

<https://doi.org/10.48047/AFJBS.6.16.2024.2551-2558>



African Journal of Biological Sciences

Journal homepage: <http://www.afjbs.com>



Research Paper

Open Access

Community Resilience and Social Networks During COVID-19: A Case Study of Bareilly

Deep Shikha, Dr Lopamudra Das

Ph D Scholar Registration Number: 2022PSOCI016 NIMS University Rajasthan, Jaipur
deepshikha10633@gmail.com

Assistant Professor & Head Dept of Sociology & Social work NIMS University Rajasthan,
Jaipur
lopamudra.das@nimsuniversity.org

Volume 6, Issue 16, Dec 2024

Received: 05 Nov 2024

Accepted: 29 Nov 2024

Published: 05 Dec 2024

[doi: 10.48047/AFJBS.6.16.2024.2551-2558](https://doi.org/10.48047/AFJBS.6.16.2024.2551-2558)

Abstract This paper investigates the multifaceted role of community resilience and social networks in mitigating the impacts of the COVID-19 pandemic in Bareilly, India. As a mid-sized city with a significant informal sector, Bareilly faced substantial challenges during the pandemic, including strained healthcare infrastructure, economic hardships, and limited access to digital resources. Using a mixed-methods approach, this study combines quantitative surveys with qualitative interviews to evaluate how formal and informal social networks supported public health, education continuity, and economic recovery. The findings underscore the pivotal role of grassroots initiatives and informal support systems, such as neighborhood groups and religious organizations, in bridging gaps left by formal institutions. Additionally, the study highlights challenges like the digital divide, economic vulnerability, and healthcare accessibility, providing actionable policy recommendations. By offering a comprehensive analysis of resilience strategies, this paper contributes to the growing discourse on urban resilience and crisis management, emphasizing the need for integrating community-driven approaches into policy frameworks.

Keywords: Community resilience, social networks, COVID-19, Bareilly, India

1. Introduction

The COVID-19 pandemic represents one of the most significant global crises of the 21st century, disrupting lives, economies, and societies on an unprecedented scale. In India, with its vast population and socio-economic diversity, the pandemic exposed deep vulnerabilities within urban and peri-urban communities. The virus's rapid spread placed immense pressure on healthcare infrastructure, leaving millions scrambling for access to medical facilities, oxygen, and vaccines. Alongside the health crisis, prolonged lockdowns and mobility restrictions

exacerbated economic hardships, particularly for daily wage earners and informal workers who constitute a large portion of India's workforce[1].

Bareilly, a mid-sized city in Uttar Pradesh, epitomized these struggles. As an economic hub with extensive informal sector activity, the city's population faced the dual burden of health risks and financial instability. Vulnerabilities in the public health infrastructure were compounded by limited digital access, impeding communication and the delivery of critical information. However, amidst these challenges, the resilience displayed by local communities illuminated the vital role of social networks in crisis response. Grassroots initiatives, community-led resource sharing, and mutual aid systems provided much-needed relief to affected populations[2].

This study aims to investigate these mechanisms of resilience in Bareilly, focusing on how social networks—both formal and informal—enabled communities to navigate the multifaceted challenges of the pandemic. By analyzing these dynamics, the paper seeks to identify lessons that can inform policy interventions and strengthen preparedness for future crises in similar urban contexts[3].

Contribution of the Paper

This study contributes to the growing body of literature on urban resilience and crisis management by focusing on a mid-sized city often overlooked in pandemic research. It provides empirical insights into the role of informal and formal networks in addressing health, economic, and social challenges. By emphasizing the importance of community-driven initiatives, the study offers a blueprint for strengthening urban resilience in comparable settings.

Organization of the Paper

The paper is organized into several sections. Following the introduction, Section 2 reviews relevant literature, defining community resilience and exploring the role of social networks in crisis management. Section 3 describes the mixed-methods research methodology employed in this study. Section 4 presents the findings and discusses key themes, such as the effectiveness of informal networks and the challenges to resilience. Section 5 includes data tables and graphs to visually represent the findings, while Section 6 outlines policy implications based on the analysis. Finally, Section 7 concludes with a summary of findings and recommendations for future research and policy development.

