected world, the outbreak of infectious diseases can escalate rapidly into public health emergencies with far-reaching consequences. Pandemics—defined as large-scale outbreaks of infectious diseases that spread rapidly across countries and continents—pose profound threats to public health, economies, and social stability (World Health Organization [WHO], 2020). Effective management and control of pandemics depend not only on medical interventions but also on the dissemination of accurate, timely, and actionable information. Consequently, public access to trustworthy information becomes critical in shaping public behavior, minimizing misinformation, and strengthening community resilience during such crises.

Public health emergencies are often accompanied by a communication crisis in which uncertainty, fear, and misinformation spread rapidly among the population. However, the sudden emergence of infectious diseases such as COVID-19 often triggers a period characterized by uncertainty, misinformation, and collective denial, which significantly hampers public health efforts (Ishola, Ojokuku, Akpobasah-Amugen, & Eluyemi, 2022). During such critical times, the efficient dissemination of credible health

information becomes paramount, as it directly influences public perception and adherence to preventive measures. In this regard, public libraries being established community hubs are strategically positioned to meet the urgent need for reliable health information. This role is particularly vital in regions like North-Central Nigeria, where information poverty can exacerbate health vulnerabilities (Egunjobi & Akerele, 2014).

Ideally, public libraries in North-Central Nigeria should be adequately prepared and equipped to provide timely, accurate, and comprehensive information on pandemics and epidemics. Such preparedness would enable communities to respond effectively to health crises, minimize disease spread, and mitigate the overall impact. Nevertheless, evidence suggests that the level of preparedness among these libraries is still inadequate. They often lack sufficient resources, face logistical constraints, and struggle with outdated information dissemination methods. Moreover, limited collaboration with health authorities further weakens their ability to serve as reliable information centers. This gap between the ideal and the actual situation hinders public libraries from fulfilling their critical role in pandemic control.

Pandemics constitute major public health emergencies that threaten human lives, disrupt economic activities, and strain social institutions. Their rapid spread across communities and national borders makes access to timely, accurate, and understandable information essential for prevention and control. During such health crises, people require reliable information on symptoms, transmission patterns, preventive measures, treatment options, and government directives. Where such information is absent,

delayed, or distorted, misinformation and fear may spread more quickly than the disease itself. Effective information dissemination therefore remains a central component of pandemic control because it shapes public awareness, influences behaviour, and supports compliance with public health measures (UNESCO, 2020; World Health Organization [WHO], 2020).

Public libraries are important community-based information institutions that can support this process. By virtue of their mandate to organize, preserve, and disseminate information for public use, they are strategically positioned to make verified health information accessible to diverse groups within society. Their relevance becomes even more pronounced in developing contexts where many citizens may have limited access to digital resources, low health literacy, or dependence on informal sources of information. In such settings, public libraries can serve as accessible channels through which people obtain credible information during health emergencies. They may do this through printed materials, media collaborations, community outreach, mobile messaging, social media platforms, and other communication channels suited to local realities (Adigun & Ogunmodede, 2020; Ekwelem & Madumere, 2021).

The importance of information dissemination channels became more evident during recent global and regional health emergencies, especially the COVID-19 pandemic. Across the world, libraries adopted a variety of channels to sustain access to pandemic-related information, including websites, social media, e-mail alerts, online resource guides, webinars, and virtual reference services. In many low-resource environments,

however, the extent to which such channels were adopted remained uneven due to infrastructural, technological, and financial limitations. In Nigeria, and particularly in the North-Central region, many public libraries continue to function within contexts marked by erratic power supply, inadequate information and communication technology facilities, low internet penetration, and insufficient institutional support. These conditions affect not only their routine services but also their ability to respond effectively during public health emergencies (IFLA, 2020; Chuks-Ibe, 2020).

North-Central Nigeria presents a particularly important setting for examining this issue. The region is characterized by a mixture of urban and rural populations, varying levels of access to formal information systems, and a continued need for dependable community information services. In such an environment, the channels used by public libraries to disseminate pandemic-related information can significantly influence how effectively communities are informed and mobilized during health crises. Traditional print channels such as brochures, posters, and newspapers may remain relevant where digital access is limited, while digital platforms may offer broader and faster reach where infrastructure supports them. Understanding which channels are adopted and the extent to which they are used is therefore necessary for evaluating the contribution of public libraries to pandemic information dissemination (UNESCO, 2020).

