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The Communication Networks Adopted and their Effectiveness in Coordinating Community Responses during Violent Group Conflicts in Nairobi County, Kenya

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Abstract

This study investigated the effectiveness of communication networks in coordinating community responses. The study employed a descriptive survey design, targeting Nairobi County residents, Nyumba Kumi leaders, administrative officers, and NGO members involved in peace and security efforts. A total of 128 respondents were targeted, with 118 responses received, yielding a 92% response rate. Data was collected using questionnaires and interviews, with quantitative data analyzed through descriptive statistics and qualitative data analyzed thematically. Findings revealed that, mobile technology is favored for communication because it offers real-time updates on violent events. Resident's value early warning information, allowing them to make timely and informed decisions in response to potential violence. The study recommends enhanced partnerships with law enforcement, improved communication infrastructure, financial and logistical support to enhance the sustainability of these interventions.

Keywords: Violent Group Conflicts, Community Property Protection Measures, Community-Led Watch Programs, Communication Networks, Physical Security Measures, Community-Based Monitoring Networks

1. Introduction

Community-led strategies can be defined as the collaborative activities, which involve approaches, and programs embraced by community members to protect them and their property against a perceived harm such as theft, destruction, or looting to support developments and relationship (Klandermans, 2004) [7]. Generally, such interventions may include various proactive and reactive measures such as neighborhood watch groups, communication networks, community-based monitoring networks, community watch program, safe house and physical security measures for property and business.

Violent group conflicts on the other hand can be defined as a violent irreconcilable disagreement between two or more persons and groups. Notably, such disagreements can be personal or group-based and can take a personal or group dimension. Thus, group conflicts can be understood as disruptive and aggressive competition between and among parties (Hansen, 2009) [4]. Conflicting parties can be mobilized based on shared identity, such as occupation, religion, interests and values cherished. Further, group conflict may be peaceful (protests) or violent (riots). Under violent conflicts, their destructive nature, including property destruction, human displacement and injury or even death, have caught the attention of scholars and practitioners necessitating the need for adequate mitigation measures. Of importance to this study are the large-scale violent group conflicts situated in urban spaces that result into a state of anarchy, stretched government intervention and temporary public or private open space takeover, thus the need for community protection measures.

With the risk of violent group conflicts, the government is expected to prepare adequately to protect people and properties during protests and prevent them from being violent. However, in some instances, the police are overwhelmed, leading to property destruction and looting (Svensson *et al*., 2022) [15]. In response, community members are forced to take action to protect their property and preserve life. While there are policing measures embraced by the police officers, Hansen (2009) [4] reveals that the affected communities often take self-protection measures as a stop gap in case government agencies become overwhelmed. Such response measures can be in the form of self-defense forces such as militia such as Mungiki, community warriors, and other criminal groups for staging revenge against community-organized attacks.

In addition, Schoeberl (2023) [12] observes that policing measures can be challenged by the varying tendency of group conflicts to evolve into violence. This is so because group conflicts vary in size, such as small and large conflicts, based on the number of people involved. This requires constant monitoring and rerouting of law enforcement response resources. Where this is not done with speed, communities are forced to devise quick intervention measures to protect their property. Therefore, given the anarchic nature of violent group conflicts coupled with government agencies' limitations to restore order, members of the community are forced to put in measures to protect themselves or minimize their vulnerability. Given the above, policing group conflicts through community-based approaches is a central topic for law enforcers and policy advocates. However, despite the need for community-initiated response strategies, such collective activity requires development of trust, common interest and strategy (Francisco, 2010) [2].

Notably, Collective Action theory postulates that effective mobilization is based on common interests, leadership and coordination, group size, diversity, and pre-existing organizations. Further, the theory underscores those influential leaders and organizer are critical in motivating collective action. Additionally, conflicts may present additional challenges such as power imbalance, limited resources, and deep social division in the case of land and ethnic conflicts. Therefore, how community members navigate through such dynamics to develop effective protective responses is an aspect this study examined.

