

A Study of the Beginnings of Urban Modernisation in Jinan From a Public Health Perspective (1904-1928)

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ABSTRACT

This article focuses on the development of public health in Jinan, exploring the evolution of public health before and after the opening of the port. Before the opening of the port of Jinan, public health lagged behind, and public health conditions were poor; after the opening of the port of Jinan in 1904, public health gradually began to develop under the policy impetus of the Qing government and local organisations; the General Administration of Commercial Ports issued relevant regulations to regulate hygiene management, and public health organisations continued to be set up and improved, and the public gradually established the concept of public health in the prevention and treatment of epidemics. Despite the impact of the turbulent times on the systematisation of policies, Jinan's public health programme began to develop on its own initiative in spite of the difficulties, and laid the foundation for subsequent development.

KEYWORDS

Jinan; Public health; Beginning; Opening; Development

1 Introduction

The public health situation in Shandong and the whole country at the end of the 19th century was extremely bad. Shanghai and Beijing, for example, Zheng Guanying once sighed: "I see the Shanghai Concession streets wide and clean, a Chinese border into the filth, non-cow ulcer that rubbish stinking mud, and even the old and young can be drowned everywhere, sores and maladies of the people everywhere, although the moaning and servants are ignored. Only cover your nose over it^[1]." Beijing is described as "now the capital for the first good area, and the filth of the place to the capital for the most, people and animals and so on, piled up in the road, sunny is crushed into a fine powder, gust of wind together, pouncing on people's noses, can not be near, the rain is a piece of mud and sand, and can not be inserted into a piece of foot^[2]".

2 Public Health in Jinan Before the Opening of the Port

Before the opening of the port of Jinan, the public health situation was poor. In this period, the streets of Jinan rubbish everywhere, only the humble bins are mostly made of bricks and stones piled up, and there is no special person in charge of its cleaning and cleaning, all by the public to clean up their own. Because of its unique geographic conditions, Jinan springs are densely packed and no worries about water supply, before the opening of the port is mainly used to spring as a source of surface water supply, although the Ming Dynasty period to repair some of the sewers, but the discharge system is not built scientifically, sewage and spring water mixing, a serious danger to public health and safety. American Presbyterian missionary Carrie Chang recorded that "cesspools and open gutters are closely connected with the rivers supplying the city with drinking water, and even communicate directly... All this provides conditions for the growth and spread of germs that are always ready to penetrate the weak points of public health defences."

At the same time, Jinan does not have a specialised public health authority. In traditional Chinese society, until the late Qing Dynasty, urban and rural governance was always based on a "combined governance" model. Under this governance structure, cities did not form independent administrative entities, and their infrastructure construction and daily management mainly served political and military needs, resulting in a limited scale of municipal construction and insufficient development impetus, with the construction of public health facilities lagging behind in particular. In Jinan, for example, although provincial, prefectural, and county administrative institutions were located there, these institutions were not established to promote urban development, but rather to serve as a tool for local control by the central government, and the centre of gravity of governance was in fact more inclined to the vast rural areas. In this context, Jinan's urban administrative system showed obvious limitations, with education, health, municipal government, business administration, and public utilities all under the unified management of the Licheng County Yamen, which lacked a specialised urban administration, not to mention the establishment of an independent public health management system. This has become one of the characteristics of the development of public health in Jinan in the later period, i.e., the provincial and municipal health administrations were united, and many systems and institutions were set up to take into account the dual identities of "Jinan City" and "Shandong Province City".

3 Reasons for the Lack of Public Health in Jinan Before the Opening of the Port

The radiation-inducing effect of the urban concessions in the trading ports and the medical and propaganda activities of the missionaries were important factors in the modernisation of public health in China as a whole. The Western imperialist countries promoted industrialisation during the Industrial Revolution, but along with machine production came a series of environmental problems, such as water and air pollution, which induced a series of epidemics. Therefore, they realised the importance of public health earlier, established the concept of public health, and brought this concept to the Chinese Concessionary Territories under their control. Shanghai, for example, the British Concession in the beginning of the opening, the British principles of public health management moved in^[3]. According to the *Records of the Shanghai Concession*, in the British Concession in 1854, *Land Charter* clearly put forward "prohibit the accumulation of filth, any ditch full of flow" "build, repair roads, piers, ditches, bridges, at any time to sweep and wash clean" "Roads, wharves, ditches and bridges should be built and repaired, and swept and washed at all times" "Coffins should not be allowed to be parked within the boundaries thereafter", etc.. Subsequently, the Shanghai Daotai and the governor continued to change the municipal regulations of the Concession, and by the beginning of the 20th century, the regulations of the Concession concerning public health had been transferred to the Chinese Concession, and the regulations of the Chinese Concession and the Concession had been integrated.

