

Research Article

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Interdisciplinary collaboration and digital dissemination of health posters in Sub-Saharan Africa: Supporting SDG 4 and SDG 8

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Abstract: Medical posters, also known as health posters, are a visible part of institutional health communication. They support face-to-face interactions between healthcare workers and patients, offering public access to health information beyond the confines of private consultations. In multilingual and low-literacy societies across Sub-Saharan Africa, these multimodal texts play a crucial role in health education. This study adopted a mixed-methods approach, combining surreptitious observational and ethnographic sampling of 130 posters in public spaces (hospitals, airports, markets, and government offices) with analysis of previous quantitative findings. This mixed-methods study examines how health posters are designed and displayed in the Nigeria and Ghana landscape. While previous statistical

findings show that 87% of respondents rely on health posters to improve their health, many posters are poorly designed: they are wordy, grammatically incorrect (for example, "after 2 week"), placed in dimly lit or obscure areas, or buried under overlapping notices. These flaws make them difficult to read and undermine their purpose. The study highlights a lack of collaboration between health professionals, linguists, communicators and designers in the production process. This affects clarity and misses an opportunity to create jobs for young people. By integrating expertise from different fields and embracing digital tools, health poster campaigns can become more effective and inclusive. Such efforts directly support Sustainable Development Goal (SDG) 4 (Quality Education) through informal learning and SDG 8 (Decent Work and Economic Growth) by generating employment in design, translation, and dissemination.

Keywords – Health posters, Interdisciplinary collaboration, Multimodal communication, Sub-Saharan Africa, Sustainable Development Goals (SDG 4, SDG 8)

1. INTRODUCTION

Language is not merely a utility or a tool; it is a fundamental necessity that underpins the existence and function of every society, serving as the primary vehicle for social cohesion, knowledge transfer, and institutional operation. Nowhere is the absolute necessity of language more evident than within the healthcare sector. From the nuanced

process of diagnosis to ensuring successful patient compliance during treatment, effective communication remains profoundly central. Hospitals, clinics, and public health centers fundamentally depend on linguistic exchanges to connect providers with patients, their relatives, and the wider community. Indeed, as Amoussou et al. (2024) suggest in a different domain asserting that language is the lifeblood of politics; it similarly functions as the critical circulatory system of the public health infrastructure.

In the highly challenging context of Sub-Saharan Africa, where healthcare systems grapple with endemic diseases (such as malaria, HIV/AIDS, tuberculosis, and emerging viral threats), resource scarcity, limited medical personnel coverage, and profound linguistic diversity (with hundreds of distinct languages spoken across regions), the efficiency and clarity of public health messaging is not merely desirable but critical for survival and preventative care. Medical communication traditionally provides either lay or technical options during interactions (Odeunmi, 2013; Gotlieb et al., 2022). However, the ethical and practical imperative is to ensure that crucial health information transcends the confidential confines of the doctor-patient encounter and successfully reaches multilingual, low-literacy communities (Kwame, 2025). This goal demands robust, accessible, and repeatable formats that can function reliably in environments characterized by mobility, visual clutter, and varying levels of formal education.

One critical form of this institutional communication, which is often overlooked but remains an indispensable and ubiquitous presence across public life, is the medical poster. Medical posters are found in settings ranging from hospitals and clinics to public markets, busy airports, and educational institutions. These posters deliver essential, repeatable health messages to a broad and diverse audience (Maskell et al., 2018). Unlike private consultations, which are necessarily constrained by issues of ethics and confidentiality, posters offer an open, repeatable, and consistently accessible source of information. They function as silent educators – informing, warning, and guiding the public through static text and imagery (Hasanica et al., 2020). During major crises or outbreaks (e.g., Ebola or HIV/AIDS), they are frequently among the first tools deployed as a rapid-response measure, serving as front-line public service announcements (Faleke, 2017). Their communicative role is so pervasive that they have been rightly referred to by some scholars as "health personnel in absenteeism," stepping into communicative gaps where human workers cannot be present everywhere at once to deliver consistent messaging (Vaccarelli & Mariantoni, 2018).

Despite this demonstrable communicative potential and critical function, rigorous observation reveals that health posters in many sub-Saharan African countries – specifically Nigeria and Ghana, remain profoundly poorly conceptualized, underutilized, and systematically flawed in their design and distribution. This systemic gap in both production quality and strategic dissemination represents a profound missed opportunity. It not only compromises the effectiveness of crucial public health education campaigns but also fails to leverage a significant avenue for fostering youth employment and achieving regional sustainable development goals. This study, therefore, assesses the quality and propagation of medical posters to diagnose the linguistic, visual, and institutional causes of these systemic failures and propose a comprehensive path toward sustainable, interdisciplinary solutions that align public health goals with critical economic development mandates (SDG 4 and SDG 8).

2. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

The foundation of this study is built upon a review of discourse analysis in health contexts, theories of multimodality and rhetoric, and the critical socio-economic framework provided by the Sustainable Development Goals (SDGs), establishing the theoretical baseline for evaluating poster efficacy.

2.1. Multimodal communication, rhetoric, and contextual failures in health discourse

Medical posters are best understood as multimodal texts and complex artifacts that blend verbal language (text), visual language (images, symbols), color, and spatial organization (layout) to convey a synthesized meaning (Aning, 2021; Mesinioti, 2025). These posters serve as non-verbal forms of institutional communication and they help address the inherent limitations of face-to-face interaction, offering scalable, repeatable, and widely accessible messaging across large populations (Faleke et al., 2023).

The posters' illocutionary force – the intended social action performed by the communication is highly diverse, spanning informing, persuading, warning, and educating, positioning them as incredibly powerful rhetorical instruments in public health campaigns. This rhetorical strength is supported by Kress's (2003) assertion that visual images are rich with meaning and, when combined with text, can significantly influence an audience's construction or deconstruction of attitudes about the referents of the images (Ogungbe & Alo, 2014). Faleke (2018) highlighted this rhetorical complexity by identifying eleven distinct speech acts in Nigerian health posters, including persuasive, informative, and directive acts, where the ultimate outcome (or perlocutionary effect) is always anticipatory, preparing the reader for subsequent health action (Leech, 1991).

While scholarly attention has traditionally focused on spoken discourse, examining politeness in doctor-client encounters (Odeunmi, 2013), register variation in medical discourse (Van Naerssen, 1985; Coutlard & Ashby, 1976), and linguistic code-switching, the scrutiny of fixed visual texts like posters reveals profound contextual failures. Research consistently highlights that designers often overlook the crucial factors of cultural background and low literacy levels among the target audience (Banda & Oketch, 2011; Nunyenge, 2013). These communication materials, often modeled on formats designed for Western or formally educated audiences, fail because designers operate under the misplaced assumption that all readers possess sufficient multimodal literacy skills to engage with complex visual and linguistic cues (Banda & Oketch, 2011). Consequently, the intended illocutionary force is lost when the message is decoded inaccurately or ignored entirely. The current study strongly supports this finding, arguing that effective poster design and dissemination fundamentally require a collaborative approach that is sensitive to the socio-cultural context of the intended viewers. Moreover, these researchers recommended that with the advancement of information technology and desktop publishing, institutions must significantly improve the quality of text and design to ensure attractiveness and information efficacy, thereby bridging the technological gap between African public health media and global standards.

2.2. Sustainable Development Goals (SDG) 4 and 8: The Economic and Educational Imperative

The demographic profile of Sub-Saharan Africa, with its overwhelmingly young population, presents both a substantial challenge and an opportunity, as projections indicate that nearly one-third of the global youth population will originate from this region by 2050 (Comyn, 2018; Population Institute, 2020; WEF, 2023). This reality necessitates urgent, multi-sectoral interventions aligned with the Sustainable Development Goals (SDGs) to prevent grave socio-economic challenges, including widespread poverty, drug addiction, human trafficking, and involvement in illicit occupations resulting from mass unemployment. Without intervention, governments risk exposing the continent to these grave risks (Comyn, 2018).

SDG 4 (Quality Education) supports lifelong learning systems (Comyn, 2018; Population Institute, 2020), recognizing that education is both an intrinsic goal and a vital pathway to decent work. Beyond formal education, skill development in creative and technical fields such as design, drawing, photography, and digital media, is a critical prerequisite for adaptable employment (King & South, 2016). Lifelong learning is indispensable for adapting to the evolving demands of the labor market, making informal educational tools like well-designed health posters relevant to SDG 4.

Simultaneously, the pursuit of SDG 8 (Decent Work and Economic Growth) requires bridging the gap between low skills, low productivity, and high youth unemployment to promote sustained, inclusive, and sustainable economic growth. The Decent Work (DW) agenda, adopted by the International Labour Organisation (ILO), defines DW as work that respects human rights, provides fair wages, safe working conditions, social protections, and offers development opportunities (ILO, 1999, 2019; Zambelli et al., 2023). The agenda emphasizes employment creation and vocational education, particularly in targets 8.5 (full and productive employment), 8.6 (reducing youth not in employment, education, or training), 8.8 (protecting labor rights), and 4.3-4.5 (vocational education). Apprenticeships, upskilling, and reskilling approaches are crucial components of this framework (Zambelli et al., 2023). Crucially, the political will demonstrated by government agencies in disseminating health-related updates,

such as during the COVID-19 pandemic (Dautey, 2025), is a strategic catalyst for public acceptance. By formalizing the entire poster production and dissemination chain, including sourcing, graphic design, linguistic editing, printing, and distribution, governments can create genuine, structured vacancies, linking public health needs directly to the core mandates of SDG 4 and SDG 8.

