The Change of Public Health Emergency Policy in China: Course, Logic, and Prospect

-- An Analysis Based on Historical Institutionalism

Jinqiu Wang
School of Public Administration, Sichuan University, Chengdu 610000, China

Abstract

With the frequent occurrence of various public health events, systematic analysis of public health emergency policies is urgently needed. Based on the historical institutional framework, it can be found that China's public health emergency policy has experienced four stages: slow start, rapid development, gradual adjustment and comprehensive improvement since the founding of the People's Republic of China. From the perspective of deep structure, economic level, social governance concept and scientific and technological development affect the evolution of public health emergency policy; From the perspective of path dependence, the policy is strengthened by increasing returns. From the perspective of dynamic mechanism, the interaction between key nodes and policy stakeholders promotes policy development. In the new era, the future development of China's public health emergency policy should grasp the key nodes of institutional change, enrich the policy system, improve the social participation mechanism, and encourage emergency technical innovation, and then realize the comprehensive improvement of China's public health emergency response capacity.

Keywords

Public health emergency policy, policy changes, historical institutionalism.

1. Introduction

"There is no great historical disaster that is not compensated by the progress of history", China's public health emergency system is constantly improved and developed under the impact of one public health crisis after another. Since the founding of the People's Republic of China, the government has issued a series of public health emergency policies to slow down the spread of negative effects of public health events and weaken their adverse social impact and economic losses. However, in the new era and the situation of the normalization of the novel coronavirus epidemic, China's public health emergency policy faces new challenges and tasks. In view of this, this paper retrospects the historical vicissitudes of China's public health emergency policy, explores the basic logic of its vicissitudes, and hopes to provide experience and suggestions for the development of China's public health emergency policy in the new period.

Public health emergency policy refers to various policy documents formulated by the Party and the state to safeguard and promote the public health emergency work in our country. Its purpose is to reduce the harm of public health emergencies and improve the ability of public health emergency response. Public health emergency policy provides the basis and system guarantee for the smooth development of public health emergency work in our country. After reviewing and sorting out the research on public health emergency policies, it can be found that domestic scholars have conducted extensive research on public health emergency policies since the outbreak of the SARS epidemic, and the research on public health emergency policies in the
academic community has basically focused on two perspectives: one is to evaluate and predict public health emergency policies from the perspective of statistics. This perspective focuses on the application of research techniques or tools, and describes the course of policy evolution through comprehensive quantitative research on public health emergency policies (Xia Liu et al., 2021, and analyzes the effects of different policy tools in the field of public health emergency response (Xuepu Ma et al., 2020; Yinghong Wang et al., 2020). The second is to analyze the historical evolution of public health emergency policies from a historical perspective. The research from this perspective focuses on the background and causes of policy changes, and concludes that the changes of China’s health emergency policies are challenged by the international situation (Lan Xue, Peng Zongchao et al, 2021), the occurrence of focal events (Shaoguang Wang, 2020), and the deviation of policy implementation (Hejing Yuan and Teng Shao, 2014) and other objective factors, but also value concept (Wei Li, 2020) and other subjective factors.

In general, there have been many achievements in the research on public health emergency policies, but the total amount of literature is small, and in the current situation of the normalization of the novel coronavirus epidemic, public health emergency work is facing more severe challenges. China’s public health emergency policy is not only conducive to the promotion of the construction of healthy China, but also an important part of the national public security strategy. Therefore, in order to establish a modern policy guarantee system adapted to the development situation of the new era, it is necessary to sort out and analyze the evolution context and evolution logic of China’s public health emergency policy in detail, so as to provide references for policy improvement.

Historical institutionalism, as an important part of the new institutionalism school, emphasizes the important position of historical factors in institutional change. Historical institutionalism studies the evolution of institutions from a historical perspective, emphasizing that problems should be viewed in an interconnected and dialectical way, and emphasizing the structure or arrangement of political variables, which is mainly reflected in the economic, social and cultural background at the macro level and the institutional subjects, institutional objects and other subject behaviors affected by institutions at the micro level. At the same time, the analytic paradigm of historical institutionalism holds that any institution is affected by path dependence and critical node phenomenon. Specifically, using the historical institutionalism analysis framework, we can explore the policy changes from the aspects of deep structure, path dependence and dynamic mechanism. Therefore, the historical institutionalism analysis paradigm has a special role and strong persuasion to explain the public health emergency policy of our country, and is one of the new theoretical basis of public health emergency policy research.

