

PLAGUE QUARANTINING IN KERALA (1897-1920)

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by

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DECLARATION

I hereby declare that the work embodied in this dissertation entitled “Plague Quarantining in Kerala (1897-1920)” carried out under the supervision of Dr. V. Rajagopal, is an original work of mine and has not been submitted for the award of any research degree or diploma of any university.



Place: Hyderabad

Signature of the Candidate

Date: 30/12/2022

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CERTIFICATE

This is to certify that Navaneetha P has carried out the research embodied in the present dissertation entitle “Plague Quarantining in Kerala (1897-1920)” for the full period prescribed under the M.Phil ordinances of the University of Hyderabad. This dissertation is an independent work and does not constitute any part of any material submitted for any research degree or diploma here or elsewhere

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CHAPTER 1

INTRODUCTION

In the state of Kerala, outbreaks of plague were reported from Malabar in the Madras Presidency and the princely states of Cochin and Travancore. In Malabar, most cases were reported from the cities and towns of Palghat and Calicut. In the Cochin state, major outbreaks were recorded from the taluks of Mattancherry and Allepey. In the Travancore state, most of the cases documented were from estates of the plantation hills like Munnar, Peermade and Kumili. Ira Klein, in her work, stated that plague deaths were reminiscent of “where human immunities were low, where economic relapse promoted malnutrition, where re-urbanisation left large market towns sinking in their own refuse, where black rats were domiciled densely with people, where plague followed major trade routes once it reached the continent.” With this understanding of the plague, we will look into outbreaks of the bubonic plague in the state of Kerala and the different measures adopted in combating its spread.

One of the reasons given by the British Indian health officials for the plague was the cool climate that continued for six to eight months which helped the plague bacilli survive and proliferate. Though this reasoning was not sufficient in the Indian context due to India’s warm temperature, which then was relatively unfavourable for plague attacks, in the case of Kerala, we could assume the rainy seasons in Kerala were one of the prime reasons responsible for a large number of deaths, especially in the Malabar district. Another reason that led to the plague being one of the most dreaded epidemics in British India was the failure to plug the loopholes in the developmental activities that enabled rodents to live and multiply. Plague attacks increased sharply in areas where people and rats lived together, such as Indian huts and grain barns, as well as godowns stacking grains in city areas. These were nesting places for rodents.

Hence, Calicut municipality, a congested urban centre with wholesale grain godowns in British Malabar and Palghat, a major rice-producing area, were susceptible to the plague attacks.

There were certain seasonal patterns in the incidence and peaking of the plague epidemic. A significant empirical study showed that it was during the autumn and spring seasons that plague infections went up in most parts of India. In the Madras Presidency, according to the study, the incidence of plague slowly appears between May and July and then develops into virulent form during August, September, or December- January.¹ Another study points out the fatally dangerous plague was not found during the famine because the rodent population and plague attacks of plague increased during the years of bumper harvest. Ira Klein observed the plague attacks between 1899 and 1918 and argued that attacks of plague was observed to have substantially increased whenever there was a bumper harvest of food grains.²

1.1 Background to the bubonic plague in the British India

In the mid-19th century, the world experienced what was called the third wave of the pandemic brought by the bubonic plague. First found in western Yunnan, China, the plague gained attention in the late 19th century when it spread in Hong Kong in 1894. The plague was said to have hit the Indian borders on September 23, 1896, when the first case of plague was identified in Mandvi a congested locality in Bombay's docks. Many scholars like Ira Klein, I. J. Catanach and, Nicholas H. A. Evans introduce the bubonic plague as the 'third plague Pandemic' as it had spread itself in various major 'cities like San Francisco, Honolulu, Sydney, Cape Town and Porto' in the next few decades after it had shown itself in Hong Kong.³ Out of all the places affected by Bubonic Plague, it was in India the plague caused the

¹ S. C. Seal. Epidemiological studies of plague in India. Bulletin of the World Health Organization, 23 (1960), pp. 283 - 292

² Ira Klein. "Plague, policy and popular unrest in British India." Modern Asian Studies 22, no. 4 (1988), p.72