2.3. Conceptual Framework: Leech's Processability Principle (PP)

This study is conceptually grounded in Leech's (1991: 67) Processability Principle (PP), one of his four principles of textual rhetoric. These principles provide the essential tools to critique the relationship between a complex communicative message and its resulting simplified text, which is paramount for public posters. The four principles are:

- The Economy Principle: This principle necessitates that a writer or speaker be maximally concise, shortening the text while ensuring the intended message's core integrity is maintained. In the context of poster design, this principle is violated by verbose, lengthy, or overly complex phrasing that imposes an undue cognitive burden on the reader.
- The Clarity Principle: The clarity principle demands a direct and transparent relationship between the original message and the text produced, specifically requiring the avoidance of ambiguity, linguistic errors, or cultural misinterpretation. Its violation leads to miscommunication and erosion of institutional authority.
- The Expressivity Principle: The expressivity principle recommends incorporating the expressive and aesthetic aspects of communication into the text to make it engaging, persuasive, and visually appealing. For posters, this relates to the use of color, high-quality imagery, and optimal layout to capture momentary attention in high-traffic, competitive environments.
- The Processability Principle (PP): This principle which this study adopts as its conceptual framework states that writers must construct their text in a way that allows readers to decode it easily and promptly. The PP is paramount for analyzing posters because it focuses explicitly on the reader's temporary experience. A poster text, being linear and time-bound, must be immediately accessible. Thus, in encoding a poster, a designer must prioritize: (1) segmenting the message into manageable units; (2) assigning degrees of prominence or subordination to different parts of the message; and (3) ordering the parts of the message logically.

The PP is therefore the ideal framework, as its focus on maximizing decoding efficiency, is paramount for communication intended for quick, passive consumption in high-traffic areas. Furthermore, its emphasis on communicative efficiency corroborates Grice's Cooperative Principle (CP) maxim of quantity by prioritizing efficient decoding in semiotic texts. The principle requires a speaker to be informative, as required in a communication act, and to avoid redundancies. Additionally, the audience must not infer beyond what is required in the communication act (Grice, 1975).

3. PROBLEM STATEMENT

Research on health communication across African nations has predominantly centered on verbal interactions, neglecting the visual and linguistic components of fixed texts that strongly influence public behavior and knowledge acquisition. While existing research confirms the potential efficacy of health posters, for instance, Faleke (2018) not only identified eleven distinct speech acts in Nigerian health posters but also quantitatively established that 87% of respondents reported improved health behaviors following poster exposure. These findings clash sharply with systemic failures in their real-world deployment and execution.

The fundamental issue lies in the systemic absence of an interdisciplinary collaborative framework in the production process. Posters are frequently initiated and finalized by medical personnel alone, lacking adequate input from:

- Linguists: To ensure clarity, adherence to the Processability Principle, and grammatical accuracy, thereby avoiding pedagogical risks.
- Graphic Designers: To optimize visual processing, layout, adherence to the Expressivity Principle, and appropriate use of semiotic resources.
- Cultural Experts: To ensure the message and imagery are culturally congruent, avoiding the misplaced assumptions highlighted by Banda and Oketch (2011).
- Communication Experts: To oversee audience analysis, strategic planning, and media selection to maximize campaign impact and ensure adherence to strategic communication goals.

This absence of collaborative checks creates systemic risk that manifests in the following failures:

- The waste of public resources: Due to ineffective messaging and investment in materials that go unseen or misunderstood, leading to budgetary inefficiencies within the health sector.
- The misinterpretation of health facts: Caused by poor grammar, linguistic ambiguity, or visually confusing layouts, which can directly lead to dangerous health behaviors.
- The erosion of patient trust: The failure of institutional communication to be professional and effective undermines public confidence in the health sector as a source of authoritative and reliable information.

Furthermore, the problem is compounded by widespread poor dissemination; posters are arbitrarily mounted in poorly lit, obscure, or irrelevant locations (a practice termed cabotage), significantly reducing their visibility and public impact. This combination of production failure and distribution negligence represents a profound missed opportunity for local job creation and severely compromises public health outcomes.

3.1. Aim and Objectives

This study seeks to assess the role of medical posters in advancing public health and sustainable development in Sub-Saharan Africa, focusing specifically on Nigeria and Ghana. The core aim is to propose a robust, interdisciplinary model for poster production and dissemination. Specifically, the study seeks to:

1. Examine the significance and current utility of health posters in selected Sub-Saharan countries, evaluating their widespread application across various public spaces.
2. Investigate the interdisciplinary professional practices required for effective health poster design that adheres rigorously to Leech's Processability Principle, focusing on linguistic and visual competency.
3. Interrogate the systemic failures in poster dissemination through appropriate collaboration and strategic placement, contrasting current cabotage practices with professional curatorial standards.
4. Disclose the benefits of improving poster design and dissemination for the achievement of Sustainable Development Goals (SDG) 4 (Quality Education) and SDG 8 (Decent Work and Economic Growth).

