

Urban Community Resilience Amidst the Spreading of COVID-19

Subjects: Urban Studies

Contributor: Vanda Ningrum, Chotib, Athor Subroto

Based on 90% of all reported COVID-19 in the world, urban areas become the pandemic's epicenter due to population size and high-level global connectivity, rather than rural areas. Urban research related to pandemics focuses on marginal groups who have difficulty accessing health facilities, particularly in informal settlements. Amid a pandemic, insufficient isolation for COVID-19 patients may be related to the rapid increase of COVID-19 cases. Lockdown has worsened economic conditions for informal workers in urban areas, the lack of labor market opportunities, livelihood advancement, and occupational mobility for informal workers make it difficult to survive in the city. Loss of income due to the lockdown has made marginal communities in urban areas more vulnerable because they have to bear the changing needs of life during the pandemic.

Keywords: community resilience ; urban community ; COVID-19

1. Introduction

During the pandemic stage, many urban communities adapt and generally function in crises. In developing and developed countries, emerging urban farming communities contribute to feeding and providing nutrients sufficient for food-insecure communities because of the increase in food prices during the pandemic ^{[1][2]}. The lack of adequate health facilities, insufficient number of health workers, long food supply chains, and limited social security during a pandemic send a message that facing this unknown disaster requires the full participation of the community. Much evidence found that community participation and implementation at a local level can improve effective practices to combat COVID-19 ^[3]. It is similar to a previous pandemic situation, such as Ebola, where community participation is an agency to reduce the effect and mitigate the risk of the virus ^[4].

While resilience is the adaptive capacity ^[5], community resilience links a network of adaptive capacity ^[6]. Adaptive capacity is a process that develops over time and interacts with the environment ^{[7][8]}, resilience in the social system was outlined as a process to learn or transform rather than the status quo or stability ^{[6][9]}. Adaptive capacity for a community in this understanding is similar to the community adaptability proposed by Matarrita-Cascante et al. ^[10], which is the community's ability to respond to current and future changes. Interestingly, a community can respond to changes quickly and maintain the system, but some communities are slow to react and disrupt the system. However, if people look back to where COVID-19 started—Wuhan, some communities can be named as vulnerable, alienated, and inefficient communities that have lower risk resilience where spatial resilience constitutes the key influencing factor of COVID-19-susceptible communities compared to three other resilience factors: social, capital and governance ^[11].

2. Urban Community Vulnerable to the COVID-19 Pandemic

Although urban areas are considered to have better health facilities than rural areas, urban locations have a higher risk of spreading the virus due to population density, higher health and diabetes risk, a transportation hub, and acute housing distress ^[12]. The social aspect is more in the spotlight of vulnerability than the physical aspect in urban community resilience research. During the pandemic, vulnerability studies in urban areas are more directed at groups of people living in informal settlements ^{[13][14]} and people in urban ethnic minorities ^{[15][16][17]}. Being unable to afford basic needs, cannot purchase food, homeless without the chance to access any public services are vulnerabilities for certain groups in urban services ^{[18][19][20]}. Lack of water, sanitation, and hygiene (wash) is emphasized in informal settlements because they are not connected to the national water grid ^[21]. The need for clean water is not enough to meet the increasing consumption needs during the pandemic, including for consumption and washing hands. In addition, the lack of public awareness in informal settlements caused stigma against people infected with COVID-19 to be a barrier to health-seeking ^[13].

The issue of food insecurity is discussed when urban people depend on food vendors on the street during the lockdown; moreover, some people with reduced income or even total loss of income make households unable to meet their daily consumption. This vulnerability occurs in migrant communities, ethnic minorities, and groups living in informal settlements [14][21][22]. Regarding food insecurity, there are gaps distinguishing participants who have insecure food because of the impact of COVID-19 or difficulties experienced before COVID-19 [11][23].

Vulnerability in marginal groups in urban areas can also be seen in the limited involvement of informal residents in planning the COVID-19 response [13] which causes a loss of trust in governance [16]. In the case of American Indian/Alaska Native (AI/AN) communities, Maudrie et al. [16] describe that certain ethnic minorities in urban areas still experience inequality of access to health services. This problem occurs because the existing population data are not based on a particular ethnic minority basis, so this ethnic group is often not considered in the health planning involvement.