³ Nicholas H. A. Evans. "Blaming the rat? Accounting for plague in colonial Indian medicine." Medicine Anthropology Theory 5, no. 3 (2018), p.18

maximum number of casualties. According to David Arnold, the total number of Indians died from plague during the Third Plague Pandemic was greater than all other nationalities put together. The number of people killed in plague amounted to twelve million people, mainly from Bombay, Punjab, and the United Provinces.⁴

The perpetrator of the bubonic plague was the rat flea. It carried the bacteria named *Yersinia pestis* and was spread by the rat. The infected individual showed symptoms such as buboes or swollen lymph nodes, nausea, and fever. The role played by the rat in the bubonic plague remained unknown till the early 20th century. And most cities which were suddenly affected by the rapidly spreading disease resorted to earlier known measures of containment, segregation, and ventilation to contain the plague. According to Nicholas H. A. Evans, this was the same bacterium responsible for the Black Death in the fourteenth century. This was showcased later in the 20th- century modern-day iconography of Black Death which was filled with images of rats as the plague carriers.⁵

In India, the effects of this very plague were numerous. The plague that hit Bombay in 1896 was a ground-breaking point in the medical history of India. According to David Arnold, its significance in the political epidemiology of colonial India was far greater than any other epidemics that India experienced previously. The records of the mortality rate of the epidemics like malaria or influenza of any year will show us a more significant number in comparison to the bubonic plague. But none of these epidemics bought in the turmoil and change in the face of colonial India's social and political sphere in the way bubonic plague invoked. The bubonic plague of 1896 in India places itself as a good example of Michel Foucault's theory. He had suggested the role of colonial state medicine and health policies in

⁴ David Arnold. *Colonizing the body: State medicine and epidemic disease in nineteenth-century India.* University of California Press, 1993, p.200

⁵ Evans, "Blaming the rat?", p.16

becoming the tools of colonising society under the colonial rule. According to Prashant Kidambi, 'The resistance from the public was the biggest crisis the colonial government had faced since 1857' as it had made the British nervous about directly interfering in the Indian local customs, religion, and practices.⁶ The responses to the hastily implemented draconian rule of Epidemic Diseases Act 1897 and adding of 'bubonic fever' to the list of infectious or contagious disorders in the Indian Railways Act, 1895 showed the profundity of colonial intrusion in their lives and to the personal spheres such as interiors of home as experienced by the Indian citizens.

According to Ira Klein, the plague resulted in extensive social disorganisation which was confronted by equally vigorous government measures. The Indian Medical Service had to undergo various modifications and later had to be abandoned because of the intense resistance before the plague could be controlled. Plague was around for more than two decades, by the late 1930's it retreated to relatively small pockets where the 'plague embers smoldered'.⁷ The impact of the plague could only be comprehended by understanding the social and ecological bases for plague mortality, interactions between western anti-plague measures and popular cultures, and the factors that led to the dramatic decline of the plague before the World War I.⁸

1.2 Urban Poor and Plague Consequences

The Plague's effects in the Indian urban sphere were tremendous. In the wake of the Plague entering the Bombay premises the Bombay municipality's immediate response to prevent its further spread and establishment was to embark on a campaign of urban cleaning on a massive scale. David Arnold mentions how with an amendment to the Bombay Municipal Act of 1888

⁶ Prashant Kidambi. "An Infection of Locality: Plague, Pythogenesis and the Poor in Bombay, c. 1896-1905." (2004), p.249

⁷ Ira Klein. "Plague, policy and popular unrest in British India." *Modern Asian Studies* 22, no. 4 (1988), p.724

⁸ *Ibid*, p.725

which extended the powers of the Bombay's municipal commissioner, the urban areas in Bombay went through thorough cleansing, 'flushing out of drains and sewers with oceans of seawater and carbolic, scouring out scores of shops and grain warehouses, sprinkling disinfectant powder in alleyways and tenements.'⁹ He also points out the tragic side of this urban cleansing which included the destruction of several hundred slum dwellings in the hope to exterminate the disease.

To lose control over the urban areas meant a dip in the power wielded by the British in the colonial India. Since the cities like Bombay, Calcutta, Karachi that were ravaged by the disease acted as the central nodes of colonial power in India. And this fear of loss of control was one of the impetuses in the hurried passing of the Epidemic Diseases Act 1897. According to David Arnold, this act was passed to prevent the spread of the disease from Bombay to Calcutta as both had close commercial and administrative ties between them.¹⁰ I. J Catanach also agrees with David Arnold in his argument and adds how these cities, politically represented colonialism in its most visible and tangible forms. Commercially and administratively, they were the hub of British enterprise and authority. And socially, these urban areas were the place Europeans lived in a concentrated manner and most antagonistically presented in a critical fashion where Indian and European lifestyles intersected.

