LOCAL LANGUAGE MEDIA FOR COMMUNITY EDUCATION ON BURN RISKS: A STUDY OF LAGOS FIRE OUTBREAKS

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Abstract

The increasing frequency of fire outbreaks following oil tanker explosions poses a significant public safety challenge, particularly in urban centers such as Lagos. This study examines the critical role local languages and cultural contexts play in designing effective media campaigns to mitigate the risks of burn injuries associated with fire outbreaks. Anchored on Health Belief Model and Cultural Dimensions Theory, data were drawn from social media analysis of X (Twitter) reactions from the public, highlighting the emotional responses and calls for accountability following fire incidents. Findings from the analysis show that integrating cultural distinctions into risk communication significantly enhances the resonance of messages with diverse audiences. Consequently, the study concluded that prioritizing linguistic inclusivity and cultural relevance is essential for enhancing public safety campaigns. Hence, the study recommends that government authorities implement multilingual strategies, encourage collaboration among community leaders, leverage traditional media, provide targeted training for NGOs, and conduct continuous evaluations to improve campaign effectiveness.

Introduction

Tankers are essential for the delivery of petroleum products nationwide; nonetheless, recurrent incidents of fires and explosions pose a continual threat. The severity of the repercussions has been pronounced in areas with minimal fire safety awareness and among people that were ill-prepared (Alimasunya, Inyang, & Clement, 2019). In numerous rural and urban communities, fires and explosions have resulted in catastrophic human and economic losses due to insufficient understanding of the circumstances, causes, and subsequent health impacts associated with oil tanker truck disasters (Obasa, Mbamali, & Okolie, 2020; Sholanke, Ajonye, & Okpanachi, 2020). Burn injuries incurred from such events frequently necessitate extended medical treatment, and survivors may have enduring physical and psychological stress (Olaiya, 2013; Odogwu, 2021).

The frequency of oil tanker disasters is a detrimental consequence intensified by potholes, driver negligence, fuel syphoning at accident locations, and additional causes (Ojiego, 2025). To mitigate fire and explosion incidents in tankers, it is essential to ascertain the reasons of such catastrophes. Global health organisations have underscored the necessity for effective risk communication techniques to inform people about fire threats and safety protocols (Rahardjo & Prihanton, 2020; Oluwunmi, 2022). Although the claim that communication failure is the fundamental issue is essential, a thorough examination must consider if the root reason is solely linguistic. Is the delayed evacuation observed in previous events solely attributable to inadequate English-only training, or is the causation more intricate, encompassing panic psychology, historical distrust of official sources, and societal conformity in times of crisis? This study asserts that the failure is not solely in the content conveyed, but also in the individuals marginalised by the medium, thus redirecting the inquiry from psychological inadequacy to institutional exclusion.

In Africa, fast urbanisation and insufficient infrastructure have led to frequent fire disasters (Odaudu, 2017; Ochayi, 2022). Numerous African cities encounter tanker explosions attributable to deteriorating road conditions, insufficient enforcement of safety laws, and inadequate emergency response systems (Odunsi, 2021; Okunola, 2020). In Nigeria, incidents involving petroleum tanker fires and explosions have resulted in fatalities and injuries, property devastation, and environmental degradation. Notwithstanding initiatives by governmental and non-governmental entities to inform the populace about fire safety, obstacles remain owing to inadequate literacy rates, linguistic difficulties, and cultural beliefs that affect risk perception and reaction (Oluwunmi, 2022; Hamilton et al., 2017).

Although digital platforms play a crucial role in disseminating health and safety information (Yang, 2017; Oguntola, 2022), the efficacy of these contemporary campaigns is consistently undermined by entrenched socio-cultural obstacles, including low literacy rates, significant language barriers, and deeply rooted cultural beliefs that shape risk perception and response (Oluwunmi, 2022; Hamilton et al., 2017). These issues endure despite numerous campaigns; the effectiveness of generic, top-down communications is fundamentally compromised. The current literature accurately identifies the obstacles but predominantly lacks a culturally-validated, actionable communication model for a diverse metropolitan setting. The efficacy of these ads hinges on their capacity to connect with the target audience through the integration of local languages and cultural subtleties (Onwumere et al., 2023; Okwe et al., 2020). Culture imparts local significance to language by infusing shared connotations and associations into the conventional denotation of

phrases. Research indicates that including indigenous languages into health campaigns enhances community involvement and understanding, resulting in more successful interventions (Huesch et al., 2016; Zazzera, 2020; Rahardjo & Prihanton, 2020). In areas where conventional communication methods, such as town criers and religious organisations, are pivotal for information distribution, utilising these frameworks in conjunction with contemporary digital platforms can amplify the effectiveness of fire safety initiatives (Oloke, Oluwatobi, Oni, & Oke, 2022; Sholanke et al., 2020).

