Study on Early Warning Mechanism of Infectious Diseases at the Intersection of Legal Empowerment and Administrative Structure

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Abstract: As the key to early prevention and control, early warning of infectious diseases is of great importance to prevent the further spread of contagious diseases. The new crown epidemic's almost ineffective early warning state has prompted a review and rethinking of the existing early warning system. The conflicts and contradictions in the current laws on early warning of infectious diseases have caused difficulties in their application, and the political considerations and conflicting roles of local governments under the administrative hierarchy in the face of emergencies have had an impact on early warning, so it is essential to harmonize the laws with administrative operations. Furthermore, it is necessary to improve the legal mechanism of early warning, clarify the authority and responsibilities of early warning, enhance the government's awareness of risk prevention and control, and hedge the influence of the existing administrative system by granting certain early warning powers to professional institutions, to achieve timely and effective early warning.

1. Introduction

The novel coronavirus pneumonia outbreak ("new coronavirus") has become a global public health event. Although the Chinese government has initially interrupted its spread in China through scientific and practical control measures, the outbreak has revealed some of the problems in the early warning stage of infectious diseases in China. The first case already existed before December 1, 2019, based on available medical investigation evidence, but only 40 days later, the Wuhan Municipal Health Commission announced a preliminary determination of a novel coronavirus. This suggests that the existing early warning mechanism for infectious diseases in China was in a state of near "failure" in this outbreak, and to some extent, affected the management of the epidemic. [1]

From a legal point of view, this article sorts out China's laws and regulations on infectious disease early warning, takes the entire contagious disease early warning legal mechanism as the perspective, and combines China's administrative structure and system to analyze the issues of the infectious disease early warning legal system, and proposes improvements. The suggestion is to provide a reference for developing China's public health legal system.

2. Review of China's Current Legal System for Prevention and Treatment of Infectious Diseases

The legal system regulates infectious disease incidents for emergency response as a public health emergency. China has initially built a complete existing emergency response system. The ERL is a comprehensive law that, in principle, overrides the personal emergency response laws established for different areas.

The current legal system of infectious diseases in China comprises administrative regulations, departmental regulations, local regulations, and local normative documents.

2.1 Laws

The legal framework comprises the ERL (People's Republic of China Emergency Response Law) and the LPTID (the People's Republic of China Law on Prevention and Treatment of Infectious Diseases). ERL provides emergency preparedness and response, monitoring and early warning, emergency treatment and rescue, post-event recovery and reconstruction, and other emergency response activities [2]; in comparison, the LPTID primarily regulates the macro-level national policy on preventing and controlling infectious diseases, the classification of infectious diseases, and the powers and responsibilities of administrative organs responsible for infectious disease management. The latter defines the state's policy for infectious disease prevention and control, the classification, and the distribution of powers and responsibilities among administrative organs responsible for infectious disease management on a macro level.

2.2 Administrative regulations

The emergency management system's fundamental framework is "one case, three systems," ("A case" refers to the emergency plan, "three systems" refers to the emergency management system, emergency management mechanism, and emergency management legal system), based on the State Council's overall national emergency plan issued at the administrative regulation level [3]. An emergency plan is a strategy or program developed in advance for a potential major accident (incident) or disaster to ensure that emergency and rescue operations are conducted quickly, efficiently, and effectively and minimize accident losses. [4] China's emergency plans are currently divided into four categories: natural disasters, accidents and disasters, public health emergencies, and events affecting social security.

External force models triggered by various emergencies are critical for the Chinese government's agenda-setting [5]. China's current emergency management system for public health emergencies was established following the 2003 SARS epidemic. In April 2003, the Chinese government issued the Emergency Regulations for Public Health Emergencies, which regulated the overall emergency response system for public health emergencies on a legal level and clarified prevention and control policies, jurisdictional agencies, and early warning and emergency response procedures. Thus, the SARS crisis catalyzed China's stretto strengthen its emergency management system, with 2003 serving as the starting year [6]. China implemented various emergency plans for public emergencies, ranging from central to local governments, to establish a sound risk prevention and control system. In China, emergency plans are classified into six categories based on their subject matter: general national emergency plans, unique emergency plans, departmental emergency plans, local emergency plans, emergency plans developed by enterprises and institutions, and emergency plans developed by organizers of significant gatherings/events (According to the article 1.6 of The National Emergency Response Plan for Public Emergencies). Among them, public health emergencies are managed by the National Health and Wellness Commission, responsible for issuing and coordinating a national emergency plan on behalf of the State Council.

