2026 Volume: 02 Issue: 01 www.ijrpa.com ISSN 2456-9995 Review Article

International Journal Research Publication Analysis

Page: 01-14

# PUBLIC AWARENESS AND ACCESSIBILITY OF EMERGENCY COMMUNICATION CENTRES FOR HOUSEHOLD EMERGENCY RESPONSE IN NIGERIA

**Sunday Omini Abam* & Chukwuemeka Ifegwu Eke**

*Sustainable Development Centre, University of Abuja, Abuja, Nigeria.*

**Article Received: 20 December 2025**
**Article Revised: 08 January 2026**
**Published on: 28 January 2026**

***Corresponding Author: Sunday Omini Abam**
Sustainable Development Centre, University of Abuja, Abuja, Nigeria.

DOI: https://doi-doi.org/101555/ijrpa.9845

**ABSTRACT:**

*Public awareness and accessibility are central to effective household engagement with emergency response systems. This study examines public awareness, knowledge, and accessibility of Emergency Communication Centres (ECCs) for household emergency response in Abuja Municipal Area Council, Nigeria. A quantitative cross-sectional survey was conducted among 384 households using structured questionnaires administered through face-to-face interviews. Descriptive statistics were used to assess levels of awareness, knowledge of the toll-free emergency number, confidence in contacting ECCs, and utilisation patterns, while chi-square tests and binary logistic regression examined factors influencing utilisation. Findings show that although general awareness of ECCs was moderate, actionable knowledge and confidence in using the service were limited. Utilisation of ECC services during emergencies was low, with households often relying on alternative or informal channels. Geographic location and prior awareness significantly influenced ECC utilisation, with lower usage observed in peri-urban and semi-rural areas. The study concludes that sustained public sensitisation and improved accessibility are essential to strengthen household utilisation of ECC services and enhance emergency response effectiveness.*

**KEYWORDS:** Emergency Communication Centres; Public awareness; Accessibility; Household utilisation; Emergency response; Disaster management

## INTRODUCTION

Effective emergency responses are a critical component of disaster risk management and human security, particularly in contexts characterised by rapid urbanisation, population growth, and increasing exposure to hazards. Across the world, emergency communication systems serve as the primary gateway through which households access life-saving services during crises, including accidents, fires, medical emergencies, and natural disasters (Wang et al., 2023). By enabling timely reporting, information exchange, and mobilisation of responders, these systems play a foundational role in reducing response delays and mitigating the consequences of emergencies (Reuter & Kaufhold, 2017). However, the effectiveness of emergency communication systems depends not only on their technical capacity or institutional design, but also on whether the public is aware of their existence, understands how to use them, and can reliably access them during emergencies (Vandrevala et al., 2024).

Public awareness and accessibility constitute the demand-side foundations of emergency communication systems. Even the most sophisticated emergency response infrastructure is rendered ineffective if households do not know which number to call, doubt the usefulness of the service, or encounter barriers when attempting to make contact (Houston et al., 2014). Studies from both developed and developing countries consistently show that lack of awareness, misinformation, and perceived inaccessibility significantly reduce utilisation of emergency services, particularly among vulnerable and marginalised populations (Akinreni et al., 2023; Lambert et al., 2025). In emergency situations where time and clarity are critical, uncertainty about whom to contact or whether assistance will be available can lead households to delay reporting, rely on informal networks, or attempt self-help measures, often with adverse outcomes (Houston et al., 2014; Akinreni et al., 2023).

In recent decades, many countries have adopted single, toll-free emergency numbers to simplify access to emergency services and improve coordination among response agencies. Centralised emergency numbers such as 911 in the United States, 112 in the European Union, and similar systems in parts of Asia and Africa are intended to reduce confusion, improve response efficiency, and strengthen public trust (ITU, 2022; European Commission, 2024). Nevertheless, evidence suggests that the mere introduction of a single emergency number does not automatically translate into widespread public awareness or effective utilisation. Awareness campaigns, continuous public education, network reliability, and user experience all shape whether households actually use emergency communication services during real emergencies (Nto et al., 2024; Birkun, 2025).