In Nigeria, fire incidents caused by tanker explosions have grown progressively frequent (Odaudu, 2017; Odogwu, 2021). Inadequate transportation infrastructure, insufficient implementation of safety laws, and perilous fuel transportation procedures lead to recurrent accidents (Nwachukwu, 2020; Odunsi, 2021). Significant urban centres including as Lagos, Abuja, and Port Harcourt have had numerous lethal tanker explosions in recent years, prompting public outrage and demands for enhanced safety protocols (Okwe et al., 2020; Oguntola, 2022). The Nigerian government, in collaboration with multiple media organisations, has initiated numerous fire safety programs to inform citizens (Ochayi, 2022; Okunola, 2020). Nonetheless, numerous initiatives have predominantly been executed in English, so restricting their accessibility to substantial portions of the population that primarily communicate in indigenous languages (Onwumere et al., 2023; Drake et al., 2017). Research indicates that localised messaging in health campaigns improves public engagement and responsiveness, particularly in multilingual nations such as Nigeria (Bruin et al., 2018; Oloke et al., 2022).

Lagos, Nigeria's most populous metropolis, has had several fire breakouts due to tanker explosions, frequently leading to substantial mortality and property destruction (Sholanke et al., 2020; Odogwu, 2021). The interplay of severe traffic congestion, inadequate road conditions, and a dense presence of gasoline depots heightens the likelihood of such calamities (Olaiya, 2013; Okwe et al., 2020). Recent events have ignited widespread discourse on social media, with individuals utilising platforms such as X (Twitter) to disseminate eyewitness accounts, articulate dissatisfaction with governmental inactivity, and call for accountability (Oguntola, 2022; Odunsi, 2021). Social media has emerged as an essential instrument for raising public awareness and promoting policy reforms (Loh et al., 2018; Admon et al., 2016). An analysis of X (Twitter) comments and online debates subsequent to previous fire incidents in Lagos uncovers trends in public perception, emergency response efficacy, and the success of government-initiated safety efforts (Rahardjo & Prihanton, 2020; Oluwunmi, 2022). Studies demonstrate that the amalgamation of social media interaction with conventional communication methods, such as community radio and broadcasts in indigenous languages, enhances fire safety education and promotes proactive behaviour among people (Oloke et al., 2022; Okunola, 2020).

A multitude of research have been undertaken to examine the causes and prevention of fire incidents. This study transitions from descriptive analysis to prescriptive prototyping, evaluating the efficacy of a culturally verified, local language risk communication framework in light of historical communication failures and political-linguistic dominance. This research underscores the necessity for a more localised and culturally pertinent strategy in fire risk communication through the examination of social media discourse, media campaigns, and community responses (Odaudu, 2017; Odogwu, 2021). The findings seek to offer guidance to policymakers, media professionals, and public health authorities on crafting more impactful fire safety campaigns that engage

varied urban demographics (Onwumere et al., 2023; Bruin et al., 2018).

Statement of the Problem

Tanker explosions and fires outbreaks have become a national concern in Nigeria (Ewbank et al., 2019). Between 2010 and 2025, approximately 3,445 national fatalities were recorded from tanker-related crashes and fire outbreaks (Ojiego, 2025). Despite the consequences of the petroleum tanker accidents which in most cases lead to fire and explosion, research show that current public safety and risk communication campaigns predominantly utilize English language, which fails to resonate effectively with the diverse, multilingual population of Lagos residents (Sholanke et al., 2020; Okwe et al., 2020; Rahardjo & Prihanton, 2020). This has created linguistic and cultural barrier where life-saving instructions regarding risk avoidance and burn injury are inaccessible or misunderstood. Communication strategies are predominantly focused on English language, rather than the skills and knowledge sthat are a prerequisite to achieving the desired change. Effective communication via the use of local languages can be the tipping point between success and failure in communal development projects. It is against this backdrop that the inability of current media-based risk education to effectively bridge this linguistic and cultural divide to address the socio-behavioral drivers of the crisis. The present paper seeks to further the studies analyze how strategic integration of local languages and cultural contexts can promote a culturally-vetted community education framework to significantly mitigate the burn risks associated with tanker explosions and fires outbreaks.

