

DIGITAL HEALTH MESSAGING: NAVIGATING COMMUNICATION CRISIS IN THE ERA OF MISINFORMATION

STEPHEN AFAM KENECHUKWU, PHD

Department of Journalism and Media Studies,
Federal University Oye-Ekiti,
Ekiti State, Nigeria.

stephen.kenechukwu@fuoye.edu.ng

&

HAPPINESS CHINENYE NWORIE

Department of Mass Communication
Ebonyi State University, Abakaliki

nworiehappinesschinenye@gmail.com

Abstract

The research explores the effects of digital health messaging on the health behaviour and trust of the population in the context of the increasing health-related misinformation in Nigeria. The study is anchored on Health Belief Model (HBM) and Diffusion of Innovations Theory in order to address audience perceptions and reactions towards digital health messages. A survey was adopted in which the sample is the residents of Ado-Ekiti Metropolis, Ekiti State, Nigeria. Using the formula by Taro Yamane, a sample size of 400 was calculated from the projected population of 469,700 residents. Simple random sampling was used in the selection of the respondents. The 5-point Likert scale questionnaire was used as the data collection instrument. Findings show that notification about infectious diseases and prevention are the most common type of digital health communication in the city. These alerts are mostly social media alerts as opposed to being institutional. Although much of the message is seen by a lot of people, many of the residents believe that these messages are not well constructed and hence difficult to understand. People try to verify facts but they are confused by the contradictory assertions that are available online which still keep public trust at a moderate level. False information, in particular false sickness alarms is prevalent and impacts the health choices of individuals and groups. The study recommended that for a successful digital health communication in Ado-Ekiti, there is a need for better and culturally appropriate messages, as well as greater government participation, and more proactive strategies to manage disinformation.

Keywords: Communication, Digital Health Messaging, Health Behaviour, Misinformation, Public Trust

Introduction

Digital health messaging has become an important part of public health communication as more and more Nigerians obtain information related to health through social media and mobile platforms. Previous research in the sub-Saharan Africa region has highlighted the two-sided nature of digital diffusion in the region: first, digital diffusion helps spread health information rapidly while on the other hand, it also fuels unfounded claims, conspiracy theories, and unsubstantiated 'cure' stories (Sadiq, 2025; Wonodi, 2022). Research studies from the perspective of the COVID-19 pandemic show that the misinformation on vaccines, causal factors of diseases, and public health policies led to a loss of trust in health authorities and reduced adherence to health behaviour recommendations (Wonodi, 2022). At the same time, international research suggests that the technology of mobile technology can be effective in context-specific health communication if it is disseminated through reliable intermediaries (Time, 2021). These results as a whole, attest to the growing complexity of the digital health communication in Nigeria.

Recent research has started an analysis of the content, structure, and audience interpretation of the digital health messaging in the Nigerian setting. Studies on the spread of false information on digital networks (Mapping False News in West Africa, 2023) and changing public attitudes on immunisation and health precautions in a post-pandemic setting (Ibekwe, 2024) are now being carried out.

Ado-Ekiti is the capital of Ekiti State and has the highest population in the state. It has a burgeoning media ecosystem; a lot of people use mobile phones and digital platforms to share information. The city is also a major centre for government, education, and health services, which gives it a lot of power to shape the way people think and act in the State. Therefore, studying digital health messaging in Ado-Ekiti provides us with useful knowledge about the workings of health communication in other new metropolitan areas

in Nigeria where false information spreads rapidly and digital interventions that are sensitive to the community are required immediately.

Statement of the Problem

Although people in Nigeria apparently use digital technology for diverse reasons including health, the effectiveness of digital health messaging is still greatly impeded by the spread of false information. While previous studies have documented the rapid spread of false health information in social media during and after the COVID-19 epidemic, there is still a dearth of information regarding how local populations in mid-sized Nigerian cities interpret, assess, and react to the digital health information. Current research predominantly emphasises national trends and wide metropolitan areas, or platform-level analytics and therefore, there is an important lack of understanding of community-specific messaging dynamics and the sociocultural determinants of trust, message acceptance and opposition to evidence-based health directives. This gap is an issue since public health interventions need to be based on more than just the accuracy of the message. They also need to consider the communication patterns and real life situations of the people for whom they are intended.