4. RESEARCH METHODOLOGY OR METHODS

This study employed a mixed-methods approach, combining qualitative ethnographic observation with quantitative reference to the reliable survey findings of Faleke (2018) as a comparative index. This mixed strategy was adopted to simultaneously assess the quality of the poster text and design (using linguistic theory) and the impact of the poster in its live, socio-pragmatic context (using observational and comparative data).

Data collection involved surreptitious observational tours across various public spaces, including hospitals, airports, markets, mosques, petrol stations, and government offices in selected cities within Ghana and Nigeria. The deliberate choice of surreptitious observation was crucial to ensure that the public's natural engagement (or lack thereof) with the posters was genuine and not influenced by the Hawthorne effect, providing a true measure of the poster's effectiveness in a natural environment. A sample of 130 medical posters was collected and analyzed across these diverse locations in Ghana and Nigeria, representing a significant body of fixed public health discourse.

The observational method was instrumental in rigorously assessing crucial contextual factors such as: (a) poster placement (for example, proximity to other signs and visual clutter), (b) legibility (e.g., font size, color contrast, and clarity), (c) lighting conditions (e.g., natural light or artificial illumination, and shadows), and (d) public engagement (for example, the frequency, duration, and nature of interaction observed among passersby). The subsequent analysis of this data is conceptually guided by Leech's Processability Principle (PP), which provides the critical metrics to evaluate whether poster curators adhered to the principle's tenets for efficient, real-time decoding, particularly concerning segmentation and prominence.

It is acknowledged that this study primarily focused on the output (the posters and their environment) rather than the complex production process itself; therefore, a limitation is the exclusion of interviews with health authorities and designers, which is recommended as a necessary area for future research to fully understand the systemic barriers to collaboration. Such producer interviews are vital for complementing the objective analysis of the finished product with a subjective rationale for decision-making regarding budget, capacity, and policy.

5. DATA ANALYSIS AND DISCUSSIONS

The rigorous observational and analytical tour across the sampled public spaces revealed pervasive violations of the Processability Principle (PP), principles of rhetoric, and systemic failures in dissemination. These findings are discussed concurrently below, demonstrating how poor design and strategic placement fundamentally undermine the health communication mandate.

5.1. Verbosity, Segmentation, and the Failure of the Economy Principle

The first significant finding relates to the extreme verbosity and preponderance of information displayed on the sampled posters, representing a clear failure of both the Economy Principle and the PP's segmentation requirement. Preponderance, which means the most significant part of something, and verbosity have to do with the excessive use of words in speech or writing (Merriam-Webster, 2025). These two notions have rendered the posters too cumbersome for readership, given that the content of the posters is highly beneficial to the public. Poster I, which conveyed vital health information on breastfeeding, exemplified a text-heavy design that ultimately failed its purpose due to excessive linguistic density, resembling a complex text document rather than a quick-read public poster. The poster's dense paragraphs and small font sizes necessitated prolonged, sustained reading – a luxury rarely afforded by citizens in high-traffic public spaces which contradicts the nature of a fixed public poster, which must communicate its core message in seconds.

The sheer density and length of the text violated the PP, which mandates that a text should be structured to allow readers to decode it promptly and efficiently within the linear constraints of time. Posters are intended for transient readers; expecting them to process several dense paragraphs is unrealistic and compromises the Economy Principle by forcing the reader to expend excessive time and cognitive energy (Leech, 1991). The observed flow of passersby who showed only desultory attention toward the poster often glancing for less than three seconds confirmed that the excessive wordiness was too cumbersome for readership. This failure in segmentation and economy, particularly in a low-literacy context where visual cues are paramount, strongly suggests a systemic lack of linguistic or design professional input, pointing to a critical need for integrated collaboration to ensure public health messages are segmented into manageable units suitable for quick public consumption.

Figure 1: Poster I



5.2. Compromised Placement, Lighting, and Socio-Pragmatic Failure

The intended visibility of posters was compromised by adverse environmental factors and haphazard placement, revealing a fundamental socio-pragmatic failure that violates the Expressivity and Processability Principles. Poster II, a pull-up sign located at an international airport, was found in a poorly lit area, despite containing crucial WHO-identified information on prevalent diseases. While the airport provides high foot traffic, placing a detailed poster adjacent to high-stress, time-sensitive transactional activities (like security checks and ticketing) ensures it will be ignored, as security staff and passengers prioritize immediate, transactional functions over passive health messaging (Drew & Heritage, 1992). The location fails to respect the Expressivity Principle by making the poster visually unattractive and the Processability Principle by violating the socio-pragmatic context of reading.

