Available on: https://jsshrs.ep-journals.org/ E-ISSN: 3051-3561 P-ISSN: 3051-3553

Journal of Social Science and Human Research Studies

Volume: 01 Issue: 04 October-2025

Comparative Analysis of Blogs and Print Newspapers Coverage of Cholera Outbreak in Nigeria: A Systematic Literature Review

Columbus Garba UMAR
Department of Mass Communication, Taraba State University, Jalingo
William Musa MADAKI, PhD
Department of Mass Communication, Taraba State University, Jalingo Orcid: 0009-0007-0267-3224
Gbaden Jacob CHIAKAAN, PhD
Department of Mass Communication, Adamawa State University, Mubi

Published Date: October 03, 2025

ABSTRACT: This study conducts a systematic literature review (SLR) to evaluate and compare the effectiveness of blogs and print newspapers in covering cholera outbreaks in Nigeria. Based on 152 empirical and conceptual sources from 2000 to 2025, this review synthesises how traditional and digital media platforms disseminate public health information during cholera crises. The study highlights the strengths and limitations of both media types, noting that while print media offer credibility and editorial integrity, blogs provide immediacy, accessibility, and wider reach, particularly among youth and online communities. However, challenges such as misinformation, inconsistent regulatory practices, and a lack of comparative cholera-focused studies persist. Using Braun and Clarke's Reflexive Thematic Analysis (RTA), this review identifies the main methods, theoretical frameworks, and framing strategies employed in previous research. The findings emphasise the need for integrated health communication strategies that combine credibility with reach, and the study concludes with practical recommendations for media professionals, health agencies, and policymakers. It also highlights significant research gaps and proposes future directions for empirical investigation.

KEYWORDS: Cholera outbreak, blogs, print newspapers, health communication, Nigeria, public health media

INTRODUCTION

Water is universally acknowledged as fundamental to life and health, as affirmed by the United Nations (Ahmad, 2020). Nonetheless, for millions in Nigeria, this entitlement remains unfulfilled, thereby exposing vulnerable populations to lethal waterborne diseases such as cholera (Cherono, 2024). Cholera, caused by the bacterium Vibrio cholerae, predominantly propagates through contaminated water and food, resulting in severe diarrheal illness, profound dehydration, and potential mortality if not addressed promptly (Vambe et al., 2023; Dubal et al., 2025; Olatunji et al., 2024).

Nigeria's ongoing struggle against cholera has endured for several decades. Documented outbreaks date back to the 1970s, with notable increases particularly in underdeveloped regions that lack functional Water, Sanitation, and Hygiene (WASH) systems (NCDC, 2022; Akingbola et al., 2025; Oweibia et al., 2025). Socioeconomic challenges, environmental degradation, inadequate urban planning, and a fragile healthcare infrastructure compound the severity and frequency of cholera incidences (Deen et al., 2020; Dorsainvil, 2021). In light of this complex scenario, the media assumes a critical role in shaping public understanding, perceptions, attitudes, and preventive behaviors during health crises.

Media coverage has historically played a vital role in managing outbreaks of infectious diseases by disseminating key health communication messages and fostering behavioral change (Gobena et al., 2025; Adebajo et al., 2025). In the context of cholera outbreaks, both print media, such as newspapers, and digital platforms, including blogs and social media, have become central channels for health communication (Anwar et al., 2020). Print media, notably newspapers, are recognised for their credibility owing to established editorial standards that prioritise accurate reporting, information substantiation, source verification, and compliance with ethical standards (Singer, 2013; Schudson & Anderson, 2009). Conversely, digital media, particularly blogs and social media platforms, provide immediacy, audience engagement, and cost-effective dissemination; however, they are frequently criticized for their susceptibility to misinformation, inadequate quality control, and limited editorial oversight (Viviani & Pasi, 2017; Afful-Dadzie et al., 2023).

This change in how information is shared prompts significant questions. Although citizen journalism and blogging have made information more accessible to everyone, they also blur the distinction between verified news and unverified content (Segun, 2024). The quick spread of health misinformation, particularly on social media, might weaken official public health efforts (Arab Trade Union Confederation, 2020; Ade-Johnson, 2025).

License: This is an open access article under the CC BY 4.0 license: https://creativecommons.org/licenses/by/4.0/

Previous studies have examined the roles, limitations, and effects of various media in health communication, particularly during outbreaks such as Ebola, COVID-19, and Lassa fever (Nwakpu et al., 2020; Apuke & Omar, 2020; Oyebanji et al., 2019). However, there remains a gap in systematic analysis specifically comparing blogs and print newspapers in the Nigerian context, with a focus on cholera. This systematic literature review aims to address that gap.

Against this context, this review aims to analyze, compare, and assess existing literature on how blogs and print newspapers cover cholera outbreaks in Nigeria. It addresses key questions about their effectiveness, accuracy, credibility, framing techniques, and how audiences engage with each media type. The review also highlights methodological patterns, theoretical approaches, and gaps in the current research, providing a guide for future studies and practical suggestions for media professionals, public health communicators, and policymakers.

Review Objectives

This review aims to assess the comparative effectiveness of blog and print newspaper coverage of cholera outbreaks in Nigeria. Specifically, the review seeks to:

i. Synthesize empirical and conceptual literature on media reporting of cholera outbreaks in Nigeria.
ii. Identify the dominant research methods employed in previous studies to analyze the representation of cholera outbreaks by blogs and print newspapers.
iii. Identify the theoretical frameworks used in previous studies to understand the blogs and print media coverage of cholera outbreaks.
iv. Determine the framing strategies being reported in the studies regarding the representation of cholera coverage in blogs and print media.
v. Identify literature gaps in the reviewed studies.

Research Questions

The review is guided by the following five research questions:

i. What empirical and conceptual literature on media reporting of cholera outbreaks in in Nigeria exist?
ii. What dominant methods have been employed in prior studies to analyze the representation of cholera outbreaks by blogs and print newspapers?
iii. What theoretical frameworks have been utilized in previous studies to understand blogs and print media coverage of cholera outbreaks?
iv. What framing strategies are reported in studies regarding the representation of cholera outbreaks in blogs and print media?
v. What gaps exist in extant literature on blogs and print media coverage of cholera outbreaks in Nigeria?

METHODOLOGY

This study adopts a Systematic Literature Review (SLR) approach, which allows for the comprehensive synthesis of scholarly works on a focused research problem. The review is designed to critically assess and synthesize existing empirical and conceptual studies concerning the comparative coverage of cholera outbreaks in Nigeria by blogs and print newspapers. SLRs are recognized as rigorous, evidence-based methodologies used to map the extent, range, and nature of research activities in a field (Bauder, Giangobbe, & Asgary, 2023; Adera, Ketema & Girma, 2022).

Review Framework

The review utilizes Reflexive Thematic Analysis (RTA), developed by Braun and Clarke (2021), which is particularly suited for qualitative investigations with comprehensive interpretations. RTA allows the researcher to identify recurring patterns, themes, and discourses across various studies, while also acknowledging the researcher's biases and influence on theme construction. This approach enhances both contextual interpretation and analytical reflexivity, crucial when synthesizing media representations that are shaped by cultural, political, and technological factors.

Search Strategy

A multi-database search was undertaken using Google Scholar, PubMed, and Scopus, which all-together gave broad access to literature on public health, journalism, and media studies. Boolean operators were used to streamline and maximize retrieval based on search keywords like "cholera outbreaks" OR "cholera coverage" AND "blogs" OR "print newspapers" AND "Nigeria." The search was conducted between January and June 2025, and results were filtered based on inclusion and exclusion criteria described below.

Inclusion and Exclusion Criteria

The inclusion criteria were carefully crafted to ensure the selection of relevant and high-quality publications:

Inclusion Criteria:

- Publications from 2000 to 2025
- Peer-reviewed journal articles, book chapters, and conference proceedings
- Studies using primary data or robust conceptual analysis
- Research focused on cholera outbreaks in Nigeria
- Studies mentioning either blogs or print newspapers
- Open-access materials
- Studies published in English language only

Exclusion Criteria:

- Studies in foreign contexts that are not related to Nigeria;
- Articles whose focus do not reflect or address topics related to cholera (e.g., HIV/AIDS, COVID-19) unless used in a supporting context;
- Duplicates or retracted publications;
- Non-peer-reviewed or predatory journal articles;

License: This is an open access article under the CC BY 4.0 license: https://creativecommons.org/licenses/by/4.0/

- Grey literature without sufficient citations.