In Europe, the 2005 riots in France, which started in the suburbs of Paris and later spread to other cities, are a notable example of urban group violence overwhelming government capacities. Socio-economic inequalities and a perceived sense of disenfranchisement among youth in the suburbs triggered the unrest. During the riots, hundreds of cars were burned, businesses were destroyed, and public infrastructure was damaged, with over 3,000 people arrested (Hunt, 2007) [6]. The French government declared a state of emergency, signaling the failure of customary policing efforts to contain the violence. This scenario highlights how, even in developed countries, the state apparatus can be stretched thin, leaving space for violent disorder, hence the need to examine the potential for grassroots strategies put in place.

On the African continent, the insurgency by Boko Haram in Nigeria exemplifies the devastating impact of violent armed groups on urban populations. Boko Haram's attacks have displaced millions of people, and the Nigerian government has struggled to contain the violence, particularly in urban centers such as Maiduguri. As a result, various community groups have mobilized to defend their neighborhoods against the insurgents. The Civilian Joint Task Force (CJTF) emerged as a grassroots response to the insurgency, playing a crucial role in reclaiming territories and providing intelligence to the Nigerian military (Thurston, 2018) [17]. This highlights the importance of studying community-led interventions and dynamics that make them effective in mitigating violence when state resources are inadequate. In both cases, violent group conflicts placed severe strain on governmental control and resources. These events provide a clear parallel to the situation in Nairobi, Kenya, where urban group violence has become a regular occurrence in informal settlements like Mathare. Urban conflicts in Kenya, driven by political, ethnic, and socio-economic disparities, have created conditions where the state's response is often delayed, insufficient, or overwhelmed.

Kenya has a long history of violent group conflicts, particularly during periods of political contestation. The post-election violence of 2007-2008 is one of the most notable examples, where political disputes escalated into ethnic clashes that resulted in the displacement of over 600,000 people and the deaths of more than 1,100 individuals (Human Rights Watch, 2008) [5]. The government struggled to maintain control, and the security apparatus was quickly overwhelmed by the scale and intensity of the violence. In Nairobi's informal settlements, such as Mathare, local militia groups exploited the vacuum created by the lack of law enforcement to engage in looting, revenge attacks, and property destruction.

A study by Svensson *et al*. (2022) [14] highlights the limitations of government resources in managing large-scale group conflicts. The study points out that in many African countries, including Kenya, police forces are underfunded, poorly equipped, and cannot handle widespread urban violence. As a result, during periods of heightened tension, such as election years, law enforcement agencies are quickly overwhelmed, leading to delays in response and an inability to prevent property destruction and loss of life. Svensson *et al*. (2022) [14] further argue that the growing frequency of urban group violence in Africa necessitates rethinking government strategies, including integrating community-based approaches to conflict mitigation.

In response to the growing prevalence of urban group violence and the limitations of government intervention, communities in Nairobi have developed various strategies to protect themselves and their property. These community-led strategies range from informal neighborhood watch groups to more organized self-defense militias. Klandermans (2004) [7] defines community protection measures as collaborative activities and programs that residents adopt to safeguard their lives and property against perceived threats. These measures can be proactive and reactive, depending on the nature of the conflict and the resources available to the community. One of the most common community-led strategies is forming neighborhood watch groups. These groups consist of residents who take it upon themselves to monitor suspicious activities, report potential threats, and coordinate responses in times of crisis. Notably, how such programs are coordinated and dynamics that enhance their effectiveness is an aspect this study examined.

Another key community-led strategy is the establishment of community-based monitoring networks. These networks involve the collaboration of residents, local leaders, and civil society organizations to monitor conflict hotspots and report incidents to the relevant authorities. While these networks do not have the authority to enforce the law, they provide valuable intelligence that can help preempt violence and coordinate response efforts. Francisco (2010) [2] notes that such networks' success largely depends on the level of trust and cooperation among community members and the leadership of influential figures within the community.