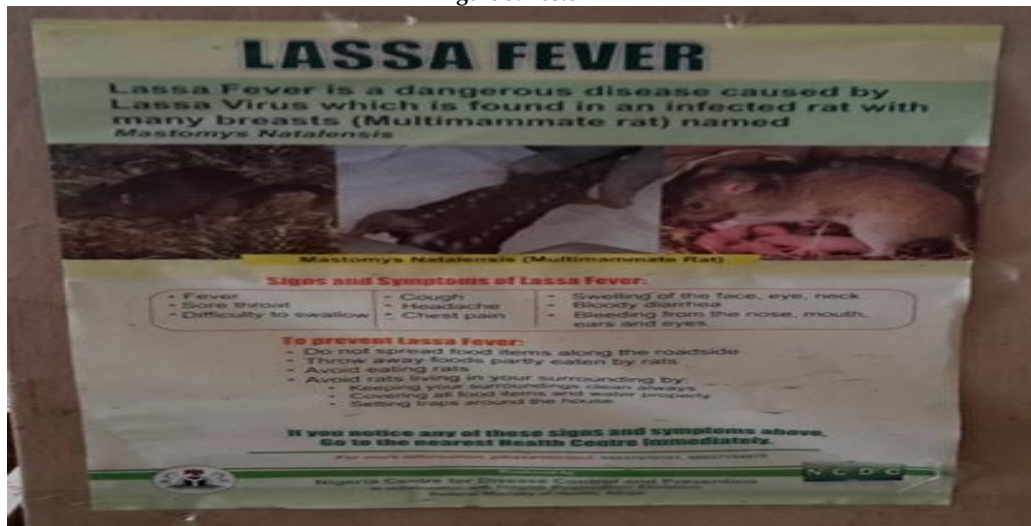
Figure 2: Poster II



Similarly, Poster III, a somewhat mutilated sheet on Lassa fever, was affixed to an office door rather than being prominently displayed in public spaces. The deadly nature of Lassa fever (CDC, 2025) warrants urgent and strategic

dissemination across the sub-region (Sierra Leone, Liberia, Guinea, Nigeria, and susceptible neighbors). This persistent lack of attention to strategic placement and lighting – an essential tenet of the PP that dictates visibility and prominence reveals a profound indifference to effective health communication among the authorities responsible for propagation. This is a critical failure of the anticipatory illocutionary force (Leech, 1991), where the poster is meant to prepare the public for subsequent health action; if it is never seen, the anticipatory function is lost entirely, thereby underscoring a missed opportunity for job creation among trained personnel capable of strategic health curatorship.

Figure 3: Poster III

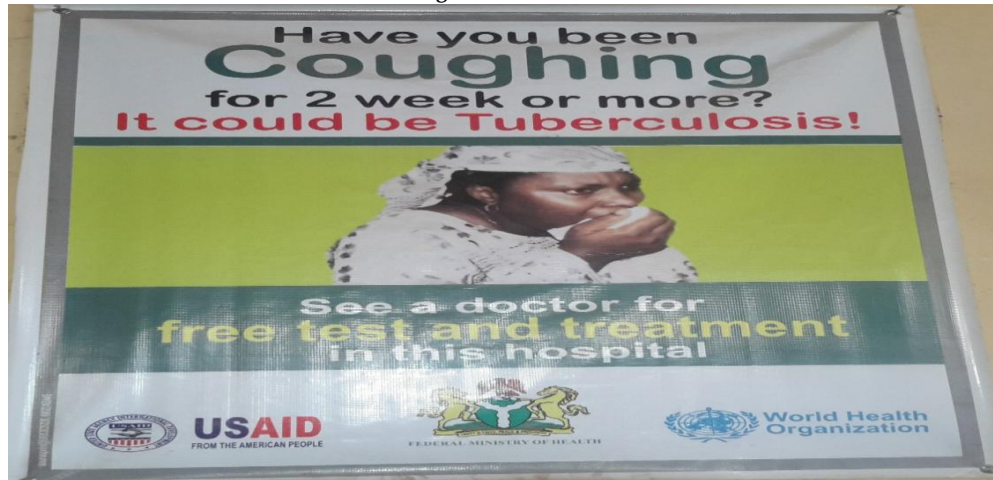


5.3. Instances of Ungrammatical Sentence Construction and Pedagogical Risk

A fundamental linguistic failure was identified in the production of some posters, representing a direct failure of the Clarity Principle. Poster IV contained an instance of ungrammatical sentence construction: "Have you been coughing for 2 week or more?". The numeral '2' requires the following noun ('week') to be in its plural form, which is, in most cases, marked by the 's' morpheme in Standard British English (SBE), the preferred variety. The absence of this morpheme affects the text's semantic correlation, demonstrating a lack of grammatical vigilance.