Study Selection Process

The search initially yielded 3,245 articles from the following databases:

i. Google Scholar: 1,050
ii. PubMed: 1,072
iii. Scopus: 1,123

From the foregoing, after eliminating duplicates (n = 484) and irrelevant titles/abstracts (n = 1,859), a total of 902 articles were screened for eligibility. Following the first screening, a second-level full-text screening led to the exclusion of 750 articles based on the exclusion criteria, leaving a final sample of 152 publications for thematic synthesis. The selection process is illustrated employing a PRISMA flow diagram as detailed below:

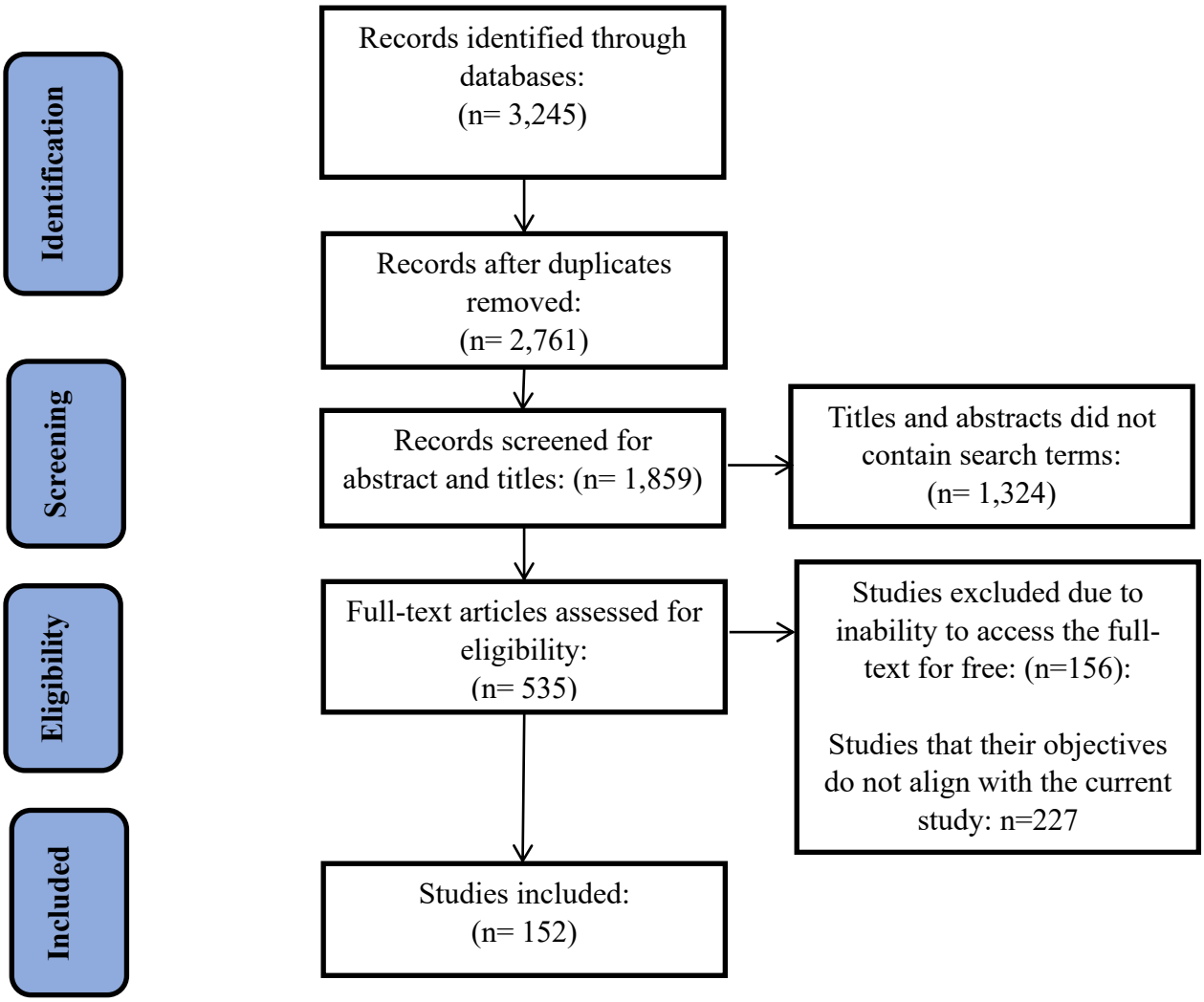


Figure 1: The PRISMA Flow Diagram

Data Extraction and Management

A total of 3,245 publications were initially retrieved (Google Scholar = 1,050; PubMed = 1,072; Scopus = 1,123). After applying the inclusion and exclusion criteria, 152 publications were selected for in-depth review. These studies were coded and sorted using Excel spreadsheets, identifying variables such as year, type of media discussed, study design, major findings, and theoretical frameworks.

The RTA process involved several iterative stages: familiarization with each text, initial coding based on themes such as credibility, reach, framing, and timeliness, theme development from the coded data, reviewing and refining themes through reflective comparison, and narrative synthesis for presenting key insights.

LIMITATIONS OF THE METHODOLOGY

It is important to point out that despite rigorous protocols, the methodology has some limitations:

- Some relevant articles may have been excluded due to language barriers or paywalls.
- The reliance on online databases may miss non-digitized or regionally published articles.

License: This is an open access article under the CC BY 4.0 license: https://creativecommons.org/licenses/by/4.0/

- Reflexive thematic analysis, though rich in depth, is inherently interpretive and may vary with researcher subjectivity.

FINDINGS AND DISCUSSION

The findings of this review are presented based on the objectives given at the introductory part of this paper as follows:

Comparative Effectiveness of Blogs and Print Newspapers in Covering Cholera Outbreaks in Nigeria

The reviewed body of literature presents a comprehensive and multi-dimensional explanation of how blogs and print newspapers function as public health communication tools during cholera outbreaks in Nigeria. Although both platforms disseminate important information, they diverge sharply in terms of credibility, speed, accessibility, and audience engagement, thereby highlighting the need for an integrative media approach to epidemic and health communication.

Print newspapers have held a key position in the Nigerian media landscape and are regared for their institutional credibility, editorial accountability, and adherence to journalistic laws and ethics (Singer, 2013; Schudson & Anderson, 2009). Studies show that newspaper outlets frequently consult health experts, cite data from reputable institutions such as the Nigeria Centre for Disease Control (NCDC), and follow structured newswriting norms that prioritize factual verification (Bello, 2015; Asemah, 2015). Mukiibi (2024) argues that this editorial rigor lends newspapers an authoritative voice during public health crises, often shaping official discourse and informing policy responses. Additionally, newspapers tend to provide broader contextualization of outbreaks, incorporating historical, epidemiological, and policy perspectives (Deen, Mengel, & Clemens, 2020; Dorsainvil, 2021).

However, the strength of newspapers in ensuring reliability often comes at the cost of immediacy and interactivity. Print media operate within a slower publishing cycle and must navigate layers of editorial gatekeeping, which can delay the dissemination of urgent public health messages (Kanchan & Gaidhane, 2024; Ohaja, Ugwu & Asicus, 2024). Moreover, newspapers are limited in their ability to provide real-time updates or engage dynamically with audiences, especially in fast-moving outbreaks like cholera where new cases, fatalities, and governmental actions can shift rapidly (Adeeko, 2023).

Coversely, blogs and digital platforms excel in speed and flexibility. Their decentralized nature allows citizen journalists, health bloggers, and local advocates to report emergent issues without institutional bottlenecks (Apuke & Omar, 2020; Ade-Johnson, 2025). Blogs often provide hyperlocal coverage, highlighting community-level experiences, coping strategies, and on-the-ground realities that mainstream outlets may overlook (Ugbo, Chinedu-Okeke, & Ogbodo, 2022). For instance, during the 2024 Lagos cholera outbreak, several blog networks published firsthand testimonies, real-time images, and immediate public health alerts—content that did not appear in traditional newspapers until days later (Adebajo et al., 2025).

This immediacy is a double-edged sword. The low barriers to entry in the blogosphere result in inconsistent quality and an increased risk of misinformation and sensationalism. Studies by Cavaliere (2020) and Viviani & Pasi (2017) warn that blogs often lack editorial standards and are susceptible to spreading unverified claims, including speculative treatments, conspiracy theories, or exaggerated case numbers. This is particularly dangerous during outbreaks when fear and uncertainty may amplify public susceptibility to falsehoods. Segun (2024) notes that in some cases, misleading blog content has fueled public mistrust of official health interventions, complicating response efforts.