In Nigeria, the national emergency communication framework is anchored on the toll-free emergency number 112, coordinated by the Nigerian Communications Commission in collaboration with relevant security, health, and disaster management agencies. Emergency Communication Centres established under this framework are designed to provide round-the-clock access to emergency assistance and to coordinate responses across police, fire services, medical responders, and disaster management authorities. In principle, the 112 system represents a significant institutional investment in improving emergency response and public safety. However, anecdotal evidence and limited empirical studies suggest that public awareness and utilisation of the system remain uneven across regions and population groups (Nto et al., 2024; NCC, 2023).

Nigeria's socio-economic diversity, infrastructural disparities, and digital divide present particular challenges for equitable access to emergency communication services. While urban residents may have greater exposure to public information campaigns and better network coverage, rural and peri-urban households often face constraints related to phone ownership, network reliability, language barriers, and limited trust in public institutions (Okoye et al., 2023). Even within urban areas, awareness of the emergency number and understanding of how Emergency Communication Centres operate vary widely across socio-economic and educational groups. These disparities raise important questions about whether the emergency communication system is fulfilling its mandate as a universally accessible public service (Nto et al., 2024).

Access to emergency communication services extends beyond physical connectivity to include functional and perceptual dimensions. Functional access refers to the ability of households to successfully place emergency calls and receive a response when needed, while perceptual access reflects users' beliefs about whether calling will lead to meaningful assistance (Spjeldnæs et al., 2023). Research in crisis communication shows that households may refrain from using formal emergency channels if previous attempts were unsuccessful or if they perceive response agencies as unreliable or unresponsive (Badu et al., 2023). As a result, awareness does not always translate into utilisation, and access barriers may persist even where services formally exist.

Despite the strategic importance of emergency communication systems in Nigeria, there remains a shortage of systematic, household-level evidence on public awareness, access, and utilisation of Emergency Communication Centres. Existing policy discussions tend to focus on institutional arrangements, infrastructure deployment, and operational performance, with less attention paid to the lived experiences of households who are expected to use these

services during emergencies. This gap limits the ability of policymakers and service providers to identify demand-side constraints, target public education efforts, and design interventions that promote equitable and effective use of emergency communication services.

Understanding awareness and accessibility is particularly important in a country where households frequently serve as first responders to emergencies before formal services arrive. Delays in contacting emergency services or failure to use official channels can exacerbate injuries, increase fatalities, and undermine coordinated response efforts. From a disaster management perspective, improving household awareness and access is therefore not merely a communication challenge, but a critical component of risk reduction and resilience building.

Against this backdrop, this study examines public awareness and accessibility of Emergency Communication Centres for household emergency response in Nigeria. Specifically, the study assesses the level of awareness and knowledge of Emergency Communication Centres among households and examines the extent to which households can access and utilise Emergency Communication Centre services during emergencies. By focusing on the demand-side foundations of emergency communication, the study provides empirical insight into whether Nigeria's emergency communication framework is reaching its intended beneficiaries and how awareness and access shape utilisation patterns. The findings are expected to inform public education strategies, accessibility improvements, and policy interventions aimed at strengthening household engagement with emergency communication services and enhancing the effectiveness of disaster response in Nigeria.

## LITERATURE REVIEW

Empirical research consistently demonstrates that public awareness and practical knowledge are foundational to household engagement with formal emergency communication systems. Evidence from Nigeria indicates that awareness of emergency response services remains limited and unevenly distributed across population groups. Akinreni et al. (2023), in a national web-based cross-sectional study, found that fewer than half of respondents were aware of medical emergency response services, while actual utilisation was substantially lower. Their analysis further revealed that gender and educational attainment significantly influenced awareness, and that lack of knowledge about the existence of services and the absence of contact information were the most frequently cited reasons for non-use. These findings highlight a persistent gap between the institutional availability of emergency services and household-level knowledge required for effective utilisation.

