



Research on the Construction of Local Grass-roots Community Emergency Management Systems Under the Normalization of Epidemic Prevention and Control

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Abstract. As the basic unit of society, the community is the front line of epidemic prevention and control. Its emergency management system is an important part of the entire social emergency management system, which is directly related to the effect of epidemic prevention and control in society. However, under the situation that epidemic prevention and control tend to be normalized, grass-roots communities still face many difficulties in the actual progress. Through theoretical research and analysis, it analyzes the problems existing in the construction of the emergency management system in grass-roots communities, and proposes optimization strategies from four aspects: building a power-responsibility matching mechanism, establishing an intelligent platform, improving emergency plans, and implementing emergency drills.

Keywords: grassroots community; emergency management; epidemic prevention and control; system optimization

1 Introduction

The grassroots community is the most basic unit of the city and the foundation of city management. At present, the new crown pneumonia epidemic is still spreading, and the epidemic prevention and control situation is becoming more and more normalized. As the basic unit of society, the community is the front line of joint epidemic prevention and control. The construction of its emergency management system directly affects epidemic prevention and control effect of the society[1]. Grassroots communities are the basis for the development of urban emergency management and an important part of the construction of the national emergency management system[2]. Stability is important [3]. However, the current community monitoring and early warning system are not perfect, and the information dissemination efficiency is gradually reflected in

epidemic prevention and control. Therefore, how to effectively optimize the grassroots community emergency management system is an urgent problem to be solved.

2 The evolution of emergency management

Emergency management originated in the West, and the foreign academic circles did research on the emergency management of emergencies relatively early, which was originally called crisis management. Before the 1950s, the research in Western countries was still on natural disasters and their responses. From the 1960s to the 1980s, there was a climax in the research on crisis management in the West. The research field expanded from the political field to the economic and social fields, and from the natural disaster field to the public crisis management field. In the 1990s, with the end of the Cold War, crisis management developed into a global theme, and crisis management began to move into new fields such as business management, natural disasters, and economic issues. The occurrence of a series of events, such as the Three Mile Island nuclear power plant accident in Pennsylvania and the Chernobyl nuclear power plant disaster, made the importance of crisis management continue to increase. Since the beginning of the 21st century, the research on emergency management of emergencies has become the focus of western crisis management research. Foreign countries have also set up many specialized research institutes on the emergency management system of public emergencies, and their research results are numerous. Such as Augustine's six stages of emergency crisis management, the "4R" strategy of crisis management proposed by Robert Heath, and the four-stage model of crisis life cycle proposed by Steven Fink. These studies make the crisis management theory more scientific and more feasible. These excellent ideas and theories have a good reference for other countries and regions to carry out research on emergency management of public emergencies.

3 The development of emergency management research in China

Compared with developed countries, the theoretical research of emergency management in my country started relatively late. Beginning in the 1990s, under the influence of the second upsurge of emergency management research in the world, my country has also begun to gradually involve the comprehensive management of public emergencies. In the early stage, my country's emergency management research only involved natural disasters or specific disasters, mainly based on the research of disaster science. The paper "Crisis and Crisis Management" published by Wei Jianing in 1994 marked the beginning of our country's entry into the field of public crisis management of emergencies [4]. The outbreak of SARS in 2003 sounded alarm bells nationwide. My country began to strengthen the construction of an emergency management system for public emergencies, and issued the Regulations on Emergency Response to Public Health Emergencies. Under this background, my country has formed an emergency management system with "one case and three systems" as the main content, which

indicates that my country's research on emergency management has gradually entered a period of rapid development. In terms of theoretical research, some universities and research institutes have successively established research institutions on emergency management, which have produced certain research results. Such as "Crisis Management - Challenges Facing China in Transition Period" by Xue Lan of Tsinghua University [5], "Government Crisis Management" by Li Jingzhong [6], etc. After the "SARS" incident, emergencies such as the 2008 southern snow disaster, the "5·12" Wenchuan earthquake, and the 2009 H1N1 influenza epidemic occurred one after another. In view of the government's performance and many problems in the emergency response to these "big events", Chinese scholars continue to expand their research on the field of emergency management. Judging from the practice in recent years, party committees and governments at all levels insist on building and improving the emergency management system as a major task in preventing and responding to various risks, challenges, contradictions and crises, and promoting the scientific and harmonious development of the economy and society. The construction of the case-three system has carried out fruitful work in many aspects, and promoted the construction of my country's emergency management system.