Most of the brunt of the anti-plague offense in the form of restriction, segregation and rehabilitation was bore by the urban poor, finds Prashant Kidambi.¹¹ The plague was thought as a disease of filth and was believed to thrive in the overcrowded spaces with no ventilation.¹² There was also a deep-seated notion that poor was the carriers of the plague disease. He

⁹ Arnold. *Colonizing the body*, 1993, p.203-4

¹⁰ *Ibid.*, p.206-07

¹¹ Prashant Kidambi. "Housing the Poor in a Colonial City: The Bombay Improvement Trust, 1898-1918." *Studies in History* 17, no. 1 (2001), pp.57-79.

¹² *Ibid.*, p.64

argues that the way government dealt with plague in Bombay, it equally important to consider the role of class along the race.¹³ Unlike other scholarly accounts that could not provide explanation for the explicit class bias that informed colonial plague policies, Kidambi argues that the ‘colonial state’s seemingly indiscriminate ‘assault upon the body’ was based upon a doctrine of ‘contingent contagionism’.¹⁴ ‘Contingent contagionism’ propounds that in comparison to the ‘respectable classes’, the poor were identified as more likely bearers of the plague infection as they lived in ill- ventilated, overcrowded dwellings in the insanitary localities of the city. And therefore, was targeted by the large anti-plague measures of the colonial state since they posed a direct threat to Bombay elites and their physical well-being. Rajnarayan Chandavarkar observes the association of the disease with consequences of poverty and not just the contagionist explanations given for the poor. He argues this relation to the disease did not dawn slowly on colonial officials and had coexisted alongside ‘contagionist’ explanations from the beginning.¹⁵

Srilata Chatterjee, in her work, observes the reports on the plague and finds that interiors of urban Calcutta had been infected by the disease by 1898.¹⁶ Most of the victims of the plague were people of low socio-economic status and poor living standard. According to her, in the early stage most deaths were reported from the poorer section of both Hindus and Muslims.¹⁷ The plague was infected highest among the age group which had more mobility due to their occupations. Males of the age group of 20 to 40 showed highest rates of death from both sections of the poor. She argues, quoting Rajnarayan Chandavarkar, that there was no

¹³ Ibid.,pp.66-67

¹⁴ Kidambi, "An Infection of Locality", (2004), pp.251-52

¹⁵ Rajnarayan Chandavarkar. "Plague Panic and Epidemic Politics in India, 1896–1914." Chapter. In *Epidemics and Ideas: Essays on the Historical Perception of Pestilence*, edited by Terence Ranger and Paul Slack, pp.203-40

¹⁶ Srilata Chatterjee. "Plague and Politics in Bengal 1896 to 1898." In *Proceedings of the Indian History Congress*, vol. 66,(2005), pp. 1194-1201.

¹⁷ Ibid.,p.1198

homogenized Indian response to the epidemic as the contemporary officials tries to promote.¹⁸ The popular response to plague measures in general were identified in the forms of flight, concealment and popular violence and riots. She finds, in the case of urban poor, the form of resistance they chose was the last mode of an active, spontaneous, and aggressive form of protest and riots in comparison to the passive mode chose by the middle-classes.

Different from how the scholars believed plague in India was urban phenomenon that later spread to the rural areas. Carol Benedict in her observation of the plague affected nineteenth-century China and the gradual diffusion of the disease from Yunnan in the eighteenth century to the southern coastal regions of China in the 1890s, finds that plague was both an urban and a rural phenomenon.¹⁹ To prove her theory, she utilized William Skinner's socio-economic model and the regional systems approach to draw upon a core-periphery regional analysis while tracking the diffusion.²⁰

1.3 Plague Policies and Measures by Colonial state

The plague was suspected to have entered India by flea infested rodents which sailed from Hong Kong in the British merchant ship that imported opium. But the unsuspecting British officials of 1896 who were receiving the reports plague symptoms was unaware of the role the rats played in spreading the disease. Till the early 20th century, the rats were thought to be just another victim of the plague. The rapidly spreading plague symptoms bought immense pressure on the British authorities. I. J. Catanach indicated that, there was overwhelming international pressure to deal promptly and effectively with the plague. According to him, the western powers were threatened by the disease, especially after cholera which had spread from India to the rest of the world. This fear of the invasion of plague in Europe bought forth

¹⁸ Ibid.,p.1200

¹⁹ Carol Benedict. "Bubonic Plague in Nineteenth-Century China", *Modern China*, 14, (1988) 107–155.