Before the opening of the Jiao-Ji railway, Jinan was neither a trading port city nor had much contact with trading ports, and was a standard inland city. Especially before the 1870s, the British and American governments were not in favour of missionaries going to the interior of China^[4], and most of the medical missionaries who came to Shandong after 1870 went to Yantai or Dengzhou. It was not until October 1877 that a female medical missionary, Miss An, came to Jinan, but she soon returned to the U.S. two years later because of health problems. 1879, Hong was a medical missionary who brought his wife to Jinan to carry out medical work, but his medical careers did not run smoothly, and he oscillated between missionary work and medical care. This shows that before the opening of the port, Jinan had fewer opportunities to be influenced by the West in terms of public health concepts and practices, which led to a lack of suitable soil for the development of public health in Jinan. However, on the other hand, this also contributed to the independent development of public health in Jinan, and its later policies and institutions were gradually improved according to the specific public health situation in Jinan, rather than copying the public health management system of Western countries, as in the case of Shanghai and other cities in the Concession.

In addition to this, the very backward state of industrial development in Jinan before the opening of the port was also an important reason for its lack of public health and its late start. In addition to the Shandong Machine Bureau, Jinan before the opening of the port almost no modern industry, the overall level of development of the city's industry is still stuck in the stage of family workshops or handmade workshops^[5], which led to Jinan's urban planning and municipal construction is very backward, the government's few attempts to rectify the public health policy has also achieved little success. 1900 Yuan Shikai in Shandong to implement the New Deal, in 1902, Shandong Governor Yamen, that is, Jinan set up a provincial city police headquarters, also in charge of environmental sanitation work inside and outside the city, and set up a provincial city police department. Provincial city police, both inside and outside of Jinan city sanitation work, and the establishment of the "clean road team" division is responsible for the city's main street cleaning, but its total number of less than 100 people^[6], there is a shortage of personnel; May 1903, the Correctional Services Bureau allocated to the General Administration of the patrol in addition to the filth of the 64 sweeping the roads of the provincial capital, at the same time, the patrol bureau ordered to tidy up the hygiene, requiring the streets to be kept clean, rubbish to be dumped at regular intervals, and manure trucks to be cleared out of the city before 8:00 a.m. According to the urban sanitation administrative programme and provisional standards drawn up by Lan Ansheng and others, the minimum sanitation expenditure for a city of one million people should reach about 1.48 million, i.e., each resident should have 1.5 yuan of sanitation expenditure per year, but Guangzhou, which was in the best situation at that time, only reached 1 yuan^[7]; specifically in Jinan, which had a population of about 246,000 people in 1904, the sanitation expenditure should be around 365,000 yuan, and the city should be able to provide sanitation for the residents of the city. However, the annual sanitation expenditure of the inner and outer Qingdao team established in 1902 and the Qingdao team of the commercial port established in 1904 totalled only more than 28,000 yuan^[8], which showed that the expenditure was not sufficient. Therefore, although the authorities to improve the public health situation in Jinan and the introduction of several targeted policies, but a shortage of funds, insufficient personnel, backward tools, poor management and other factors^[9], the second is due to the city's low degree of industrialisation, infrastructure backwardness, the government and the public's awareness of public health seems to stay only in the "street health Secondly, due to the city's low level of industrialisation and backward infrastructure, the government and the public's awareness of public health seemed to remain only in "street hygiene", and the overall public health situation in Jinan did not improve significantly before the opening of the port.

4 Development of Public Health in Jinan after the Opening of the Port

Jinan was officially opened in 1904. As a typical city in northern China, Jinan often used animals such as horses, cows, donkeys and mules to carry goods in transport. This reliance on animal power was convenient, but it also created a significant problem, namely the disposal of animal manure. Cow dung, horse dung, donkey dung, etc. were scattered everywhere on the road, and these dung mixed with dust not only damaged the overall image of the street, but also emitted an unpleasant odour. After the opening of the port, due to more frequent trade activities, there are many shops selling meat, vegetables and tea in the commercial port, the environmental hygiene of the ground is really worrying. In addition, due to its unique geological structure, Jinan has abundant spring water resources, and many springs converge into dense rivers crisscrossing the city. On the one hand, this makes Jinan beautiful and unique, but on the other hand, it also makes Jinan residents and factories established after the opening of the port produce sewage that is discharged more freely, and further leads to the original surface water supply system due to water pollution problems, which is scrapped one after another.