Research Objectives

The study is guided by the following research objectives.

i. To determine how local language and cultural integration affect the comprehension and effectiveness of burn risk communication in Lagos?

ii. To analyze social media discourse to develop a culturally-vetted community education framework to mitigate burn risks in Lagos?

Theoretical Framework

This study is anchored primarily on two theoretical perspectives which are Health Belief Model (HBM) and Cultural Dimensions Theory (Hofstede's Framework). These models are not merely applied as descriptive tools, but are critically used as conceptual foils to interrogate the assumptions behind current risk communication failures.

Health Belief Model (HBM)

The Health Belief Model (HBM) was initially introduced by social psychologist Irwin M. Rosenstock in the 1950s and subsequently expanded by Becker in the 1970s. The approach emphasises individuals' perceptions of health hazards and their willingness to act based on these views. The Health Belief Model posits that individuals are more inclined to adopt health-promoting behaviours when they perceive themselves as vulnerable to a health threat (perceived susceptibility), recognise the threat's serious implications (perceived severity), believe that a particular action would mitigate the threat (perceived benefits), and view the obstacles to taking that action as minimal (perceived barriers).

In the realm of media campaigns addressing burn injury hazards from tanker explosions in Lagos, HBM can inform the messaging strategy. Utilising local languages, the campaigns can effectively tackle the community's understanding of burn injuries, highlighting their vulnerability and seriousness, while providing explicit, concrete measures to

mitigate risks. The local language is redefined as the principal means for effective cues to action. In the multilingual context of Lagos, campaigns conducted solely in English frequently do not effectively engage the diverse target population. Consequently, our study asserts that the utilisation of indigenous languages (Yoruba, Igbo, Hausa) is crucial for cues to action to be accurately recognised, internalised, and acted upon, as appeals in one's mother tongue inherently convey greater urgency and clarity. This strategy can encourage individuals to engage in preventive measures, such as evading hazardous locations or reporting unsafe tanker operations.

Cultural Dimensions Theory (Hofstede's Framework)

Geert Hofstede, a Dutch social psychologist, formulated the Cultural Dimensions Theory in the 1980s. The notion delineates the impact of culture on workplace values and has been extensively utilised in communication techniques. Hofstede delineated multiple elements of culture, including power distance, individuality against collectivism, masculinity versus femininity, uncertainty avoidance, and long-term versus short-term orientation. These cultural elements elucidate the variations in communication across diverse civilisations. Regarding media campaigns, particularly those focused on burn injuries from tanker explosions, Hofstede's approach underscores the necessity of customising communications to resonate with the cultural values of the intended audience. In Lagos, where 82% of residents speak Yoruba languages, employing culturally pertinent language and framing the message to align with local customs and social structures such as reverence for elders and community cohesion can augment the campaign's efficacy and foster greater acceptance.

The Cultural Dimensions Theory applies by recognising the predominantly collectivistic characteristics of the society; messages are constructed to emphasise collective protection, hence enhancing perceived benefits through social obligation. The study directs the choice of high-credibility channels, including traditional or religious leaders, for the efficient spread of Cues to Action. This offers a distinctive perspective to evaluate the effectiveness of a culturally and linguistically tailored community education framework, so enhancing theoretical application by affirming cultural compatibility as an essential prerequisite for attaining protective behavioural outcomes.

Methodology

This study employs a qualitative research design grounded on literature, specifically utilising a systematic literature review methodology. A literature-based strategy was selected as the study is exclusively dependent on already published academic sources, including journal articles, books, institutional reports, and scholarly papers. This method facilitates a comprehensive synthesis of available evidence regarding the influence of local languages and cultural contexts in the formulation of effective media campaigns designed to educate communities about the risks of burn injuries related to these situations. The selection of data sources prioritises studies published from 2015 to 2025 to incorporate contemporary perspectives on tanker explosions and fire outbreaks in Nigeria. The data collection adhered to a systematic and reproducible methodology, in accordance with the protocols for systematic literature reviews. Keywords including explosions, burn injuries, fire safety programs, local languages, and cultural background were utilised. Additional factors encompass the tally of fatalities, injuries, property damage, and an exacerbating element for each incident. The specified keywords were inputted into academic databases to obtain pertinent material. Only scholarly publications authored in English and

accessible in full-text format were chosen. Retrieved articles were evaluated for relevancy, publication date, and methodological rigour. The findings were subjected to theme analysis to address the research objectives.