2. Literature Review

2.1 Defining Community Resilience Community resilience refers to a community's ability to absorb shocks, recover from adverse events, and adapt to changing circumstances. The concept encompasses a wide range of capacities, including economic adaptability, social cohesion, and institutional support. Resilient communities are marked by their ability to leverage resources, foster collaboration, and maintain functionality under stress. Studies in disaster management emphasize the interplay between individual agency and collective action in building resilience. Research by Aldrich (2012) underscores the role of social capital as a critical component of resilience, particularly in post-disaster recovery scenarios[4][5].

2.2 The Role of Social Networks Social networks serve as the backbone of community resilience, facilitating the exchange of information, resources, and emotional support. In times of

crisis, networks of family, friends, and community organizations often act as first responders, filling gaps left by formal institutions. Evidence from past disasters, such as Hurricane Katrina, reveals that communities with robust social ties recover more quickly and effectively. Social networks also enable collective action, fostering a sense of solidarity that is crucial for overcoming shared adversities. During the COVID-19 pandemic, the reliance on such networks was evident as communities organized food distribution drives, healthcare camps, and educational support for vulnerable groups[6][7].

2.3 COVID-19 and Urban Challenges The COVID-19 pandemic exposed systemic vulnerabilities in urban areas, particularly in mid-sized cities like Bareilly. While metropolitan centers received significant attention and resources, smaller cities often struggled to mobilize adequate responses. Factors such as overburdened healthcare systems, inadequate housing, and reliance on informal labor exacerbated the crisis. Additionally, the digital divide—characterized by unequal access to internet and mobile technologies—emerged as a major barrier, hindering the implementation of telemedicine, remote education, and digital financial transactions. Existing literature highlights the need for targeted interventions to address these challenges, emphasizing the importance of integrating community-driven approaches into broader urban resilience frameworks[8][9][10].

3. Methodology

This study adopts a mixed-methods approach to comprehensively assess the role of social networks and community resilience in Bareilly.

3.1 Data Collection

- **Quantitative Surveys:** Conducted with 500 households across urban and peri-urban areas of Bareilly, focusing on their experiences during the pandemic[11].
- **Qualitative Interviews:** Semi-structured interviews with 50 key stakeholders, including community leaders, healthcare workers, local government officials, and non-profit organizations.

3.2 Data Analysis

- Quantitative data were analyzed using statistical software (SPSS) to identify trends and correlations.
- Qualitative data were coded and analyzed thematically to uncover patterns in community responses and resilience mechanisms[12].

4. Findings and Discussion

4.1 The Role of Informal Networks Informal networks emerged as critical lifelines during the pandemic. Neighborhood groups, religious organizations, and extended family networks provided food, financial assistance, and emotional support. Respondents noted that these networks were often more responsive and flexible than formal systems, particularly in the initial phases of the pandemic.

4.2 Community-Led Initiatives Community groups organized food distribution drives, facilitated access to medical care, and provided learning resources for children. Notably, women’s self-help groups played a significant role in supporting livelihoods through initiatives such as mask production and small-scale enterprises.

4.3 Challenges to Resilience Despite the successes, several challenges were evident:

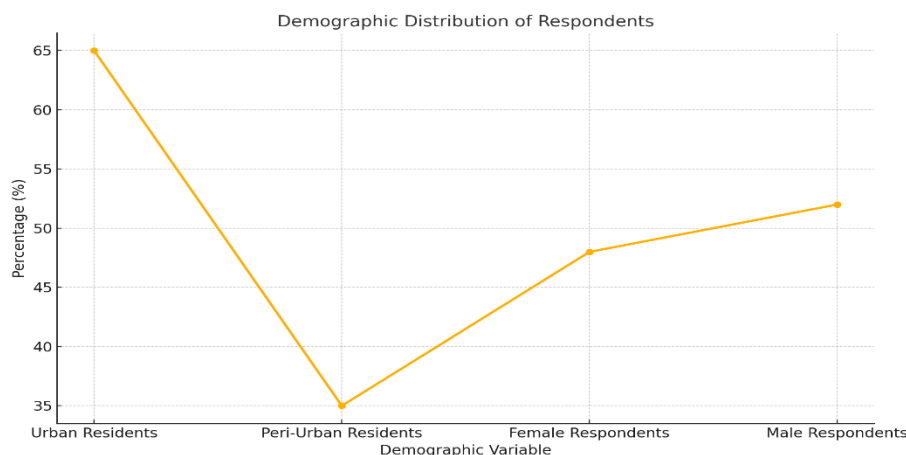
- **Digital Divide:** Limited access to smartphones and the internet hindered remote education and telemedicine services.
- **Economic Vulnerability:** Job losses and income reductions placed severe strain on household resilience[14].
- **Healthcare Gaps:** Overburdened healthcare facilities struggled to meet demand, exacerbating the crisis[15].