3. Initiative Community Organization

Community engagement has become a topic of discussion in tackling epidemics, such as malaria, HIV, and Ebola [24][25]. During the COVID-19 Pandemic, community engagement has also become a research theme in prevention and control efforts, not only in liberal but also in communist countries. In Vietnam, the government successfully engaged migrant workers in controlling COVID-19. In that study, the researchers emphasize the availability of resources, appropriate capacity strengthening, transparent and continuous communication, and a sense of trust in government legitimacy as the basic formula to engage the community [26].

A survey conducted by Fransen et al. [27] mapped organizational types built at the community level in dealing with the COVID-19 Pandemic in 42 cities in 32 countries.

4. Key Dimensions in Building Community Resilience amid COVID-19 Pandemic

4.1. Social Capital

Social capital and participatory capacity have the highest score of urban resilience to deal with the pandemic [28]. There are three types of social capital used to facilitate access to health systems and social support systems [29], which are social bonds (within community members), social bridges (with other communities), and social links (with the state). The three types have different levels within each community and community organization, depending on the community organization initiative [27]. Almost every study on community resilience that discusses social capital relates to Putnam's concept from 1993 to 2000, considering the community's capacity to deal with various crises [27][30][31][32][33][34].

Another approach that is seen from social capital in the COVID-19 situation gives the name "communing", derived from the word common in Ostrom's book, which means shared resources that are collectively used and managed by a local community [35]. This concept is used in response to conditions where budget cuts and privatization of the health system led to inequality within society. In terms of commonly arguing that the impossibility of fully immunizing ourselves from the virus (and from each other), people have to consider themselves as part of a community, bound not by shared properties but by a shared obligation [36]. The term solidarity is the key to the communication approach.

Studies in Africa approach the concept of communality to examine Ubuntu culture. Where people with middle-income help provide support for school feeding programs for children affected by COVID-19 in poor community groups in urban areas, in conclusion, the Ubuntu concept contains two sets of complementary values: the first focused on communality, group solidarity, co-responsibility, social justice, and sharing, and the second on respect, dignity, value, acceptance, and belonging. These two values are vital elements in building community resilience in Africa [37].

Another term used to explain social capital's role is virus-combat social capital. This concept defines social connectedness under physical isolation in China. Based on the survey in Chinese, people with higher virus-combat social capital do better in both behavioral responses (such as preventive habitus, social support, problem-solving) and measures of quality of life (such as positive coping, harmful copying, self-rated health, subject wellbeing) [30].

In one Jewish case, Communal infrastructure and social capital are the critical dimensions for community response to COVID-19 [18]. Sharing material and mental support within the Orthodox Jewish communities was identified as a potential risk factor for acquiring COVID-19 and possibly a protective element in dealing with disaster [38]. Another study states that solidarity in social capital is the solidarity within the community and needs to be incorporated into public institutions in order to increase participation and global health decision-making [39].

4.2. Social Innovation

Three research provide empirical evidence of social innovation in urban communities in the face of COVID-19. Although the explanation is similar to social capital, the two research emphasize that social innovation occurs when external actors outside the community provide intervention to the community. The first study takes the case of the American Indian urban community. When the American government reduces the Urban Indian Health Programs (UIHP) budget, the American Indian community must partner with other community organizations—including a Black-led food sovereignty movement within Baltimore City—to serve the AI/AN community ^[16].

The second study is a support program for local communities and students around Hobart and William Smith Colleges in the Finger Lakes region of New York via the ConnectGeneva.com (accessed on 21 June 2020) website. The University helps provide food assistance and financial assistance opportunities for local communities and students during social distancing. The website also presents several art performances to entertain the audience during the scary situation of the COVID-19 Pandemic ^[40]. Another case is a vaccine collaboration program to help marginalized communities obtain vaccines through the Community Vaccine Collaborative ^[41]. Social innovation is needed in the poorest populations, conflict zones, prisons, and refugee camps to promote new forms of collective action and solidarity, reducing negative impacts due to unequal conditions ^[42].

Although social innovation is an element in responding to the community's emerging needs and generating benefits for the community during a crisis, not all communities have access and justice in obtaining social innovation programs, particularly the process of emancipation for the urban poor ^{[43][44]}.