Concept of Local Languages

The local language is an essential element that should not be underestimated in the communication process, particularly in circumstances of community education and public safety. The primary objective of communication is to create a shared understanding between the communicator and the recipient. The local language constitutes the fundamental framework of every efficient communication process (Jegede & Harris, 2016, p. 3). The efficacy of community interventions is sometimes undermined when behaviour modification models neglect the necessity of knowledge dissemination in the local language (Mellor & Seyfeddinipur, 2017). In multilingual environments such as Lagos, where 82% of the population speaks Yoruba languages, the linguistic landscape exhibits considerable assimilation (Adedun & Shodipe, 2011). It is estimated that more than 85% of non-Yoruba inhabitants in Lagos are proficient in speaking Yoruba (Adedun & Shodipe, 2011). This statistic highlights that Yoruba is the predominant language that inhabitants of Lagos generally acquire first, serving as the major vehicle for assimilated knowledge. In this situation, English is typically regarded as the second language. This indicates that communication may be poor if the local language is not utilised correctly. Okafor and Noah (2014) underscore that many overlook the significant function local languages serve in conveying knowledge, values, attitudes, emotions, and ideologies within the realm of development.This study defines Local Languages as the native or regional languages of the community, such as Yoruba, Igbo, and Hausa, utilised intentionally in communication to enhance cultural connections, establish trust, and facilitate a more effective and culturally informed understanding of essential public safety information (Hamidah & Dungcik, 2024).

Concept of Cultural Context

Communication and culture are two phenomena that are deeply intertwined; their link extends beyond mere content exchange. The convergence of culture and communication extends beyond the literal interpretation of communications, significantly impacting the modalities of these messages and the methods by which they are assessed and comprehended by the intended audience (Neuliep, 2021). The cultural environment serves as a crucial interpretive framework through which meanings are communicated and comprehended, frequently remaining unnoticed by its participants, while significantly influencing the reception of risk messages (Mellor & Seyfeddinipur, 2017). Culture serves as a contextual framework comprising the collective knowledge, beliefs, and assumptions held by community members regarding the functioning of the world, as well as the manifestation and interpretation of this knowledge in communicative acts (Hamidah & Dungcik, 2024). To ensure the success of a public safety campaign addressing burn dangers from tanker explosions in Lagos, it must attain cultural significance and align with local expectations. This study underscores that the efficacy and acceptance of risk communication hinge on the deliberate integration of cultural context. For this study, cultural context is defined as the dynamic, collective, and inherited framework of values, beliefs, communication norms, and social practices (including risk perception) that directs a community's interpretation and reaction to public safety messages. This context must be strategically incorporated into media campaigns to ensure that messages are culturally pertinent, credible, and effective in

encouraging protective behaviours against burn risks.

Major Fire Incidents Caused by Tanker Explosions in Lagos

Lagos, Nigeria, confronts a continual and severe hazard from devastating fire incidents triggered by fuel truck explosions. These incidents consistently result in substantial fatalities, extensive property damage, and considerable environmental harm, exemplifying the severe dangers linked to the transportation of highly volatile substances through densely populated urban areas (Na'inna, Ani & Kassimu, 2025). Despite extensive safety laws and governmental interventions, the persistence of tanker explosions underscores profound systemic deficiencies concerning road infrastructure, vehicle maintenance standards, regulatory enforcement, and human factors.
A significant tanker explosion in the metropolitan area's history transpired on the Lagos-Ibadan Motorway, specifically at the Otedola Bridge. The incident entailed a petrol-laden truck losing control and discharging its contents into the packed route, culminating in a substantial, immediate explosion. The subsequent fire resulted in a minimum of 12 fatalities and consumed more than 50 automobiles, inflicting significant infrastructural damage (Busari, Murphy, & Adebayo, 2018; BC News, 2018). The extent of this destruction incited widespread public indignation and heightened demands for prompt and more stringent regulatory supervision of hazardous material transit in the corridor.
The Lagos State Government has implemented new safety measures, such as restricting fuel tanker movements during peak traffic hours; nevertheless, a thorough examination indicates that this approach neglects the fundamental communication and accountability deficiencies present in the problem. This regulation seeks to diminish vulnerability but fails to consider the community's perceived barriers to evacuation, nor does it mitigate the historical mistrust that fosters misinformation during the event. The government response emphasises vehicular travel instead of the susceptibility of residents and the communicative readiness of the public.