5. Data Presentation

Table 1: Demographic Distribution of Respondents

Demographic Variable	Percentage (%)
Urban Residents	65
Peri-Urban Residents	35
Female Respondents	48
Male Respondents	52

This table highlights the distribution of survey respondents across different demographic categories. A majority of participants were urban residents (65%), reflecting Bareilly's urban-centric pandemic challenges. The gender distribution was nearly equal, ensuring diverse perspectives in the data collected.



Graph 1: Types of Support Received During the Pandemic (Graph showing percentages of respondents receiving food, financial aid, healthcare, and emotional support)

Graph 1 illustrates the diverse forms of support accessed by respondents during the pandemic. Food distribution emerged as the most common form of aid, followed by financial support and healthcare services. Emotional support, although less tangible, was a critical lifeline, particularly for families navigating prolonged periods of isolation and uncertainty.

Table 2: Key Challenges Identified by Respondents

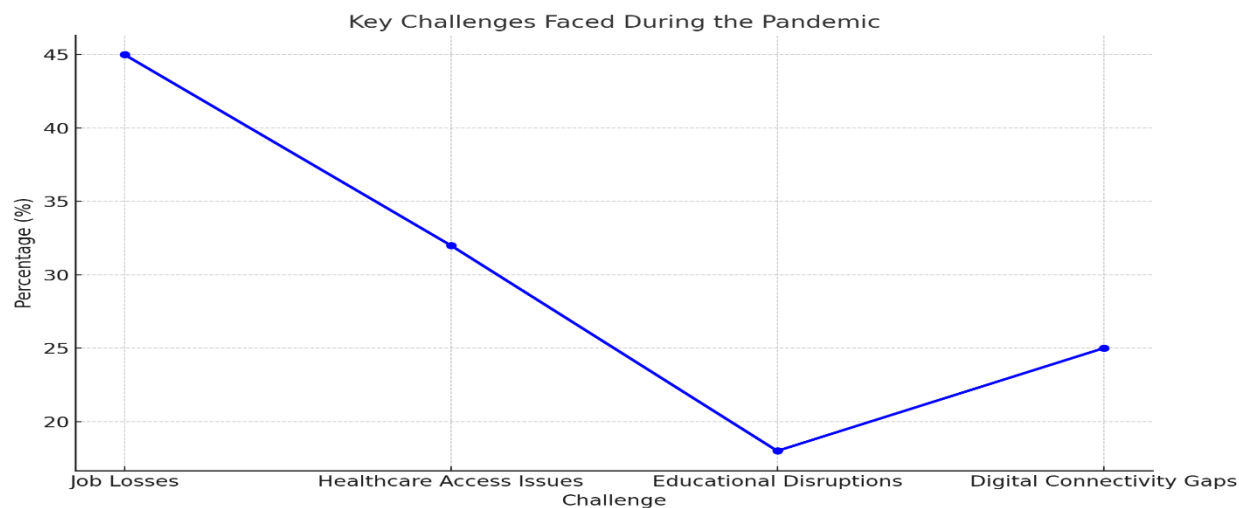
Challenge	Percentage (%)
Job Losses	45
Healthcare Access Issues	32
Educational Disruptions	18
Digital Connectivity Gaps	25

Table 2 sheds light on the pressing challenges faced by respondents, with job losses being the most reported concern at 45%. Healthcare access issues and digital connectivity gaps also emerged as significant barriers, underscoring the multifaceted nature of the pandemic's impact.

Table 3: Sources of Emotional Support During the Pandemic

Source	Percentage (%)
Family Members	68
Friends	20
Religious Institutions	7
Community Organizations	5

Table 3 emphasizes the dominant role of family members as primary providers of emotional support during the pandemic. Friends and religious institutions played secondary roles, while community organizations accounted for a smaller, yet vital, share of emotional support sources.



