



Communicating Adoption of Artificial Intelligence (AI) for Sustainable Healthcare Decision-Making in Federal Teaching Hospital Abakiliki (FETHA), Ebonyi State, Nigeria

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ABSTRACT

Background: Artificial Intelligence (AI) is increasingly recognised as a strategic tool for improving healthcare decision-making and advancing sustainable development. However, in many developing countries, including Nigeria, AI adoption remains limited despite supportive policy frameworks.

Objective: This study examined how communication influences the adoption of Artificial Intelligence for sustainable healthcare decision-making in Federal Teaching Hospital Abakiliki (FETHA), Ebonyi State, Nigeria.

Method: Adopting descriptive survey research design, Cochran's formula was used to get the sample size of 80 health professionals and administrative staff of FETHA comprising of 35 Doctors, 25 Nurses and 20 administrative staff who were sampled using a stratified random sampling technique. Data were collected through a combination of questionnaire and online survey with a consistency coefficient of 0.81, while data were analysed using descriptive statistics and presented using frequency tables and percentages.

Results: There was moderate to high awareness of AI among healthcare professionals and administrative staff of FETHA which posits that the adoption of innovation is influenced by perceived relative advantages, compatibility, trainability and observability. Effective communication significantly influences trust and acceptance of AI technologies among healthcare professionals and administrative staff of FETHA in Ebonyi State. Transparent communication on data privacy ethical standards, and the role of artificial intelligence in clinical decision making was perceived as essential for building confidence.

Conclusion: This study concludes that communication is a critical determinant of AI adoption in Ebonyi State's healthcare sector. While AI offers significant potential for improving sustainable decision-making, its effectiveness depends largely on how well its benefits, risks, and ethical safeguards are communicated.

Unique Contribution: This study has offered new insight into the increasing influence of communication on AI adoption for sustainable decision. Without deliberate communication strategies including training, participatory dialogue, and ethical transparency AI adoption may remain limited despite policy support. Hopefully, policymakers, healthcare practitioners, and communication experts will find this fresh insight useful in planning more effective communication flow, strong stakeholder engagement and sufficient information dissemination mechanisms on AI adoption in health institutions in Ebonyi State. This will enable Ebonyi State and Nigeria as a whole to harness AI's full potential for sustainable healthcare decision-making.



Key Recommendation: Ebonyi State Healthcare Institution should develop clear, transparent and consistent communication strategies that will explain purpose and benefit of AI technologies. Regular training programmes, workshop and professional development initiative should be organized to improve healthcare professionals and administrative staff's understanding and use of AI system. Communication frameworks should be incorporated into state and institutional health policies to ensure sustainable AI adoption.

Keywords: Artificial Intelligence, Communication, Decision-Making, Sustainable Healthcare, Technology Adoption

INTRODUCTION

Artificial Intelligence (AI) has emerged as a transformative technology capable of reshaping healthcare delivery, policy formulation, and sustainable development outcomes globally. AI-driven systems enhance diagnostics, predict disease outbreaks, optimise resource allocation, and support data-informed decision-making (Topol, 2019; World Health Organisation [WHO], 2021). In developing countries, AI presents opportunities to address structural inefficiencies in healthcare systems and accelerate progress toward the Sustainable Development Goals (United Nations, 2019). Countries across the world are increasingly integrating AI into healthcare systems to improve diagnostic accuracy, optimise resource allocation, and enhance patient outcomes (Nwafor et al., 2025). In Nigeria, policy recognition of AI's strategic importance is evident in frameworks such as the Federal Government of Nigeria's National Digital Economy Policy and Strategy (2020–2030) and the Draft National Artificial Intelligence Strategy, both aligned with the United Nations Sustainable Development Goals (SDGs).