The increasing prevalence of violent group conflicts in urban areas, particularly in informal settlements like Mathare, underscores the need for a comprehensive understanding of community-led strategies for conflict mitigation. With limited government resources and stretched law enforcement capabilities, communities are often left to fend for themselves. This study explored the communication

networks adopted and their effectiveness in coordinating community responses during violent group conflicts in Nairobi County, Kenya. By understanding these communication networks adopted and their effectiveness, the study will provide valuable insights into how communities can effectively protect themselves in urban violence. It offers lessons that could be applied to similar contexts globally.

2. Materials and methods

The study employed a descriptive survey design due to its flexibility in exploring real-life phenomena such as violent group conflicts and community responses. This design was appropriate as it allowed for a detailed observation of current practices, behaviors, and strategies adopted by the community as they naturally occur (Kothari, 2004) [8]. The focus of the study was not only to describe the existing community responses but also to analyze their effectiveness. By utilizing this design, the research captured a broad range of data, from residents' experiences of conflict to their perspectives on the efficacy of various response mechanisms. This design is further justified for several reasons: It enables data collection in a natural setting without manipulating variables, which is essential for studying social behaviors and community strategies in response to conflict. Furthermore, it facilitates gathering both qualitative (through interviews) and quantitative (through surveys) data, providing a comprehensive understanding of the phenomenon. Additionally, the design supports sampling from a large, diverse population, ensuring that the findings are representative of the Nairobi community.

Mathare, one of Nairobi County's oldest and most densely populated informal settlements, was selected as the study area due to its longstanding history of violent group conflicts and its residents' reliance on community-led security initiatives. This selection is justified for several key reasons. First, Mathare is a recognized hotspot for various forms of violence, including politically motivated clashes, ethnic conflicts, and resource-based disputes. These recurrent conflicts have resulted in loss of lives, destruction of property, and mass displacement, making it an ideal setting to analyze the effectiveness of community-led responses to violence. The area's instability and history of violence provide a relevant context for examining the role of grassroots security measures in mitigating conflict-related harm. Second, Mathare presents a unique opportunity to study community-driven security mechanisms. Due to limited formal policing and government intervention, residents have historically relied on informal strategies such as community watch programs, physical security measures, and communication networks to protect themselves and their assets. These grassroots initiatives serve as a critical case study for understanding how community-led security measures function in areas with weak state presence. Third, Nairobi County's ethnic diversity—reflected in Mathare's demographic composition—adds another layer of significance to the study. The settlement is home to multiple ethnic groups, including Kikuyu, Luo, Luhya, and Kamba, among others. Ethnic tensions have often been a catalyst for conflict in Mathare, especially during election periods. Examining how different ethnic groups collaborate or face challenges in managing violent group conflicts provides valuable insights into the intersection of ethnicity, security, and community resilience. Lastly, Mathare's location within Nairobi, Kenya's capital, offers broader implications for urban conflict management. As one of the country's most politically and economically significant regions, findings from this study can inform policies and strategies applicable to other informal settlements facing similar security challenges. By studying Mathare, this research contributes to a deeper understanding of how urban communities in fragile settings navigate violence and implement locally driven solutions to security threats.

The study targeted four key groups in Nairobi County who have substantial experience with conflict dynamics, ensuring that the responses collected are relevant to the research objectives. These groups include:

1. Residents of Mathare – Individuals who have lived in the area for at least five years and have experienced or witnessed violent group conflicts.
2. Nyumba Kumi Leaders – Community security representatives responsible for coordinating local safety initiatives and conflict resolution efforts.
3. Administrative Officers – Government representatives who act as intermediaries between the state and the community, providing insights into formal security measures and policies.
4. NGO Members – Individuals actively involved in peace and security programs, offering external perspectives on interventions and grassroots conflict management strategies.

To maintain the study's focus on experienced and relevant respondents, individuals who had recently moved to Mathare or had no direct involvement in security or conflict resolution efforts were excluded.