2.3 Departmental regulations

The departmental regulations are primarily based on some procedural, operational standards issued by the NHWC (formerly the Ministry of Health) regarding the reporting and disposal of infectious diseases by disease control departments and medical institutions, such as the Administrative Measures for Reporting Information on Public Health Emergencies and Infectious Diseases (2006 Revision), and the Administrative Measures for Pre-Checking and Triage of Infectious Diseases. This section primarily contains the NHC (National Health Commission of Republic of China, A constituent department of the State Council of China, in charge of the national health administration of China) for primary health care management agencies, disease control agencies, and medical institutions, as well as practical and operational regulations.

2.4 Local regulations and local normative documents

Local rules and normative documents are broadly divided into local emergency plans, Local resolutions, and measures to implement laws related to infectious diseases.

The local emergency plan is a local emergency plan developed by the local government under the framework of the overall national emergency plan, combined with the actual situation of the local area. For example, the "Beijing Emergency Regulations for Public Health Emergencies" and "Guangdong Emergency Management Measures for Public Health Emergency.". Local implementation of infectious disease-related laws and resolutions and measures are the provincial hall legislature according to the relevant laws, combined with the actual situation in the province to develop implementation measures. For example, local regulations and normative documents can be broadly classified into two types: local emergency plans and local resolutions and measures to implement infectious disease-related laws.

3. Limitations of the operation of the early warning mechanism for infectious diseases in China3.1 Legal Level

As stated previously, China has no specific early warning laws or regulations. Therefore, the legal mechanism of early warning is only understood through provisions of infectious disease and public health laws and regulations.

According to the current regulations in China, the regulations on early warning conflict, and it is unclear which institutions and levels of institutions can issue an early warning. The first two are valid laws administered by the NPC and its Standing Committee, the second only to the Chinese Constitution, and the last is proper administrative regulations issued by the State Council. The first two paragraphs should be applied first in terms of legal effect. There is no provision in the two laws for priority application and no legislative or judicial interpretation to explain the Law's application in specific situations. The dilemma will be faced with the choice of application. The NPC Standing Committee should interpret the conflict of laws.

Second, China's early warning system adopts a "graded warning" system. According to the LPTID, infectious disease incidents are classified into three categories: A, B, and C, and based on these three categories, different authorities and levels of prevention and control measures are stipulated. On the other hand, the ERL is divided into four groups of emergencies, especially significant, significant, large, and general, which is different from the three levels of the LPTID, which also causes some trouble in applying the Law.

To summarize, the contradictions and differences between the aforementioned diverse laws result from a lack of uniform legislation. The provisions relating to institutions and mechanisms are not identical between the comprehensive Law and the single legislation. There are some conflicts between the two, resulting in disagreements among local governments regarding which Law should be applied during the early warning and response to the emergencies process. [9]

By examining the pertinent regulations, it is clear that Article 38 of the Prevention and Control of Infectious Diseases Law contains a separate provision on the information release system, which details the authority to release information in the event of an infectious disease outbreak or epidemic; thus, this provision can be interpreted as stating that information release and early warning are not synonymous procedures and that there is no causal relationship between the two. However, the ERL provides for information release in Articles 44 and 45, i.e., as one of the measures following the warning, information about the outbreak is released to the community. Therefore, the subject of the warning is entitled to the power to release information. As a result, the current Law is ambiguous regarding the provisions governing the release of information about infectious diseases. It contains a conflict regarding the authority of the subject of the information release.