Crystal (1995) posits that errors made in written text are unpardonable because the writer has the opportunity to edit, unlike in spontaneous speech. Since written texts, particularly those from authoritative public health bodies, are preserved, they serve as a powerful pedagogical tool in language learning (Adetunji, 2016, p. 226). The propagation of such fixed errors within the highly authoritative discourse of public health poses a significant risk of internalizing grammatical mistakes among L2 English readers in the region, thereby contradicting the goals of quality education (SDG 4). This evidence conclusively proves that qualified linguists, who would typically edit for clarity and correctness, were excluded from the editorial process, allowing basic, preventable errors to undermine the message's authority and educational function.

Figure 4: Poster IV



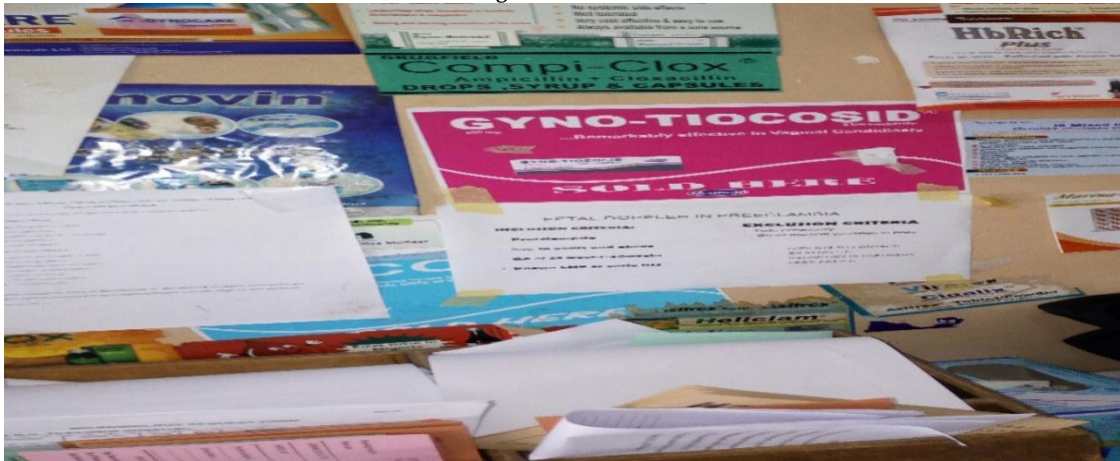
5.4. The Cabotage and Fixity of Analogue Media

The ineffective and haphazard method by which posters are transported and placed, referred to as cabotage in this study, highlights the profound limitation of the overwhelmingly analogue nature of the medium in the digital age. Posters V and VI demonstrated this failure: Poster V, featuring cartoon graphics on Ebola, was placed on an abandoned structure and subsequently attracted only children, while Poster VI was obscured by overlapping commercial advertisements on a noticeboard, rendering both pieces of health information ineffective. This poor display violates the PP as it fails to attract or sustain readership.

Figure 5: Poster V



Figure 6: Poster VI



The reliance on analogue media ensures that when posters are poorly placed, they remain "fixed" in a location that may not serve the readership (Adetunji, 2016, p. 226). This demands professional engagement to prevent the poster's purpose from dissolving into a lack of purpose.

Poster VII is best described as an occupational poster, which would help most workers had it been properly displayed in offices, where it would be seen. It was found on an abandoned notice board.

Figure 7: Poster VII



Poster VIII, "Say No to Meat on Monday," a poster with strong public health pragmatic meaning relevant to controlling high cholesterol and related ailments, was also found hidden in an obscure public place, illustrating profound dissemination negligence. The analogue nature limits dynamism; the message cannot change with the season or local outbreak, unlike a digital screen. This technological lag contributes directly to the poor deployment, underscoring the necessity of transitioning to digital, dynamic signage.

Figure 8: Poster VIII



6. RESEARCH IMPLICATIONS

The findings of this study have significant practical and policy implications, fundamentally challenging the existing paradigm of health communication in Sub-Saharan Africa and offering actionable solutions aligned with national development goals.

The comprehensive deficiencies found in poster design, language, and dissemination present critical opportunities to meet the Sustainable Development Goals (SDGs):

- Formalizing Public Health Communication as Lifelong Learning (SDG 4 - Quality Education): By enforcing interdisciplinary collaboration (involving linguists, communicators and designers), the quality of textual content improves significantly. This ensures that public health messaging, which is a key form of informal learning, serves as an accurate and effective source of information, thereby contributing directly to the goal of lifelong learning, rather than propagating grammatical errors or misleading information. The visual literacy skills of the population will also be supported through professionally designed multimodal texts, creating a virtuous cycle of skill acquisition and health literacy.
- Translating Public Health Needs into Decent Work (SDG 8 - Decent Work and Economic Growth): The systemic failures identified are direct pathways to creating specialized employment. By transitioning from outdated analogue media to digital dissemination (using digital television screens and electronic billboards, as exemplified in Posters IX and X), governments can create specialized vacancies for IT specialists (for digital integration), graphic designers (for visual processing), curatorial personnel (for strategic placement and maintenance), and performing arts graduates (for creating dynamic, engaging video content). This process directly translates public health needs into sustainable economic opportunities, aligning with apprenticeship and upskilling models crucial for youth employability (Brandl et al., 2024).