In 2019, a catastrophic event occurred, resulting in 147 fatalities when petrol ignited after residents utilised cups and buckets to collect the flammable fuel (Agency Report, 2019). This catastrophe, with its significant economic impact and greater casualties than Otedola, redirects the essential emphasis from the level of injury to the severity of consequences for the local population. Additionally, the economic ramifications of these incidents were underscored in 2021 when a fuel tanker explosion at the Toyota Bus Stop on the Oshodi-Apapa Motorway led to the swift destruction of multiple vehicles and significant interruption to trade (Elegbede, 2021). This documented event led to millions of naira in business losses owing to operational stagnation in the region. Eyewitness testimonies often ascribe these explosions to insufficient tanker maintenance and documented pre-existing fuel leaks, highlighting the significant safety hazards and the ongoing necessity for more stringent enforcement of roadworthiness regulations.

The trend of destruction persisted into 2022, exemplified by the catastrophic explosion at Mile 2 in December 2021 and the April devastation of the Festac Link Bridge. In all instances, tankers ignited during peak traffic hours, resulting in chaos, widespread vehicle abandonment, and the devastation of several vehicles, trucks, and commercial buildings. The swift propagation of fire in densely populated urban settings highlights the significant challenges encountered by emergency response teams and emphasises the pronounced susceptibility of residential and commercial zones situated along primary fuel transportation corridors.

This suggests that the public views the locus of power and accountability as predominantly residing with the government (High Power Distance/Low Individualism according to Hofstede's framework). Consequently, any localised safety initiative must transcend individual behavioural modification and focus on enabling communities to act as enforcers and hold accountable, which is essential for establishing a culturally-informed framework that recognises local political dynamics.

Analysis of Twitter Trends and Public Reactions to Recent Lagos Fire Incidents

The recent conflagration at a prominent spare parts market in Lagos has ignited fervent discourse on Twitter, with some Nigerians articulating irritation, scepticism, and apprehension regarding the recurrence of such events. Following the emergence of news regarding the fire, numerous X (Twitter) users expressed their scepticism, scrutinised the government's response, and underscored the persistent occurrence of market fires, especially those impacting enterprises held by traders from the South-East. The discussions rapidly evolved into a trending subject, with multiple narratives prevailing in the dialogue. Initial responses from users indicated that this incident was not a unique occurrence but rather indicative of a troubling trend. Numerous individuals enquired why such conflagrations always appeared to focus on particular markets. @jude4naija tweeted: "Is there yet another fire at a spare parts market in Lagos?" This occurrence is getting too common to be mere chance. What is occurring precisely?

This tweet struck a chord with numerous individuals, accumulating thousands of retweets and responses, as people recounted prior instances of analogous fires that transpired in recent years. Certain users conjectured that these fires were intentional and warranted additional inquiry. @IfeanyiX stated: "Markets predominantly occupied by Igbo traders are consistently the ones that are set ablaze." When will we commence posing substantive enquiries? Nonetheless, not all individuals were eager to embrace the conspiracy beliefs. Some advocated for prudence, cautioning against the dissemination of falsehoods. @bolajiLagos tweeted: "Before reaching conclusions, may we await an official investigation?" Not all occurrences constitute a conspiracy against a specific group. Notwithstanding appeals for patience, some Nigerians articulated their exasperation about the government's inaction and lack of accountability in addressing these calamities. A prevalent feeling was that authorities appeared solely for photographic opportunities and made insincere commitments. @AdaezeO posted on Twitter: “After a few days, you will observe the officials of the Lagos state government at the location, documenting the situation and making unfulfilled commitments.” We have previously encountered this film. The efficacy of emergency services was also questioned, as numerous people expressed dissatisfaction with the fire service's performance. Some dealers allegedly attempted to extinguish the fire independently while awaiting assistance that arrived tardily. Tweeted by @DejiAdeoye:

What accounts for the prolonged response time of the fire service in Lagos? By the time they arrive, the harm has already occurred. This nation is exhausting. Aside from assigning blame, certain X (Twitter) users advocated for preventive steps, contending that fire outbreaks would persist without the enforcement of safety laws. @ChidiFire disseminated: "While we may continue to hold the government accountable, our markets also require fire safety protocols." What is the number of these traders possessing fire extinguishers? Prevention is superior to treatment. Images and videos from the location proliferated, depicting traders frantically attempting to salvage their merchandise as dense smoke enveloped the market. The photos

clearly depicted the devastation, intensifying public outrage and emotional responses. While the impacted traders assess their losses and strive to recover, the discourse on Twitter persists. A multitude is advocating for a transparent inquiry into the incident, but others express scepticism on the likelihood of any substantive action ensuing. The prevalence of market fires in Lagos continues to be a significant issue, and without decisive action, the apprehension of recurrence will endure.