Based on the unique perspective and core point of view of historical institutionalism, China’s public health emergency policy can be divided into four stages: slow start stage, rapid development stage, gradual adjustment stage and comprehensive improvement stage. From the deep structure analysis, the macro factors such as economic level, social governance concept and scientific and technological development affect the evolution of public health emergency policies; at the same time, the path dependence of “increasing returns” makes the policy self-reinforcing. From the perspective of dynamic mechanism, the interaction between key nodes and multiple subjects has promoted policy development and promoted significant historical changes in public health emergency policies.
2. Course of public health emergency policy change in China

Looking at the development of China’s public health emergency policy since the founding of the People’s Republic of China, we can find that China’s public health emergency policy has experienced a process from weak to gradually perfect.

2.1. The slow start stage (1949-2002) : the focus was on the prevention and control of major infectious diseases

After the founding of the People’s Republic of China, the economic level is relatively backward, the primary task of the country is to carry out economic construction, and the attention to social construction is relatively weak. At that time, the most prominent problem in the field of public health was the low level of people’s health, the serious shortage of medical resources, the general lack of doctors and medicines, and the harm of infectious diseases. Based on the situation at that time, the prevention and control of major infectious diseases was the main task in the field of public health, and the government strengthened the management of acute infectious diseases by issuing corresponding policies. In 1955, the Measures for the Management of Infectious Diseases were issued. In 1978, the Regulations of the People’s Republic of China on the Management of Acute Infectious Diseases were promulgated. These policies included the establishment of a three-level medical and preventive health care network by the Chinese government in the early days of the founding of the People’s Republic of China, the provision of basic medical and public health services at the grass-roots level through health and epidemic prevention stations at all levels, and the emphasis on continuing to carry out "patriotic health campaigns" to prevent infectious diseases. At the same time, it provided some guidance for the emergency management of infectious diseases at that time, and effectively prevented and controlled the spread of major infectious diseases at that time.

In the early days of the founding of the People's Republic of China, generally speaking, China began to establish a public health emergency system with Chinese characteristics led by the government. However, due to the specific background of The Times at that time, the disease prevention and control network experienced several adjustments and its stability was poor, and the health and epidemic prevention stations at that time were not equipped with the ability to deal with large-scale public health emergencies. Moreover, the socialist market-oriented reform from the reform and opening up to the SARS epidemic also led to the failure of China's public health emergency response system. Therefore, the public health emergency policy at this stage was mainly to prevent the spread of common infectious diseases, and no systematic public health emergency system was formed.

2.2. Rapid development stage (2003-2007) : The formation of a "one case, three systems" public health emergency response system

In the 21st century, although the severity of public health events has not been concerned by the decision-making level, and the government’s emergency capacity for public health events is correspondingly insufficient, some major public health events from time to time are obviously the fuse that leads to the issuance of new emergency policies for public health events. In 2003, the SARS epidemic appeared in China, and the outbreak of the epidemic made the response to SARS become the focus of the government’s work at that time. The SARS epidemic fully exposed the serious problems and deficiencies in China’s traditional public health emergency response system, and showed that many contents of the Law on the Prevention and Control of Infectious Diseases, the public health law of China at that time, were out of date, and various loopholes in China’s public health policies were prominent. Therefore, it is urgent to build a complete public health emergency management system with the support of a series of relevant policies to solve many problems in the field of public health emergency, such as weak barriers, backward management mode, imperfect early warning mechanism, and imperfect treatment system.
In order to cope with the severe challenge of SARS epidemic to our public health emergency system, the government began to reconstruct the public health emergency policy system. In 2003, The State Council promulgated the Regulations on Public Health Emergencies, which defines and divides public health emergencies. In 2005, the Ministry of Health issued the Regulations on the Management of Information Reporting Related to Public Health Emergencies, which clearly stipulates that the monitoring work of public health emergencies should be standardized, timely and effectively handled. In 2006, the Ministry of Health issued the National Emergency Plan for Public Health Emergencies and the National Health Emergency Support Plan for Public Health Emergencies, clarifying the emergency organization system and emergency support system for public health emergency management. In 2007, the Standing Committee of the National People's Congress promulgated the Emergency Response Law of the People's Republic of China, which laid a solid institutional foundation for efficient public health emergency response procedures and helped improve the main responsibility framework for public health emergency response in China. At this point, China has formed an emergency management system construction of "one case (pre-plan) three systems (system, mechanism and legal system)"