3.2 Administrative level

As the first-line authorities facing public health emergencies, local governments have the advantage of being timelier in collecting relevant information and the response and disposal of emergencies. Based on China's existing information reporting system for infectious diseases, the existing administrative procedures for reporting contagious diseases are theoretically less time-consuming. The primary issue now is timely warnings in an outbreak's early prevention and control stages.

According to the current administrative framework in China, all levels of government operate under a strict administrative hierarchy, which is an organizational system and management style with a clear division of labor and order of authority and positions, and with rules as the main body of management [10]. As a result, most non-top-level governments prioritize and set their own "power boundaries" before using them. Because of the subordination of the subordinate to the superior and the overwhelming management system, this "boundary of power" is often not between the government and the citizens but between the government at that level and the government of its superior. However, calculating this power distinction and fearing conflicts with higher authorities in the border zone often creates a power vacuum.

3.3 Realistic operation of infectious disease early warning and institutional conflict

When confronted with a broad range of administrative tasks, particularly under the strict section structure, the distribution of responsibilities between higher and lower levels of government is frequently accomplished through assignment subcontracting. By delegating administrative tasks to lower-level governments, higher-level governments can assign some or all of them for completion and use the quantity and quality of completed assignments as a critical criterion for administrative evaluation. [11] According to a news media survey of grassroots governments' workloads, a township deputy secretary of politics and Law held more than 280 meetings per year, demonstrating that grassroots governments' workloads are not underestimated. [12]

As discussed earlier, local governments have a responsibility to deal with public health emergencies, both administratively and socially, by issuing early warnings when they can be foreseen and minimizing losses to the public interest. However, local governments are subject to many limitations in exercising their authority as the governed.

(1) Articles 44 and 45 of the ERL state that issuing an early warning activates the emergency plan and gives the government special management powers. However, issuing warning information may cause panic among the local public, resulting in security issues. In addition, many public activities may be canceled due to the emergency plan, affecting the local economy. The choice between early warning and the "overall economic situation" is often difficult for local governments.

Second, the Chinese government has always been a "paternalistic government" that values its public image. Even if a local government later retracts or cancels a warning, the public will believe that the government is wrong or has made a mistake. So, rather than risking misinformation, the government usually chooses to verify information after release.

- (2) Diagnostics of infectious diseases require professional medical technology, and prevention and control of infectious diseases require a comprehensive and coordinated effort involving public health, medical technology, administration, and other factors. When it comes to unexplained contagious diseases, it is critical to rely on solid medical technology and medical experts with a higher level of expertise to collaborate to quickly and accurately identify and confirm, making collaboration and resource coordination a significant challenge for a grassroots local government.
- (3) According to the ERL, the government is responsible for responding to public health emergencies on its territory. However, since administrative agencies, not professional agencies, have the legal authority to issue warnings, the process is not truly "professional people doing professional work."

Early warning is theoretically based on professional institutions monitoring and assessing risk. It can be activated when experts believe the risk exceeds a particular threshold value. Still, the current

setup gives administrative agencies power, leading to inevitable non-professional interference in issuing an early warning, and gradually administrative and politicized.

Lesser Penalties for Violations of the LPTID are stipulated in Chapter 8 regarding accountability. This article focuses on local governments and health institutions' responsibilities. Article 65 holds local governments accountable for failing to report infectious diseases, concealment, misrepresentation, and failure to organize timely treatment.

(4) The regulation's goal is to hold the government legally accountable for "inaction," i.e., monitoring and encouraging the government to fulfill its obligations actively. After "acting," the author believes the relevant laws and regulations do not identify and investigate the government's responsibility. As stated previously, the government is reluctant to issue warnings because it cannot foresee the risk of issuing warnings and is afraid of liability if the signs fail. Because scientific research has limitations, neither the relevant institutions nor the government can guarantee that all studies and assessments of infectious diseases are accurate. Suppose that the relevant institutions report inaccurate information to the government, which then issues an early warning later found to be excessive or erroneous. Is it possible to exempt the government from liability?