Figure 9: Poster IX



Figure 10: Poster X



7. CONTRIBUTIONS TO SCIENTIFIC COMMUNITY AND FUTURE RESEARCH

This research makes three key intellectual contributions to the fields of applied linguistics and health communication:

- Extending the Processability Principle (PP) in Multimodal Contexts: It successfully extends the application of Leech's PP from traditional textual analysis to the multimodal institutional discourse of health posters, providing a robust, empirically grounded framework for assessing communication failures in real-time, high-traffic contexts based on decoding efficiency.
- Diagnosing the Interdisciplinary Failure as Root Cause: It formally identifies and critiques the systemic lack of collaboration between medical professionals and linguistic/design/communication experts as the fundamental cause of poor poster efficacy, shifting the analytical focus from merely describing the visual outcomes to diagnosing the production process failure and its institutional context.
- Proposing a Digital Transition Model for Public Health: It advocates for a transition from outdated analogue media and its associated failures (cabotage) to accessible digital platforms (electronic billboards and screens), offering a novel, scalable, and economically justifiable solution for improving the fixity and expansive reach of health communication in Sub-Saharan African economies.

On the basis of the limitation noted in the methodology, future research must incorporate qualitative methods to capture the perspectives of the producers. This would involve conducting in-depth interviews with:

- Health Authorities and Policy Makers: To understand the existing protocols for poster creation, budgetary allocations, and the perceived bureaucratic or technical barriers to engaging external specialists and digital platforms.
- Youth Designers and Linguists: To gauge their current capacity, training needs, and willingness to participate in the production process and better understand the necessary training curriculum required to align with SDG 4 goals.

8. CONCLUSION

The study has definitively demonstrated that health posters in Ghana and Nigeria currently violate the core tenets of the Processability Principle (PP) due to a confluence of poor design choices (verbosity, ungrammaticality, failure of the Economy and Clarity Principles) and ineffective dissemination strategies (poor placement, analogue fixity, failure of the Expressivity and Anticipatory Illocutionary Force). The root cause is the failure to establish a robust interdisciplinary partnership in the production pipeline, compounded by institutional indifference in dissemination. This failure leads to profound negative consequences, including wasted public resources, the pedagogical risk of spreading grammatical errors, and compromised public health outcomes.

The necessary path forward requires a structural shift: replacing outdated analogue dissemination with dynamic digital television screens and electronic digital billboards, and mandating the involvement of linguistic and design professionals at the production stage. This holistic approach not only dramatically improves the efficacy of health communication but also significantly contributes to national development by creating essential job opportunities, thereby fulfilling the objectives of SDG 4 and SDG 8.

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REFERENCES

- Adetunji, A. (2016). The context of reader-orientation in the Ibadan linguistic landscape. In A. Odebunmi & A. Ayoola (Eds.), *Language, context and society: Festschrift for Wale Adegbite* (pp. 1–15). Obafemi Awolowo University Press.
- Amoussou, F., Allagbe, A. A., & Toboula, C. M. Z. (2024). A pragma-stylistic analysis of Nigeria's president Bola Ahmed Tinubu's inaugural speech. *International Journal of Educational and Psychological Sciences*, 2(1), 27-48.
- Aning, E. (2021). An analysis of Covid-19 poster of the Ghana health service: A semiotic approach. *European Journal of English Language and Literature Studies*, 9(6), 56-68.
- Banda, F., & Oketch, O. (2011). Localizing HIV/AIDS discourse in a rural Kenyan community. *Journal of Asian and African Studies*, 46(1), 19–37. <https://doi.org/10.1177/0021909610381078>.
- Brandl, A., Leichsenring, H., & Schmid, H. (2024). *Apprenticeships in the ILO's decent work agenda and alignment with sustainable development goals*. ILO Working Paper No. 100.
- Centers for Disease Control and Prevention. (2025, January 31). *About Lassa Fever*. U.S. Department of Health and Human Services. Retrieved from <https://www.cdc.gov/lassa-fever/about/index.html>
- Comyn, P. J. (2018). Skills, employability and lifelong learning in the sustainable development goals and the 2030 labour market. *International Journal of Training Research*, 16(3), 200–217.
- Coutlard, M., & Ashby, M. (1976). A linguistic description of doctor-patient interviews. In M. Wadsworth & D. Robinson (Eds.), *Studies in everyday medical life*. Martin Robertson.