At this stage, it can be found that the occurrence of the SARS epidemic in 2003 highlighted the shortcomings of public health emergency policies, so China improved the public health policy system, and gradually formed a public health emergency system with "one case and three systems" as the core. Under this framework, China's public health emergency management has gradually improved its response capacity in the perfection of laws and regulations, and has become institutionalized and standardized.

2.3. **Gradual adjustment stage (2008-2014): Strengthening the public health emergency response mechanism of "joint prevention and control"**

The Wenchuan earthquake in 2008 and the Sanlu milk powder incident accelerated the construction of China’s emergency management system. The subsequent emergence of influenza A (H1N1) further promoted the system construction and policy improvement of public health emergency management. During this period, the traditional epidemics of major infectious diseases have stabilized, but some public health emergencies continue to appear, threatening human health and social stability. In addition, although China’s public health emergency response system has been preliminarily established after the SARS epidemic, and the government has formulated a series of relevant policies and regulations, most of them are abstract, general and comprehensive macro-guiding policies, and the implementation, implementation and soundness of policies still need to be enhanced. For example, although monitoring subjects have been identified in some policies, However, the monitoring scope and specific responsibilities of each unit are not clearly divided, resulting in the formation of gaps and overlapping areas in practice. Therefore, in 2009, The State Council issued the Opinions on Strengthening the Construction of grass-roots Emergency Response Teams and the Guidelines for Emergency Response Exercises to enhance the practicability of public health emergency response. At the same time, in terms of food safety and natural disaster emergency work, the state has promulgated the "Food Safety Law" and the "Ministry of Health Health Emergency Plan for Nuclear and Radiation Accidents" to make clear provisions on public health emergency work in different fields. In 2011, the Multi-Department Public Health Emergency Response Coordination Mechanism was issued, which emphasizes that in the face of new public health incidents, joint prevention and control should be strengthened, and a coordinated emergency response mechanism with multi-agent cooperation should be formed.

At this stage, the Chinese government began to think about the adjustment of policies under the new policy concepts such as human text and building a harmonious society. In order to further improve the public health emergency policy system, the government began to pay attention to
how the policy linkage is multi-dimensional and multi-faceted, and constantly strengthen the
public health emergency system of "joint prevention and control".

2.4. Comprehensive improvement stage (2015 to present): Shift to the
strategic development goal of "public health"
China’s public health policy has reached a stage of comprehensive improvement while being
constantly adjusted. The public health of our country in the new era faces many new challenges,
such as the acceleration of the aging trend of the population, the change of the ecological
environment and lifestyle, the change of the spectrum of human diseases give rise to new health
risks, thus the changed health needs of the people and the development of public health do not
match. In 2015, the CPC Central Committee began to consider major and long-term issues
related to people’s health from the strategic level, and put forward a strategy for healthy China
based on the current situation and future development direction, which shows that the CPC
Central Committee has raised public health policy issues to the height of a national strategy in
the new era. In 2016, the state issued the Outline of the Healthy China 2030 Plan, which calls
for improving the capacity of prevention, detection, response and handling of public health
emergencies, and improving the public health emergency response system. In 2017, the Notice
of The General Office of the State Council on Issuing the 13th Five-Year Plan for the Construction
of the National Emergency Response System required further strengthening of public health
emergency procedures according to the actual situation; In 2019, the Law on the Promotion of
Basic Medical Care and Health pointed out that the level of public health should be improved to
promote the health of the masses. These policies have been introduced to meet the needs of the
people for health and safety in the new era.
This new stage is characterized by the transformation of risk society and aging society, which
put forward higher requirements for public health emergency management in our country.
Under the new social development situation in the new era, China's public health emergency
work is no longer limited to the single field of public health, but has changed into the public
health emergency management under the concept of big health and big health, which is related
to all aspects of social development, that is, has changed into the emergency management
involving all fields of public health and public health.