The Effectiveness of Using Indigenous Languages in Public Safety Campaigns

Indigenous languages are essential for enhancing the efficacy of public safety campaigns, particularly in areas characterised by linguistic variety. In nations such as Nigeria, where numerous indigenous languages are prevalent, integrating these languages into public safety communications helps improve the clarity and dissemination of safety directives. Numerous persons, especially in rural or underserved metropolitan regions, may lack proficiency in English, the official language utilised in many emergency broadcasts (Sholanke et al., 2020; Okwe et al., 2020). For instance, when fire safety instructions are exclusively conveyed in English, a substantial segment of the public may not grasp the message, resulting in delayed evacuations and heightened casualties (Rahardjo & Prihanton, 2020). The communication issue highlighted by Sholanke et al. (2020) and Okwe et al. (2020), wherein English-only emergency broadcasts result in postponed evacuations (Rahardjo & Prihanton, 2020). It is not solely a result of basic linguistic diversity, but is significantly amplified by the dynamics of language utilised in metropolitan centres. Although studies characterise Lagos's linguistic environment as genuinely cosmopolitan due to integration (Adedun & Shodipe, 2011), the analysis uncovered a dominance of Yoruba-English bilingualism that systematically marginalises other Nigerian communities. This indicates that the lack of understanding in emergency situations is not an arbitrary obstacle, but a foreseeable systemic risk arising from the imbalanced power dynamics and linguistic erosion that the cosmopolitan setting systematically imposes on speakers of minority languages (Adedun & Shodipe, 2011). Furthermore, employing local languages helps capture cultural subtleties that may be neglected in generic, English-exclusive advertising. In indigenous cultures, safety protocols communicated in the native tongue are frequently regarded as more approachable and credible. This cultural resonance might enhance the probability that individuals would comply with prescribed safety protocols, such as the right use of fire extinguishers or evacuation during a crisis (Odogwu, 2021; Olaiya, 2013). Residents are more inclined to respond swiftly and efficiently to emergency warnings sent in their local languages, hence reducing injury during events such as fires or floods (Stanley et al., 2020; Kerr et al., 2021; Na'inna, Ani & Kassimu, 2025).

Utilising indigenous languages enhances comprehension and mitigates the dissemination of disinformation during emergencies. In numerous crisis scenarios, especially within multilingual countries, misinformation might proliferate rapidly when official communications are not comprehended by the majority of the populace. Miscommunication during emergencies can result in uncertainty, panic, and inaction, hence intensifying the disaster's effects (Okon & Njoku, 2018). In contrast, translating emergency notifications into local languages guarantees that persons from diverse linguistic backgrounds obtain precise and prompt information, hence diminishing the likelihood of disinformation proliferating (Odogwu, 2021). For example, during significant fire events in Nigeria, the utilisation of local dialects in media broadcasts has demonstrated an enhancement in public

awareness and reaction times (Sholanke et al., 2020).

The efficacy of multilingual campaigns in public safety is shown in the reaction to health crises. During fire outbreaks and other natural catastrophes, persons who comprehend emergency signals are more inclined to engage in preventative actions, such as fire drills or evacuations, resulting in less casualties. Employing a bilingual strategy, safety programs can enhance community involvement and cultivate a proactive culture of readiness (Kerr et al., 2021; Sholanke et al., 2020). Utilising indigenous languages in public safety campaigns is essential for linguistic inclusion and a crucial technique for ensuring that important safety information effectively reaches all societal segments (Rahardjo & Prihanton, 2020).

Media Campaign Strategies for Effective Risk Education

Effective risk education necessitates focused media campaign methods that cater to the distinct needs of a community while taking into account the available resources. The integration of traditional media, internet platforms, and participatory methods can enhance the dissemination and effectiveness of safety messaging.

Conventional Media Traditional media is essential for spreading information, particularly in populations with restricted access to modern technologies. Local radio stations, town criers, and community theatre have shown to be effective mediums for disseminating risk education messages. In rural and remote regions, where numerous individuals may lack internet access or cellphones, these communication methods are highly trusted and effectively reach varied audiences (Odogwu, 2021; Nwachukwu, 2020). Local radio transmissions in indigenous languages can guarantee that fire safety messages are communicated to individuals who may lack proficiency in the official language (Oloke et al., 2022). Town criers, regarded as reliable information sources, can facilitate the direct delivery of emergency alerts to houses in both urban and rural communities (Rahardjo & Prihanton, 2020).