Despite the recognized value of libraries in crisis communication, concerns remain about the adequacy and effectiveness of the channels they employ in disseminating information for pandemic control. Existing observations suggest that while public

libraries attempt to provide health-related information, their communication efforts are often constrained by low technological capacity, weak institutional collaboration, and limited investment in modern information delivery systems. This raises important questions about whether public libraries in North-Central Nigeria are making sufficient use of the available dissemination channels and whether the level of dissemination is adequate to support pandemic control efforts (Chuks-Ibe, 2020; Dooshima, 2023; Oyelude et al., 2022).

It is against this background that this study examines the information dissemination channels adopted by public libraries for control of pandemics in North-Central Nigeria and the extent to which such information is disseminated. By focusing specifically on channels and extent of dissemination, the study provides a clearer understanding of how public libraries communicate pandemic-related information within their communities. The findings are expected to contribute to library and information science scholarship and offer practical insight for strengthening public library communication strategies in support of public health emergencies.

Research Questions

The study was guided by the following research questions:

1. What are the information dissemination channels adopted by public libraries for control of pandemics in North-Central Nigeria?
2. To what extent do public libraries disseminate information for control of pandemics in North-Central Nigeria?

Literature Review

The dissemination of information during pandemics is an essential component of public health communication. Scholarly discourse underscores that effective information dissemination practices influence how individuals and communities respond to crises, shaping both perception and behavior (Gulati & Sharma, 2020). Within this context, public libraries function as pivotal institutions that bridge the gap between expert knowledge and community understanding, particularly in regions characterized by limited digital infrastructure or information poverty.

The dissemination of accurate and timely information is central to effective pandemic management, influencing public attitudes and compliance with control measures (Gulati & Sharma, 2020). In the library and information science context, recent empirical research emphasizes that public and academic libraries shifted rapidly to digital and hybrid modes of service delivery during and after the COVID-19 pandemic, while also confronting structural constraints that limited their reach and effectiveness

Drawing on the Functionalist (Durkheim (1897) and Diffusion of Innovations (Rogers, 1962) theories, this review explores the evolving practices, channels, and challenges associated with public library information dissemination, as well as its significance in pandemic control. Rogers' Diffusion of Innovations helps explain why library-mediated messages can be persuasive: libraries' established trust and local legitimacy increase message credibility and therefore speed adoption among community members—provided the messaging is accessible and culturally compatible. Durkheim's Functionalist perspective complements this by highlighting the broader social-stabilising effects when libraries successfully disseminate public-health information.

Conceptualizing information dissemination in pandemics

Information dissemination practices refer to the systematic and purposeful methods employed to share information with a defined audience. They encompass traditional and digital communication tools, including print media, social media, electronic databases, and interpersonal networks (Gulati & Sharma, 2020). Across disciplines, these practices ensure that accurate and relevant knowledge reaches the intended recipients efficiently. In healthcare, they enhance patient education and system responsiveness through innovations such as electronic health records (Bates et al., 2014). Similarly, in education, online platforms and open-access resources facilitate knowledge exchange between educators and learners (Al-Azawei et al., 2017), while in business, digital dissemination supports marketing and organizational communication (Smith et al., 2012). Collectively, these examples emphasize that effective dissemination depends on accessibility, organization, and retrieval efficiency (Chatterjee & Samanta, 2021; Hjørland, 2013).

More so, Information dissemination practices encompass both technological channels (databases, websites, apps) and interpersonal channels (workshops, community outreach), and their effectiveness depends on organization, accessibility, and trustworthiness of the source (Chatterjee & Samanta, 2021; Hjørland, 2013). Libraries contribute to this ecosystem by organizing knowledge for retrieval and by acting as trusted intermediaries—roles that are particularly consequential in low-information environments where misinformation proliferates. Theoretical lenses such as Functionalist Theory and Diffusion of Innovations underscore these roles: libraries stabilize social systems by supplying reliable information and act as channels that can speed adoption of health innovations (e.g., vaccination campaigns).

Role of Public Libraries in Information Dissemination

Public libraries occupy a unique position in ensuring equitable access to information, which is central to building knowledge societies and fostering social inclusion (Scott, 2011; Asselin & Doiron, 2016). Their mission extends beyond lending

materials to include organizing, preserving, and communicating information for community empowerment. According to Blake (2011), knowledge organization through proper classification schemes enhances future retrieval, ensuring that information seekers can efficiently access relevant materials. This efficiency, in turn, accelerates learning, decision-making, and public awareness.