4 The necessity of construction of community-level emergency management system in my country

The party and the state attach great importance to the construction of emergency management capability system. The Decision of the Central Committee of the Communist Party of China on Adhering to and Improving the Socialist System with Chinese Characteristics and Promoting the Modernization of the National Governance System and Governance Capability, adopted by the Fourth Plenary Session of the 19th CPC Central Committee, calls for "building a unified An emergency management system with command, specialization and regularity, agile response, and top-down linkage, optimize the construction of the national emergency management capability system, and improve disaster prevention, mitigation, and relief capabilities." On November 29, 2019, General Secretary Xi Jinping also emphasized in the 19th collective study of the Political Bureau of the CPC Central Committee that "to give full play to the characteristics and advantages of my country's emergency management system, and actively promote the modernization of my country's emergency management system and capabilities". At the critical stage where the prevention and control of the new crown pneumonia epidemic is the most difficult, General Secretary Xi Jinping emphasized that it is necessary to study and strengthen the epidemic prevention and control work, innovate and improve major epidemic prevention and control measures in terms of systems and mechanisms, improve the national public health emergency management system, and improve the response to the epidemic. In order to comprehensively improve the capital's ability to respond to public health emergencies and accelerate the modernization of the public health governance system and governance capacity, the Municipal Party Committee and the Municipal Government's "On Strengthening the Construction of the Capital Public Health Emergency Management System" "Several Opinions", the General

Office of the Beijing Municipal Committee of the Communist Party of China, the General Office of the Beijing Municipal People’s Government issued the “Three-Year Action Plan for Strengthening the Construction of the Capital Public Health Emergency Management System (2020-2022)”, requiring that by 2022, cities, districts, streets (townships and towns), the community (village) four-level public health governance system has become more complete, the community health service center has achieved full coverage, and the public health and basic medical service capabilities have been significantly strengthened. The document especially emphasizes the need to improve the grass-roots public health prevention and control system. It can be seen that both the national and local levels attach great importance to the construction of the grass-roots emergency management system, and the research on the construction of the grass-roots community emergency management system is in line with the development of the times and the need is urgent. Figure 1 is a block diagram of the important time development of the construction of my country's emergency management system.

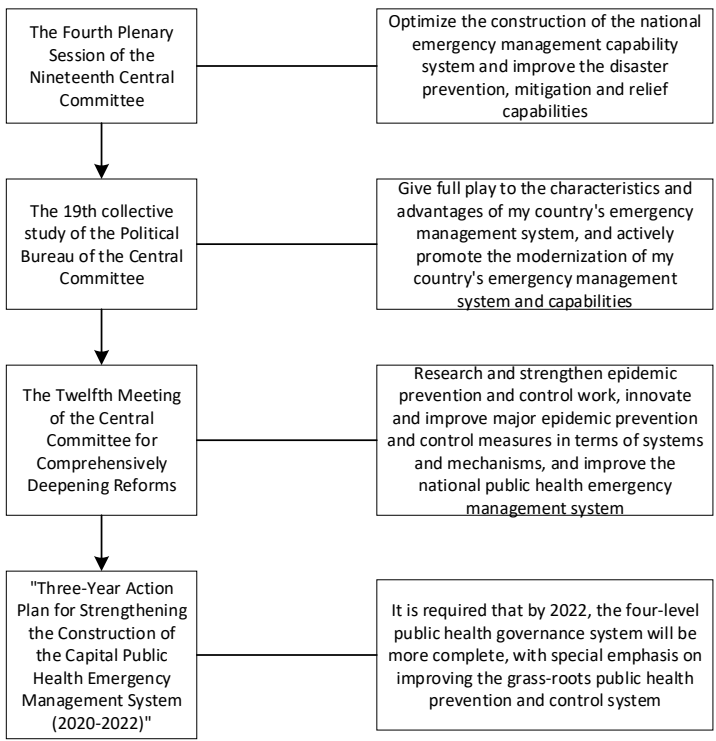


Fig. 1. The development block diagram of my country’s emergency management system construction (Photo credit: Original)