Digital Media

In metropolitan regions and among younger, technologically adept demographics, digital media methods, including social media campaigns, SMS notifications, and mobile applications, can be very effective in enhancing awareness of hazards and informing individuals about preventive measures. Social media platforms such as Facebook, Twitter, and WhatsApp facilitate the swift distribution of information and permit direct interaction with audiences via comments, shares, and likes (Stanley et al., 2020). These platforms are especially beneficial for real-time notifications during emergencies, enabling local governments and organisations to issue prompt alerts on fires, floods, or other natural disasters. SMS notifications can deliver prompt, succinct safety advice or emergency contact numbers to citizens during crises (Kerr et al., 2021). In nations with restricted internet access, mobile applications that deliver offline safety protocols can fill the void by supplying critical emergency information despite the absence of data connectivity (Odogwu, 2021).

Utilisation of Narrative Techniques

Storytelling, a practice ingrained in numerous cultures, serves as an effective medium for conveying risk education in a sympathetic and memorable manner. Folk stories, proverbs, and cultural symbols can convert safety messaging into culturally pertinent teachings that appeal with local communities. Embedding safety information into narratives that resonate with the beliefs and experiences of a community enhances the likelihood of retention and action (Sholanke et

al., 2020; Okezie, 2021). Fire safety advertisements should use traditional narratives that highlight the significance of fire hazard prevention, utilising metaphorical lessons to motivate individuals to adopt preventive measures in their residences and workplaces (Stanley et al., 2020).

Collaborative Methodologies

Finally, participatory methods, like community-based workshops and interactive sessions, are exceptionally effective in including the public in risk education. These tactics enable participants to engage in discussions, exchange experiences, and acquire knowledge about safety protocols within a collaborative setting. Interactive sessions may encompass realistic demonstrations of fire drills, first aid, or evacuation protocols. Engaging the community directly in the educational process enhances knowledge, cultivates trust, and promotes a culture of shared responsibility (Odogwu, 2021; Sholanke et al., 2020). Community seminars can be customised for various demographic groups, guaranteeing that the content is pertinent and accessible to everyone. This participatory paradigm enhances community resilience by enabling individuals to assume responsibility for their own safety and that of their neighbours (Oloke et al., 2022).

Challenges in Implementing Localized Risk Communication

Localised risk communication (LRC) is essential for enabling communities to comprehend specific hazards and respond effectively during emergencies. Nonetheless, the execution of these techniques encounters widespread obstacles that impede public safety initiatives. The fundamental problem is characterised not simply as a technical deficiency, but as a crisis in conveying risk perception across many linguistic and cultural contexts. This paper critically examines the difficulties to LRC, claiming that effective implementation relies on rectifying conceptual deficiencies in centralised risk models.

Language Barriers

A principal obstacle in executing localised risk communication is surmounting linguistic limitations. In several areas, particularly within multicultural or multilingual communities, individuals communicate in various indigenous or local languages. Public safety messages, when solely provided in the predominant or national language, may marginalise significant segments of the community, especially in rural regions. This study contends that the indigenous language should be redefined as the foremost and most pressing "Cue to Action" (Nwachukwu, 2020; Kerr et al., 2021) due to its inherent capacity to communicate more clarity and urgency, essential for behavioural transformation. Consequently, it is imperative to ensure that material is translated effectively and sensitively into many local languages; nevertheless, resource limitations frequently hinder such initiatives (Stanley et al., 2020).

Cultural Sensitivities

Effective risk communication must be culturally pertinent, although this frequently presents a barrier. Diverse groups may perceive risk or safety signals differently owing to cultural beliefs, practices, or prior interactions with authorities. Certain groups may possess a historical scepticism towards government-led projects, rendering them less amenable to information from official sources (Sholanke et al., 2020). Unrecognised perceived obstacles within the Health Belief Model (HBM) framework. The findings indicate that fostering trust by authentic community interaction is essential for overcoming these obstacles and initiating public action (Oloke et al., 2022). If the messaging fails to conform to local cultural standards, it may be disregarded or misinterpreted. Consequently, it is imperative to modify the communication style and

methodology to correspond with cultural norms, necessitating a comprehensive understanding and involvement with community leaders and stakeholders (Oloke et al., 2022).

Technological Accessibility and Proficiency

The digital gap is a substantial challenge. Although mobile phones and social media serve as potent instruments for the distribution of safety information, access to these technologies is not uniformly available to all individuals. Rural and low-income communities may lack dependable internet connectivity or smartphones, hindering their capacity to receive and respond to digital communications. Moreover, even when digital communications are available, inadequate technology literacy can impede their efficacy (Kerr et al., 2021). The study asserts this as an ethical need to utilise redundant, low-technology channels (e.g., radio, town criers, community posters) to ensure access for varied audiences, especially in contexts of low digital literacy (Odogwu, 2021). It is crucial to ensure that messages are disseminated through various communication channels, including radio broadcasts, town criers, and community posters, to effectively reach diverse populations (Odogwu, 2021).