Similar patterns emerge in broader studies of household preparedness and emergency-related behaviours. Yin et al. (2025), drawing on a large nationally representative sample across China, reported widespread inadequacies in household preparedness, with marked disparities linked to education, income, residence type, and employment status. Although their focus was on emergency supplies rather than communication services, the findings reinforce the argument that socio-demographic inequalities strongly shape households' capacity to engage with formal emergency systems. The study further demonstrates that self-efficacy and perceived social support mediate preparedness behaviours, suggesting that awareness alone is insufficient unless households feel capable of acting and believe support systems are accessible.

Beyond individual awareness, access to emergency communication services is shaped by the broader communication environment and the channels through which households interact with institutions during crises. Smith et al. (2024), in a scoping review of disaster communication for children with medical complexity, emphasise the importance of proactive outreach, multi-channel communication, and the use of existing social and neighbourhood networks to ensure continuity of access during emergencies. Their findings suggest that households are more likely to successfully engage emergency services when communication systems are flexible, two-way, and embedded within trusted social structures. This perspective aligns with the emphasis by Sundar et al. (2024) on the need for emergency response systems to build trust and familiarity with local populations, particularly in high-risk or sensitive contexts, as trust and clarity directly affect whether households initiate contact during emergencies.

The role of communication infrastructure and system reliability further conditions household access and utilisation. Wang et al. (2023) provide a comprehensive survey of emergency communication network technologies, arguing that reliability, rapid deployment, and integration across platforms are essential for effective emergency response. While their analysis is technology-focused, it underscores a critical demand-side implication: awareness and willingness to use emergency services are undermined when communication networks are unstable, congested, or inaccessible during crises. In such circumstances, households may revert to informal coping mechanisms, even when they are aware of official emergency numbers.

Institutional coordination and governance dynamics also indirectly influence household utilisation by shaping public trust and perceptions of system effectiveness. Abbas and Miller (2025), through qualitative interviews with emergency management and health professionals,

identify persistent barriers to information sharing and coordination, including fragmented systems, weak inter-agency relationships, and limited community engagement. These shortcomings were found to reduce situational awareness and constrain effective response. Although the study does not focus on households directly, its findings suggest that fragmented institutional communication can weaken the credibility of formal emergency systems, thereby discouraging household reliance on official channels during emergencies. This insight is reinforced by Badu et al. (2023), who argue that communication and trust are inseparable elements of crisis management, with deficiencies in communication amplifying public scepticism and disengagement, particularly in slow-onset or "creeping" crises.

In contrast, a body of crisis communication literature focuses primarily on organisational strategies, reputational concerns, and institutional response postures rather than household access and utilisation of emergency services. Studies by Testa (2025), Molavi (2025), and Schermer (2021) examine crisis communication frameworks, organisational stance, and stakeholder management in reputational or institutional crises. While these works contribute valuable theoretical insights into communication strategies and stakeholder expectations, they provide limited empirical evidence on household awareness of emergency communication systems or the practical barriers households face when attempting to access emergency services. Their relevance to household emergency response is therefore indirect, serving mainly to underscore the importance of aligning communication strategies with stakeholder perceptions.

Overall, the empirical literature indicates that low public awareness, uneven access to reliable communication channels, and trust-related factors jointly constrain household utilisation of emergency communication services. While institutional investments in emergency communication infrastructure are necessary, they are insufficient without sustained public education, accessible and reliable communication networks, and governance arrangements that reinforce public confidence. Despite growing recognition of these issues, there remains limited nationally focused, household-level evidence on awareness, accessibility, and utilisation of Emergency Communication Centres in Nigeria. This study addresses this gap by empirically examining how Nigerian households perceive, access, and use Emergency Communication Centres during emergencies, thereby contributing demand-side evidence to inform policy and practice.