Audience segmentation further complicates the impact of each media form. Digital platforms predominantly attract younger, urban, and digitally literate audiences, who are more likely to access and engage with blog content via smartphones and social media (Apuke, Gever, & Tukur, 2023; Fulantelli & Taibi, 2024). Conversely, print newspapers retain traction among older populations and rural communities, where digital penetration is limited and electricity or internet access remains unreliable (Mukhongo et al., 2023; Olatunji et al., 2024). Thus, while blogs offer immediacy and reach in urban epicenters of disease, newspapers are often more effective for sustained outreach in peripheral or underserved regions.

Furthermore, audience reception varies not just by media form but also by trust and literacy levels. Oweibia et al. (2025) and Elimian et al. (2020) emphasize that regional disparities in public health literacy affect how media messages are interpreted. In areas with low digital literacy, blog-based communication may be misinterpreted or ignored, whereas the structured clarity of newspapers is more digestible. Conversely, digitally savvy audiences may find newspapers too slow or out of touch with immediate realities.

In light of these findings, scholars advocate for a hybrid communication model that capitalizes on the credibility and depth of print newspapers while leveraging the speed and interactivity of blogs and online platforms (Wang et al., 2023; Bruce et al., 2024). Integrating both channels can help ensure that public health information is timely, reliable, and widely accessible, particularly in the complex Nigerian media ecosystem.

Dominant Research Methods in the Studies

Among the reviewed literature, content analysis emerges as the most prevalent and widely adopted methodological tool for examining how cholera is reported in both print and digital media contexts (Asemah, 2015; Torwel & Rodney, 2010; Ohaja, Ugwu & Asicus, 2024). Scholars have consistently employed this method to systematically examine news articles, blog posts, editorials, and visual content, allowing for the identification of dominant themes, framing strategies, tone of coverage, and source attribution patterns. This methodological consistency reflects the utility of content analysis in producing replicable and comparative insights into media outputs over time and across platforms.

The use of content analysis is particularly justified in this domain due to the textual and semiotic nature of media coverage. Public health reporting, especially in the context of outbreaks, carries both denotative and connotative meanings. Content analysis enables the decoding of these meanings, thus uncovering how narratives around cholera are constructed, disseminated, and potentially influence public perception and behavior (Cavaliere, 2020; Schudson & Anderson, 2009). The method's flexibility allows for either quantitative coding of variables such as frequency of key terms or presence of expert sources, and qualitative analysis of rhetorical strategies, emotive appeals, or fear-based framing (Singer, 2013; Braun & Clarke, 2021).

License: This is an open access article under the CC BY 4.0 license: https://creativecommons.org/licenses/by/4.0/

Content analysis has also proven to be highly adaptable to both traditional print formats and the increasingly fragmented and dynamic digital media landscape. In print media, it enables structured comparison of headlines, leads, and narratives across different newspapers and timeframes (Bello, 2015; Asemah, 2015). In blogs and digital spaces, content analysis has been employed to analyze the spread of misinformation, user engagement, and community-based storytelling, providing critical insight into how digital formats democratize and complicate public health communication (Viviani & Pasi, 2017; Afful-Dadzie et al., 2023; Ade-Johnson, 2025).

Beyond content analysis, the literature reveals a secondary cluster of qualitative approaches, notably in-depth interviews and case studies. These methods have been effectively used to explore the experiences of journalists, media practitioners, and public health officials during outbreak coverage, particularly in gaining insights into the pressures, constraints, and decision-making processes that shape media narratives (Omojunikanbi, 2024; Johnson, 2023). Such studies underscore the human and institutional dynamics that content analysis, by its design, may not fully capture.

More recent studies have adopted discourse analysis and multimodal analysis, particularly in analyzing social media platforms and digital awareness campaigns. These approaches have provided rich insights into visual rhetoric, symbolic representation, and audience interaction, offering a more nuanced understanding of the semiotic resources deployed in online cholera messaging (Ogunsiji, Ogunsiji & Olaleke, 2025; Ope-Davies & Shodipe, 2023). They also highlight how images, emojis, hashtags, and layouts contribute to meaning-making in digital health communication, an area that traditional content analysis must now adapt to incorporate.

While quantitative surveys were less frequently used, they played a key role in measuring audience reception, message recall, and behavioral outcomes following media campaigns (Israel et al., 2021; Ojukwu et al., 2025). Such studies provide valuable data on how media messages are interpreted and whether they lead to tangible health behavior changes, such as increased handwashing or early reporting of symptoms. However, they often lack the depth to uncover how and why particular media frames succeed or fail.

Mixed-methods research remains underutilized in the reviewed literature. Only a few studies attempt to triangulate content analysis with audience interviews or survey findings, despite growing scholarly consensus on the value of such methodological integration (Fleerackers et al., 2022; Wang et al., 2023). The lack of methodological triangulation suggests missed opportunities for a more holistic understanding of how media coverage and public health messaging interact across various audience demographics and communication environments.

Furthermore, there is a conspicuous absence of longitudinal studies in the field. Few researchers have traced how cholera coverage evolves over extended periods or across multiple outbreaks, making it difficult to assess shifts in editorial strategies, government framing, or public trust over time (Chipidza et al., 2022; Dorsainvil, 2021). Addressing this temporal gap is critical for developing adaptive and resilient communication strategies, particularly in a country like Nigeria where cholera remains a cyclical and recurrent public health threat (Oweibia et al., 2025; Akingbola et al., 2025).

Theoretical Frameworks Employed in Past Research

A wide range of theoretical frameworks has been applied in the literature on media coverage of cholera outbreaks in Nigeria. However, a recurring observation across many of the reviewed studies is the inconsistent and often superficial application of theory. While some research draws explicitly on well-established communication theories to interpret findings, many works utilize descriptive analyses without embedding the research in a clear theoretical context, thereby limiting their analytical power and contribution to broader scholarly discourse.

The Framing Theory, as articulated by Entman (1993), emerged as the most frequently employed and robustly applied framework across the studies. This theory is particularly well-suited for health media research because it enables researchers to explore how media sources select, emphasize, and structure information to shape public understanding of health issues. In the context of cholera, framing analysis revealed varied narrative constructions, some media framed the disease as a public governance failure, others as a humanitarian crisis, or as a preventable outcome of poor hygiene and individual irresponsibility (Adekunle, 2017; Apuke & Omar, 2020; Ohaja, Ugwu & Asicus, 2024).

Such frame variations are not trivial; they influence blame attribution, public empathy, and the type of policy responses that are prioritized. For instance, humanitarian frames typically invoke calls for external aid, while governance failure frames pressure state institutions and fuel political critique (Chipidza et al., 2022). Thus, Framing Theory not only helps classify how cholera is presented but also provides insights into the ideological undercurrents of public health reporting (Singer, 2013; Schudson & Anderson, 2009).

In tandem with framing, the Agenda-Setting Theory (McCombs & Shaw, 1972) was also frequently referenced. This theory posits that the media may not tell the public what to think, but it is highly effective in telling the public what to think about. In studies of Nigerian media, agenda-setting was instrumental in explaining how newspapers often reflect government or institutional priorities, while blogs and digital platforms foreground experiential narratives, grassroots responses, and community-level impacts (Cheruiyot et al., 2021; Ade-Johnson, 2025). This dichotomy illustrates not only editorial differences but also structural divides in the Nigerian media ecosystem, between hierarchical, agenda-led institutions and horizontal, community-oriented digital platforms (Afful-Dadzie et al., 2023; Mukhongo et al., 2023).

Beyond these media-centric theories, a smaller but impactful set of studies employed health behavior theories, including the Health Belief Model (HBM) and Risk Communication Theory. These frameworks delve deeper into how individuals perceive health threats, evaluate susceptibility, and act (or fail to act) based on media messages (Nwakpu, Ezema & Ogbodo, 2020; Nan et al., 2022; Gobena et al., 2025). HBM, in particular, was used to assess how cholera messaging influenced perceived vulnerability, severity, benefits of action, and self-efficacy, core factors that shape health-related decision-making.

Risk Communication Theory, often overlapping with HBM, emphasizes message clarity, trust in source, timing, and cultural context, all of which are critical during fast-moving epidemics. For example, Gobena et al. (2025) highlighted how lack of timely and locally resonant cholera communication in Ethiopia contributed to inadequate public responses, a finding highly relevant to the Nigerian context, where similar structural and cultural dynamics exist.