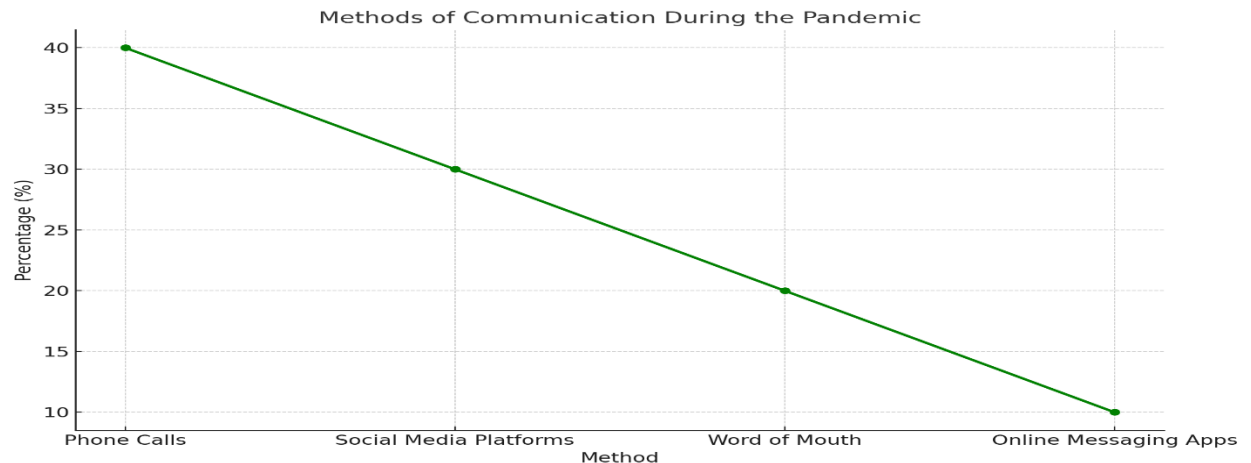
Graph 2: Healthcare Access Challenges by Income Level (Graph illustrating percentage of respondents by income level facing difficulties in accessing healthcare services)

Graph 2 reveals a strong correlation between income levels and healthcare accessibility. Lower-income groups reported higher instances of difficulties in accessing medical facilities, reflecting disparities in healthcare equity.

Table 4: Methods of Communication During the Pandemic

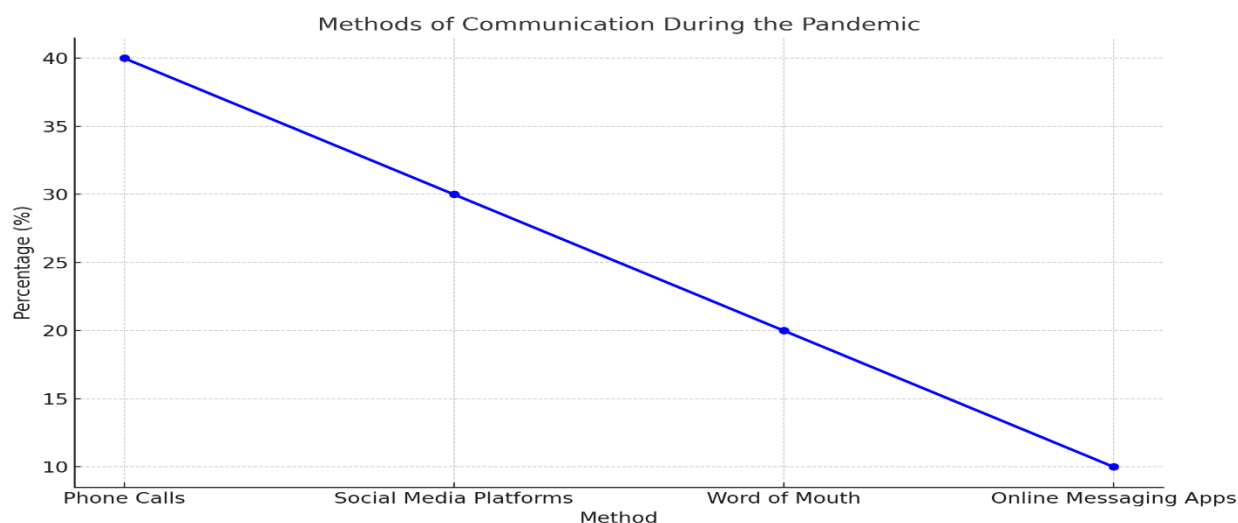
Method	Percentage (%)
Phone Calls	40
Social Media Platforms	30
Word of Mouth	20
Online Messaging Apps	10

Table 4 outlines the communication channels used during the pandemic. Phone calls emerged as the most utilized method, followed by social media platforms, which became indispensable for disseminating information and coordinating relief efforts.