3. Logic of public health emergency policy change in China
As a new perspective of policy analysis, historical institutionalism can be used to analyze the
evolution and changes of public health emergency policies since the founding of the People’s
Republic of China. Under the explicit form of continuous changes of The Times and continuous
evolution of policies, China’s public health emergency policy presents a specific internal
institutional logic under the interaction of multiple elements such as deep structure, path
dependence and dynamic mechanism, and the development of its policy system is constantly
improving.

3.1. Deep structure: The macro background of China’s public health emergency
policy change
Historical institutionalism studies the evolution of institutions from a historical perspective,
emphasizing that problems should be viewed in an interconnected and dialectical way. Based
on the analysis perspective of historical institutionalism, it can be concluded that the change of
a policy is the result of the comprehensive effect of various macro factors, and economic
background, political background, cultural background and scientific and technological
background are all the reasons for maintaining or promoting policy changes. In other words,
the deep structure of China's public health emergency policy changes is also affected by these
elements. After systematic analysis, it can be found that economic level, social governance
concept and science and technology have played an important role in the historical changes of China’s public health emergency policy.

3.1.1. Economic level determines the choice of public health emergency policy
In the early days of the founding of the People’s Republic of China, the economic level was relatively backward. According to the data of the National Bureau of Statistics, China’s per capita GDP was only 119 yuan in 1952 and only crossed the 10,000 yuan mark in 2003. In 2003, China’s per capita health expenditure was only 450.75 yuan, due to the lack of national public health funding, so the construction of public health emergency system is quite imperfect. Based on the rapid development of the national economy and the continuous improvement of living standards, the public's requirements for public health services are getting higher and higher, and the government's public finance expenditure on public health is also increasing, which makes the public health emergency system move towards a standardized development road.

3.1.2. The renewal of social governance concept promotes the change of public health emergency policy
With the deepening of the understanding of economy and social comprehensive development and the development and transformation of governance concepts, the construction of public health emergency system has been placed in an important position. In the early years of the founding of the People's Republic of China, the prevention and control of major infectious diseases was the main task in the field of public health, and the government mainly strengthened the management of acute infectious diseases by issuing corresponding policies. In 2015, due to the mismatch between the people’s changing health needs and the development of the public health field, the Party Central Committee began to consider the major and long-term issues related to the people’s health from the strategic level, and put forward the strategy of healthy China based on the actual situation and the future development direction, and China’s public health emergency policy in the new era began to focus on the overall situation. With the development of the concept of social governance, public health emergency management in our country shows a trend of advancing. In the first two stages, the government paid more attention to rescue and disposal, and paid less attention to preventive preparation, monitoring and early warning. Modern public health emergency policy began to focus on the overall situation, including public health into the national development strategy framework, and gradually changed the passive response to public health emergency management into proactive prevention. At the same time, the main body of public health emergency response is gradually showing a diversified development trend, focusing on multi-department joint prevention and control, and giving play to the effectiveness of collaborative emergency response mechanism. It can be said that the renewal of the concept of social governance requires the prior monitoring of public health events and the strengthening of multi-sectoral joint management, and this change of concept has correspondingly promoted the change of public health policies.