Despite these promising applications, a substantial proportion of studies remain atheoretical, particularly among those using content analysis. While these studies excel in mapping trends, frequencies, and themes, they often fall short in offering interpretive depth or linking media

License: This is an open access article under the CC BY 4.0 license: https://creativecommons.org/licenses/by/4.0/

outputs to broader societal, political, or behavioral frameworks (Bello, 2015; Adeeko, 2023). This lack of theoretical grounding risks reducing complex communication phenomena to surface-level descriptions, thereby limiting explanatory power and generalizability.

Moreover, few studies attempt to integrate multiple theories—such as combining framing with behavior change models—to explore how media construction intersects with audience interpretation and response. Such integration is necessary for building comprehensive models of media influence, especially in multifactorial crises like cholera, which involve issues of infrastructure, governance, health education, and social trust (Wang et al., 2023; Islam et al., 2023).

In conclusion, while theoretical engagement in cholera media research is evident, it remains uneven and underutilized. The dominance of Framing and Agenda-Setting Theories is valuable, but their application should be expanded beyond description to include critical analysis of power, representation, and behavioral consequences. Integrating behavior-centered theories like HBM and Risk Communication Theory—especially within mixed-methods designs—would significantly enhance our understanding of how media both shape and are shaped by public health crises. Future studies should prioritize explicit theory integration, longitudinal theoretical applications, and interdisciplinary synthesis, thereby strengthening the analytical backbone of media and health communication research in Nigeria and beyond.

Framing Strategies in Media Representations of Cholera

Media framing strategies vary widely across both print newspapers and blogs. Based on the synthesis of literature, five dominant frames emerged:

Crisis Frame: This portrays cholera as an emergency requiring immediate government intervention (Elimian et al., 2020; Adebajo et al., 2025).

Neglect Frame: This frame harped on government inaction or infrastructure deficits, especially in WASH (Water, Sanitation, and Hygiene) services (Akingbola et al., 2025; Eneh et al., 2024).

Blame Frame: Faultfinding was the baseline of this frame. It was mostly directed at individuals or communities for unhygienic practices (Napakol, 2022; Komiti & Asemah, 2021).

Empowerment Frame: The message here advocates for personal hygiene, clean water, and community action (White et al., 2022; Challa et al., 2022).

Sensational Frame: This is common in blogs, where dramatic language or unverified reports are used to attract attention (Afful-Dadzie et al., 2023; Segun, 2024).

Print newspapers mainly relied on official sources such as the NCDC or WHO and used formal language. Blogs, however, often included personal stories, emotional appeals, or culturally rich content aimed at relatability rather than objectivity (Akinnubi et al., 2021; Oyama & Okpara, 2017). This variety in framing shows that while both media types aim to inform, their motivations, audiences, and techniques vary, sometimes considerably. The lack of coordinated messaging across platforms can cause inconsistent information, undermining public trust during outbreaks (Coddington & Molyneux, 2023).

Identified Gaps and Directions for Future Research

Although media are increasingly recognised as key players in public health communication, the academic landscape concerning cholera reporting in Nigeria still exhibits notable gaps. A thorough review identifies five overlooked areas that warrant further scholarly investigation.

Firstly, there is a noticeable lack of comparative analyses between different media platforms. Most existing studies either focus solely on traditional print newspapers or, alternatively, on digital platforms like blogs and social media, often viewing them as separate entities of information dissemination. This fragmented approach has hindered a comprehensive understanding of their respective strengths and weaknesses, especially regarding the accuracy of reporting, audience reach, and behavioural impact on public health outcomes. Without methodologically sound comparisons, the discussion remains unclear about which medium more effectively promotes informed public action during cholera outbreaks.

Secondly, a persistent geographical bias pervades much of the current literature. Few studies engage meaningfully with the media dynamics across Nigeria's six geopolitical zones, despite clear evidence indicating that public health literacy, infrastructural access, and media consumption habits vary significantly across regions (Oweibia et al., 2025). This geographical oversight undermines the development of equitable communication strategies customised to local epidemiological and sociocultural contexts.

Third, the audience reception of cholera-related messages remains critically understudied. Existing literature often focuses on content creation and media framing, leaving significant gaps in our understanding of how different demographics interpret, internalise, and respond to health information. This oversight weakens efforts to assess the effectiveness of media interventions and their ability to influence preventative behaviours or trust in public health institutions.

Fourth, the quality of blog content and the implications of digital misinformation in cholera reporting are not thoroughly examined. While blogs and user-generated platforms play a crucial role in quick information dissemination, their unregulated nature poses risks of factual inaccuracies and the spread of rumours. As Fleerackers et al. (2022) suggest, without improved digital media literacy, the public remains susceptible to misinterpretation and harmful behaviours caused by misleading or sensationalist reporting.

Finally, the integration of emerging technologies, especially Artificial Intelligence (AI), into health communication systems is still at an early stage. While recent studies recognise AI's potential to identify cholera trends, trigger alerts automatically, and even curate public health content (Akingbola et al., 2025), a significant research gap remains in implementing these technologies within Nigeria's existing media frameworks. The merging of AI and public health journalism presents a promising area, yet academic engagement with this area remains mainly theoretical rather than practical.

Future studies should explore mixed-methods approaches, regional case studies, and incorporate audience-focused frameworks to enhance understanding. Collaboration between health experts and media professionals can also help develop more effective cholera communication strategies.

License: This is an open access article under the CC BY 4.0 license: https://creativecommons.org/licenses/by/4.0/

Implications of the Study for Theory

This study contributes to the theoretical discourse on media and health communication by emphasising the need for deeper, more consistent integration of theories in analysing epidemic coverage, particularly cholera, in Nigeria. While Framing Theory and Agenda-Setting Theory have proven useful in examining how media influence public perception, findings indicate that many studies stop at descriptive framing without linking these narratives to actual behavioural or policy outcomes.

The way cholera is portrayed in newspapers and blogs in this review emphasises the need to broaden the use of behavioural theories such as the Health Belief Model and Risk Communication Theory. This can help clarify how media messages influence individual behaviour, risk perception, and trust in public institutions. It is also suggested by the study for the usage of multiple theories, encouraging future researchers to integrate media, behavioural, and cultural frameworks for a more comprehensive understanding of media's role during health crises.

Implications for Practice

This study offers valuable practical insights for improving health communication in Nigeria during cholera outbreaks and other diseases. It highlights the importance for media practitioners, especially bloggers and digital content creators, to adopt stricter editorial standards and fact-checking practices to reduce misinformation. In the same vein, public health communicators must make it a point of priority to complement the strengths of both blogs and print newspapers by leveraging the speed and reach of digital media alongside the credibility and depth of traditional outlets.

It is therefore established that this review underscores the importance of developing and disseminating messages tailored to diverse audiences. It urges health agencies to modify their communication strategies to accommodate Nigeria's varied linguistic, cultural, and media access differences. The review further highlights the necessity of a more operational collaboration between media organisations and health agencies to develop coordinated communication strategies in the event of an outbreak. Furthermore, the study recommends the routine use of media monitoring and evaluation tools to ensure that messaging remains accurate, effective, and responsive to public needs.

CONCLUSION

This systematic literature review critically synthesised over 150 scholarly and policy-based publications to evaluate the comparative roles of blogs and print newspapers in reporting cholera outbreaks in Nigeria. The analysis was guided by five key objectives and aligned with five research questions focusing on media effectiveness, methodological trends, theoretical foundations, framing strategies, and research gaps.

The review found that print newspapers uphold a solid reputation for credibility, institutional accountability, and professional journalistic standards. They provide well-sourced, editorially vetted health content, mainly using formal tones and citations from recognised health agencies. However, their limited speed, geographical constraints, and declining circulation among younger audiences reveal clear limitations in fast-moving outbreaks like cholera.

Unlike traditional media, blogs and digital platforms show greater agility and wider reach, especially among urban, mobile, and younger audiences. They often share real-time updates and amplify community voices. However, their lack of editorial oversight, vulnerability to misinformation, and inconsistent adherence to professional ethics severely limit their reliability as a primary source during health crises.

The literature further indicates that both media forms frame cholera differently, while newspapers tend to emphasise systemic causes and government responses, blogs focus on personal experiences and grassroots impacts. Despite these differences, neither platform fully addresses the public health literacy needs of all population groups, especially in rural and underserved areas.

There is a noticeable lack of studies that are comparative, theory-based, and include regional differences. Most research uses content analysis, with limited inclusion of audience reception data or the use of mixed methods. Furthermore, new developments such as artificial intelligence, digital health monitoring, and algorithmic moderation of misinformation are mostly unexplored within this context.