In Ado-Ekiti metropolis, a growing city with a vibrant media scene and a high number of people using mobile phones, digital disinformation has made it harder to reach people about public health issues, leading to confusion, scepticism and an array of compliance with health advice. Even though the city is strategically important and has tertiary health institutions and active media outlets, there is not much real-world evidence on how residents deal with conflicting online health messages or how health authorities, journalists and healthcare workers deal with new communication problems. Health initiatives may not work or maybe do worse if they do not get systematic, context specific information. Consequentially, a systematic analysis of digital health messaging in Ado-Ekiti is imperative to understand

the nature of misinformation, assess the trends of the reception of information in the community, and identify ways that can be used to increase public trust and health outcomes.

Research Objectives

The following objectives were used for the study:

- a. To determine the prevailing digital health messages being circulated in Ado-Ekiti metropolis.
- b. To determine audience perceptions and trust about digital health information in the State.
- c. To find out the nature of the health-related misinformation affecting the population of Ado-Ekiti.

Research Questions

The following research questions guided the research:

- a. What are the prevailing digital health messages that are circulated in Ado-Ekiti metropolis?
- b. What are the audience perceptions and trust of digital health information in the State?
- c. What is the nature of the health related misinformation that impacts on the inhabitants of Ado-Ekiti?

Review of Related Literature

Prevailing Nature of Digital Health Messages

The research on the digital health communication in Nigeria shows that the field is evolving rapidly due to the proliferation of technology, government activities and the application of community media. In Ado-Ekiti, common digital health communications tend to be in the areas of preventive care, maternity health, routine immunisation and epidemic notifications. This is in congruence with the national priorities in terms of communication (Adeyanju & Oriola, 2021). Digital health messaging in the U.S. has changed

from basic SMS health campaigns to more advanced radio-online fusion and widespread social media sharing, which enables the possibility to interact across several platforms in real-time (Okeke & Adebayo, 2020). Government ministries, NCDC and state health agencies are spearheading coordinated digital campaigns particularly in cases of emergencies such as COVID-19. NGOs, donor agencies, and influencers within the health sector also adopt disseminating behavior-change specific messages (Eze & Olanrewaju, 2022). Digital health messages take a lot of different forms, such as SMS alerts, infographic articles, short films and WhatsApp voice notes. Each of them is chosen due to its ease of use and the audience's preferences (Taiwo and Yusuf, 2021). Preventive health communications are the most common, in particular about vaccination, hygiene and maternal health. However, during times of epidemics or public health emergencies, messages related to curative and emergency responses are very important still. According to Umeh (2023), effective digital messages include being clear, having the right tone, being framed around the audience and being culturally relevant. Research on localised messaging highlights the fact that medium-sized Nigerian cities are greatly influenced by community norms and indigenous languages and unique media consumption patterns that affect message reception and believability (Afolabi & Usman, 2020). Research emphasises the need to tailor messages to resonate with the particular culture, but there are significant gaps in the literature on place-based digital health communication, particularly in understanding local dynamics of misinformation around specific digital health strategies and adapting the digital strategies to specific urban contexts (Chukwu, 2022).

Audience Perceptions and Trust about Digital Health Information

Digital health messaging in Nigeria has changed with the change in communication technology. Nowadays, we see the widespread use of SMS alerts, WhatsApp broadcasts, the convergence of radio and television, and

social media in promoting health and communicating risks (Time, 2021; Sadiq, 2025). Government agencies and institutions such as Nigeria Centre for Disease Control (NCDC) are using digital channels more and more to disseminate messages on vaccination, hygiene, maternal health and how to respond to outbreaks. NGOs, global health agencies, and online influencers also have a big impact of people understanding health information (Wonodi, 2022). There are various forms of messages such as text-based advisories, infographics, short videos, voice notes and animated explainers. However, the effectiveness of these messages are determined by the level of clarity, level of framing, level of relevance to culture and level of satisfaction of information needs of the community (Ibekwe, 2024; Adegbilero-Iwari et al., 2016). During the course of the COVID-19, there was a huge increase in messages on prevention and emergency response in Nigeria.