4.3. Local Resource and Decentralization

The failure of a top-down approach in disaster management is why a bottom-up approach through a more decentralized and socially sustainable community empowerment system is considered more practical because it builds sustainable risk management at all levels of society. This sustainable risk management should increase understanding of the social dimensions of disasters. It should also identify, engage, and strengthen the capacity of local communities to learn from local vulnerabilities, social risks, and impacts of disasters and transform positively towards improving community welfare ^[45]. The local community must design mitigation in COVID-19 to define its problems, challenges, and adaptation funds to mitigate COVID-19, and build community resilience ^[46].

The centralized approach in the early period of COVID-19 in China in 2019 showed that the government's role in increasing collaboration with the community was also by developing emotional communication. This communication was not considered to increase public trust in the government and the surrounding environment ^[47]. From the results of a rapid desk research, Kimani et al. ^[21] also found that centralized handling of COVID-19 will tend to increase poor accountability for assistance to the 'most vulnerable'. It will cause tension, distrust, and insecurity among communities that are already vulnerable. His study suggested that in disaster management, the community should lead data conducted to validate rights claims, increase accountability for distribution, and expand income support needed to build solidarity and improve the future resilience of these communities ^[21]. The literature also shows that residents, leaders, and community-based groups should be involved and resourced to develop locally appropriate control strategies in partnership with government and local authorities in addressing vulnerabilities in informal urban settlements ^[48].

The evaluation study of community engagement shows that external stakeholders, such as the master garden program from the University successfully encouraged community involvement because the community is wholly involved in identifying needs, planning programs, locally-owned resources, and program implementation to monitoring ^[49]. Studies in South Africa also show that the strategy to achieve food security through local production, local distribution, and food-saving infrastructure is able to respond to the disturbance ^[37].

In a case in Turkey, there are clear links between public health agencies and the communities to ensure health outcomes. This shows empirical evidence from history that occurs when communities are fully involved in handling disaster victims, places of isolation, use of transportation systems, protecting the natural environment, and providing clean water which can increase strength in the face of the COVID-19 pandemic ^[3]. In the case of a small island, such as Samoa, where the government cannot bear the loss of public health, the health system's efforts to deal with COVID-19 are to improve community skills and increase community involvement in health services together with the Red Cross–Red Crescent Movement ^[50].

4.4. Technology and Capacity Building

The theme of technology was discussed a lot in studies during the COVID-19 period, not only on data collection methods but also on technology as part of building community capacity in facing restrictions due to lockdowns. Fear of the risk of being infected with COVID-19 has encouraged the education community and workers to increase their willingness to change by leveraging social networks around the education community and promoting collective action in community groups who have access to change methods of learning and working online ^[51].

The movement to utilize social media, such as Facebook, Instagram, and other social media is a strategy for the restaurant owner community in Tokyo to survive during the COVID-19 Pandemic. In a situation where there are no tourists and social activities, restaurant owners use social media to promote menus and sell and deliver them to local consumers in their communities. This new change in selling also helps local consumers still obtain food without leaving the house ^[52].

Furthermore, social media is used as a bridge to provide literacy in responding to the pandemic by increasing community engagement and participation through (1) past and memory; (2) places; (3) voice and wisdom; (4) recognition and solidarity and (5) participation and learning ^[33]. Invitations primarily drive social action movements in informal settlement communities in Latin America through social media ^[14]. During the fight against COVID-19, technology increases the efficiency and capacity of network governance at the community level, not only in coordinating human resources but also in self-government through pro-democracy ^{[47][53]}. In the case of Pakistan, public knowledge of the pros and cons of issues is widely obtained through social media, and even social media can influence positive behavior in alertness to various threats ^[54].

Technology is a tangible asset that can increase population participation, transparency of government systems, and social connectedness from urban planning. During a pandemic, technology plays a role in improving the physical and mental health of the population and helping to maintain the function of education and work systems amid the limited mobility of the city's population ^[55]. Another study shows that digital infrastructure can strengthen health care quality with an online platform for consultation ^[56]. However, there are several challenges and barriers to applying technology in crisis management, such as privacy, confidentiality and trust, social inclusivity, political bias and the spread of misinformation, technical problems, and urban functioning in the education and employment ^[55].

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