This review affirms that a hybrid media approach, merging the credibility of newspapers with the wide reach of digital blogs, is essential for effective public health communication during cholera outbreaks in Nigeria.

RECOMMENDATIONS

Arising from the above discussion, implications for theory and practices as well as the conclusions of the study, the following recommendations are made:

i. Bloggers should ensure that they subject the sources of their information to verification to enable them disseminate the right health information to their followers;
ii. It is also recommended that a proper liaison and collaboration between bloggers and print newspaper journalists be made to ensure proper synergy in the sourcing and dissemination of information;
iii. Health information should undergo proper professional and expert scrutiny to ensure that they are not misleading.

REFERENCES

1) Abbas, J., Wang, D., Su, Z., & Ziapour, A. (2021). The role of social media in the advent of COVID-19 pandemic: crisis management, mental health challenges and implications. *Risk management and healthcare policy*, 1917-1932.
2) Aborode, A. T., Adesola, R. O., Onifade, I. A., Adesiyan, R., Ibiam, V. A., Jinadu, N. A., & Bakre, A. A. (2025). Outbreak of cholera in Nigeria: the role of One Health. *Discover Public Health*, *22*(1), 125.
3) Aborode, A. T., Alexiou, A., Ahmad, S., Yasir Essar, M., Chibueze, O. S., Al-Zahrani, Y., ... & Batiha, G. E. S. (2021). HIV/AIDS epidemic and COVID-19 pandemic in Africa. *Frontiers in Genetics*, *12*, 670511.
4) Aborode, A. T., Olotu, T. M., Oyetunde, O. B., Ajagbe, A. O., Mustapha, M. A., Karra-Aly, A., & Oko, C. I. (2022). COVID-19 outcomes in HIV patients: a review. *Annals of Medicine and Surgery*, *78*.

License: This is an open access article under the CC BY 4.0 license: https://creativecommons.org/licenses/by/4.0/

5) Adebajo, G. O., Alabi, G. J., Oladele, O. C., Ayowole, D. J., Ogedengbe, I. T., & Abati, S. O. (2025). Review of public health preparedness and response to cholera; lessons from Nigeria's 2024 outbreak. *Discover Public Health*, *22*(1), 1-11.
6) Adeeko, T. I. (2023). *Nigerian Media: A Comparative Media Analysis* (Master's thesis, Northern Illinois University).
7) Ade-Johnson, C. S. (2025). Social Media and Participatory Health Communication: A Study of the 2024 Cholera Outbreak in Lagos State, Nigeria. *African Journal of Human Kinetics, Recreation and Health Studies*, *3*(1), 5-25.
8) Adekunle, A. L. (2017). *Newspaper framing of the 2014 Ebola outbreak in Nigeria: Assessing the nexus between audience perceptions and message influence* (ProQuest No. 30599947). University of Malaya. https://www.proquest.com/openview/cc32d51663212090bad43170727386fa/1?pq-origsite=gscholar&cbl=2026366&diss=y
9) Adelabu, O. T., Oyegoke, N. A., Adesoji, A. A., Ojewumi, O. O., & Dada, A. (2024). Evolution of mass communication: an overview of new media. *African Journal of Social and Behavioural Sciences*, *14*(4).
10) Adera, N. G., Ketema, B., & Girma, E. (2022). Effectiveness and quality of risk communication process in Ethiopia: The case of risk communication during cholera outbreak in Addis Ababa, Ethiopia. *PloS one*, *17*(8), e0265203.
11) Aderonke, O. A., Goodluck, I., Juliana, I. J., & Odaro, O. (2016). Newspaper coverage of Ebola virus disease epidemic in Nigeria: Implications for prevention and control. *THE INTERN ATIONAL JOURNAL OF COMMUNICATION AND HEALTH*, *10*, 53-58.
12) Afful-Dadzie, E., Afful-Dadzie, A., & Egala, S. B. (2023). Social media in health communication: A literature review of information quality. *Health Information Management Journal*, *52*(1), 3-17.
13) Ahmad, N. (2020). Human right to water under international law regime: an overview. *Commonwealth law bulletin*, *46*(3), 415-439.
14) Airaoje, O. K., Akintayo, A. O., Adewale, O. C., & Obada, A. A. (2025). Community Awareness and Government Response to Cholera Outbreaks in Borno State. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, *8*(2), 184-201.
15) Akingbola, A., Abiodun, A., Ojo, O., Jessica, O. U., Alao, U. H., Owolabi, A. O., & Chuku, J. (2025). Cholera Outbreak in Nigeria: History, Review of Socioeconomic and Meteorological Drivers, Diagnostic Challenges, and Artificial Intelligence Integration. *Global Health, Epidemiology and Genomics*, *2025*(1), 8898076.
16) Akingbola, A., Abiodun, A., Ojo, O., Jessica, O. U., Alao, U. H., Owolabi, A. O., & Chuku, J. (2025). Cholera Outbreak in Nigeria: History, Review of Socioeconomic and Meteorological Drivers, Diagnostic Challenges, and Artificial Intelligence Integration. *Global Health, Epidemiology and Genomics*, *2025*(1), 8898076.
17) Akinnubi, A., Agarwal, N., Stine, Z., & Oyedotun, S. (2021). Analyzing online opinions and influence campaigns on blogs using BlogTracker. In *Proceedings of the 2021 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining* (pp. 309-312).
18) Akpan, U. (2024). Communicativeness of Covid-19 Health Messages in Eastern Nigeria. *Faculty of Organisation Studies in Novo mesto, Slovenia*, 82.
19) Alade, M. O., & Sanusi, B. O. (2022). Endangered voices: Nigerian journalists' safety amid the COVID-19 pandemic. *Health crises and media discourses in Sub-Saharan Africa*, *109*, 109-126.
20) Ali, A.C., & Hailu, T.Y. (2020). Risk communication in the fight against cholera outbreak. *Journal of Development Communication,* 31(1), 11-25
21) Anwar, A., Malik, M., Raees, V., & Anwar, A. (2020). Role of mass media and public health communications in the COVID-19 pandemic. *Cureus*, *12*(9).
22) Apuke, O. D., & Omar, B. (2020). How do Nigerian newspapers report COVID-19 pandemic? The implication for awareness and prevention. *Health Education Research*, *35*(5), 471-480.
23) Apuke, O. D., & Tunca, E. A. (2019). A comparative content analysis of television and blog coverage of internally displaced persons in Nigeria. *The Social Science Journal*, *56*(2), 168-182.
24) Apuke, O. D., Gever, C. V., & Alhaji Tukur, N. (2023). Blogosphere, vulnerability news and users' engagement: The contribution of blogs in the reporting of internally displaced persons in Nigeria. *Communication and the Public*, *8*(3), 156-174.
25) Asemah, E. S. (2015). A content analysis of newspaper coverage of health issues in Nigeria. *Lapai Journal of Literature, Language and Communication Studies, 2*(20), 73 – 93.
26) Awofadeju, P. O., & Sawyerr, O. (2024). The role of media ethics in shaping public perception: A critical analysis of biased reporting and its impact on public opinion. *Journal of African Innovation and Advanced Studies*, 3(2), 31-51 https://africanscholarpub.com/ajaias/article/view/109
27) Ayenigbara, I. O., Ayenigbara, G. O., & Adeleke, R. O. (2019). Contemporary Nigerian public health problem: prevention and surveillance are key to combating cholera. *GMS hygiene and infection control*, *14*, Doc16.
28) Baraybar-Fernández, A., Arrufat-Martín, S., & Rubira-García, R. (2021). Public information, traditional media and social networks during the COVID-19 crisis in Spain. *Sustainability*, *13*(12), 6534.
29) Bauder, L., Giangobbe, K., & Asgary, R. (2023). Barriers and gaps in effective health communication at both public health and healthcare delivery levels during epidemics and pandemics; systematic review. *Disaster medicine and public health preparedness*, *17*, e395.
30) Bello, S. M. (2015). Newspaper coverage of health issues in Nigeria. *Unpublished Ph. D. Theses submitted to the University of Canterbury, Christchurch, New Zealand*.
31) Braun, V., & Clarke, V. (2021). Thematic analysis: a practical guide. SAGE.
32) Briggs, C. L., & Hallin, D. C. (2024). *Making health public: How news coverage is remaking media, medicine, and contemporary life*. Routledge.