The General Administration of Commercial Ports paid attention to these public health problems at the beginning of the construction of commercial ports, and after the opening of the ports, it promulgated the *Jinan Commercial Ports Patrol Statutes, Article 14*, which stipulated that "All shopkeepers in the commercial ports are permitted to pile up their rubbish in front of their houses before six o'clock every day and after eleven o'clock in the evening, so that they can set up a factory car to collect and dispose of their rubbish at the designated place of pile-up and abandonment. Beyond these two hours, no rubbish is allowed to be discarded on the road^[10]", and increased the number of the port's clean-up team; in the *Jinan Commercial Port Rental and Construction Regulations, Article 15*, also specifically on the drainage ditches and other sewage system specifications and requirements for the construction of exhaustive provisions, "Where the building of a house in the commercial port or the refurbishment of an old house, you must first build a ditch that drains away the sewage. A ditch or several ditches must be constructed, and this ditch must lead to the ditch built by the Agency, so as to vent the stagnant water; the ditch to be constructed, what method of construction should be used, what kind of materials should be used, the size and width of the ditch, the depth of the ditch from the ground, as well as the situation of the high, low and flat sides, and how it should be connected to the ditch, must be declared one by one, and listened to the instructions of the Agency, and the tenant should comply with them".

During this period, Jinan's public health undertakings in the Qing government, provincial and municipal institutions and policies to promote the process of active development. 1905 after the implementation of the new policy of the end of the Qing dynasty, the Qing government ordered the capital and the provinces set up a special Yamen police department, which set up five divisions of sixteen departments, five divisions in the Department of the police and the Department of Health, Health Section, Health Division, the duties of the Department of Health, mainly for the supervision of the medical hall set up and the assessment of the doctor, and is responsible for the cleanliness, epidemiological prevention and hygiene regulations; and later ordered to change the Ministry of Police to the Ministry of Civil Affairs, which still set up five divisions of Health Department was established. The validation of the statute; and then ordered to change the Ministry of police for the Ministry of civil affairs, which still set up five divisions, thus the Ministry of civil affairs health department was established^[11]. In the capital to promote the establishment of public health institutions, in 1908, Shandong police patrol also set up under the provincial capital police office health section and management of the Qingdao team^[12].

In 1911, a large-scale outbreak of bubonic plague in Shandong seriously jeopardised public health and safety. The plague was brought back to Shandong by labourers returning from the north-east and spread rapidly through Shandong via the Jinpu Railway and the Jiao-Ji Railway. Shandong governor Sun Baoqi cooperated with the German colonial authorities in Qingdao, and the plague was finally extinguished in three months. Thereafter, by the German doctor's epidemic prevention methods and the German Qingdao colonial authorities to prevent the epidemic decision-making, the then governor Sun Baoqi reported "to create health, additional hospitals", decided to set up a public health institutions in Jinan, that is, in the Jinan commercial port bureau to set up a health clinic, and by the Jinan Chinese and Western hospitals began to prepare for Shandong Red Cross Society^[13]. At the same time, in the process of this plague prevention and treatment, Jinan and other epidemic areas of the people's psychology from fear and panic, rejection of strict isolation and blockade measures to face up to the dangers, support for the prevention of the epidemic, and gradually set up the concept of public health. 1912, Jinan with reference to the Ministry of Civil Affairs social management system structure, the official establishment of the administrative agencies specifically responsible for public health affairs, and at the same time, inside and outside of the city and merchant port clearing the way the team was also in 1913 to develop to 140 people. In 1913, the Qingdao team in the city and in the merchant towns grew to 140 members, which pushed the sanitary management towards the track of institutionalisation, normalisation and routinisation. However, under the influence of multiple factors such as the chaotic organisation of the regime and the turmoil of the current situation, in addition to the *Jinan Commercial Ports Patrol Statutes, Article 14* promulgated at the beginning of the opening of the port, until the establishment of the Jinan Municipal Government in 1929, the authorities did not see the

introduction of a more systematic and scientific policy on public hygiene, and there were only a few individual initiatives (e.g., the authorities restrained the management of the gold-juice industry in 1925; and also stipulated that the Jinan city stores, units, and residents should provide their own water supply). shops, units, and residents to provide their own water tanks and sprinkle water three times a month).

5 Conclusion

The development of public health in Jinan from the predicament before the opening of the port to the exploration in the initial stage reflects the complex trajectory of the transformation of modern Chinese cities, and is a microcosm of the difficult progress of traditional society towards modernisation. Although it has not completely escaped its historical limitations, it has accumulated valuable experience for subsequent development through independent exploration, and provides a vivid sample for the study of the modernisation of Chinese cities under the perspective of public health.

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