²⁰ Ibid.,p.146

severe pressure from their side on to British authorities in Colonial India. The threat of ban on trade in India resulted in stringent measures to suppress the plague and its transmission to Europe.²¹

According to I J Catanach, the Indian authorities were not completely unprepared. The plague predecessor Asiatic cholera had already prepared some ground for such emergency. There were international sanitary conferences that had been held since 1850's and in its tenth conference which was conducted in Venice, 1897 the India government was forced to take immediate action. They also provided detailed rigorous measures that Indian ports must immediately follow to avoid its closure to foreign shipping.

David Arnold, in his work points out the stages through which the British authorities tried to tackle the menacing plague.²² The initial stage involved the flushing out of drains and sewers and the wholesale sprinkling of disinfecting powders through the streets and houses. But once it was found to ineffective in containing the plague the next stage involved policies which required procedures such as hospitalization, segregation, and corpse inspection. This is when the authorities first felt the fierce public opposition and found themselves ineffective in ceasing the spread of disease. It was the invention of the anti-plague vaccine by Waldemar Haffkine (a Russian bacteriologist) in Bombay and the inoculation which finally showed some prospect of success, which he based on his early trials and claimed, "the only measure known to Science up to now for combating that disease" and was established "by accurate observations and measured in an unmistakable manner."²³

²¹ Ian J. Catanach. "A South Asian Muslims and the plague 1896–c.1914" *South Asia: Journal of South Asian Studies*, (2009), pp.87-107

²² Arnold. *Colonizing the body*, 1993, p.233-34

²³ *Ibid.*

1.4 Epidemic Diseases Act and its Implementation

Most scholars who have worked on epidemics in India would agree that it was the Epidemic Diseases Act, 1897, passed by Viceroy Lord Elgin that distinguished the bubonic plague from the other epidemics which had caused way more fatalities. This act came into life when the initial measures to curb the plague was found to be ineffective and the threat of plague was spreading outside Bombay and Pune became a reality. This act which was passed in Lord Elgin councils with hardly any debate and consultation came to be well-known as a draconian measure undertaken by the British authorities and had taken immediate affect and was applied on all British India. According to David Arnold, this act gave ‘gave the government powers to inspect any ship or intending passenger; to detain and segregate plague suspects, to destroy infected property; search, disinfect, evacuate, open up for ventilation, or simply demolish any dwelling thought to harbour plague’.²⁴

With the implementation of the Act, small groups of European doctors and civil servants took over the responsibility for health and sanitation from the municipal councils in the cities of Bombay, Pune, Karachi, and Calcutta. In Bombay and Pune to speed up the control of disease, the act enabled Army to bring military efficiency to the sanitary campaign. The Act gave immense power to authorities over human rights. Every house could be checked without prior permission and the houses marked as “unfit for human habitation” could be asked by the landlords to evict their tenants or cut off the water supply to prevent dampness which could fester the disease. In some cases, the buildings will be simply asked to be burned down or demolished by the authorities. Prashant Kidambi points out how the authorities could stop sanitary workers from leaving Bombay which was one of their main fears since a group migration of these workers would result the mission in failure.

²⁴ Ibid.,pp.206-7

Prashant Kidambi gives us an insight to how the surveillance was outside the sphere of home.²⁵ In the case of passengers on local and outstation train, they were medically inspected at selected stations like Santa Cruz and Kurla. The inspection in the trains were crucial since the panicked citizens evaded the inspections and rules to migrate and the whole process of surveillance would be futile. The return of these migrant population to city once they had depleted their finances was also anticipated by the plague committee. The residents from the infected area and the new people arrived the city was isolated in several health camps that was opened across the city. Marine drive had one such health camps. These camps had “surveillance passes” that were issued to daily- wage workers. In these passes their temperature for the day was noted and, in some cases, people were photographed as an added measure which would be inspected and compared on alternative days.