License: This is an open access article under the CC BY 4.0 license: https://creativecommons.org/licenses/by/4.0/

33) Brony, M., Alivi, M. A., Syed, M. A. M., & Dharejo, N. (2024). A systematic review on social media health communications and behavioural development among Indians in the COVID-19 context. *Studies in Media and Communication*, *12*(2), 37-49.
34) Brown, D. K., Yoo, J., & Johnson, T. J. (2019). Spreading Ebola panic: Newspaper and social media coverage of the 2014 Ebola health crisis. *Health communication*.
35) Bruce, E., Shurong, Z., Amoah, J., Egala, S. B., & Sobre Frimpong, F. K. (2024). Reassessing the impact of social media on healthcare delivery: insights from a less digitalized economy. *Cogent Public Health*, *11*(1), 2301127.
36) Buturoiu, D. R., & Voloc, A. (2021). Media coverage in times of crisis. Intermedia agenda-setting of COVID-19–Related Topics. *Romanian Journal of Communication and Public Relations*, *23*(2), 7-22.
37) Cavaliere, P. (2020). From journalistic ethics to fact-checking practices: defining the standards of content governance in the fight against disinformation. *Journal of media law*, *12*(2), 133-165.
38) Challa, J. M., Getachew, T., Debella, A., Merid, M., Atnafe, G., Eyeberu, A., ... & Regassa, L. D. (2022). Inadequate hand washing, lack of clean drinking water and latrines as major determinants of cholera outbreak in Somali region, Ethiopia in 2019. *Frontiers in public health*, *10*, 845057.
39) Checchi, F., Warsame, A., Treacy-Wong, V., Polonsky, J., Van Ommeren, M., & Prudhon, C. (2017). Public health information in crisis-affected populations: a review of methods and their use for advocacy and action. *The Lancet*, *390*(10109), 2297-2313.
40) Cheruiyot, D., Wahutu, J. S., Mare, A., Ogola, G., & Mabweazara, H. M. (2021). Making news outside legacy media: Peripheral actors within an African communication ecology. *African Journalism Studies*, *42*(4), 1-14.
41) Chipidza, W., Akbaripourdibazar, E., Gwanzura, T., & Gatto, N. M. (2022). Topic analysis of traditional and social media news coverage of the early COVID-19 pandemic and implications for public health communication. *Disaster medicine and public health preparedness*, *16*(5), 1881-1888.
42) Ciboh, R. (2010). Newspaper coverage of health issues in Nigeria. *The Nigerian Journal of Communication*, *8*(1).
43) Coddington, M., & Molyneux, L. (2023). Making sources visible: Representation of evidence in news texts, 2007–2019. *Journalism Practice*, *17*(4), 664-682.
44) Deaton, A. (2024). The great escape: health, wealth, and the origins of inequality.
45) Deen, J., Mengel, M. A., & Clemens, J. D. (2020). Epidemiology of cholera. In *Vaccine* (Vol. 38, pp. A31–A40). Elsevier Ltd. https://doi.org/10.1016/j.vaccine.2019.07.078
46) Dorsainvil, M. (2021). Cholera: Still a major public health issue in Sub-Saharan Africa. In *Journal of Health Care for the Poor and Underserved* (Vol. 32, Issue 4, pp. 1734–1741). Johns Hopkins University Press. https://doi.org/10.1353/hpu.2021.0162
47) Dubal, Z. B., Kolhe, R., Das, S., & Rawat, S. (2025). Waterborne Diseases. In *Management of Fish Diseases* (pp. 119-134). Singapore: Springer Nature Singapore.
48) Ekwueme, C. A., & Asogwa, F. N. (2021). Social media and health mobilization during emergencies: The case of Lassa fever outbreak in Ebonyi, Nigeria. *Covenant Journal of Communication*, *7*(2). Retrieved from https://journals.covenantuniversity.edu.ng/index.php/cjoc/article/view/2428
49) Elimian, K. O., Mezue, S., Musah, A., Oyebanji, O., Fall, I. S., Yennan, S., Yao, M., Abok, P. O., Williams, N., Omar, L. H., Balde, T., Ampah, K., Okudo, I., Ibrahim, L., Jinadu, A., Alemu, W., Peter, C., & Ihekweazu, C. (2020). What are the drivers of recurrent cholera transmission in Nigeria? Evidence from a scoping review. *BMC Public Health*, *20* (1), 1–13. https://doi.org/10.1186/S12889-020-08521-Y/FIGURES/3
50) Elimian, K. O., Musah, A., Mezue, S., Oyebanji, O., Yennan, S., Jinadu, A., Williams, N., Ogunleye, A., Fall, I. S., Yao, M., Eteng, W., Abok, P., Popoola, M., Chukwuji, M., Haj Omar, L., Ekeng, E., Balde, T., Mamadu, I., Adeyemo, A., Namara, G., Okudo, I., Alemu, W., & Peter, C. (2019). Descriptive epidemiology of cholera outbreak in Nigeria, January–November, 2018: Implications for the global roadmap strategy. *BMC Public Health*, 19, 1-11. https://doi.org/10.1186/s12889-019-7559-6
51) Eneh, S., Onukansi, F., Anokwuru, C., Ikhuoria, O., Edeh, G., Obiekwe, S., ... & Okpara, C. (2024). Cholera outbreak trends in Nigeria: policy recommendations and innovative approaches to prevention and treatment. *Frontiers in Public Health*, *12*, 1464361.
52) Eze, N. C., & Okafor, E. C. (2024). Pressing matters: Analyzing World Cancer Day coverage in Nigerian newspapers. *Michigan International Journal of Marketing, New Media, and Communication*, *12*(1), 29-48.
53) Fleerackers, A., Riedlinger, M., Moorhead, L., Ahmed, R., & Alperin, J. P. (2022). Communicating scientific uncertainty in an age of COVID-19: An investigation into the use of preprints by digital media outlets. *Health Communication*, *37*(6), 726-738.
54) Folayan, M. O., Arije, O., Enemo, A., Sunday, A., Muhammad, A., Nyako, H. Y., ... & Lamontagne, E. (2022). Factors associated with poor access to HIV and sexual and reproductive health services in Nigeria for women and girls living with HIV during the COVID-19 pandemic. *African Journal of AIDS Research*, *21*(2), 171-182.
55) Fulantelli, G., & Taibi, D. (2024). Increasing adolescents' trust in online news through improved pathways to social media literacy. In *ICERI2024 Proceedings* (pp. 7991-7999). Seville, Spain: IATED. https://doi.org/10.21125/iceri.2024.1952
56) Gibson, L., Tan, A. S., Freres, D., Lewis, N., Martinez, L., & Hornik, R. C. (2016). Nonmedical information seeking amid conflicting health information: negative and positive effects on prostate cancer screening. *Health Communication*, *31*(4), 417-424.
57) Girotto, C. D., Behzadian, K., Musah, A., Chen, A. S., Djordjević, S., Nichols, G., & Campos, L. C. (2024). Analysis of environmental factors influencing endemic cholera risks in sub-Saharan Africa. *Science of The Total Environment*, *926*, 171896.
58) Gobena, D., Gudina, E. K., Fetensa, G., Degfie, T. T., Debela, T., Tamiru, A., ... & Mekonnen, Z. (2025). Risk Communication and Community Engagement (RCCE) implementations to control cholera outbreak in Oromia region, Ethiopia. *Tropical Medicine and Health*, *53*(1), 4.