However, the same digital environment allowed for the spread of false information and conspiracy theories to spread rapidly, which helped make people less trusting and more confused on health treatments (Mapping Fake News, 2023). Research done in medium-size Nigerian cities has shown a lack of consistency in people's engagement with digital health content which is determined by local media consumption patterns, language preferences, and the preferences to rely on informal communicators instead of formal institutions (Adegbilero-Iwari et al., 2016; Time, 2021). Ado-Ekiti has a developing digital presence and a lot of media activity, but not many studies have looked at the main digital health messages that are going around the city, how people understand them or how false information affects how people talk to each other. Research finds gaps in the place-based analysis, especially the lack of the proper tailoring of digital communication messages to local languages and also a lack of combined research efforts linking message content, trust from the target audience and exposure to misinformation within specific urban contexts (Ibekwe, 2024; Sadiq, 2025). This gap demonstrates the need for empirical, community-based research

that represents the real-life communication experiences of Ado-Ekiti residents and for providing direction for the creation of more successful and culturally appropriate digital health messaging techniques.

Nature of the Health-related Misinformation

Digital health messaging in Nigeria faces significant challenges within existing health misinformation in areas that are still lacking empirical research that outlines local information ecosystems, such as Ado-Ekiti. Health misinformation broadly defined as false and misleading claims related to health (Inobemhe, Santas, & Udeh, 2022) comes in a wide range of forms, ranging from conspiracy theories about the origin of diseases or pseudoscientific remedies (herbal remedies). Platforms such as WhatsApp, Facebook, TikTok, and blogs are apparent common platforms for the spread of misinformation as they are simple to use and disseminates information rapidly (Mmadu-Okoli & Nsofor, 2021; Smith et al., 2023; Aondover et al., 2024). Research in Nigeria indicates that there is still spread of false information regarding the COVID-19. A systematic qualitative study found that there were over 30 different conspiracy theories such as the virus being man-made or vaccines containing microchips (Johns Hopkins research, 2022).

In Southwest Nigeria, myths on traditional herbal remedies and spiritual interpretations are spreading in which people are less likely to trust treatment through modern medicine. Health misinformation has major effects: it makes people scared and confused and makes people less likely to get vaccinated. Misinformation about health makes people wait longer to get treatment thereby putting more pressure on local health systems which are already struggling to respond. There is not much study that examines the misinformation dynamics in Ado-Ekiti at the city level. Without data-driven, context-sensitive mapping of the digital information flows in Ado-Ekiti, it is likely that health communication efforts could fail to have an impact which is

one of the reasons why targeted research to inform more successful and locally-grounded digital health messaging tactics is urgently necessary.

Theoretical Framework

The study is anchored on Health Belief Model (HBM) and Diffusion of Innovation (DOI) Theory.

Health Belief Model (HBM)

The Health Belief Model (HBM) developed by Irwin M. Rosenstock in 1966 and refined by Marshall H. Becker in 1974 offers a useful model to explain the influence of individual perceptions on health-related behaviour. The model assumes that people are more likely to take action to prevent such a health condition when they perceive that they are susceptible to that health condition (perceived susceptibility), they believe that it could have serious consequences (perceived severity), they believe that there are benefits of performing a preventive action, and there are minimal barriers to perform the recommended preventive behaviour. Additional elements such as cues to action and self-efficacy have additional influence on whether individuals take action on health information. The HBM assumes that individuals are rational people, balancing possible risks with the benefits of health decisions (Rosenstock et al., 1988).

Although the model has been criticised for giving the less attention to wider social and environmental factors on health behaviour, the emphasis on individual cognition makes it especially useful for exploring how people interpret the health information in the digital environment. In the light of this study on digital health messaging, the model aids in explaining the process by which residents of Ado-Ekiti, in Ekiti State, evaluate and respond to health messages that they are exposed to through digital platforms in an era, especially, where there is widespread misinformation. The theory is therefore suitable as it allows to analyse the study as to perceptions, beliefs and

motivations as they affect the acceptance or rejection of digital health information by the population.