In times of health crises, libraries serve as reliable sources of verified information, helping to counter misinformation and support informed decision-making. They perform what Functionalist Theory identifies as a stabilizing function within society—maintaining equilibrium by fulfilling informational and educational needs essential to community well-being. When libraries fail to perform this function, they risk becoming “dysfunctional,” thereby affecting the social system’s stability (Durkheim, as cited in Ishola et al., 2022). Moreover, through the lens of Diffusion of Innovations Theory (Rogers, 2003), libraries act as communication channels that accelerate the adoption of new health behaviors and technologies. Their credibility and established trust within communities make them ideal agents for diffusing innovations such as vaccination campaigns, hygiene practices, and health literacy programs.

Channels of Information Dissemination

During public health emergencies such as pandemics, libraries employ a multifaceted array of communication channels to ensure equitable and inclusive access to credible information. The integration of both digital and traditional media reflects the library’s dynamic role as an intermediary between knowledge production and community well-being.

Digital platforms and online resources constitute the foundational mechanisms through which libraries transcend physical boundaries. Tools such as e-books, academic databases, and multimedia repositories facilitate uninterrupted access to scholarly and health-related information, thereby sustaining learning and engagement during

lockdowns or restricted movements (Ray & Day, 2020). These platforms not only enhance accessibility but also support real-time dissemination of updates from verified health institutions.

Social media has emerged as another indispensable medium for information diffusion. Through platforms such as Facebook, Twitter, and Instagram, libraries are able to engage interactively with their patrons, disseminate timely health guidelines, correct misinformation, and foster participatory communication (Jun & Chiang, 2019). The immediacy and bidirectional nature of social media communication amplify the library's capacity to respond to user inquiries and reinforce behavioral awareness during crises.

In addition to social media, email newsletters and alert systems have proven to be effective in maintaining consistent and targeted communication. These curated bulletins enable libraries to circulate verified information, promote health literacy, and sustain public engagement with credible pandemic-related resources (Abel, & McQueen, 2021). Similarly, webinars and virtual programming have redefined community outreach by creating interactive spaces where experts, stakeholders, and community members can exchange knowledge, deliberate on emerging issues, and promote preventive health behaviors (Smith, 2017).

Furthermore, library websites and institutional portals serve as centralized digital gateways to pandemic-related information. They provide structured access to e-resources, policy updates, and official health advisories, reinforcing the library's credibility as a trustworthy source of public information (Rubin, 2019). Nonetheless, acknowledging the persistence of digital divides, libraries often complement online communication with traditional media collaborations. Partnerships with radio stations and print newspapers remain instrumental in extending outreach to rural and low-connectivity populations (Okechukwu, & Anunobi, 2020).

Mobile applications and short message service (SMS) technologies further enhance this inclusivity by transmitting concise alerts, safety protocols, and health advisories to users' mobile devices. This approach ensures an uninterrupted flow of information, particularly in contexts where internet access is limited or unreliable (Mnubi-Mchombu, Mostert, & Ocholla, 2013).

Beyond digital communication, libraries also emphasize community-based interventions that strengthen social trust and resilience. Community engagement through physical or hybrid workshops facilitates direct interaction, encourages collective learning, and reinforces behavior change conducive to public health (Fisher et al., 2016). Likewise, printed materials such as posters, brochures, and newsletters continue to play a vital role in disseminating information in underserved communities, where literacy and access barriers may hinder digital communication (Leitner et al., 2017).

Collectively, these modalities underscore the adaptability and resilience of libraries in addressing diverse user needs during pandemics. The strategic integration of digital innovation with traditional outreach modalities not only enhances the inclusivity of information dissemination but also reaffirms the library's pivotal role in promoting informed citizenship and community empowerment in times of crisis.

Information Dissemination and Pandemic Control

The concept of control in public health denotes the capacity to manage, mitigate, and contain the spread of infectious diseases (Smith & Jones, 2016). Effective control strategies rely on the integration of medical, behavioral, and informational interventions (Brown, Hume, Pearson & Salmon, 2013). Within this framework, information provision is fundamental; it empowers communities to understand risk, adopt preventive measures, and cooperate with public health directives (Johnson et al., 2017). Public libraries contribute to these efforts by serving as accessible and credible hubs for disseminating accurate information.