The Nigerian government has acknowledged the strategic importance of AI through initiatives such as the National Digital Economy Policy and Strategy (2020–2030). Despite these efforts, AI adoption in the Nigerian health sector remains slow and uneven. While infrastructural and regulatory constraints exist, a less examined but critical factor is communication. The success of technological innovation depends significantly on how effectively it is communicated, understood, and trusted by stakeholders (Rogers, 2003; Aligwe, 2016). Despite these policy commitments, the actual adoption and implementation of AI technologies within Nigeria's healthcare sector remain significantly limited. Existing literature and policy analyses suggest that beyond infrastructural and financial challenges, a critical yet underexplored barrier is ineffective communication among policymakers, healthcare professionals, technologists, and the general public. There exists a persistent communication gap characterised by inadequate public sensitisation, limited stakeholder engagement, insufficient policy dissemination, and poor strategic messaging regarding AI applications in healthcare.

This communication deficiency has resulted in low awareness levels, skepticism, ethical concerns, and fears of job displacement among healthcare professionals. Consequently, trust in AI systems remains fragile, and willingness to adopt AI-driven solutions is constrained. In Ebonyi State, where healthcare institutions are striving to improve service delivery amidst resource limitations, ineffective communication further undermines efforts to integrate AI tools into sustainable clinical decision-making processes.



The problem, therefore, is not solely technological but fundamentally communicative. The absence of structured, transparent, and participatory communication strategies weakens knowledge transfer, reduces institutional trust, limits stakeholder collaboration, and slows AI adoption. If this communication gap is not addressed, Nigeria's healthcare sector risks underutilising AI's potential to enhance sustainable decision-making, improve health outcomes, and contribute meaningfully to national development goals.

Communication influences awareness, shapes perceptions, reduces uncertainty, and builds trust in emerging technologies. In contexts where digital literacy levels vary and skepticism about data privacy and job displacement persists, communication becomes a central determinant of adoption (Floridi et al., 2018; WHO, 2021). This study therefore investigates how communication practices influence AI adoption for sustainable decision-making in FETHA, Ebonyi State, Nigeria.

OBJECTIVES OF THE STUDY

1. To assess the awareness of artificial intelligence among healthcare professionals and administrative staff in FETHA Ebonyi State.
2. To assess the extent to which communication strategies adopted by healthcare professionals and administrative staff of FETHA influence trust and acceptance of AI technologies in Ebonyi State.
3. To identify the communication barriers that hinder effective adoption of AI technologies in hospitals and healthcare facilities in Ebonyi State.
4. To develop tailored communication frameworks and strategies that will enhance AI adoption and support sustainable development goals within the healthcare sector in Ebonyi State.

LITERATURE REVIEW

AI Revolution and its Importance in Health Institutions

The Artificial Intelligence (AI) revolution represents one of the most profound technological transformations of the 21st century. It reflects a shift from mechanised automation toward systems capable of learning, reasoning and autonomous adaptation. The term Artificial Intelligence was coined and first introduced by John McCarthy at the 1956 Dartmouth Conference, where he defined it as the science and engineering of making intelligent machines (Teneo.ai, 2024; McCarthy, 2007). This foundational definition positioned AI not merely as a computational advancement but as an ambitious scientific endeavor aimed at replicating human cognitive functions. Subsequent scholars expanded this conceptualisation. Stuart Russel and Peter Norvig (4th ed. 2020) defined AI as the study of intelligent agents systems that perceive their environment and act rationally to maximise success. Similarly, Stuart Russel and Peter Norvig (3rd ed. 2010) conceptualises AI as the computational modeling of intelligent behavior. These perspectives collectively frame the AI revolution as a transformation from simple automation to adaptive intelligence capable of operating under uncertainty. Thus, the AI revolution can be conceptually understood as the transition from programmed logic to self-



learning systems embedded in real-world environments. In developing countries, the AI revolution offers opportunities to bridge expertise gaps, optimise limited resources and strengthen public institutions. However, such benefits depend on ethical governance and contextual adaptation.