5 Current problems in the emergency management system of grass-roots communities in China

Looking at the above research, it is found that domestic scholars mainly focus on the research on ways to improve the construction of emergency management system, lack of grasp of the changes and development of my country's grass-roots emergency management system, and have no in-depth research and development of comprehensively improving the construction of emergency management system for public health emergencies. The scope of research is also relatively broad, and there are few empirical studies specifically targeting specific regions and grassroots communities. Judging from the capital's response to the new crown pneumonia epidemic, my country's current emergency management system for public health emergencies has a weak monitoring and early warning system, lack of on-site control equipment, outdated equipment, imperfect command system, insufficient emergency linkage and collaborative command capabilities, and high and low levels. There are problems such as poor information dissemination and interaction, insufficient material reserves, inadequate emergency drills, untimely response actions, imperfect emergency laws and regulations, and imperfect community emergency plan system. For example, emergency plans play an important role in emergency management. However, the current practice of epidemic prevention and control shows that there are certain deficiencies between the emergency plans and actual response actions of grass-roots communities. Although some communities have formulated emergency plans, the plans are inconsistent with the basic situation of the community. Although my country has clarified the idea and direction of the construction of the emergency management system from the top level, local areas, especially the grass-roots communities, still face many difficulties in the actual promotion process. At present, epidemic prevention and control tend to be normalized, which is different from the emergency management of previous emergencies. It is urgent to further optimize and improve the ideas for the construction of local grass-roots community emergency management system based on the characteristics of local grass-roots community emergency management. Objectives and main contents to optimize the emergency management system of the capital's grass-roots communities.

6 Optimization strategy of emergency management system for grassroots community emergencies

6.1 Build a mechanism for matching rights and responsibilities of grassroots communities

When an epidemic occurs, the community, as the front line of prevention and control, has the responsibility to respond quickly to prevention and control, but the grass-roots community has very limited rights such as law enforcement power and coordination power [7], making it difficult to respond quickly in the first place. Therefore, building a system of matching rights and responsibilities of grassroots communities, sinking rights resources, and giving grassroots communities autonomy to the greatest extent

can effectively improve the ability of grassroots communities to prevent and control the epidemic. Government departments should formulate in accordance with the law and revise the implementation rules for community response to public health emergencies in a timely manner according to the actual situation, empower communities in accordance with the law, and clarify their responsibilities and tasks in epidemic prevention and control. With a clear line of authority and responsibility, grassroots communities can carry out effective emergency response actions in the first time.

6.2 Build an intelligent platform for grassroots communities

Optimizing the emergency management system is inseparable from the guidance of science and technology, using modern technologies such as big data, artificial intelligence and cloud computing to establish an intelligent platform for grass-roots communities, integrating the mayor's hotline, government applications, WeChat platforms and mobile terminals to build real-time Share the data information database to establish an interoperability network between the city-district-county-town-street-community, and realize the data sharing of public service resources during the epidemic prevention and control period [8]. And the integration of video, GPS positioning, etc. can realize 24-hour security monitoring. In the event of an emergency, the risk source can be quickly located and alarmed. The intelligent platform not only solves the problem of poor interaction between the community and superiors in information dissemination, but also improves the monitoring and early warning level of the grassroots community.

6.3 Improve grassroots community emergency plans

Based on the actual situation of the community, formulate or revise and improve the emergency plan for the grass-roots community. The formulation of the emergency plan should include the complete emergency response process, the deployment of epidemic prevention medical staff, the reserve and supply of emergency materials, etc., to solve the problem of poor operability of the community emergency plan. In view of the weaknesses of community epidemic prevention and control, improve the specific responsibilities of each person in charge of the community and related epidemic prevention workers in the emergency plan, and the content is concise and clear, so as to improve the pertinence of the grass-roots community emergency plan. In addition, the improvement of the community's emergency plan also needs to combine the surrounding environment, population and other conditions of the community, and form a linkage mechanism with other surrounding communities [9], so as to facilitate rapid response after emergencies and protect residents' lives in the most efficient way.

6.4 Implement grassroots community emergency drills

In the process of epidemic prevention and control, the community should actively summarize the epidemic prevention experience, and carry out multi-form, multi-channel and multi-level epidemic prevention drills based on the characteristics of the community and the requirements of epidemic prevention and control as well as the content of

the improved emergency plan. As epidemic prevention and control becomes normalized, epidemic prevention drills should also become normalized. Regularly organize to ensure that grassroots communities conduct emergency drills at least once every half a year. During drills, not only should the residents' ability to respond to the epidemic be improved, but also attention should be paid to training emergency rescue teams, and gradually improving the community's emergency response capabilities to emergencies. In addition, the intelligent platform of grassroots communities can also be used to track the drill site in real time. Experts can evaluate the effect of emergency drills through the platform and make corresponding suggestions to improve the effectiveness of emergency drills in grassroots communities.

7 Conclusions

As the front line of epidemic prevention and control, the grassroots community's emergency management system is directly related to the social epidemic prevention and control effect. In view of the current problems in the emergency management system of grass-roots communities in my country, corresponding optimization strategies are proposed to optimize the existing emergency management system of grass-roots communities, which can effectively enhance the ability of community emergency management. When emergencies occur, the optimized grass-roots community emergency management system will make more accurate and timely emergency response actions for the community, achieve precise prevention and control, and ensure the safety of people's lives, which is of great practical significance.

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