Table 1: Target Population

Category	Estimated Population Size (N)
Residents of Mathare	10,000
Nyumba Kumi Leaders	23
Administrative Officers	11
NGO Members	47
Total	**10,081**

The study employed several sampling techniques to ensure geographical representativeness and the inclusion of critical stakeholders in Nairobi County. Cluster sampling divided the area into wards or zones that frequently experience violent group conflicts, ensuring that the sample reflects the diversity of conflict-affected areas. Purposive sampling was employed to select key informants, such as Nyumba Kumi leaders, administrative officers, and NGO members, based on their direct involvement in peace and security initiatives. Simple random sampling selected residents from each cluster, ensuring every eligible individual has an equal chance of being included.

The sample size was determined using a combination of purposive and stratified sampling techniques. Since the population of Mathare residents is significantly large, a representative sample was drawn to ensure diverse perspectives. The study used Slovin's formula to determine an appropriate sample size:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n = Sample size
N = Population size
e = Margin of error (0.05).

Using this formula, the sample size for Mathare residents was calculated. For the smaller groups (Nyumba Kumi leaders, administrative officers, and NGO members), proportional stratified sampling was applied to ensure fair representation.

Table 2: Distribution of Sample Size

Category	Target Population (N)	Sample Size (n)
Residents of Mathare	10,000	100
Nyumba Kumi Leaders	23	8
Administrative Officers	11	4
NGO Members	47	16
Total	**10,081**	**128**

Data was collected using questionnaires and interview guides to ensure a comprehensive understanding of community-led security measures in Mathare. Structured questionnaires were administered to Mathare residents, Nyumba Kumi leaders, administrative officers, and NGO members to gather quantitative data on their experiences with violent group conflicts and the effectiveness of various security strategies. Additionally, interview guides were used to conduct key informant interviews (KIIs) with Nyumba Kumi leaders, administrative officers, and NGO representatives, allowing for in-depth qualitative insights into the challenges and successes of conflict mitigation efforts. This combination of methods ensured the collection of both statistical and narrative data for a well-rounded analysis.

The study used a combination of questionnaires and interview guides to collect comprehensive data. The questionnaire, detailed in Appendix A, consists of closed and open-ended questions designed to gather information aligned with the study's objectives. These questions were organized into sections to address specific aspects of the research, such as demographic data, conflict experiences, community response strategies, the role of external actors, and suggestions for improvements. Appendix B provides an interview guide for the participants to explore these issues further through in-depth discussions with key informants.

A pilot study is a preliminary step to assess the feasibility and suitability of research instruments before the main study (Pearson *et al*., 2020) [10]. According to Aziz and Khan (2020) [1], a pilot study is essential as it allows the researcher to identify potential flaws in the design of the research instruments, evaluate the feasibility of participant recruitment, and estimate the necessary resources, such as time and cost, for the entire study. Teresi, Yu, Stewart, and Hays (2022) [16] suggest that 1-11% of the sample population is adequate for a pilot test; with Sim and Lewis (2012) [13] concurring that 11% is an appropriate proportion. This study selected 11% of the sample population—equivalent to 13 participants—for the pilot. The pilot took place in Kibera, an informal settlement with similar conflict dynamics to Nairobi County, allowing for a relevant testing environment. This pilot aimed to assess the clarity and effectiveness of the questionnaires and interviews. By identifying any ambiguities or difficulties in understanding terms, the tools could be refined for optimal performance in the main study. Feedback from the 13 participants guided improvements to ensure that the instruments effectively collected accurate and relevant data during the full-scale research.

Data analysis encompassed qualitative and quantitative approaches to address the study's objectives comprehensively. Qualitative Data Analysis involved thematic analysis of interview data, where codes were developed based on recurring themes such as community-led responses and challenges encountered. NVivo software assisted in systematically coding and organizing the data, enabling a detailed examination of patterns and insights into how the communication networks adopted, organized and implemented. On the other hand, Quantitative Data Analysis focused on the data collected from questionnaires, employing descriptive statistics to summarize and interpret the results. This included calculating means and percentages to present trends and highlighted the effectiveness of community strategies. The quantitative findings were visually represented in tables and graphs, facilitating a clear understanding of the patterns and effectiveness of various community interventions. This combined approach ensured a thorough analysis, integrating qualitative depth with quantitative breadth to provide a comprehensive overview of the study's findings.