Disinformation and Speculation

Misinformation and rumours can diminish the efficacy of localised risk communication. In numerous societies, especially those with restricted access to reliable information, erroneous or deceptive statements can proliferate rapidly, resulting in confusion and alarm. In the era of social media, rumours can proliferate more rapidly than official communications, complicating effective countermeasures (Rahardjo & Prihanton, 2020). To address this difficulty, public safety campaigns must deliver accurate, clear, and timely information swiftly and consistently. Moreover, enlisting reputable local individuals or community leaders to serve as intermediaries for official communications can aid in countering misinformation (Stanley et al., 2020).

Insufficient Community Engagement

Localised risk communication is most efficacious when it is driven by the community. Nonetheless, insufficient community engagement frequently constrains the efficacy of such efforts. Excluding community members from the planning and execution of the communication strategy hinders the ability to customise the messaging to the community's requirements and context. Involving community leaders, local organisations, and the public in risk communication planning helps cultivate trust and guarantee that the information is pertinent and actionable (Sholanke et al., 2020). The difficulty is in establishing environments conducive to significant engagement, particularly in communities exhibiting apathy or opposition to such programs (Oloke et al., 2022).

Scarce Resources Inadequate financial and human resources can pose a significant barrier to the execution of successful localised risk communication programs. Numerous localities, particularly in low-income nations, encounter difficulties in obtaining sufficient funds for public safety initiatives. These limitations hinder the production of multilingual materials, the execution of media campaigns, and the training of local communicators to convey messages effectively. Furthermore, constrained resources may lead to campaigns that are disjointed, ephemeral, or inadequately address all regions requiring assistance (Stanley et al., 2020; Nwachukwu, 2020).

Collaboration Among Stakeholders

The absence of collaboration among many stakeholders in disaster management and risk communication can impede the efficacy of localised initiatives. The stakeholders may encompass government agencies, local

authorities, non-governmental organisations, community-based organisations, and the media. Ambiguity in roles, responsibilities, and communication pathways can result in inconsistent messaging, action delays, and lost collaborative opportunities (Olaiya, 2013). Successful risk communication necessitates a coordinated effort across all stakeholders to synchronise their activities and messaging.

Localised risk communication encounters substantial obstacles that must be resolved to guarantee its efficacy. These obstacles, encompassing linguistic barriers, cultural sensitivities, technology limits, misinformation, and resource constraints, necessitate a multidisciplinary approach for resolution. Effective campaigns must be culturally attuned, inclusive, and accessible across diverse communication mediums. Moreover, promoting community involvement and guaranteeing collaboration among principal stakeholders are crucial for the efficacy of risk education and awareness initiatives. By mitigating these obstacles, we can bolster community resilience to diverse threats and augment their ability to respond effectively during catastrophes (Odogwu, 2021; Rahardjo & Prihanton, 2020).

Conclusion

The research underscores the essential need to incorporate indigenous languages and cultural contexts into media efforts aimed at reducing burn injury risks linked to tanker explosions in urban areas such as Lagos. Ongoing fire incidents demonstrate that general, centralised communication systems exhibit considerable deficiencies, frequently leading to failures in safety protocols. The study contends that effective risk communication relies on transcending mere translation to achieve linguistic inclusivity and cultural relevance, so enhancing comprehension, cultivating trust, and promoting proactive community engagement. This study significantly enhances current theoretical frameworks, particularly the Health Belief Model (HBM), by positing that cultural mistrust is fundamentally associated with the HBM's Perceived Barriers construct. Consequently, the formation of trust, facilitated by local involvement and reliable intermediaries, is considered an essential prerequisite for initiating preventative measures. The research advocates for substituting top-down communication with an inclusive and focused framework that emphasises local authority and linguistic relevance, thereby presenting a feasible approach to substantially improving community resilience to fire-related disasters.

Recommendations

i. Government authorities and emergency management agencies must use multilingual media campaign prototypes to broadcast the common language of assimilation.

ii. Local leaders and community organizations should collaborate to adapt safety messages culturally and contextually to foster community trust.

iii. Media outlets should utilize traditional channels, such as local radio stations and community drama, to effectively broadcast safety messages.

iv. Non-governmental organizations (NGOs) should provide training workshops on emergency response and fire safety protocols in local languages.

v. Conduct continuous evaluation of campaign effectiveness not just based on reach (views/listeners), but on indicators of behavioral change and

trust scores immediately following real-world incidents.

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