- Crystal, D. (1995). Speaking of Writing and Writing of Speaking. *Longman Language Review* 1(5–8), pp. 5-8.
- Dautey, W. (2025). Communicating political ideologies through health-related messages. In I. Kecskes, A. Buregeya, A. Odeunmi, F. O. Unuabonah, K. Agyekum, & H. Dinh (Eds.), *Pragmatics of African varieties of English* (pp. 73–94). De Gruyter Mouton.
- Drew, P., & Heritage, J. (1992). *Analysing talk at work: An introduction*. Cambridge University Press.
- Faleke, V. O. (2017). Persuasive Act in Medical Communication: A Case of Medical Posters in Nigerian Context. *Humanities and Social Sciences Review*, 6(02), 143–152.
- Faleke, V. O. (2018). *A pragmasemiotic analysis of language and visuality: A case study of medical-related posters in selected Nigerian hospitals*. (Unpublished doctoral dissertation). Ahmadu Bello University, Zaria.
- Faleke, V. O., Abaya, S. A., & Ahamad, A. M. (2023). The language of medical posters in Nigeria. *Journal of English Scholars' Association of Nigeria*, 25(2), 119–141.
- Gotlieb, R., Praska, C., Hendrickson, M. A., Marmet, J., Charpentier, V., Hause, E., & Pitt, M. B. (2022). Accuracy in patient understanding of common medical phrases. *JAMA Network Open*, 5(11), e2242972-e2242972.
- Grice, H. P. (1975). Logic and Conversation. In P. Cole & J. Morgan (Eds.), *Syntax and Semantics, Vol. 3: Speech Acts* (pp. 41–58). Academic Press.
- Hasanica, N., Ramic-Catak, A., Mujezinovic, A., Begagic, S., Galijasevic, K., & Oruc, M. (2020). The effectiveness of leaflets and posters as a health education method. *Materia socio-medica*, 32(2), 135.
- ILO. (1999). *Decent work: Report from the Director-General*. International Labour Office.
- ILO, S. L. (2019). *Work for a brighter future*. Geneva: Global Commission on the Future of Work, International Labour Organization.
- King, J., & South, J. (2017). *Reimagining the role of technology in higher education: A supplement to the national education technology plan*. US Department of Education, Office of Educational Technology, 10, 1-10.
- Kress, G. (2003). Visual and verbal modes of representation in electronically mediated communication: The potentials of new forms of text. In *Page to screen* (pp. 53–79). Routledge.
- Kwame, A. (2025). Achieving universal healthcare coverage in a multilingual care setting: linguistic diversity and language use barriers as social determinants of care in Ghana. *Qualitative Health Research*, 35(10-11), 1219-1230.
- Leech, G. N. (1991). *Principles of pragmatics*. Longman.
- Maskell, K., McDonald, P., & Paudyal, P. (2018). Effectiveness of health education materials in general practice waiting rooms: a cross-sectional study. *British Journal of General Practice*.
- Merriam-Webster. (2025a). *Preponderance*. In Merriam-Webster.com dictionary. Retrieved from <https://www.merriam-webster.com/dictionary/preponderance>
- Merriam-Webster. (2025b). *Verboseness*. In Merriam-Webster.com dictionary. Retrieved from <https://www.merriam-webster.com/dictionary/verboseness>
- Mesinioti, P. (2025). Multimodal discourse analysis in health communication: sketching out the field. *Qualitative Health Communication*, 2-16.
- Nunyenge, R. V. (2013). The meaning people make of HIV posters: A case study on health improvement at Jirapa District in the Upper West Region of Ghana. *Journal of Biology, Agriculture and Healthcare*, 3(12), 1–8.
- Odeunmi, A. (2013). Greetings and politeness in doctor-client encounters in Southwestern Nigeria. *Iranian Journal of Society, Culture and Language*, 1(1), 101-117.
- Population Institute. (2020, November). *Youthful age structure: Africa is, by far, the youngest continent*. SDGs Africa Report. Retrieved from <https://www.populationinstitute.org/wp-content/uploads/2020/11/PI-3047-SDGs-AFRICA-Report-02-WEB.pdf>
- Vaccarelli, A., & Mariantoni, S. (2018). *Children after a Natural disaster: Materials for educators and teachers (Velino for Children-Amatrice Heartquake 2016)*. FrancoAngeli.
- Van Naerssen, M. M. (1985). Medical Records: One Variation of Physicians' Language. *International journal of the sociology of language*, 1985(51).

World Economic Forum. (2023, August). *How will Africa's youth population drive global growth?* WEF Agenda. Retrieved from <https://www.weforum.org/agenda/2023/08/africa-youth-global-growth-digital-economy/> [weforum.org](https://www.weforum.org)

Zambelli, C., Rossier, J., & Marcionetti, J. (2023). A longitudinal study of relations among apprentices non-work orientation, decent work, and job satisfaction. *International Journal for Educational and Vocational Guidance*, 23(2), 1–22. <https://doi.org/10.1007/s10775-023-00601-6>.