3. Results and discussion

Communication is essential for coordinating community responses to violent group conflicts. This section therefore examines the commonly used mode of communication used and aspects that made it to be most preferred.

3.1 Communication Channels Used in Conflict Situations

Respondents were asked to identify the popular mode of communication they relied on during conflict situations. The results are summarized in Table 3 below.

Table 3: Preferred Mode of Communication

Popular Mode of Communication	Frequency	Percentage (%)
Mobile Alerts	47	47%
Social Media (e.g., WhatsApp)	33	33%
Word of Mouth	14	14%
Local Radio	6	6%

From the table above, mobile alerts were the most widely used communication method, with 47% of respondents relying on them for conflict updates. This could be explained by the fact that most of the participants use ‘dumbphones’ which only let them to make calls, send and receive messages. Preference for mobile alerts can also be linked to the aspect of immediacy. For example, compared to social media, message alerts are prompt in that they one does not need to have internet connectivity to access the message. This aligns with findings by Patel and Connolly (2011) [9], who emphasize that SMS-based emergency alerts allow residents to receive real-time warnings, enabling them to take precautionary measures such as avoiding violence hotspots and securing property. Additionally, the affordability of basic mobile phones that support SMS alerts has increased the accessibility of this communication method, making it a preferred choice in low-income urban settings (Rao, 2019) [11].

On the flip side, local radio was the least used communication method (6%). While some respondents acknowledged its importance in disseminating official announcements from authorities, others noted its limited

effectiveness in real-time conflict response. This aligns with findings from Rao (2019) [11], who explains that radio broadcasts often provide general information rather than localized, immediate updates needed for rapid community mobilization. Additionally, in highly volatile situations, radio stations may struggle to adapt to rapidly changing security conditions, making other forms of communication more practical.

3.2 Role of Communication Channels in Managing Violence

Respondents were further probed on the specific roles of communication channels in managing violence

Table 4: Role of communication channels in managing violent

Role of Communication Channels	Frequency	Percentage
Providing real time information of unfolding violent incident	46	46%
Sensitizing people to preventing measures they can take to	32	32%
Coordinating intervention strategies	22	22%

As observed in table 4, the table reveals that 46% of the respondents indicated that communication channels play a crucial role in providing real-time information about unfolding violent events. This implies that, the locals are concern with the need to have an early opportunity of getting wind of what is about to happen in terms of violence thus having ample time to take the most appropriate decisions. These findings align with Lovreglio (2016), who noted that community members place a high value on early communication, which is essential for preparing for incident responses. With prior information as tensions rise, community members can effectively monitor the situation and evaluate appropriate response actions.

3.3 Challenges Experienced While Using Communication Networks During Conflicts

Despite their importance, communication networks in conflict-prone areas face several challenges that limit their effectiveness. A community member lamented that, 'sometimes at the point of need, one may experience limited connectivity thus missing out on important updates. This was corroborated by Nyumba Kumi Representative who noted that;

In some scenarios, we experience network disruptions during violent conflicts, which further complicate communication efforts. We often experience mobile networks outages or slowdowns during crisis situations, making it difficult to receive SMS alerts or access social media. Government authorities may deliberately disrupt communication channels during election-related violence or protests to control the flow of information. These disruptions create significant delays in security coordination and emergency response efforts. (Nyumba Kumi Representative).