## METHODOLOGY

The study adopted a quantitative cross-sectional survey design to examine public awareness, knowledge, accessibility, and utilisation of Emergency Communication Centres among households in Abuja Municipal Area Council of the Federal Capital Territory, Nigeria. Abuja Municipal Area Council was selected because of its administrative significance, high population density, and socio-economic diversity, which make it a strategic setting for assessing household engagement with emergency communication services. The study population comprised household heads or responsible adult household members aged 18 years and above. A minimum sample size of 384 respondents was determined using Cochran's formula for large populations at a 95 percent confidence level and a 5 percent margin of error. To ensure representativeness, a multi-stage sampling technique was employed, involving the inclusion of all twelve wards in the Area Council, selection of one enumeration area per ward, and systematic random sampling of households, with one eligible adult respondent selected from each household.

Primary data were collected through face-to-face administration of a structured questionnaire by trained research assistants. The instrument captured respondents' socio-demographic characteristics, awareness and knowledge of Emergency Communication Centres, familiarity with the national toll-free emergency number, and experiences related to accessing and utilising ECC services during emergencies. Data analysis was conducted using the Statistical Package for the Social Sciences. Descriptive statistics were used to summarise levels of awareness, access, and utilisation, while inferential statistical techniques, including chi-square tests and regression analysis, were applied to examine relationships between socio-demographic factors, awareness, accessibility, and utilisation at a 5 percent level of significance. Ethical standards were observed throughout the study, including informed consent, voluntary participation, confidentiality, and secure handling of data for academic purposes only.

## FINDINGS

The findings indicate that public awareness of Emergency Communication Centres in Abuja Municipal Area Council is moderate but shallow. As shown in Table 1, two-thirds of respondents (66.0%) had heard of ECCs prior to the survey, yet only 34.6% could correctly identify a toll-free emergency number such as 112. This disparity reveals a critical gap between general awareness and actionable knowledge, suggesting that many households may recognise the existence of ECCs without possessing the information necessary to use them

effectively during emergencies. Exposure to public sensitisation efforts was similarly uneven, with just over half of respondents reporting contact with an ECC awareness campaign in the preceding year.

Procedural confidence further underscores this gap. Table 2 shows that more than one-third of respondents reported no confidence in knowing how to contact ECCs during emergencies, while fewer than 15% expressed extreme confidence. The mean confidence score of 2.68 indicates that, on balance, households lack sufficient assurance to act decisively under emergency conditions. Such uncertainty may translate into delayed or avoided use of ECC services at critical moments.

**Table 1 - Awareness and Knowledge of ECCs. (Percentages)**

| **Question** | **No (%)** | **Yes (%)** | **Not Sure (%)** |
|---|---|---|---|
| Before today, have you heard of Emergency Communication Centres (ECCs) in the FCT? | 34% | 66% | – |
| Do you know any ECC toll-free number (e.g., 112)? | 65.4% | 34.6% | – |
| In the last 12 months, have you seen or heard any ECC awareness campaign in AMAC? | 40.5% | 50.4% | 9.1% |

**Table 2 – Confidence in Knowing the Correct Procedure to Reach ECCs.**

| **Confidence Level** | **Percentage (%)** |
|---|---|
| Not Confident | 36.5 |
| Slightly Confident | 9.3 |
| Somewhat Confident | 18.4 |
| Very Confident | 21.2 |
| Extremely Confident | 14.4 |
| **Mean confidence score** = 2.68 (SD = 1.50) on a 1–5 scale | |

Chi-square analysis (Table 3) revealed no statistically significant associations between awareness, knowledge, or confidence and socio-demographic characteristics, including age, sex, education, residential area, or mobile phone ownership. This suggests that the observed awareness deficits are systemic rather than concentrated within specific demographic groups. While minor variations were observed, effect sizes were consistently small, indicating that ECC-related knowledge gaps cut across socio-economic categories. Collectively, these findings point to the need for broad-based, sustained public education strategies that move beyond name recognition to emphasise procedural clarity, repeated messaging, and confidence-building.