The Artificial Intelligence (AI) revolution refers to the transformative shift from traditional automation to intelligent, data-driven systems capable of learning, reasoning and adaptive decision-making. Globally, AI has been described as a general-purpose technology reshaping productivity, governance and innovation (OECD, 2021). In Nigeria, the AI revolution is emerging within a complex socio-economic landscape characterised by youthful demographics, digital expansion and infrastructural constraints.

Artificial Intelligence (AI) has emerged as one of the most transformative technological developments of the 21st century. It has reshaped how societies approach problem-solving, productivity and innovation. This foundational understanding established AI as a field concerned with designing machines capable of performing tasks that require human-like intelligence such as reasoning, learning and adaptation.

In the context of Nigeria's healthcare system, adopting such a framework implies integrating AI not only for efficiency but also for sustainability, transparency and improved human welfare outcomes. Understanding AI not only as a technological tool but also as a communicative and ethical system ensures that adoption is guided by both human and contextual intelligence.

Artificial Intelligence (AI) is gradually transforming healthcare delivery in Nigeria by enhancing diagnosis, data management, disease surveillance, and clinical decision-making. As a data-driven and socio-technical innovation, AI is increasingly being integrated into hospitals, research centres, and public health institutions to address persistent systemic challenges such as inadequate manpower, poor health information systems, and uneven access to specialist care.

The Link between Communication and AI Adoption

Communication is the primary causal driver of adoption. Drawing from *Diffusion of Innovations*, adoption is fundamentally a communication-dependent social process. Innovations do not spread automatically; they diffuse through communication channels, opinion leaders, interpersonal networks and organizational messaging. Thus, communication determines awareness of AI, understanding of its functions, perceived relevance and speed of movement across adoption stages. Without effective communication, AI cannot move from awareness to confirmation. Communication shapes cognitive mediators of adoption. Adoption depends on: perceived usefulness and perceived ease of use. Communication interventions (training, demonstrations, framing) directly influence these perceptions. For example: clear demonstrations of AI diagnostic accuracy increase perceived usefulness. Communication activates and affects performance expectancy, effort expectancy and social influence which accelerate adoption (Rogers, 2003).

Artificial Intelligence (AI) and communication are deeply interconnected, as intelligent systems have fundamentally transformed how humans create, transmit, interpret, and manage



information. Classical communication theory, particularly the model proposed by Shannon and Weaver (1949), conceptualises communication as the transmission of messages from a sender to a receiver through a channel. In the context of digital transformation, AI functions not only as a channel but also as an active facilitator and participant in communication processes. It automates language processing, enhances feedback mechanisms, and optimises information flow across platforms. Kaplan and Haenlein (2020) conceptualise AI as a “social actor” capable of interpreting human intent, responding to inquiries, and predicting communicative needs through data analytics. This perspective positions AI not merely as a technical instrument but as a communicative agent shaping emerging forms of human–machine interaction.

One of the most transformative intersections between AI and communication lies in Natural Language Processing (NLP), which enables machines to understand, interpret, and generate human language. NLP powers conversational agents, thereby redefining interpersonal and organisational communication. As Cambria et al. (2022) argue, NLP systems extract meaning from unstructured textual and speech data, facilitating more intuitive and context-aware human–machine dialogue. In Nigeria, the (NITDA, 2024) reports increased deployment of AI-driven chatbots in banking and telecommunications to provide real-time customer engagement. Through such applications, AI acts as a communicative intermediary, streamlining interactions between institutions and citizens.

AI also reshapes public and interpersonal communication through algorithmic personalisation. Machine learning models underpin content recommendation systems on digital platforms, tailoring information to users’ preferences and behavioral patterns. Tufekci (2021) notes that algorithmic curation significantly influences what individuals see, engage with, and ultimately believe, thereby redefining digital discourse. In this capacity, AI becomes an active agent in agenda-setting and opinion formation. Omodara and Alabi (2023) observe that while AI-driven personalisation enhances audience engagement and organisational outreach, it simultaneously raises concerns regarding transparency, echo chambers, and manipulation. Within Nigeria’s media ecosystem, AI analytics are increasingly used to monitor audience sentiment, predict trends, and optimise digital advertising strategies, demonstrating AI’s growing influence in strategic communication.