Furthermore, behavioral change communication, as discussed by Chang and Lee (2018), is indispensable to control efforts. Libraries, through awareness campaigns and educational programs, help dispel misconceptions and promote adherence to health protocols. Continuous surveillance and feedback mechanisms enable libraries to adjust their communication strategies in response to evolving needs (Rodriguez et al., 2010). At the global level, collaboration and information sharing are vital, emphasizing the interconnectedness of library networks and international agencies (WHO, 2020).

In the Nigerian context, particularly within the North-Central region, libraries face unique barriers such as inadequate funding, limited technological infrastructure, and insufficient collaboration with health agencies. Yet, by leveraging diverse dissemination channels, they hold substantial potential to enhance community preparedness and contribute meaningfully to public health resilience. Ultimately, the integration of library services into pandemic response frameworks can strengthen both local and national control strategies.

All in all, literature demonstrates that libraries adapted rapidly during the COVID-19 pandemic—deploying social media, portals, webinars, and community outreach—yet persistent infrastructural, financial, and collaborative constraints limited their full impact in Nigeria and parts of Africa. The reviewed empirical evidence supports the argument that integrating libraries into formal pandemic control frameworks, and investing in equitable digital access and staff capacity, would significantly improve information dissemination and community-level pandemic resilience.

3. RESEARCH METHOD

This study adopted a descriptive survey research design to examine the information dissemination channels adopted by public libraries for control of pandemics in North-Central Nigeria and the extent to which such information is disseminated. The study was conducted in public libraries located in the North-Central geopolitical zone of

Nigeria, comprising Benue, Kogi, Kwara, Nasarawa, Niger, and Plateau States, as well as the Federal Capital Territory, Abuja. The population consisted of professional and paraprofessional staff of public libraries in the study area who are directly involved in information provision and dissemination. A purposive sampling technique was used to select respondents considered knowledgeable about library practices during health emergencies. Data were collected using a structured questionnaire developed by the researcher, titled Public Libraries and Pandemic Information Dissemination Questionnaire (PLPIDQ).

The instrument was validated by experts in Library and Information Science and related fields to ensure clarity, relevance, and adequacy of coverage. The questionnaire was administered through both physical and electronic means, depending on the accessibility of respondents, and the data collected were analyzed using descriptive statistics such as frequency counts, percentages, mean, and standard deviation. Frequency counts and percentages were used to answer the research question on dissemination channels, while mean and standard deviation were used to determine the extent of information dissemination. A criterion mean of 2.50 was used as the basis for decision-making on the extent items.

Results and Discussions

Dissemination Channels

The adoption of digital dissemination channels was found to be remarkably low among public libraries in North-Central Nigeria. None of the libraries reported the use of websites, virtual events, or mobile applications as communication platforms.

Research Question One: What are the information dissemination channels adopted by public libraries for control of pandemics in North-Central Nigeria?

Table 1: Frequency Counts and Percentages of the channels adopted by public libraries to disseminate information for control of pandemics in North Central Nigeria

S/N	Channels	Frequency		Percentage (%)		Decision
		A	NA	A	NA	
1	Library websites	0	292	0	100	Not Adopted
2	Social media platforms	30	262	10.3	89.7	Not Adopted
3	Email newsletters	22	270	7.5	92.5	Not Adopted
4	Virtual events and webinars	0	292	0	100	Not Adopted
5	Mobile Apps	0	292	0	100	Not Adopted
6	Podcasts and videos	09	283	3.1	96.9	Not Adopted
7	Informational brochures and posters	170	122	58.2	41.8	Adopted
8	Collaboration with local media	101	191	34.6	65.4	Not Adopted
9	Collaboration with community organizations	110	182	37.7	62.3	Not Adopted
10	Virtual reference services	0	292	0	100	Not Adopted
11	Online resource guides	0	292	0	100	Not Adopted
12	SMS alerts	60	232	20.5	79.5	Not Adopted
13	Engagement with online communities	0	292	0	100	Not Adopted
14	Newspaper/Magazines	162	130	55.5	44.5	Adopted

Source: Field survey data 2025

Key: A = Adopted, NP = Not Adopted

The findings of this study revealed that the major information dissemination channels adopted by public libraries for control of pandemics in North-Central Nigeria were largely traditional channels, traditional media such as brochures/posters (58.2%) and newspapers/magazines (55.5%) remained the most frequently used dissemination channels. Only 20.5% of libraries used SMS alerts, indicating minimal utilization of mobile communication tools. In contrast, most digital channels such as library websites, virtual events and webinars, mobile applications, virtual reference services, online resource

guides, and engagement with online communities were either minimally used or not adopted at all.