Thus, the absence of liability provisions in-laws and regulations increases the government's concern about issuing early warnings, leading to the government abandoning timely alerts to minimize risks.

4. Exploration of ways to improve the coordination between the infectious disease warning system and administrative operation

(1) The existing legislation and regulations on early warning are contradictory. When combined with the administrative section system's influence on local government administration, the law's lack of clarity and contradictions equates to giving the local government an excuse to absolve itself of responsibility. Thus, the root cause of attempting to resolve this issue is to clarify the subject of early warning responsibility; by clearly designating a certain level of government, we can maximize the reduction of mutual shirking and shirking of responsibility, which helps to improve the government's sense of responsibility and active implementation of its early warning responsibilities.

The Law should be improved to avoid the existence of risks by avoiding political considerations by the government on the early warning procedure. In the formulation of the warning activation procedure, the warning activation conditions should be quantified, i.e., the warning can be activated as long as the risk of the current infectious disease exceeds the threshold value set by the Law after the monitoring by professional institutions and the judgment of skilled technicians, to avoid the interference imposed by the government in the evaluation of the warning activation.

(2) A "whistleblower" is anyone who reports violations of the UNCAC to the relevant authorities "in good faith and on reasonable grounds." The Convention defines a "whistleblower" as "anyone who reports a violation of the Convention to the relevant authorities in good faith and on reasonable grounds." [13] The whistleblower system protects those who reveal the truth in the public interest. The existence of "whistleblowers" is also required for early disease detection. Whistleblowers can report delays, laxity, and irregularities in risk management procedures. Whistleblowers can also avoid expert "dictatorship" and expert system failure due to expert bureaucratization. [14] The current Chinese infectious disease legal system prevents expert system failure.

The Chinese infectious disease legal system currently lacks "whistleblower" protection. Article 58 of the LPTID gives units and individuals the right to report to administrative departments; Article 66 defines whistleblowers' legal responsibilities. Unfortunately, the current law does not protect whistleblowers' rights and interests, which means that when they reveal insider information, they may face difficulties and retaliation from their employers, medical institutions, and even local governments. "Under one point of benevolence lies nine points of selfishness," said British philosopher Herbert Spencer. Thus, the lack of protection of whistleblowers' rights and interests will affect and discourage them, ultimately harming the public interest. So, some scholars argue that whistleblowers' rights and interests should be protected by law to avoid retaliation from government agencies and avoid civil and criminal liability if their information is factual. So long as the information provided is accurate, the

"whistleblower" is immune from retaliation by the relevant agencies. [15] As long as the information provided is correct, the whistleblower's rights and interests are protected from retaliation by the agency.

(3) In the reality of mass migration and rapid transportation development, infectious diseases may have had a wide range of transmission from the time they appear to the time they are detected. Therefore, whether it is legislative or administrative, the goal is to issue early warnings and take action as soon as possible. However, regardless of how the procedures are regulated, the government needs to implement the spirit of risk prevention fundamentally.

It is better to take timely preventive measures to avoid or reduce risk based on knowledge and information that is not sufficient at the moment, even if it is not entirely sure. [16] Being involved in risk assessment and respecting expert opinion are essential principles of risk prevention because public health events are highly specialized. Preventing the government from self-closing the early warning process and maximizing its timeliness and efficiency should be central to its implementation of risk prevention.

5. Conclusion

In a sense, human history is a struggle against germs, diseases, and infectious diseases. From ancient times to the present, the battle against infectious diseases has shown the glory of human reason and fraternity and the power of human solidarity. Modern, professional government agencies now prevent and control infectious diseases, but we must all be aware of the risks. Local governments' early warning powers protect the social good in their jurisdictions and, to some extent, the public interest of the whole country. Of course, no one can fight infectious diseases alone. However, we must all raise our awareness of infection prevention and control to reduce the risk of disease spread. We will respond to the next infectious disease crisis with ease and ultimately protect the community's safety and stability if we all work together.

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