The healthcare sector further illustrates the synergy between AI and communication. The study by Eze and Ibeh (2023) underscores the role of AI chatbots and diagnostic tools in improving health literacy by translating complex medical information into accessible language. In Nigeria, Eze and Ibeh (2023) identify AI-powered mobile platforms such that enhance communication between healthcare providers and patients, particularly in underserved rural communities. These technologies bridge informational gaps, promote remote consultations, and foster inclusive health communication.

Challenges in the Adoption and Utilization of Artificial Intelligence in Nigeria

The adoption and utilisation of Artificial Intelligence (AI) in Nigeria are constrained by a complex interplay of infrastructural, educational, institutional, economic, and socio-cultural



challenges. Although Nigeria has demonstrated growing interest in digital transformation, structural limitations continue to impede the large-scale integration of AI across sectors.

One of the most critical barriers to AI implementation in Nigeria is inadequate digital and physical infrastructure. According to the National Information Technology Development Agency (NITDA, 2024), inconsistent electricity supply, limited broadband penetration, and insufficient data center capacity significantly undermine AI deployment. Similarly, Oke (2023) and Akpobo (2013) observes that despite Nigeria's enthusiasm for emerging technologies, infrastructural fragility restricts the scalability of AI initiatives. Without reliable power, high-speed internet connectivity, and secure cloud infrastructure, sustainable AI integration remains aspirational rather than systemic.

A second major constraint is the shortage of skilled human capital. AI development requires expertise in machine learning, data science, robotics, and computational analytics. However, Adedeji (2022) identifies a persistent "knowledge deficit" in Nigeria, noting that many tertiary institutions still emphasise traditional computer science curricula with limited focus on applied AI. Data quality and accessibility also present formidable obstacles. AI systems depend on large volumes of structured, reliable datasets for training and validation. Yet, the Centre for Intellectual Property and Information Technology Law (CIPIT, 2023) reports that many Nigerian institutions lack standardised data-collection frameworks, while government databases are often fragmented or outdated. Weak data governance structures and inconsistent enforcement of privacy regulations (Akinwotu & Okonkwo, 2023) further discourage data-sharing collaborations. Consequently, limited data integrity undermines algorithmic accuracy and reduces investor confidence in data-driven innovation.

Financial constraints constitute another significant challenge. AI implementation requires substantial capital investment in hardware, cloud computing infrastructure, software licensing, cyber security, and maintenance. Mogaji (2020) notes that most small and medium-sized enterprises (SMEs) in Nigeria consider AI adoption financially prohibitive, thereby restricting advanced AI utilisation to large corporations and financial institutions. The World Bank (2024) similarly emphasises that limited access to innovation funding in emerging economies constrains AI-related entrepreneurship, particularly given the high upfront costs associated with experimentation and scaling. Ethical and regulatory uncertainties further complicate AI deployment. Issues surrounding data protection, algorithmic bias, accountability, and transparency remain insufficiently addressed within Nigeria's legal framework. Bello (2025) argues that the absence of a comprehensive AI governance structure exposes the country to risks of misuse and unethical practices. Adedoyin and Olayinka (2024) add that existing legislative mechanisms have not evolved to manage complexities such as liability, explainability, and fairness in AI-driven decision-making. Regulatory ambiguity therefore creates uncertainty for innovators and policymakers, potentially slowing experimentation and technological advancement.