**Table 3 - Chi-Square Test Results – Awareness and Knowledge of ECCs by Socio-Demographic Variables.**

| Outcome Variable | Predictor Variable | $\chi^2$ Value | df | p-value | Phi / Cramer's V |
|---|---|---|---|---|---|
| Heard of ECCs | Age | 5.572 | 5 | 0.35 | 0.126 |
| | Sex | 1.361 | 1 | 0.243 | 0.062 |
| | Education | 6.567 | 6 | 0.363 | 0.136 |
| | Type of area | 4.564 | 2 | 0.102 | 0.114 |
| | Mobile phone ownership | 4.487 | 2 | 0.106 | 0.113 |
| Know ECC toll-free number | Age | 6.962 | 5 | 0.223 | 0.14 |
| | Sex | 1.681 | 1 | 0.195 | 0.069 |
| | Education | 1.34 | 6 | 0.969 | 0.062 |
| | Type of area | 2.659 | 2 | 0.265 | 0.087 |
| | Mobile phone ownership | 3.772 | 2 | 0.152 | 0.103 |
| Confidence in contacting ECC in emergency | Age | 20.458 | 20 | 0.43 | 0.241 /0 .120 |
| | Sex | 2.52 | 4 | 0.641 | 0.084 |
| | Education | 27.849 | 24 | 0.266 | 0.281 /0.140 |
| | Type of area | 7.361 | 8 | 0.498 | 0.144 /0.102 |
| | Mobile phone ownership | 6.448 | 8 | 0.597 | 0.135 /0 .096 |

Household utilisation of ECC services was low despite moderate levels of awareness. As presented in Table 4, although 41.4% of respondents reported experiencing an emergency in the previous 12 months, only 15.6% contacted an ECC during their most recent incident, and just 30% had ever used ECC services in their lifetime. Instead, households frequently relied on alternative channels, including direct police lines, community leaders, fire services, and social media. This pattern indicates that ECCs are not yet firmly established as the default point of contact for emergency assistance.

**Table 4 - Descriptive Statistics on Access, Utilisation, and Perceptions of ECC Services.**

| Variable | Categories / Scale | % |
|---|---|---|
| Household faced emergency in last 12 months | No | 58.6 |
| | Yes | 41.4 |
| Dialed ECC during most recent emergency | No | 84.4 |
| | Yes | 15.6 |
| Ever used ECC services (lifetime) | No | 70 |
| | Yes | 30 |
| Preferred channel to contact help in emergency | ECC (112) | 28.6 |
| | Direct police line | 24.6 |
| | Direct ambulance/FRSC | 8.5 |
| | Fire service | 9.9 |
| | Neighbour/community leader | 15 |
| | Social media | 9.9 |
| | Other | 3.4 |
| | | |

Perceptions of access and trust were moderate but not strong. Table 5 shows mean scores of 3.54 for perceived accessibility and 3.48 for trust in ECCs' ability to provide help. While these values suggest general acceptance of ECCs as a service option, they also reflect ambivalence, with substantial variation across respondents. Such mixed perceptions may explain why many households bypass ECCs in favour of more familiar or direct channels when emergencies occur.

**Table 5 - Perceived Accessibility and Trust in ECC Services**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Perceived accessibility of ECC services in your area | 353 | 1 | 5 | 3.54 | 1.105 |
| Trust in ECC to help your household if you call | 353 | 1 | 5 | 3.48 | 1.166 |
| Valid N (listwise) | 353 | | | | |

Logistic regression analysis (Table 6) identified two significant predictors of ECC utilisation. Geographic location played a decisive role, with respondents in peri-urban and semi-rural areas significantly less likely to use ECC services than those in the urban core. This finding points to persistent spatial inequalities, likely linked to differences in infrastructure quality, network reliability, and historical service reach. Prior awareness of ECCs also significantly increased the likelihood of utilisation, reinforcing the importance of visibility and recognition in shaping emergency response behaviour. Other socio-demographic, technological, and perceptual variables did not retain significance in the multivariate model, suggesting that awareness and spatial access outweigh individual characteristics in explaining utilisation patterns.