3.1.3. The development of science and technology promotes the evolution of public health emergency policy
The innovation of science and technology can promote the transformation of the basic equipment of public health emergency management and the mode of information dissemination, and improve the efficiency of public health emergency management. For example, after the SARS epidemic, the Chinese government began to attach importance to the application of science and technology in public health emergency work, which enabled us to rely on the help of advanced technology in the response to the novel coronavirus epidemic in 2020, and greatly improved the public health emergency response capacity. In addition, with the advent of the Internet and big data era, the government encourages public health emergency management agencies to cooperate with Internet companies, rely on massive data, combined with modern data mining technology, strengthen information integration, explore
the use of big data means, predict risk factors, strengthen intelligent monitoring, and improve emergency response capabilities. It can be said that science and technology innovation have brought new opportunities for the practical operation of public health emergency management, and put forward new requirements for public health emergency management in our country, and then promoted the corresponding transformation of our public health emergency policy.

3.2. Path dependence: Self-reinforcing changes of public health emergency policy

The phenomenon of path dependence is a factor that cannot be ignored when analyzing policy changes. It refers to the homogenous dependence of a certain policy or system in history on the development direction and content of the current institutional structure, resulting in policy balance. An American scholar, Paul Pearson, borrowed the concept of economics to explain the emergence of path dependence. It is believed that "increasing returns" is an important reason that leads to path dependence of policy. Based on this analysis, it is concluded that when formulating and implementing a policy, the learning effect, synergistic effect and adaptive expectation generated in the process will increase the cost of policy and system change, and thus the effect of "increasing returns" will inevitably appear, forming the path dependence phenomenon of policy change.

3.2.1. The learning effect reduces the operating cost of public health emergency policies

After the policy is introduced, the state will summarize and optimize the policy rules through repeated exploration and practice, and promote people to accept and recognize the system, so as to ensure that relevant activities can be carried out efficiently, which is the learning effect of the organization. On the one hand, the national competent departments such as the Ministry of Health and the Ministry of Emergency Management have accumulated experience in the long-term practice process and made the system design more efficient through continuous refinement and improvement. On the other hand, the state is accustomed to guiding various health emergency policy subjects to carry out adaptive learning with the help of the abundant resources carried by the existing policy system, urging them to grasp the target direction and connotation of the policy, so as to deeply understand the development concept and construction mode of public health emergency that reflect the will of the government. In the process of formulating and implementing public health emergency policies in our country, relevant government-led institutions have continuously formed a perfect model system in long-term practice, and the operation of this system has achieved efficient and orderly operation, thus reducing the operating cost of public health emergency policies, and correspondingly increasing its transition cost, so that public health emergency policies have entered a period of balance.

3.2.2. The synergistic effect builds the policy community of public health emergency

Synergy effect means that once a policy is implemented, corresponding policies will also be established, forming a closely connected policy community. Since China put forward the health emergency system with "one case and three systems" as the core, the state has successively issued a series of supporting policies in the setting of emergency plans, the construction of emergency teams, emergency drills and other aspects, and derived a policy network system closely linked to the existing system. The coordination between the organization and the policy system jointly promotes the synergistic effect, which plays an important role in ensuring the smooth implementation of public health emergency policies, but at the same time, it also increases the cost and risk of public health emergency policy transformation, so that China's public health emergency policies will continue to develop in accordance with the established direction.
3.2.3. Adaptive expectations affect the rational choice of institutional subjects

Adaptive expectation means that on the basis of "synergistic effect", the implementation of public health emergency policy gets good feedback effect, that is, the popularity of public health emergency system based on a specific system continues to increase, which reduces the uncertainty in the field of rule durability. The application in the field of public health emergency means that when the implementation of public health emergency policy achieves positive and good results, the adaptability of policy makers and participants to the policy is expected to gradually increase. Based on the current situation, they believe that public health emergency policy can also bring good policy results in the future development and implementation process. Thus, the policy has entered a relatively balanced stage. Due to the outbreak of SARS in 2003, China began to reconstruct the public health policy system, and gradually formed a public health emergency system with "one case and three systems" as the core. Under this framework, China's public health emergency management has gradually improved its response ability in the perfection of laws and regulations, and played an important role in responding to subsequent public health events. The adaptability of governments at all levels to the public health emergency system has been gradually strengthened. Such as the urgency, unpredictability, and comprehensiveness and complexity of emergency work, the emergence of many new problems often exceeds the scope of human imagination. In the case of insufficient reference information and time pressure, or the lack of implementation experience of the government, most of them choose to continue to follow the basic path of public health emergency policies in the past.