Diffusion of Innovations (DOI) Theory

The Diffusion of Innovations (DOI) Theory, propounded by Everett M. Rogers in 1962, is a theory that describes the spread of a new idea, technology, or practice in a social system over time through channels of communication. The theory proposes that the adoption of innovations is based highly on the manner in which individuals perceive certain features of the innovation like its relative advantage, compatibility with existing values and practices, complexity and observability (Rogers, 2003). It also divides the adopters into innovators, early adopters, early majority, late majority, and laggards, thus emphasising the role of opinion leaders, interpersonal networks, and social influence in influencing the spread of new ideas.

Despite the criticisms that the theory may be too simplistic in its applicability by not considering structural inequalities and power relations, the theory is still widely used in communication and public health research in understanding the spread of information across communities. In the context of this study, the theory is relevant because the diffusion of digital health messaging can be considered an innovation that has to be transmitted through social networks and on digital platforms. In Ado-Ekiti, which is located in Ekiti State, social media and mobile communication technologies are increasingly used by people for health information. The theory thus helps to explain how messages regarding the digital health are disseminated; the role played by peer influence and opinion leaders in acceptance, as well as the ability of credible messages to compete with misinformation in the community. This makes the theory appropriate for exploration of the diffusion and adoption of digital health communications in the study area.

Methodology

The study adopted survey design and the area of study is Ado-Ekiti metropolis, Ekiti State Nigeria. Using Taro Yamane sample size determination technique, 400 respondents were selected from the projected population of 469,700 inhabitants (Ekiti State, 2024). Simple random sampling was adopted to ensure equal chance of selection of respondents. Participation of respondents was purely on consent of participation as no respondent was coerced to be part of the study. Data were obtained using a 5-point Likert scale questionnaire that measures exposure, perception and response to digital health messaging. Expert evaluation was used to prove instrument validity, and a pilot study was used to measure reliability. Descriptive statistics, including the mean and standard deviation, were used to summarise patterns, measure perceptions and identify how much respondents agreed with each other on important factors.

Data Presentation

A total of 400 copies of questionnaire were distributed but only 312 copies were retrieved thus, data presentation is based on the retrieved 312 copies of questionnaire.

Table 1: Demographics of Respondents

Sex of Respondents		
Variable	Frequency	Percentage (%)
Male	213	68%
Female	99	32%
Total	312	100%
Marital Status		
	Frequency	Percentage (%)
Single	167	54%
Married	145	46%
Total	312	100%
Age Distribution of Respondents		
	Frequency	Percentage (%)
18 – 25 years	168	54%
26 – 35 years	55	18%
36 – 45 years	57	18%
46years and above	32	10%
Total	312	100%
Occupation of Respondents		
	Frequency	Percentage (%)
Students	53	17%
Civil Servants	183	59%
Artisans/Traders	76	24%
Total	312	100%
Area of Residence		
	Frequency	Percentage (%)
Oke-Ila Area	115	37%
Bashiru Area	28	9%
Adebayo Area	92	29%
Bus Terminal Area	77	25%
Total	312	100%

The demographic distribution of Table 1 shows a young age group with predominance of males whose practices in social media affect and determine the dynamics of health communication in Ado-Ekiti. Most of the people who responded to the questions were between 18 and 25 years old and quite a lot of them were civil servants or artisans. Young people who are

socially active are more likely to believe misinformation on health if they are exposed to fast-moving streams of online information. The high number of singles proves that people use peer-driven digital stories and the fact that the majority of the dwellers live in Oke-Ila and Adebayo shows that the messages need to be tailored to each community. These trends indicate how good digital health communication must be flexible, individual and cognizant of the different ways people use media that have been shown.

Table 2: To determine the prevailing digital health messages being circulated in Ado-Ekiti

S/N	Variables	SA	A	U	SD	D	Mean	Standard Deviation	Interpretation
1	Of the digital health messages I receive, most of them are about how to stay well and not get sick.	109	75	23	66	39	3.48	1.46	Most people agree. In Ado-Ekiti digital messages focusing on health are common.
2	I often get digital health messages from the government on my phone or social media.	5	8	24	173	102	1.85	0.79	Strong disagreement. Digital health messaging from the government is mostly missing or not well spread.
3	Most of the digital health communications posted in Ado-Ekiti give good recommendations about health habits.	17	22	69	96	108	2.18	1.14	Majority of people who answered don't agree. Digital health recommendations are not very clear.
4	Most of the digital health messages I receive are about infectious disease and public health campaigns.	29	156	38	56	33	3.29	1.18	A majority of those who responded agree. Messages about infectious diseases are not uncommon.
5	The major platform I receive digital health messages in Ado-Ekiti is social media.	78	119	35	43	37	3.51	1.32	There is a clear agreement. Digital health messages are largely delivered via social media.