**Table 6 – Binary Logistic Regression Predicting ECC Utilisation During Most Recent Emergency.**

| **Predictor Variable** | **B** | **S.E.** | **Wald** | **df** | **p-value** | **Exp(B)** | **95% CI for Exp(B) (Lower – Upper)** |
|---|---|---|---|---|---|---|---|
| Age Group | | | 4.169 | 5 | 0.525 | | |
| 18–24 years | 0.776 | 0.725 | 1.144 | 1 | 0.285 | 2.172 | 0.524 – 8.999 |
| 25–34 years | 0.64 | 0.695 | 0.848 | 1 | 0.357 | 1.896 | 0.486 – 7.400 |
| 35–44 years | 0.536 | 0.725 | 0.546 | 1 | 0.46 | 1.709 | 0.412 – 7.083 |
| 45–54 years | 1.105 | 0.723 | 2.335 | 1 | 0.126 | 3.02 | 0.732 – 12.467 |
| 55–64 years | 1.265 | 0.771 | 2.691 | 1 | 0.101 | 3.542 | 0.782 – 16.051 |
| Sex (Male) | -0.568 | 0.326 | 3.033 | 1 | 0.082 | 0.566 | 0.299 – 1.074 |
| Highest Education Completed | -0.035 | 0.115 | 0.091 | 1 | 0.763 | 0.966 | 0.771 – 1.210 |
| Main Occupation | 0.131 | 0.116 | 1.273 | 1 | 0.259 | 1.14 | 0.908 – 1.432 |
| Monthly Household Income | 0.056 | 0.078 | 0.507 | 1 | 0.477 | 1.057 | 0.907 – 1.233 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Type of Area | | | 6.851 | 2 | 0.033 | | |
| Urban core (ref.) | — | — | — | — | — | — | — |
| Peri-urban | -0.934 | 0.383 | 5.958 | 1 | 0.015 | 0.393 | 0.186 – 0.832 |
| Semi-rural | -0.898 | 0.418 | 4.625 | 1 | 0.032 | 0.407 | 0.180 – 0.923 |
| Mobile Phone Ownership | 0.346 | 0.347 | 0.998 | 1 | 0.318 | 1.414 | 0.717 – 2.789 |
| Internet Access | 0.088 | 0.261 | 0.113 | 1 | 0.737 | 1.092 | 0.654 – 1.821 |
| Heard of ECCs Before | 0.637 | 0.325 | 3.844 | 1 | 0.05 | 1.89 | 1.000 – 3.572 |
| ECC Awareness Campaign in Last 12 Months | 0.061 | 0.055 | 1.204 | 1 | 0.273 | 1.062 | 0.953 – 1.184 |
| Perceived Accessibility | 0.195 | 0.146 | 1.78 | 1 | 0.182 | 1.215 | 0.913 – 1.619 |
| Trust in ECC | -0.031 | 0.131 | 0.055 | 1 | 0.815 | 0.97 | 0.750 – 1.254 |
| Constant | -3.262 | 1.277 | 6.523 | 1 | 0.011 | 0.038 | — |

**Model Statistics:**

- Model $\chi^2$ (17 df) = 20.254, p = 0.261
- −2 Log Likelihood = 285.198
- Nagelkerke $R^2$ = 0.096
- Hosmer–Lemeshow: p > 0.05 (adequate fit)
- Overall Classification Accuracy = 84.4%

Overall, the findings demonstrate that while ECC infrastructure exists, demand-side barriers continue to constrain its effective use. Limited operational knowledge, uneven campaign reach, and geographic disparities in access collectively weaken household engagement with ECC services. Addressing these challenges will require integrated strategies that expand awareness beyond urban centres, strengthen communication outreach, and ensure that ECCs are perceived as reliable, accessible, and appropriate first points of contact during emergencies.