Closely related is the challenge of algorithmic bias and contextual misalignment. Ogu and Adeyemo (2024) observe that many AI systems deployed in Nigeria are imported and trained predominantly on Western datasets that inadequately represent African linguistic and socio-



cultural realities. The Centre for Intellectual Property and Information Technology Law State of AI in Africa Report (2023) underscores the necessity of localised datasets and African-centered AI research to prevent digital marginalization. Without contextual adaptation, AI tools may generate exclusionary outcomes in sensitive sectors such as recruitment, financial inclusion, and healthcare diagnostics. Policy fragmentation and bureaucratic inefficiencies also impede progress.

Finally, regional disparities intensify inequality in AI readiness. Major urban centers such as Lagos, Abuja, and Port Harcourt function as innovation hubs, while rural and semi-urban regions remain digitally marginalised. Eze and Ibeh (2023) argue that this digital divide restricts equitable access to AI-driven opportunities. The World Economic Forum (2023) cautions that without inclusive infrastructural and educational investments, Nigeria risks cultivating an “AI elite,” thereby reinforcing socio-economic stratification.

In summary, the challenges confronting AI adoption in Nigeria are deeply interconnected, spanning infrastructure deficits, human capital shortages, weak data ecosystems, financial barriers, regulatory ambiguity, ethical risks, policy fragmentation, governance weaknesses, public skepticism, and regional inequality. Addressing these structural limitations requires coordinated policy frameworks, sustained investment in digital infrastructure, localised research capacity, inclusive education reforms, and transparent governance systems. As NITDA (2024) asserts, only through integrated national planning and inclusive capacity development can AI meaningfully contribute to Nigeria’s sustainable socio-economic transformation.

METHODOLOGY

Research Design

The study adopted a descriptive survey research design to examine the influence of communication on AI adoption for sustainable healthcare decision-making in Federal Teaching Hospital Abakiliki (FETHA), Ebonyi State.

Population and Sample

The population was 100 which comprised of healthcare professionals and administrative staff from Federal Teaching Hospital Abakiliki, Ebonyi State. Cochran’s formula was used to get the required sample size for an unknown. Cochran's formula for an infinite or unknown population (n_0) is used first. Assuming a 95% confidence level ($z = 1.96$), a 5% margin of error ($e = 0.05$), and maximum variability ($p = 0.5$):

$$n_0 = \frac{z^2 \cdot p \cdot (1-p)}{e^2} = \frac{1.96^2 \cdot 0.5 \cdot 0.5}{0.05^2} = 384.16$$

Since the population size ($N = 100$) is known and small, the initial result must be adjusted using the modified Cochran formula:

$$n = \frac{n_0}{1 + \frac{n_0 - 1}{N}} = \frac{384.16}{1 + \frac{384.16 - 1}{100}} = 79.51$$

The final sample size is 80 (rounded up to the nearest whole number).



Health professionals comprising 35 Doctors, 25 Nurses and 20 administrative staff were sampled using a stratified random sampling technique.

Instrumentation

Data were collected using a structured questionnaire adapted from validated AI adoption and communication scales. The instrument measured communication practices; trust and perceived usefulness; communication barriers; and AI adoption intention.

Cronbach's alpha values for all constructs were $\geq .78$, indicating acceptable reliability. Content validity was ensured through expert review, while pilot testing (n = 10) confirmed clarity and construct alignment.

Data Analysis

Data were analysed using descriptive statistics (frequencies and percentages). Findings were interpreted in relation to research objectives and related literature.

RESULTS

Firstly, findings reveal moderate to high awareness of AI among healthcare professionals. However, awareness did not automatically translate into adoption readiness. This aligns with Rogers' (2003) argument that awareness is only the first stage in innovation diffusion. Two, the study found that effective communication significantly influenced trust and acceptance of AI technologies. Respondents indicated that transparent communication about data privacy, ethical safeguards, and AI's supportive role enhanced confidence. This finding supports TAM, as communication improved perceived usefulness and ease of use (Davis, 1989). Healthcare professionals were more receptive when AI was framed as a decision-support tool rather than a replacement for human expertise. Similarly, patients expressed greater acceptance when healthcare providers clearly explained AI's benefits in diagnosis and service delivery.