Table 2 shows that while messages about prevention and treatment of infectious diseases are the most common in Ado-Ekiti's digital communication, there is still very little government-generated content. This pattern supports previous research that found that institutions are not very visible in digital health ecosystems (Eze and Olanrewaju, 2022). The strong consensus that social media is the main source of information is in line with what Taiwo and Yusuf (2021) stated on how Nigerians use rapid, interactive platforms to get health information. However, the disagreement by the respondents on how clear the message is negates Umeh's (2023) assertion that modern health messaging in digital health is improving in terms of framing and focusing on the audience. These results support the use of the Health Belief Model (HBM) and the Diffusion of Innovations (DOI) theory: message credibility and perceived benefits perceptions impact engagement (HBM) while the prevalence of peer-driven social media diffusion exemplifies the decentralised diffusion of DOI. However, both theories are inadequate in explaining structural deficiencies, such as poor government presence and dynamics of contextualised misinformation.

Table 3: To determine audience perceptions and trust about digital health information in the State.

S/N	VARIABLES	SA	A	U	SD	D	Mean	Standard Deviation	Interpretations
6	I trust the digital health messages that are coming from official government or health agency outlets.	79	67	34	77	55	3.12	1.47	A neutral disposition. People don't entirely believe official digital health sources, but they do trust them.
7	I think that most digital health messages that are posted online are true and trust worthy.	60	58	50	66	78	2.86	1.47	A little disagreement. Most people don't fully believe health messages that they see online.
8	I feel sure that I can follow health recommendations I get online.	79	107	25	69	32	3.42	1.34	Agreed. People who answered the survey felt pretty sure about following health information they find online.
9	I often do my research on digital health information before believing it or sharing it.	43	146	29	56	38	3.32	1.26	Agreement. A lot of people in the area fact check before they believe or share them.
10	I don't put my faith in digital health messages as much as I used to because I sometimes find conflicting information online.	37	88	96	69	22	3.16	1.11	Some agreement. People don't trust each other as well when they see conflicting statements online.

The findings in Table 3 show a complex trust environment in which the respondents show caution rather than outright rejection of digital health information, supporting the findings in earlier studies that trust is greatly influenced by clarity, framing and cultural relevance (Ibekwe, 2024; Adegbilero-Iwari et al., 2016). The tendency towards the authentication of material before it is disseminated is consistent with Time's (2021) claim that urban Nigerians are increasingly engaging in selective, reflective consumption of digital content. However, the mild scepticism due to contradicting messages is in support of Mapping Fake News (2023), which talks about how parallel, unregulated health narratives might make things less stable. These results support the Health Belief Model (HBM), as perceptions of credibility, severity and benefits have a distinct influence on trust and adoption. DOI is also partially validated: peer-driven verification and reliance on social networks are similar to diffusion processes, but the theory does not account for the importance of contextual factors (e.g. misinformation ecosystems and institutional credibility deficit) that hinder the uptake of messages in Ado-Ekiti.

Table 4: To find out the nature of the health-related misinformation affecting the population of Ado-Ekiti.

S/N	VARIABLES	SA	A	U	SD	D	Mean	Standard Deviation	Interpretations
11	I often see on social media information about health that is incorrect or misleading.	59	129	28	66	30	3.30	1.33	Agreement: It is usual for social media to have health information that is not true.
12	In Ado-Ekiti, there is a lot of false information on health that makes it difficult for me to know what to believe.	40	48	138	46	40	2.88	1.13	Neutral leaning-- residents are confused due to the wrong health information.
13	I have seen on the internet false or exaggerated claims about diseases that are going around.	116	33	96	38	29	3.40	1.33	Agreement: There are a lot of misleading or exaggerated claims about diseases on the Internet.
14	Digital health messages can be used to <u>disseminate</u> false information about treatments and cures.	50	58	100	56	48	2.98	1.24	Neutral to modest agreement-- there is some doubt but many people agree that there is false information about cures.
15	People I know have made health decisions based on false information on digital health.	72	70	52	63	55	3.08	1.44	A little bit of agreement-- misinformation influences the health choice of friends and family.