As observed, while mobile phones are increasingly favored for managing violent conflicts, their reliability is frequently compromised by network fluctuations. This underscores the urgent need for a diverse array of communication channels to ensure effective coordination. By establishing alternative means of communication, we can better navigate unpredictable situations and maintain our ability to respond swiftly and effectively when mobile networks fail us. This aligns with the critical insights provided by Gachago (2021) [3] who highlighted that communication channels often face significant challenges, particularly connectivity issues. These obstacles can undermine their reliability, making it essential to address them to ensure effective communication. Overall, these findings indicate that mobile technology has transformed conflict communication in urban informal settlements, offering faster and more interactive ways for residents to stay informed and respond to threats. While traditional methods such as word of mouth and local radio remain relevant, particularly for older or offline populations, digital communication channels such as mobile alerts and social media have become the dominant tools for real-time information exchange and community coordination during conflicts.

The findings showed that mobile technology was preferred mode of communication largely due its ability to provide real-time information about unfolding violent events. Locals priced the need to have an early opportunity of getting wind of what is about to happen in terms of violence thus having ample time to take the most appropriate decision. This study concluded that mobile alerts were preferred mode of communication due their immediacy, accessibility and ability to provide real time information of unfolding violent incident.

4. Recommendations

Based on the conclusions, the study recommends that, the establishment frameworks that should integrate and enhance the use of other modes of communication other than mobile alerts for timely sharing of information.

5. Further Research

Based on the scope and the findings for this study, the following is the recommendation for future research: Comparative studies between urban and rural areas could also provide valuable insights into how the communication networks adopted and their effectiveness in coordinating community responses during violent group conflicts operate in different environments and whether certain approaches are transferable across contexts.

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7. References

1. Aziz S, Khan N. The importance of pilot testing in research design. International Journal of Social Science Research. 2020; 8(1):55-62.
2. Francisco RA. Collective action theory and empirical evidence. Springer Science & Business Media, 2010.
3. Gachago D. Traditional communication networks and their role in urban conflict response. African Journal of Communication Studies. 2021; 9(1):78-94.
4. Hansen A. Early warning and conflict prevention: The role of community-based monitoring networks. Journal of Peacebuilding & Development. 2009; 4(1):18-30.
5. Human Rights Watch. Ballots to bullets: Organized political violence and Kenya's crisis of governance, 2008.
6. Hunt A. The role of urban unrest in France: The 2005

riots. French Politics, Culture & Society. 2007; 25(3):1-17.
7. Klandermans B. Collective action. In C. Spielberger (Ed.), Encyclopedia of Applied Psychology (pp. 403-408). Elsevier, 2004.
8. Kothari CR. Research methodology: Methods and techniques (2nd ed.). New Delhi: New Age International Publishers, 2004.
9. Patel R, Connolly P. Crisis communication in marginalized communities: The role of mobile technology in emergency response. Journal of Urban Resilience. 2011; 12(4):47-73.
10. Pearson R, Smith T, Green M. Pilot studies in social research: Methods and considerations. Journal of Research Methods. 2020; 18(2):101-115.
11. Rao M. Media access and security information in informal settlements: Bridging the digital divide. Journal of Urban Studies. 2019; 16(3):101-117.
12. Schoeberl R. Trends in Political Violence and Mass Demonstrations. Domestic Preparedness. 2023; 10(2):140-150. Accessed on October 11, 2023, from: https://www.domesticpreparedness.com/articles/trends-in-political-violence-and-mass-demonstrations
13. Sim J, Lewis M. The size of a pilot study for a clinical trial should be calculated based on precision and feasibility. Journal of Clinical Epidemiology. 2012; 65(3):301-308.
14. Svensson I, Jones R, Williams L. Urban conflict and community defense strategies in developing regions. Conflict Studies Quarterly. 2022; 30(1):45-67.
15. Svensson I, Schaftenaar S, Allansson M. Violent political protest: Introducing a new Uppsala conflict data program data set on organized violence 1989–2019. Journal of Conflict Resolution. 2022; 66(9):1103-1130.
16. Teresi JA, Yu G, Stewart AL, Hays RD. Evaluating health surveys: Guidelines for pilot testing. Health Services Research Journal. 2022; 57(3):456-470.
17. Thurston A. The disease is unbelief: Boko Haram's religious and political worldview. Brookings Institution Press, 2018.