Thirdly, findings identify major communication barriers which include inadequate sensitisation programs; misinformation and fear of job displacement; limited patient-centered engagement; and insufficient training opportunities. These findings align with WHO (2021), which identifies communication gaps and digital literacy challenges as barriers to AI adoption in low and middle-income countries. Fourthly, healthcare professionals perceived communication as a critical enabler of competence and confidence in AI usage. The administrative staff emphasised the importance of communication in ensuring trust, data confidentiality, and ethical compliance.

Differences in perception were role-dependent. Professionals prioritised technical clarity and operational efficiency, while administrative staff emphasized safety, confidentiality, and quality of care. Finally, healthcare institutions such as FETHA primarily rely on staff training sessions, workshops, internal memos, meetings and digital platforms (email and WhatsApp) as their current communication channels. However, patient-centered and community-based communication remains limited, potentially constraining broader acceptance and sustainability.



DISCUSSION

The objective one sought to examine the awareness of artificial intelligence among healthcare professionals and administrative staff in FETHA Ebonyi State. The study reveals that awareness of artificial intelligence among healthcare professional and administrative staff in FETHA, Ebonyi State is generally moderate to high. These findings aligns with Roger's diffusion of innovation theory, which posits that the adoption of innovation is influenced by perceived relative advantages, compatibility, trainability and observability, (Roger 2003). In this study, clear communication reduced perceived complexity between AI technologies and existing healthcare practice. This finding is consistent with earlier studies which show that in many developing healthcare systems, awareness of digital technologies often precedes adequate understanding and utilisation (Adebayo, Adeyemi, and Bello, 2022)

Objective two sought to assess the extent to which communication strategies adopted by healthcare professionals and administrative staff of FETHA influence trust and acceptance of AI technologies in Ebonyi State. The study found that effective communication significantly influences trust and acceptance of Ai technologies among healthcare professional and administrative staff of FETHA in Ebonyi State. Transparent communication on data privacy ethical standards, and the role of artificial intelligence in clinical decision making was perceived as essential for building confidence. This finding supports the technology acceptance model, which emphasises perceived usefulness and perceived ease of use as key determinants of acceptance. This suggest that when healthcare institution clearly explain the supportive role of AI as an aid rather than a replacement of human professional acceptance increases. This reinforces earlier studies which argue that communication framing strongly shapes stakeholders perceptions of emerging technologies. Adejumo and Salami (2020) also found that poor communication about digital health technologies increases skepticism and resistance among patient and professional.

The objective three sought to identify the communication barriers that hinder effective adoption of AI technologies in hospitals and healthcare facilities in Ebonyi State. The finding revealed low digital literacy, limited access to reliable information channels, insufficient participatory communication and feedback mechanism as barriers that hinder effective AI adoption. These barriers are consistent with studies by Oke & Sibomana (2025) who reports that lack of clarity; misinformation and limited engagement reduce technology adoption in health care. This indicate that communication challenges are both structural and cognitive in nature. These barriers limit stakeholder ability to understand AI system and reduce their willingness to adopt such technologies. W.H.O (2021) reports that communication gaps and limited digital skills remain critical challenges to AI adoption in low and middle income countries.

The fourth objective sought to develop tailored communication frameworks and strategies that will enhance AI adoption and support sustainable development goals within the healthcare sector in Ebonyi State. The study revealed that tailored communication framework emphasising capacity building, stakeholder engagement, ethical transparency, cultural sensitivity and multi-channel communication are essential for enhancing artificial intelligence adoption and achieving sustainable development goals in Ebonyi State's health sector. Based on the findings also, a sustainable framework was proposed emphasising capacity building, ethical transparency,