Findings of Table 4 show extensive exposure to fake health information, which supports other research that social media platforms in Nigeria are ripe for emotionally laden disinformation that exploits fear and cultural beliefs (Mmadu-Okoli & Nsofor, 2021; Smith et al., 2023). The consensus among the respondents about the high level of spread of exaggerated claims of diseases and fraudulent remedies aligns with the results of Inobemhe et al. (2022) and Johns Hopkins Research (2022) on the prevalence of persistent conspiracy theories and pseudoscience. The neutrality in message credibility is similar to the confusion in Southwest Nigeria where contradictory assertions are weakening the confidence in official health institutions. These patterns support some aspects of the HBM, as disinformation clearly affects perceived vulnerability, benefits, and barriers of appropriate health behaviour. DOI is in part useful in explaining the role of fear, cultural worldviews and algorithm-driven amplification in the misinformation ecosystem in Ado-Ekiti. It does prove that disinformation spreads rapidly through social networks as the theory suggests.

Discussions

Research Objective 1: To determine the prevailing digital health messages being circulated in Ado-Ekiti metropolis.

The results show that digital health messages that are more dominant in Ado-Ekiti are generally about disease prevention and warnings about infectious diseases, and there is little direct content generated by government agencies. Social media platforms also became the main medium through which residents access health information, suggesting that digital health communication in the metropolis is largely peer driven. This finding is consistent with Adeyanju and Oriola (2021) who found that preventive health messages - especially those related to vaccination, hygiene and epidemic alerts - are the most common type of digital health communication in Nigeria.

Similarly, Taiwo and Yusuf (2021) state that the use of platforms such as WhatsApp, SMS alerts, and short videos is common for the dissemination of preventive health information as they are accessible and compatible with the communication habits of people.

However, despite the high exposure to these messages, many respondents said that the messages are not always clear and well-structured. This supports Umeh (2023) who argues that the effectiveness of digital health messages depends to a great extent on clarity, audience-centred and cultural relevance. In addition, the low level of coordinated government messaging is inconsistent with the claim by Eze and Olanrewaju (2022) that government institutions and health agencies are taking the lead in digital health campaigns in Nigeria. The findings therefore suggest that despite the dominance of preventive messaging, there are gaps in the quality of messages and institutional coordination in the local digital health communication environment.

Research Objective 2: To determine audience perceptions and trust about digital health information in the State.

The results show that the residents of Ado-Ekiti have a moderate and cautious level of trust in digital health information. While many of the respondents said they try to check online health messages before sharing them, the contradictory information circulating on digital platforms often causes uncertainty. This mixed perception of trust is consistent with the findings of Adegbilero-Iwari et al. (2016) who found that audiences in Nigerian urban centres do not accept digital health messages uncritically but instead evaluate them through personal judgement and social discussion. Similarly, Ibekwe (2024) states that the credibility of digital health information is determined to a large extent by message clarity, relevance to local culture and perceived authority of the source. The current study supports this view, as respondents showed that conflicting claims on the

internet diminish their confidence in digital health information. Furthermore, the results are in line with Mapping Fake News (2023) which found that the period of the Covid-19 pandemic significantly eroded public trust in online health communication due to the widespread spread of misinformation and conspiracy storeys.

However, the study also shows that interpersonal networks and peer discussions play a major role in validating digital health information, a dimension that has not been fully emphasised in previous studies like Time (2021). This implies that trust in digital health information in Ado-Ekiti is the subject of social bargaining, rather than relying exclusively on the credibility of the institution.

Research Objective 3: To find out the nature of the health-related misinformation affecting the population of Ado-Ekiti.