## CONCLUSION

This study examined public awareness and accessibility of Emergency Communication Centres for household emergency response in Abuja Municipal Area Council, Nigeria, with a focus on understanding how awareness, knowledge, and access shape utilisation of ECC services during emergencies. Using a quantitative cross-sectional household survey, the study assessed levels of awareness of ECCs, knowledge of the national toll-free emergency number, confidence in contacting ECCs, and patterns of access and utilisation during recent

emergencies. By concentrating on the demand-side foundations of emergency communication, the study provides empirical insight into whether existing emergency communication arrangements are effectively reaching households and supporting timely engagement during crisis situations.

The findings reveal a clear gap between general awareness and actionable knowledge. While a majority of respondents had heard of ECCs, only a minority could recall the correct toll-free number or expressed high confidence in using the service during emergencies. Awareness deficits were systemic rather than confined to particular demographic groups, indicating that current sensitisation efforts have not achieved consistent penetration across communities. Utilisation of ECC services was low, even among households that had recently experienced emergencies, with many residents preferring alternative or informal channels such as direct police lines, community leaders, or social media. Geographic disparities were pronounced, as households in peri-urban and semi-rural areas were significantly less likely to use ECC services than those in the urban core. Prior awareness of ECCs emerged as a key predictor of utilisation, underscoring the importance of visibility and recognition in shaping emergency response behaviour.

These findings suggest that improving ECC utilisation requires a combination of communication and access-oriented interventions. Public education strategies should move beyond general awareness to emphasise practical knowledge, including repeated dissemination of the toll-free number and clear guidance on when and how to use ECC services. Awareness campaigns should be sustained, multi-channel, and extended to peri-urban and semi-rural areas where utilisation remains low. In parallel, efforts to strengthen network reliability and service reach in non-urban areas are essential to address spatial inequalities in access. Integrating community-based actors into awareness initiatives and reinforcing trust in ECC responsiveness may further encourage households to adopt ECCs as their primary point of contact during emergencies. Together, these measures can strengthen household engagement with emergency communication systems and enhance the effectiveness of disaster response in Nigeria.

## REFERENCES

1. Abbas, R., & Miller, T. (2025). Exploring communication inefficiencies in disaster response: Perspectives of emergency managers and health professionals. *International Journal of Disaster Risk Reduction*, *120*, 105393. https://doi.org/10.1016/j.ijdrr.2025.105393

2. Akinreni, T., Filani, T., Asuni, O., & Owodunni, F. (2023). Awareness and utilization of emergency response service to road traffic crashes in Nigeria: a cross-sectional study. *Journal of Public Health and Emergency*, *7*, 17. https://doi.org/10.21037/jphe-23-31
3. Badu, J., Kruke, B. I., & Saetren, G. B. (2023). Crisis communication and trustworthiness among crisis actors: towards a typology of crisis management difficulties. *Safety in Extreme Environments*, *5*(2), 119–130. https://doi.org/10.1007/s42797-023-00074-8
4. Birkun, A. A. (2025). Public awareness of telephone number for medical emergencies: a scoping review. *Clinical and Experimental Emergency Medicine*. https://doi.org/10.15441/ceem.24.289
5. Cubeddu, F. (2025). Risk and emergency communication. *Encyclopedia*, *5*(4), 183. https://doi.org/10.3390/encyclopedia5040183
6. European Commission. (2024). *Report on the effectiveness of the implementation of the single European emergency number "112".* COM(2024) 575 final. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52024DC0575
7. Houston, J. B., Hawthorne, J., Perreault, M. F., Park, E. H., Hode, M. G., Halliwell, M. R., McGowen, S. E. T., Davis, R., Vaid, S., McElderry, J. A., & Griffith, S. A. (2014). Social media and disasters: a functional framework for social media use in disaster planning, response, and research. *Disasters*, *39*(1), 1–22. https://doi.org/10.1111/disa.12092
8. International Telecommunication Union. (2022). *Resolution 100: A common emergency number for Africa*. ITU. https://www.itu.int/dms_pub/itu-t/opb/res/T-RES-T.100-2022-PDF-E.pdf Sources:
9. Lambert, H., Doumont, D., Reviers, N., Vandenbroucke, M., & Aujoulat, I. (2025). Enhancing accessibility of crisis communication to people in vulnerable circumstances. *Journal of Public Health*. https://doi.org/10.1007/s10389-025-02436-x
10. Molavi, H. (2025). The application of contingency theory to crisis response instead of crisis communication: the influence of strategy and time. *Humanities and Social Sciences Communications*. https://doi.org/10.1057/s41599-025-06383-6
11. Nigerian Communications Commission (2023). News release: NCC's 112 emergency number central to successful implementation of NEMSAS. https://www.ncc.gov.ng/media-centre/press-releases/news-release-nccs-112-emergency-number-central-successful
12. Nto, S. E., Oluwatola, T., Samuel, O., Okagbue, H., Atobatele, S., Ibanga, A., Adegoke, A., Emuren, D., Dumbulwa, S. A., Sampson, S., Isiaka, S. D., & Sadiq, S. (2024).
13. Strengthening care for emergencies: what is the level of awareness and utilization of Emergency Medical Services (EMS) in FCT, Nigeria? *BMC Emergency Medicine*, *24*(1). https://doi.org/10.1186/s12873-024-00991-2