stakeholder engagement, and multi-channel communication. The study demonstrated that continuous and participatory communication increases trust, reduces resistance, and supports long-term adoption of AI in healthcare decision-making. This finding aligns with United Nations (2019) which highlights communication as a key driver of SDG 9 (industry, innovation and infrastructure). Floridi *et al* (2018) also, emphasise that ethical and transparent communication is fundamental to sustainable AI development in healthcare professionals, communication should emphasise clinical relevance, ethical safeguard and operational efficiency, for patients, simplified explanations focusing on benefits, safety and confidentiality are required. This is consistent with WHO (2021) which advocates stakeholder-specific communication in AI health governance. W.H.O (2021) emphasises that communication on ethical governance is essential for aligning AI development with sustainable development objects and protecting human rights.

Additionally, healthcare professionals and administrative staff of FETHA in Ebonyi state generally perceive communication as vital factor in the adoption of AI in healthcare, however, their perceptions, expectations and communication needs differs based on their roles within the health system from the professional perspective. Communication largely, is a critical enabler of AI adoption, particularly in terms of improving understanding, competence and confidence in the use of AI driven system.

SUMMARY OF FINDINGS

Across all objectives, the findings consistently indicate that communication operates as the central mechanism linking awareness, trust, perception, and sustained use of AI technologies. Therefore, achieving sustainable AI integration in Ebonyi State healthcare institutions depends more on effective communication systems than on technological availability alone. The study confirms that communication plays a foundational role in AI adoption for sustainable decision-making in Ebonyi State's healthcare sector. WHO's (2021) recommend for ethical AI governance through inclusive communication. Sustainable AI adoption must therefore integrate multi-channel, culturally sensitive, and stakeholder-specific communication strategies.

CONCLUSION

This study concludes that communication is a critical determinant of AI adoption in Ebonyi State's healthcare sector. While AI offers significant potential for improving sustainable decision-making, its effectiveness depends largely on how well its benefits, risks, and ethical safeguards are communicated. Without deliberate communication strategies including training, participatory dialogue, and ethical transparency AI adoption may remain limited despite policy support. Communication should therefore be institutionalised as a core component of AI governance and healthcare policy implementation.

RECOMMENDATIONS

1. Develop Structured Communication Strategies: Healthcare institutions should implement transparent and consistent messaging explaining AI's purpose, benefits, and ethical safeguards.
2. Enhance Capacity Building: Regular workshops and training programs should improve AI literacy among healthcare professionals.



3. Integrate Communication into Policy Frameworks: Communication frameworks should be embedded within state and institutional health policies.
4. Promote Participatory Engagement: Establish feedback platforms such as town halls and stakeholder forums to encourage dialogue and ownership.
5. Collaborate with Media and Community Leaders: Partnerships with media organisations and civil society groups can enhance public awareness and counter misinformation.

Ethical clearance

Ethical consent was sought and obtained from the participants used in this study. They were made to understand that the exercise was purely for academic purposes, and their participation was voluntary.

Acknowledgements

We acknowledge Lilian Nnenna Asiegbu and Nweze Pauline for assisting us with data collection. We equally appreciate Nweze Pauline and the University Library staff for their cooperation and support.

Sources of funding

The study was not funded.

Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Authors' Contributions

Dr. Mercy Ifeyinwa Obichili conceived the study, including the design, Lilian Nnenna Asiegbu collated the data, and both handled the analysis and interpretation, and the initial manuscript. All authors have critically reviewed and approved the final draft, and are responsible for the content and similarity index of the manuscript.

Data availability statement.

The datasets on which conclusions were made for this study are available on reasonable request.

Citation

Obichili, M. I. & Asiegbu, L. N. (2026). Influence of Communication on Artificial Intelligence Adoption for Sustainable Healthcare Decision-Making in Federal Teaching Hospital Abakiliki (FETHA), Ebonyi State, Nigeria. *International Journal of Sub-Saharan African Research*, 4(1), 269-281. doi:10.5281/zenodo.18925774



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