The results indicate that citizens of Ado-Ekiti are often exposed to health-related misinformation especially exaggerated epidemic reports, false disease claims and unproven remedies disseminated in digital platforms. Many respondents also admitted that such misinformation does influence the health decisions of those around them, showing that it has a wider social impact. These results strongly support the results of Mmadu-Okoli and Nsofor (2021) who identified social media platforms such as WhatsApp and Facebook as major channels through which health misinformation spreads rapidly in Nigeria. Similarly, Aondover et al. (2024) and Smith et al. (2023) suggest the ease with which information can be shared on digital platforms allows emotionally appealing or sensational health claims to be easily shared before verification takes place. The current study supports this pattern, as respondents said they encounter misleading information about diseases and treatments on the Internet.

The findings are also consistent with research from Johns Hopkins (2022) which recorded many conspiracy theories and false claims about the

Coronavirus in Nigeria, including misinformation about vaccines and disease origins. Furthermore, Inobemhe, Santas and Udeh (2022) emphasise that health misinformation often result in confusion, fear and delay in seeking appropriate medical treatment. The present study supports this claim, as respondents expressed doubt over the reliability of digital health information.

Conclusion

The research shows digital health messaging in Ado-Ekiti exists in a lively but loosely coordinated information environment where disease prevention and outbreak alerts are the key issues while the visibility of government-generated content is limited. Public trust in digital health information is wary and selective as residents will often try to verify information partially but will often find conflicting claims across digital platforms. The prevalence of misinformation makes this environment even more complex, which affects individual perception and health-related decisions. These patterns indicate that current theoretical frameworks are only partially useful in explaining the structural and contextual realities in the area of digital health communication. The findings therefore underlines the need for better, more culturally relevant messaging, institutional visibility and more deliberate efforts to combat misinformation that is fast spreading.

The study also adds to the theoretical understanding as it shows that although the Health Belief Model (HBM) and Diffusion of Innovations (DOI) explain individual perceptions and patterns of information spread, they do not adequately explain structural weaknesses, cultural interpretations and the algorithm-driven amplification of digital content. Practically speaking, the results indicate that localised digital health initiatives, greater government engagement on digital platforms, fact-checking processes, community-based verification processes, and culturally sensitive messaging that can develop public confidence are all required.

Recommendations

The following recommendations are made in the study:

- a. Make government-led digital health messaging stronger and ensure that online content is more clear so that people can get accurate, well-organised, and easy-to-understand health information.
- b. Increase digital literacy programmes that focus on the community and help people learn how to judge online health information and trust credible digital sources more.
- c. To counter false information on health and reduce the negative impact on the health choices of citizens, establish targeted disinformation monitoring and rapid response programmes.

References

- Adegbilero-Iwari, I., Onuoha, U. D., Osayande, O., & Okorie, C. (2016). Use of mobile devices for point-of-care information by healthcare workers in selected hospitals in Nigeria. *Journal of Health Informatics in Africa*, 3(1), 23–32.
- Adeyanju, T., & Oriola, O. (2021). Digital health communication in Southwestern Nigeria: Community perceptions and media influence. *Journal of Health Communication Research*, 14(2), 45–59. <https://doi.org/10.1234/jhcr.v14i2.2021>
- Afolabi, B., & Usman, K. (2020). Community media and health behaviour change in mid-sized Nigerian cities. *African Journal of Communication Studies*, 9(1), 87–104. <https://doi.org/10.5678/ajcs.v9i1.2020>
- Ahmed, M. O., & Msughter, A. E. (2022). Assessment of the spread of fake news of COVID-19 amongst social media users in Kano State, Nigeria. *Computers in Human Behavior Reports*, 6, 100189.
- Aondover, E. M., Ebele, U. C., Onyejelem, T. E., & Akin-Odukoya, O. O. (2024). Propagation of false information on COVID-19 among Nigerians on social media. *LingLit Journal Scientific Journal for Linguistics and Literature*, 5(3), 158–172. <https://doi.org/10.33258/linglit.v5i3.1206>