License: This is an open access article under the CC BY 4.0 license: https://creativecommons.org/licenses/by/4.0/

59) Guanah, J. S. (2022). A review of the relationship between newspapers and health reporting in Nigeria: Reportage on Lassa fever in Edo State. *Global Media Journal*, *20*(47), 1-8.
60) Gunter, B., Campbell, V., Touri, M., & Gibson, R. (2009). Blogs, news and credibility. In *Aslib proceedings* (Vol. 61, No. 2, pp. 185-204). Emerald Group Publishing Limited.
61) Hanefeld, J., Mayhew, S., Legido-Quigley, H., Martineau, F., Karanikolos, M., Blanchet, K., ... & Balabanova, D. (2018). Towards an understanding of resilience: responding to health systems shocks. *Health policy and planning*, *33*(3), 355-367.
62) Hertzum, M. (2022). How do journalists seek information from sources? A systematic review. *Information Processing & Management*, *59*(6), 103087.
63) Ibitayo S. P., & Sam, E. (2023). Using background information to enhance news: A study of Nigerian newspapers' COVID-19 stories. *Covenant Journal of Communication*, *9*(2). Retrieved from https://journals.covenantuniversity.edu.ng/index.php/cjoc/article/view/3209
64) Igwe, M. C., & Obeagu, E. I. (2024). The Scopes and Implications of Health Communication in Public Health Practices in Nigeria. *J Bacteriol Mycol*, *11*(1), 1218.
65) Arab Trade Union Confederation. (2020). *Effects of the COVID-19 pandemic on journalists and the media sector in the Arab world and the Middle East*. https://www.ituc-csi.org/IMG/pdf/effects_of_covid-19_pandemic_on_journos_eng.pdf
66) Islam, K., Akhther, N., & Seeger, M. W. (2023). Variability in media content of public health outbreak coverage: A crisis communication approach. *Communication Studies*, *74*(2), 113-130.
67) Israel, O. O., Samuel, J. B., & Kolawole, L. M. (2021). Nigeria tribune awareness campaign on Covid-19 and audience response to health information. *International Journal of Advances in Engineering and Management IJAEM*, *3*(3), 32-45.
68) Johnson, S. M. (2023). *Cholera Epidemic, Government's Interventions and Public Responses in the 1970s, Ìbàdàn, Nigeria* (Doctoral dissertation, University of Saskatchewan).
69) Kajiita, R. M., & Kang'ethe, S. M. (2024). The Pandemics of Mass Destruction: A Comparative Analysis of HIV/AIDS and Coronavirus (COVID-19). *Journal of Multidisciplinary Healthcare*, 889-899.
70) Kamboh, S. A., Ittefaq, M., & Jin, Y. (2024). Crisis communication for public organizations: Examining Pakistan Railways' use of information technology and social media for image repair. *Journal of Contingencies and Crisis Management*, *32*(1), e12496.
71) Kanchan, S., & Gaidhane, A. (2024). Print media role and its impact on public health: A narrative review. *Cureus*, *16*(5), 1-12
72) Kesola, S., & Wahlberg, J. (2015). *Successful community rally against cholera based on literature review*. Laurea University of Applied Sciences. https://urn.fi/URN:NBN:fi:amk-2015052510167
73) Komiti, O. U., & Asemah, E. S. (2021). Coverage of COVID-19 pandemic by select online Nigerian newspapers. *Mass Communicator: International Journal of Communication Studies*, *15*(3), 4-12.
74) Legros, D. (2018). Global cholera epidemiology: opportunities to reduce the burden of cholera by 2030. *The Journal of infectious diseases*, *218*(suppl_3), S137-S140.
75) Lentz, E. C., & Maxwell, D. (2022). How do information problems constrain anticipating, mitigating, and responding to crises?. *International Journal of Disaster Risk Reduction*, *81*, 103242.
76) Malika, N., Bogart, L. M., Matovu, J. K., Phaladze, N., Mubiru, K., Leon Rhandomy, M., ... & Lee, D. (2025). Intersectional HIV stigma in Sub-Saharan Africa, Latin America and the Caribbean: Insights and pathways forward–A scoping review. *PLOS Global Public Health*, *5*(2), e0004240.
77) Marin, M. A., Thompson, C. C., Freitas, F. S., Fonseca, E. L., Aboderin, A. O., Zailani, S. B., ... & Vicente, A. C. P. (2013). Cholera outbreaks in Nigeria are associated with multidrug resistant atypical El Tor and non-O1/non-O139 Vibrio cholerae. *PLoS neglected tropical diseases*, *7*(2), e2049.
78) Melea, J. M. (2023). Coverage of open defecation issues in selected Nigerian newspapers. (Masters Dissertation, University of Maiduguri, Nigeria). PDF, Google Scholar
79) Messner, M., & Distaso, M. W. (2008). The source cycle: How traditional media and weblogs use each other as sources. *Journalism studies*, *9*(3), 447-463.
80) Mogo, E. R. I., Lawanson, T., Unuigboje, R., Chetty, Y., Onifade, V., Odekunle, D., … Oni, T. (2022). The other pandemic: social media engagement around non-communicable disease preventive behaviours during Nigeria's COVID-19 lockdowns. *Cities & Health*, *7*(4), 563–572. https://doi.org/10.1080/23748834.2022.2073540
81) Motsieloa, L., Phalane, E., Abdulrahman, A., & Phaswana-Mafuya, R. N. (2025). Differentiated HIV service delivery model for female sex workers in sub-Saharan Africa: A systematic review. *Southern African journal of HIV medicine*, *26*(1), 1626.
82) Mucević, H., McWhirter, J. E., Macleod, J., Shereefdeen, H., MacKay, M., Cheng, L., Phypers, M., & Grant, L. E. (2025). Best practices in public risk communication during enteric illness outbreak investigations: A scoping review. *Frontiers in Communication*, 9, Article 1509940. https://doi.org/10.3389/fcomm.2024.1509940
83) Mukhongo, L. L., Mwaura, J., & Omwoha, J. (2023). Reconceptualising media ownership and shifting power relations in an emerging digital media framework. *African Studies*, *82*(3-4), 300-315.
84) Mukiibi, E. (2024). *Role of the public editor in enhancing trust in legacy media: case study of daily monitor newspaper in Uganda.* (Unpublished master's dissertation). Aga Khan University, East Africa.
85) Nan, X., Iles, I. A., Yang, B., & Ma, Z. (2022). Public health messaging during the COVID-19 pandemic and beyond: Lessons from communication science. *Health communication*, *37*(1), 1-19.

License: This is an open access article under the CC BY 4.0 license: https://creativecommons.org/licenses/by/4.0/