According to Saurav Rai, who studied the implementation of the Epidemic Diseases Act, the significance of the Act was that it gave draconian powers to the even the lowest orders of colonial authorities to intrude in the lives of people at their will.²⁶ The actions taken by them in the name of surveillance could not be challenged in the court as they were only trying to restrict the spread of disease. He also observes how the cases of disease and its symptoms among European population was always hidden and went unreported by the colonial medical policies as it could challenge the power hierarchy and racial superiority, they maintained to rule India. The Europeans in India had separate arrangements for treatment made for them.

1.5 Resistance, Rumours and Repercussions to the Colonial Policies

The Colonial policies and measures to contain the plague was met with furious resistance. Under these policies the Indian body lost its individual identity and its value as sacred

²⁵ Prashant Kidambi. "'The Ultimate Masters of the City': Police, Public Order and the Poor in Colonial Bombay, C. 1893-1914." *Crime, History & Societies* 8, no. 1 (2004),pp. 27-47.

²⁶ Saurav Rai. "How the Epidemic Diseases Act of 1897 Came to Be". *The Wire*, April 02, 2020

territory, according to David Arnold, the body was now viewed as a secular object and a state property.²⁷ The body was responsible and was an integral part of the wider community. It was exposed to an outsider's gaze; an alien western practitioner could not only view but physically touch as he likes. This was not acceptable in the customs and traditions of the Indian society where even touch implied possession or pollution.

To the people of Indian society, the need of such sudden intrusive measures was not comprehensible. The plague was not as deadly as the previous epidemics. The forceful nature of earlier plague policies was instantly met with resistance as was evident from the contemporary sources of English and vernacular press in India which had a rapid growth in the late nineteenth century. In the earlier policies the corpses were examined and disposed as it was believed to be the focus of infection and it curtailed all religious rites and ceremonies attached to death. If this assault of body was not enough, many oppositions to the anti-plague policies came from the loss of property and possessions destroyed or pilfered during plague operations.²⁸

According to David Arnold, the panic among the people was worsened by involvement and intrusion into the caste and customs. He finds that most resistance came from the upper- caste Hindus, some Muslims sects and Parsis. "Men couldn't tolerate the sight of a wife's hand being held by a health worker; caste Hindus refused to eat food served by those from "lowly castes".²⁹ The military search parties that were set up by the committee was met with get resistance from the public as they saw hospitals as a place where people went to die and refused to move to health camps.

Few scholars questioned the exceptional degree to which colonial state power was exercised

²⁷ Arnold. *Colonizing the body*,1993, p.211

²⁸ *Ibid.*,216-17

²⁹ *Ibid.*,p.214

in the service of medicine and its nature and purpose since it had incited a radical reception from Indians. Most of the colonial policies were implemented in the belief that the epidemic was a result of localist etiological framework, that the disease was a product of filth and environmental pollution. But according to David Arnold the Germ theory was already in existence, the colonial medical and sanitary officials chose not to discard the well-entrenched localist ideas in making sense of the plague.³⁰

It made more sense to them to relate the germs to be a product of localised sanitary disorder and was easier to point towards the unhygienic densely populated areas as the breeding ground. Ira Klein also identifies plague reservoirs as the focus of endemic plague as he finds factors like population pressure, crowding, malnutrition and insanitation increase the vulnerability of humans to infection.³¹ In Calcutta, Srilata Chatterjee finds that the British doctors were clearly divided on the question whether plague could exist in a dormant form in the human body.³² Here to the Board was primarily concerned with improving the sanitary condition of the town and summarized the defects of the town of Calcutta. These included overcrowded and badly built houses, defects of the private and public latrines and the condition of house drains, surface drains, pollution of wells and condition of the slum.