3.3. Dynamic mechanism: the direct factor of Chinese public health emergency policy transition

Based on the emergence of path dependence phenomenon, the policy will enter a relatively stable development stage under the influence of this phenomenon, but some other factors will also lead to policy changes. From the perspective of historical institutionalism, the two more important factors in the dynamic mechanism of policy change are the occurrence of key node events and the interaction between the meta-interest subjects. These two factors also constitute the dynamic mechanism of public health emergency policy change in our country to a great extent.

3.3.1. Critical node in the development of public health emergency response

Based on the analysis framework of historical institutionalism, the key node, as one of the driving forces affecting policy change, refers to a special historical time point in the development of a policy, where major events have led to the adjustment or change of the policy by the relevant parties. For China’s public health emergency policy, there are mainly three key nodes in its development process:

The first critical juncture was the outbreak of SARS in 2003. Before the outbreak of SARS, although the shortcomings of the public health system had been exposed, it was difficult to make substantive policy adjustments due to the lack of attention. The outbreak of SARS broke the long-term weak position of public health policy issues, and public health emergency began to become the priority and core issue of the national public policy agenda and entered the national policy agenda in a comprehensive way, and policy reforms followed. The second key node was the 2008 Wenchuan earthquake. Before this, the traditional major infectious disease epidemic has stabilized, but some new public health emergencies similar to food poisoning continue to emerge, threatening human health and social stability. The occurrence of these events accelerated the process of building our country's public health emergency management system. The third key point is the Fifth Plenary session of the 18th CPC Central Committee. The CPC Central Committee began to consider major and long-term issues related to the people’s health from a strategic level, and put forward a strategy for a healthy China based on the current
situation and future development direction. Under the new social development situation in the new era, China's public health emergency work is no longer limited in the single field of public health, but has changed into the public health emergency management related to all aspects of social development, that is, has changed into the emergency management involving all areas of public health and public health.

3.3.2. The game between the government, the public and the media

Historical institutionalism believes that the evolution of institutions is gradual, and in this process, the actors involved in policies are not only the action units driven by interests, let alone the recipients of institutions, but also the builders of policies. Based on this, the interaction among relevant stakeholders will also promote the development of public health emergency policies.

There are often game phenomena among policy participants. With the increasing attention of the Chinese government to the field of public health emergency response, the policy coverage is increasingly extensive, and multi-sectoral cooperation is needed to publish. Although the health department still dominates the main body of the document, other participants are gradually playing an increasingly important role. In addition, other interest groups have also exerted practical influence on policy formulation and implementation. For example, during the SARS epidemic and the novel coronavirus epidemic, the intervention of the media, the widespread concern of the public and the international community, and the appeal of knowledge groups have all provided a certain impetus to the change of public health emergency policies. While the Government plays a fundamental role in this process of change, it may be slowed down without the pressure of public opinion and the involvement of other stakeholders. Therefore, every actor plays an important role in the process of public health policy change. Due to different interest preferences, policy expectations, knowledge level, social status and other conditions, various policy stakeholders must have a certain game phenomenon. It is the game among policy stakeholders that promotes the development and change of public health emergency policies to a higher level.

4. Prospect of public health emergency policy change in China

Through sorting out the public health emergency policy, we can see that China's public health emergency work has achieved remarkable results. Since the founding of the People's Republic of China, not only has the public health emergency system been comprehensively strengthened, the public health emergency response capacity has been significantly improved, and the role of China’s public health emergency policies in maintaining social stability has become increasingly prominent. However, through the emergency response to the novel coronavirus epidemic, we can also see that there are still places that need to be strengthened and improved in public health emergency policies.