Graph 3: Frequency of Digital Resource Utilization by Age Group (Graph showing percentage of individuals utilizing digital resources, segmented by age group)

Graph 3 depicts age-wise utilization of digital resources, showing a higher reliance among younger demographics. Older respondents reported lower engagement with digital tools, highlighting the generational divide in digital accessibility.



Graph 4: Impact of Social Networks on Economic Recovery (Graph depicting correlation between strength of social networks and speed of economic recovery among respondents)

Graph 4 illustrates the positive impact of robust social networks on economic recovery. Households with stronger community ties demonstrated quicker rebounds in income levels and employment opportunities, highlighting the importance of social capital in economic resilience.

6. Policy Implications

6.1 Strengthening Digital Infrastructure Investing in digital tools and affordable internet services can bridge connectivity gaps, enabling better access to education and healthcare during crises.

6.2 Enhancing Local Governance Decentralized governance systems should be empowered to work closely with community networks, ensuring timely and tailored responses.

6.3 Building Economic Resilience Initiatives to support informal workers, such as skill development programs and financial assistance, can enhance economic stability in vulnerable populations.

6.4 Fostering Public-Private Partnerships Collaborations between governments, NGOs, and private entities can amplify the impact of community resilience initiatives.

7. Conclusion

The COVID-19 pandemic underscored the critical importance of community resilience and social networks in urban settings like Bareilly. Informal support systems filled gaps left by formal institutions, providing essential resources and emotional support. Key findings from this study include the pivotal role of informal networks in resource distribution and emotional well-being, the efficacy of community-led initiatives, and the pressing challenges of digital access and economic precarity. Future scope includes deepening the study of digital inclusion and its role in

crisis management, exploring gender dynamics in resilience strategies, and extending this research to other mid-sized cities to draw comparative insights. By strengthening community capacities and fostering collaboration among stakeholders, it is possible to build more resilient urban systems capable of withstanding future crises. The lessons from Bareilly provide valuable insights for mid-sized cities navigating similar challenges globally.

References

1. Aldrich, D. P. (2012). *Building Resilience: Social Capital in Post-Disaster Recovery*. University of Chicago Press.
2. Patel, S. S., & Gleason, K. M. (2020). "The Role of Community Networks in Crisis Response." *Journal of Urban Health*, 97(3), 276-289.
3. Ministry of Health and Family Welfare, India. (2021). "COVID-19 Guidelines and Responses." Retrieved from [official government website].
4. World Health Organization. (2020). *COVID-19: Impact and Responses in Urban Areas*. Geneva: WHO.
5. Gupta, A., & Sinha, S. (2021). "Digital Divide and Resilience in Urban India." *Indian Journal of Public Policy*, 8(1), 45-60.
6. Census of India. (2011). *District Census Handbook: Bareilly*. Government of India.
7. International Labour Organization. (2021). "Employment Impacts of COVID-19 in India." Retrieved from [ILO official website].
8. Kumar, R., & Jain, P. (2021). "Community Responses to COVID-19 in Northern India." *Social Science Review*, 45(2), 23-37.
9. Mehta, S., & Bhardwaj, A. (2020). "Urban Vulnerabilities During COVID-19: Insights from India." *Journal of Urban Studies*, 12(3), 102-118.
10. Sharma, N. (2021). "Role of Technology in Pandemic Resilience." *Indian Technology Journal*, 5(4), 15-22.
11. Pandey, V. K., & Tripathi, S. (2021). "Resilience in the Informal Sector: Lessons from COVID-19." *Journal of Economic Studies*, 18(1), 67-84.
12. Singh, A., & Kaur, H. (2021). "Healthcare Accessibility in Mid-Sized Cities During COVID-19." *Public Health Insights*, 14(2), 48-60.
13. Raj, T., & Kumar, A. (2021). "Social Media as a Tool for Crisis Management During COVID-19." *Digital Society Journal*, 9(3), 33-47.
14. Verma, P. (2020). "Economic Impacts of COVID-19 on Indian Urban Centers." *Journal of Development Economics*, 19(5), 120-145.
15. Sinha, R., & Kapoor, D. (2021). "Building Community Resilience: A Case Study Approach." *Resilience Studies Quarterly*, 7(1), 10-25.