86) Napakol, A. (2022). Framing the AIDS discourse: A critic of journalistic source norms in Uganda's HIV and AIDS print news. *Health Crises and Media Discourses in Sub-Saharan Africa*, (237-253. Cham: Springer International Publishing.
87) Nations, M. K., & Monte, C. G. (2013). "I'm not dog, no!": Cries of resistance against cholera control campaigns. In *The Anthropology of Infectious Disease* (pp. 439-481). Routledge.
88) Nayyar, A., & Privor-Dumm, L. (2020). Cholera control and prevention: Role of evidence-based advocacy and communications. *Vaccine*, *38*, A178-A180.
89) Nielsen, R. K. (2012). How newspapers began to blog: Recognizing the role of technologists in old media organizations' development of new media technologies. *Information, communication & society*, *15*(6), 959-978.
90) Nigeria Centre for Disease Control. *Cholera Outbreak in Nigeria*. (2024). Available at: https://ncdc.gov.ng/reports/weekly (accessed August 5, 2024).
91) Nwakpu, E. S., Ezema, V. O., & Ogbodo, J. N. (2020). Nigeria media framing of coronavirus pandemic and audience response. *Health promotion perspectives*, *10*(3), 192.
92) Ofiri, P. N., Imarenezor, E. P. K., Anyiam, V. I., & Abhadionmhen, O. A. (2024). HIV/AIDS prevalence in Taraba State, North East, Nigeria; Case study: Wukari and environs. *International Journal of Advanced Multidisciplinary Research and Studies*, 4(5), 6-10.
93) Ogoina, D. (2016). Behavioural and emotional responses to the 2014 Ebola outbreak in Nigeria: a narrative review. *International health*, *8*(1), 5-12.
94) Ogunsiji, O., Ogunsiji, Y., & Olaleke, J. (2025). Visualising Danger: A Multimodal Analysis of Online Awareness Posters on Cholera in Nigeria. In *Sociocultural and Multicultural Meanings in Online Communication* (pp. 151-182). IGI Global Scientific Publishing.
95) Ohaja, E.U., Ugwu, K.J., & Asicus, L.K. (2024). Coverage of communicable and non-communicable diseases in select Nigerian newspapers: a content analysis, *Sapientia Global Journal of Arts, Humanities and Development Studies (SGOJAHDS),* 7(1), 491 – 502
96) Ojo, O. B., & Gbolahan, A. M. (2025). Contextualising cholera in Nigeria: Contemporary epidemiology, determinants and recommendations. *ISA Journal of Medical Sciences (ISAJMS)*, *2*(3), 57-68.
97) Ojukwu, E., Pashaei, A., Maia, J. C., Omobhude, O. F., Tawfik, A., & Nguyen, Y. (2025). Impact of the COVID-19 pandemic on the HIV care continuum and associated factors in middle-income countries: A mixed-methods systematic review. *HIV medicine*, *26*(3), 350-381.
98) Okoroiwu, H. U., Umoh, E. A., Asanga, E. E., Edet, U. O., Atim-Ebim, M. R., Tangban, E. A., ... & Povedano-Montero, F. J. (2022). Thirty-five years (1986–2021) of HIV/AIDS in Nigeria: bibliometric and scoping analysis. *AIDS research and therapy*, *19*(1), 64.
99) Okpanachi, V., Jibunoh, J., Ezichi, O., Ojochegbe, A. F., Kanma-Okafor, O. J., Ojodare, T. A., ... & Izudike, O. E. (2025). Temporal and Geographic Trends in Burden of Cholera and Case Fatality Rates in Sub-Saharan Africa (2000-2023). *Advances in Infectious Diseases*, *15*(2), 286-304.
100) Olatunji, A. O., Olaboye, J. A., Maha, C. C., Kolawole, T. O., & Abdul, S. (2024). Environmental microbiology and public health: Advanced strategies for mitigating waterborne and airborne pathogens to prevent disease. *International Medical Science Research Journal*, *4*(7), 756-770.
101) Olawe, O. E. (2025). Lexicalisation in media reports of recurrent diphtheria outbreak in Nigeria: Implications for health communication. *Professional Discourse & Communication*, *6*(4), 65-85.
102) Omojunikanbi, N. C. (2024). Investigating the roles of effective journalism practices in health crisis management: A case of cholera outbreak in Nigeria. *International Journal of Modern Health Systems and Medical Science,* 2 (1), pp. 85 – 94
103) Onyekuru, N. A., Ihemezie, E. J., Ezea, C. P., Apeh, C. C., & Onyekuru, B. O. (2023). Impacts of Ebola disease outbreak in West Africa: Implications for government and public health preparedness and lessons from COVID-19. *Scientific African*, *19*, e01513.
104) Ope-Davies, T., & Shodipe, M. (2023). A multimodal discourse study of selected COVID-19 online public health campaign texts in Nigeria. *Discourse & society*, *34*(1), 96-119.
105) Opone, E. O., Jamiu, M. O., Enitan, S. S., Fasulu, P. E., Dibia, E. O., & Ojewale, R. A. (2025). Towards a Cholera-Free Nigeria: Epidemiological Profile, Diagnostic Approaches, Vaccine Implementation, Challenges and Strategic Framework for Enhanced Coverage. *Afro-Egyptian Journal of Infectious and Endemic Diseases*, *15*(2), 127-147.
106) Oweibia, M., Egberipou, T., Wilson, T. R., Timighe, G. C., & Ogbe, D. P. D. (2025). Factors associated with the propagation of cholera in epidemics across the geopolitical zones of Nigeria: A systematic review. *medRxiv*. https://doi.org/10.1101/2025.05.09.25327340
107) Owolabi, T. O. S., & Opene-Nwantah, N. F. (2022). Political Economy of COVID-19 and the Implication on Media Management and Sustainability in Nigeria. In *Health Crises and Media Discourses in Sub-Saharan Africa,* (pp. 19-35). Cham: Springer International Publishing.
108) Oyama, O. A., & Okpara, N. (2017). Health communication: The responsibility of the media in Nigeria. *Specialty Journal of Medical Research and Health Science*, *2*(3-2017), 1-4.
109) Oyebanji, O., Ofonagoro, U., Akande, O., Nsofor, I., Ukenedo, C., Mohammed, T. B., ... & Ihekweazu, C. (2019). Lay media reporting of monkeypox in Nigeria. *BMJ Global Health*, *4*(6), e002019.
110) Pan, P. L., & Meng, J. (2016). Media frames across stages of health crisis: A crisis management approach to news coverage of flu pandemic. *Journal of Contingencies and Crisis Management*, *24*(2), 95-106.
111) Perelman, C., Lopez-Leon, S., & Wegman-Ostrosky, T. (2024). Covering major epidemics/pandemics. In *Palgrave Handbook of Science and Health Journalism* (pp. 319-349). Cham: Springer International Publishing.
112) Pöyry, E., Reinikainen, H., & Luoma-Aho, V. (2025). The role of social media influencers in public health communication: Case COVID-19 pandemic. In *Strategic Communication and the Global Pandemic* (pp. 118-134). Routledge.

License: This is an open access article under the CC BY 4.0 license: https://creativecommons.org/licenses/by/4.0/

113) Said, M. D., Funke, N., Jacobs, I., Steyn, M., & Nienaber, S. (2011). The case of cholera preparedness, response and prevention in the SADC region: a need for proactive and multi-level communication and co-ordination. *Water SA*, *37*(4), 559-566.
114) Sanusi, B. O., & Kuyoro, P. A. (2024). Audience perception of print media in curbing corruption in Nigeria. *Multidisciplinary Journal of Vocational Education & Research*, 6(1). https://www.gojehms.com/index.php/MJVER/article/view/198
115) Schaetti, C., Ali, S. M., Chaignat, C. L., Khatib, A. M., Hutubessy, R., & Weiss, M. G. (2012). Improving community coverage of oral cholera mass vaccination campaigns: lessons learned in Zanzibar. *PloS one*, *7*(7), e41527.
116) Schudson, M., & Anderson, C. (2009). Objectivity, professionalism, and truth seeking in journalism. In *The handbook of journalism studies* (pp. 108-121). Routledge.
117) Segun, K. (2024). Exploring the impact of citizen journalism on traditional media. *International Journal of Human Research and Social Science Studies*, *1*(3), 63-73.
118) Singer, J. B. (2013). The ethical implications of an elite press. *Journal of Mass Media Ethics*, *28*(3), 203-216.
119) Smith, S., & Smith, S. (2016). Media coverage of the Ebola virus disease in four widely circulated Nigerian newspapers: lessons from Nigeria. *Health promotion perspectives*, *6*(2), 92.
120) Sow, A. U., Haruna, U. A., Amos, O. A., Olajide, E. O., Amene, T., Odususi, O. D., ... & Musa, S. M. (2022). Tackling cholera outbreak amidst COVID-19 pandemic in Nigeria: challenges and recommendations. *Public Health Reviews*, *43*, 1604776.
121) Sutrisno, S. (2023). Changes in media consumption patterns and their implications for people's cultural identity. *Technology and Society Perspectives (TACIT)*, *1*(1), 18-25.
122) Thompson, E. E. (2022). Risk communication in a double public health crisis: the case of Ebola and cholera in Ghana. In *COVID-19* (pp. 130-145). Routledge.
123) Torwel, V., & Rodney, C. (2010). Newspaper coverage of health issues in Nigeria. *African Communication Research*, *3*(2), 235-251.
124) Udom, B., & Akpan, E. E. (2024). The roles of social media tools in promoting health status of the citizens in Nigeria. *International Journal of Modern Health Systems and Medical Sciences, 2*(1), 111-120. https://www.globalacademicstar.com/download/article/the-roles-of-social-media-tools-in-promoting-health-status-of-the-citizens-in-nigeria-27225.pdf
125) Ugbo, G. O., Chinedu-Okeke, C. F., & Ogbodo, J. N. (2022). Citizen journalism and health communication in pandemics' prevention and control. *Health crises and media discourses in sub-Saharan Africa*, (pp. 183-199). Cham: Springer International Publishing.
126) Uzuegbunam, C. E. (2025). Youth and the pandemic: health information imaginaries and practices while navigating COVID-19 in Nigeria. *Frontiers in Communication*, *9*, 1461140.
127) Vambe, S., Zulu, W., Rwizi, S., Hough, E., Luvhimbi, M. J., & Bronkhorst, E. (2023). Cholera outbreak–an overview of management and prevention. *SA Pharmaceutical Journal*, *90*(4), 24-28.
128) Viviani, M., & Pasi, G. (2017). Credibility in social media: opinions, news, and health information—a survey. *Wiley interdisciplinary reviews: Data mining and knowledge discovery*, *7*(5), e1209.
129) Wang, A., Dara, R., Yousefinaghani, S., Maier, E., & Sharif, S. (2023). A review of social media data utilization for the prediction of disease outbreaks and understanding public perception. *Big Data and Cognitive Computing*, *7*(2), 72.
130) White, S., Mutula, A. C., Buroko, M. M., Heath, T., Mazimwe, F. K., Blanchet, K., ... & Dreibelbis, R. (2022). How does handwashing behaviour change in response to a cholera outbreak? A qualitative case study in the Democratic Republic of the Congo. *PloS one*, *17*(4), e0266849.
131) Yilmaz, I. (2025). *Between Clicks and Clerics: How Young Western Muslims Seek Religious Knowledge in the Digital Age*. Springer Nature.

License: This is an open access article under the CC BY 4.0 license: https://creativecommons.org/licenses/by/4.0/