14. Okoye, N. S., Umeifekwem, U. T., & Eme, O. I. (2023). Addressing digital technology gap challenges: The Nigerian experience. *Nigerian Journal of Social Development*, 11(1), 95–100. https://www.arabianjbmr.com/pdfs/NGJSD_VOL_11_1_2023/9_ngjsd_2023_1.pdf
15. Reuter, C., & Kaufhold, M. (2017). Fifteen years of social media in emergencies: A retrospective review and future directions for crisis Informatics. *Journal of Contingencies and Crisis Management*, *26*(1), 41–57. https://doi.org/10.1111/1468-5973.12196
16. Schermer, T. (2021). Crisis Communication and Reputation management. In *Reputational Crises Unspun* (pp. 13–43). https://doi.org/10.1007/978-981-16-5130-4_2
17. Smith, N., Donaldson, M., Mitton, C., & Lee, E. (2024). Communication in disasters to support families with children with medical complexity and special healthcare needs: a rapid scoping review. *Frontiers in Public Health*, *12*, 1229738. https://doi.org/10.3389/fpubh.2024.1229738
18. Spjeldnæs, T. B., Nilsen, K. a. V., Myrmel, L., Sørnes, J., & Brattebø, G. (2023). "Calling for help: I need you to listen" - A qualitative study of callers' experience of calls to the emergency medical communication centre. *Scandinavian Journal of Trauma Resuscitation and Emergency Medicine*, *31*(1). https://doi.org/10.1186/s13049-023-01161-2
19. Sundar, R. S., Cooper, D. H., Hornish, M., & Laufer, A. (2024). Emergency response and crisis communications. In *Initiatives in Strategic Studies: Issues and Policies.* (pp. 115–158). https://doi.org/10.1007/978-3-031-56814-5_4
20. Testa, G. (2025). The importance of crisis communication. In *International series in advanced management studies* (pp. 7–29). https://doi.org/10.1007/978-3-031-83896-5_2
21. Vandrevala, T., Morrow, E., Coates, T., Boulton, R., Crawshaw, A. F., O'Dwyer, E., & Heitmeyer, C. (2024). Strengthening the relationship between community resilience and health emergency communication: a systematic review. *BMC Global and Public Health*, *2*(1), 79. https://doi.org/10.1186/s44263-024-00112-y
22. Wang, Q., Li, W., Yu, Z., Abbasi, Q., Imran, M., Ansari, S., Sambo, Y., Wu, L., Li, Q., & Zhu, T. (2023). An overview of emergency communication networks. *Remote Sensing*, *15*(6), 1595. https://doi.org/10.3390/rs15061595
23. Yin, X., Yu, Y., Kang, Y., Hu, D., & Wu, Y. (2025). A cross-sectional study on household disaster preparedness in China and analysis of its influencing factors. *BMC Public Health*, *25*(1), 2118. https://doi.org/10.1186/s12889-025-23281-3.