This finding suggests that public libraries in the study area still rely heavily on conventional communication methods for public health information dissemination. This pattern is consistent with earlier studies which observed that libraries in Nigeria and other developing contexts were constrained in their use of digital technologies during health emergencies. Adigun and Ogunmodede (2020) found that although libraries were expected to support public awareness during the COVID-19 pandemic, their actual response in Nigeria was limited by poor digital readiness and inadequate technological infrastructure. Similarly, Chuks-Ibe (2020) reported that public library services in Nigeria during and after COVID-19 were weakened by low ICT capacity, unstable electricity supply, and poor internet access, thereby making effective digital outreach difficult. The present finding therefore reinforces the argument that while public libraries remain relevant as community information institutions, their capacity to use modern dissemination channels is still underdeveloped.

The dominance of brochures, posters, and newspapers as the main channels of dissemination may be explained by the socio-technical realities of North-Central Nigeria, where many communities still face limited internet access and low digital inclusion. In such contexts, print-based channels remain practical and accessible means of communication. This agrees with the view of Ekwelem and Madumere (2021), who noted that libraries in Nigeria continued to play useful roles in combating misinformation during the coronavirus pandemic, especially through familiar and community-oriented forms of information provision. Although these traditional channels remain valuable, their dominance in the present study also indicates a communication gap, since pandemic information in emergency situations often requires rapid, wide, and interactive dissemination that digital tools are better positioned to provide.

Taken together, the findings of this study indicate that public libraries in North-Central Nigeria possess the institutional relevance to support pandemic control, but their actual contribution is weakened by overreliance on traditional communication channels and inadequate use of digital dissemination tools. The literature supports this conclusion by showing that libraries can serve as vital public health information agents when supported with infrastructure, training, and institutional partnerships. Therefore, improving digital capacity, strengthening collaboration with health agencies, and broadening the mix of dissemination channels are necessary steps if public libraries are to function more effectively in pandemic communication and control.

Research Question Two: To what extent do public libraries disseminate information for control of pandemics in North-Central Nigeria?

Table 2: Mean and Standard Deviation Analysis of the Extent to which Public Libraries Disseminate Information for Control of Pandemics and Epidemics in North-Central, Nigeria

S/N	Item Statement	VHE	HE	LE	VLE	Mean	St.D	Remark
1	Public libraries provide access to accurate information from reputable sources to combat misinformation	43	64	101	84	2.23	1.02	Low Extent
2	Public libraries disseminate information about the preventive measures of pandemics through various channels	50	78	98	66	2.38	1.02	Low Extent
3	Public libraries actively promote official health guidelines, such as wearing masks, practicing social distancing, and proper hand hygiene	79	80	68	65	2.59	1.11	High Extent
4	Public libraries offer resources that address mental health issues, coping strategies, and stress management techniques.	40	61	105	86	2.19	1.01	Low Extent
5	Public libraries provide online resources such as e-books, e-journals, databases, and online public access catalogue among others that allow patrons to access relevant health information from the safety of their homes.	31	42	118	101	2.01	.96	Low Extent
6	Libraries organize virtual programs featuring health experts to provide a platform for patrons to ask questions, receive accurate information, and address concerns	15	31	125	121	1.79	.82	Low Extent
7	Libraries provide information in multiple languages to cater to diverse populations, ensuring that language barriers do not hinder understanding and access to critical information.	23	37	146	86	2.00	.87	Low Extent
8	Libraries actively participate in public health campaigns initiated by government agencies or health organizations, contributing to a coordinated effort to control the spread of the pandemic	78	82	54	78	2.55	1.15	High Extent

9	Libraries collaborate with local health departments and organizations to provide information about testing centers, vaccination sites, and other community resources, ensuring that individuals have access to necessary services	58	61	91	82	2.33	1.09	Low Extent
10	Libraries play a role in disseminating emergency alerts and updates from health authorities and local governments to ensure that communities stay informed in real-time.	60	57	88	87	2.31	1.11	Low Extent
Cluster Mean						2.24	1.02	Low Extent

Source: Field survey data 2025

Key: VHE = Very high extent, HE=High extent, LE=Low extent, VLE=Very Low extent

The results in Table 2 reveal that public libraries in North-Central Nigeria disseminate information for the control of pandemics and epidemics to a low extent, as indicated by a cluster mean of 2.24 (SD = 1.02). While some activities, such as promoting official health guidelines (Mean = 2.59, SD = 1.11) and participating in public health campaigns (Mean = 2.55, SD = 1.15), are performed to a high extent, most services are rated as being provided to a low extent. These include providing online health resources (Mean = 2.01, SD = 0.96), organizing virtual programs with health experts (Mean = 1.79, SD = 0.82), and offering multilingual information (Mean = 2.00, SD = 0.87). Furthermore, efforts to combat misinformation (Mean = 2.23, SD = 1.02) and collaborate with health departments (Mean = 2.33, SD = 1.09) remain limited.