4.1. Adapt to changes in the macro background and improve the protection of laws and regulations

From the macro level of China's public health emergency policy, it is found that there is a phenomenon of "more rules and less laws" in the legal effect of public health emergency policy, and the legal support is obviously insufficient. Therefore, examining the current situation of public health emergency law in China, we can find that the lack of emergency law in the current public health emergency policy system has restricted the full play of the effectiveness of the emergency system. Therefore, we should promote the legislative pace of emergency, so that it can be used as the legal basis for public health emergencies, and on this basis, we can also formulate special emergency laws in the field of public health, so as to fill the legal gap and improve the legal guarantee.
4.2. **Strengthen the positive path dependence and enrich the content of the policy system**

It is necessary to make full use of the self-reinforcing path dependence of policy and improve the construction of prevention system in public health emergency. As the top priority of effective response to public health emergencies, China’s preplan early warning system and security system construction has received enough attention from the government with the evolution of time, but the preplan system still needs to be further optimized, so it is necessary to establish a sound scientific evaluation system, ensure applicability, and further enhance the operability of public health emergency plans through training exercises. In addition, it is necessary to ensure the funding guarantee for public health emergency prevention, provide sufficient economic support for the construction of public health emergency hardware facilities, build high-quality and capable scientific research teams, and improve the ability to quickly monitor and analyze public health emergencies.

4.3. **Strengthen the interaction of actors and improve the mechanism of social participation**

Public health events often have a great impact on society. The current COVID-19 epidemic also shows that public health is a social issue that involves many areas of social life and requires the joint participation of all social forces. It is difficult for government departments alone to effectively control the development and spread of the situation, so it is necessary to give full play to the strength of social members and improve the overall emergency response capacity of society. Achieve coordination and interaction. First of all, governments at all levels should set up public health emergency response teams, set up special public health emergency response training institutions in their respective regions based on different geographical conditions and development conditions, and improve their ability to respond to public health emergencies through continuous training. Secondly, it is necessary to publicize the relevant knowledge of public health emergency through various means, such as we-media, and actively popularize the coping methods of public health emergency to the public, and go to the grassroots level to ensure that rural and other grass-roots areas and vulnerable groups receive relevant knowledge education and training, and improve the public's self-rescue and mutual rescue ability. Finally, we should encourage the participation of diverse social subjects and give full play to the role of the masses.

4.4. **Grasp the key nodes of reality and promote the innovation of emergency technology**

Today's novel coronavirus epidemic is a key node in the public health emergency policy. Compared with SARS in 2003, one of the major features of China's response to the novel coronavirus epidemic is the extensive use of scientific and technological means for epidemic prevention and control. It can be said that the development of science and technology has brought great changes to all fields of society. As the most active factor and the most important supporting force in modern productivity, the development of science and technology has provided opportunities for all walks of life, including the field of public health emergency response. No matter what kind of public health events, we need to use scientific and technological means to better respond. The importance of science and technology can also be clearly felt through the application of large data means in trajectory screening during the new coronavirus epidemic. Therefore, it is necessary to grasp the key nodes of reality, give sufficient institutional guarantee to the development of science and technology in the form of policies and regulations, encourage investment in public health emergency science and technology, promote the development of science and technology, encourage technological innovation, and further improve China's public health emergency response capacity.
5. Conclusion

Based on the analysis framework of historical institutionalism, this paper reviews and reviews the historical evolution of China’s public health emergency policy, summarizes its development at various stages from its inception to its comprehensive perfection, and shows the development path of public health emergency policy from the prevention of major infectious diseases in the early days of the founding of the People’s Republic of China, to the development of standardization and legalization, and then to the current emphasis on the concept of public health. It also discusses the evolution logic of public health emergency from three aspects: deep structure, path dependence and dynamic mechanism, comprehensively explores the policy changes of public health emergency, and proposes that in the new era, China’s public health emergency policy should grasp the key nodes of institutional changes in the future, enrich the content of the policy system, improve the mechanism of social participation and encourage innovation of emergency technology. The emerging digital technology is applied to the field of public health emergency response, and the blockchain technology is used to realize the traceability and immutable of public health emergency information, so as to ensure the security of personal information in public health emergency response. At the same time, advanced technologies such as the Internet of Things are adopted to accelerate the speed of information flow in public health emergency, in order to achieve the comprehensive improvement of China’s public health emergency response capability.

References