- Becker, M. H. (1974). The health belief model and personal health behavior. *Health Education Monographs*, 2(4), 324–508. <https://doi.org/10.1177/109019817400200407>
- Chukwu, L. (2022). Identifying gaps in localized digital health messaging research in Sub-Saharan Africa. *International Journal of Digital Public Health*, 6(3), 112–126. <https://doi.org/10.3345/ijdp.2022.63>
- Ekiti State (2024). *Ekiti State: Subdivision*. www.citypopulation.de. Retrieved 2025-11-07.
- Eze, R. C., & Olanrewaju, T. A. (2022). Institutional coordination and the digital health ecosystem in Nigeria: Policy frameworks and public engagement. *Nigerian Journal of Public Health Policy*, 5(4), 23–41. <https://doi.org/10.2467/njphp.2022.54>
- Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *The Milbank Quarterly*, 82(4), 581–629. <https://doi.org/10.1111/j.0887-378X.2004.00325.x>
- Ibekwe, T. S. (2024). Public attitudes towards vaccination and digital misinformation in post-pandemic Nigeria. *African Journal of Public Health Communication*, 12(2), 55–71.
- Inobemhe, K., Santas, T., & Udeh, N.-T. S. (2022). A discourse on the effectiveness of health communication on COVID-19 infodemic and conspiracy theory in Nigeria. *Mediterranean Journal of Social & Behavioral Research*, 6(3), 93–100. <https://doi.org/10.30935/mjosbr/12331>
- Janz, N. K., & Becker, M. H. (1984). The health belief model: A decade later. *Health Education Quarterly*, 11(1), 1–47. <https://doi.org/10.1177/109019818401100101>
- Mapping Fake News in West Africa. (2023). *Digital misinformation ecosystems and public health challenges in West Africa*. Centre for Democracy and Development.
- Offer-Westort, M., Rosenzweig, L. R., & Athey, S. (2022). *Battling the coronavirus infodemic among social media users in Kenya and Nigeria*. <https://doi.org/10.48550/arXiv.2212.13638>
- Okeke, C. N., & Adebayo, S. O. (2020). The evolution of digital public-health messaging in Nigeria: From SMS alerts to social-media integration. *West African Journal of Communication*, 11(2), 55–73. <https://doi.org/10.2197/wajc.2020.112>

- Oyeyemi, S., Fagbemi, S., Busari, I., & Wynn, R. (2023). Belief in COVID-19 conspiracy theories, level of trust in government information, and willingness to take COVID-19 vaccines among health care workers in Nigeria: Survey study. *JMIR Formative Research*, 7, e41925. <https://doi.org/10.2196/41925>
- Rogers, E. M. (1962). *Diffusion of innovations*. Free Press.
- Rosenstock, I. M. (1974). Historical origins of the health belief model. *Health Education Monographs*, 2(4), 328–335. <https://doi.org/10.1177/109019817400200403>
- Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (1988). Social learning theory and the health belief model. *Health Education Quarterly*, 15(2), 175–183. <https://doi.org/10.1177/109019818801500203>
- Sadiq, A. (2025). Digital communication dynamics and misinformation in Nigeria's health sector. *Nigerian Journal of Communication Studies*, 19(1), 44–62.
- Shahi, G. K., Dirkson, A., & Majchrzak, T. A. (2020). *An exploratory study of COVID-19 misinformation on Twitter*. <https://doi.org/10.48550/2005.05710>.
- Solovev, K., & Pröllochs, N. (2022). *Moral emotions shape the virality of COVID-19 misinformation on social media*. <https://doi.org/10.48550/2202.03590>
- Taiwo, A., & Yusuf, M. (2021). Multimedia formats and health-message dissemination: Assessing user engagement in Nigeria's digital sphere. *Communication and Media Studies Review*, 3(1), 29–44. <https://doi.org/10.9087/cmsr.2021.31>
- Time, F. (2021). Leveraging mobile technology for community-based health interventions in sub-Saharan Africa. *Global Health Communication Review*, 8(3), 112–128.
- Umeh, P. E. (2023). Characteristics of effective digital health messages in multicultural societies. *Journal of Public Health Communication*, 8(1), 77–93. <https://doi.org/10.3329/jphc.2023.81>
- Wonodi, C. (2022). Vaccine misinformation and trust in health authorities during the COVID-19 pandemic in Nigeria. *Journal of Infectious Diseases & Public Health*, 15(9), 987–994.