Overall, the findings revealed that the extent of pandemic information dissemination by public libraries in North-Central Nigeria is low, reflecting limited readiness to support large-scale public health communication during crises. Although libraries have been somewhat effective in promoting official health guidelines and participating in campaigns, their overall contribution to digital and multilingual

dissemination remains insufficient. In particular, libraries recorded low extent in providing online resources, organizing virtual programmes with health experts, offering multilingual information, collaborating with health departments, and disseminating emergency alerts in real time. This implies that public libraries in the study area have not fully developed the operational strength needed to function as strong pandemic communication channels.

This finding corroborates Oyelude *et al.*, (2022), who found that librarians were aware of the importance of COVID-19 information sensitization but were constrained by inadequate resources, poor institutional support, and weak preparedness structures. In the same direction, Ganiyu *et al.*, (2020) observed that Nigerian libraries faced serious barriers in the fight against COVID-19, especially in the areas of service continuity, digital connectivity, and effective public communication. The low extent recorded in this study therefore appears to reflect not a total absence of effort, but rather the limited capacity of public libraries to sustain broad and effective pandemic information dissemination.

The low extent of dissemination also supports findings from comparative studies outside Nigeria. Chigwada and Maturure (2022) reported that libraries in Zimbabwe encountered similar limitations during the pandemic, including unreliable internet service, inadequate infrastructure, and weak digital systems. Likewise, Sultana and Shubhra (2021) showed that libraries in developing countries generally struggled more than those in developed countries because of funding constraints, poor technological

preparedness, and lack of robust emergency service models. The implication of the present study is that the challenges facing public libraries in North-Central Nigeria are part of a broader structural problem affecting library responsiveness in low-resource environments.

Another important point emerging from the findings is that the limited use of digital channels appears to be directly related to the low extent of information dissemination observed in the study. Where websites, virtual platforms, mobile apps, and online guides are absent, the ability of libraries to reach users quickly and at scale becomes restricted. This relationship supports the position of IFLA (2020), which emphasized that libraries that were able to adapt their services during the COVID-19 period did so largely through digital platforms and remote communication tools. The present study therefore suggests that the weak adoption of digital dissemination channels in North-Central Nigeria may be one of the major reasons for the overall low extent of pandemic information dissemination by public libraries in the region.

Recommendations

Based on the findings of this study, the following recommendations are made:

- i. Public libraries in North-Central Nigeria should strengthen their use of digital information dissemination channels such as social media platforms, library websites, e-mail newsletters, online resource guides, and virtual reference

- services in order to improve the reach and timeliness of pandemic-related information.
- ii. Government at federal and state levels should provide adequate funding for public libraries to acquire relevant information and communication technology facilities, stable internet connectivity, and alternative power supply needed for effective dissemination of health information during pandemics.
 - iii. Library management and professional bodies should organize regular training and capacity-building programmes for public librarians on digital communication, health information dissemination, and the use of emerging media tools for public sensitization during health emergencies.
 - iv. Public libraries should establish stronger collaboration with public health agencies, media organizations, and community-based groups to ensure that accurate and up-to-date pandemic information is widely disseminated through both formal and informal communication channels.
 - v. Public libraries should develop multilingual and user-friendly information materials in English and relevant local languages so that pandemic-related messages can reach diverse populations, including rural dwellers and people with limited literacy skills.

Conclusion

This study concludes that public libraries in North-Central Nigeria play a limited role in the dissemination of information for pandemic and epidemic control. While

libraries have contributed to awareness creation through traditional channels, their lack of digital infrastructure, weak collaboration with health agencies, and inadequate training in information communication significantly reduce their impact.

Nevertheless, public libraries hold substantial potential to serve as reliable community information centers for health crises management. Their strategic positioning within local communities and professional expertise in information organization can make them vital partners in combating misinformation and promoting public health literacy—provided that their operational capacity is strengthened through technology, policy inclusion, and adequate funding.

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