Ian J Catanach observes how there was a great amount of alienation from western medicine in the Indian society. His study was not giving us any alternatives offered by the practitioners of indigenous medicine which seemed to appeal to the masses. David Arnold informs us about

³⁰ Ibid.,pp.59,89

Burton Cleetus. "Tropics of Disease: Epidemics in Colonial India", EPW Engage 55, No. 21, (May 2020), p.5 These developments coincided with the discovery of the germ theory of disease by Louis Pasteur, which was further developed by Robert Koch. This marked a sharp deviation in the idea of disease, moving its causation away from the environment to germs. Such a realisation undermined the earlier relationship between the environment and disease that sustained the miasmatic theory of disease

³¹ Ira Klein. "Plague, policy and popular unrest in British India." *Modern Asian Studies* 22, no. 4 (1988) pp. 723-5

³² Chatterjee, "Plague and Politics in Bengal 1896 to 1898,p. 1196

the development of colonial medicines and its interaction with the indigenous medical systems. According to him, there was a certain amount of hybridisation but the western medicine with its innate superiority of Western medical ideas and techniques gained more authority over the Indian medicine and Indian bodies. But in the situation of exercising of actual power, it had little access to Indian society and was confined into few arenas like “jails, barracks, hospitals, and dispensaries”.³³

Rumours played an important role in the resistance and instigation of riots in plague affected areas. In the work of Mridula Ramanna, she finds that people were more distressed by the plague measures than the plague itself.³⁴ According to her the general atmosphere surrounding the application of western medicine was clouded with a lot of suspicion and doubt, they believed it was more about cutting up bodies than healing them. There were rumours flying around that injections were given to kill patients and sent their hearts to the Queen of England as a conciliation for the disfiguring her statue at the beginning of the epidemic.

There were rumours flying around about inoculation that it induced infertility, it was widely believed that the British authorities had to call and request local medical practitioners like hakims, vaidas and native popular leaders like Tilak and Aga Khans volunteers for inoculation. I J Catanach, had pointed out how these native leaders like Tilak and Gokhale had consolidated their positions as nationalists using the measures adopted by the British for controlling the plague in contrasting ways, therefore their involvement in the vaccination was used to gain trust from the Indian people. David Arnold in his work brings to our notice some prominent rumours of this time for example, therein his work brings to our notice some prominent rumours of this time for example, a popular rumour was that government policies

³³ Arnold. *Colonizing the body*, 1993, pp.59-60

³⁴ Mridula Ramanna. “Systems of Medicine: Issues and Responses in Bombay Presidency” *Economic and Political Weekly* Vol. 41, (2006) pp. 3221-3226

were directed to destroy caste and religious observances and was an ultimate design to force Christianity onto the natives.³⁵ There was constant suspicion that it was not only the British, but the Indians were also their agents and allies. The rajas and notables who assisted the British in their plague operations or allowed themselves to be inoculated were seen as accomplices in an evil conspiracy to poison, pollute, and plunder.

The repercussions of the anti-plague policy were massive as despite intensive operations in towns and cities the epidemic continued to spread, and the mortality rate remained rising. This led to various riots breaking out in different parts of the country, the riot in Bombay 1896 was followed by another riot in 1898. In northern India there were riots against house searches, segregation, and hospitalization at Jawalpur in March 1898, and at Garhshankar in Punjab in April. The disturbances in Calcutta in May 1898 in the imperial capital itself was the most upsetting. The greatest height of the crisis created by the coercive plague policies was the assassination of the Plague Commissioner of Pune, W C Rand, and his assistant Lieutenant Ayerst by the Chapekar brothers in June 1897. The administrators feared the repercussions of enforcement of the same policies they applied in Bombay and Bengal on the Muslims and the martial races of northern India. This led to the relaxation in the plague policies after 1898 by government officials as the committee realized the need to respect the caste sympathies and native prejudices. Many private hospitals along the lines of caste, many of them especially for the communities most resistant to searches were opened by April 1898.

1.6 Plague Spread in the Madras Presidency

Southward spread of plague from Bombay have been charged on the trading communities like Baniyas and Marwaris. It was believed that Baniya class was responsible for the plague transmission to Deccan and the plague came to be known as the 'Marwadi Sickness'.

³⁵ David Arnold. "Touching the body: Perspectives on the Indian plague, 1896–1900." *Subaltern Studies V* (1987), pp.73-77

According to David Arnold, the plague was brought into Southern India by the travelling communities and traders particularly in Madras which had good commercial contacts with traders and business communities and was also a major port city.³⁶ According to the Reports on the Administration of Madras Presidency for the Years 1901 to 1921, plague was responsible for the high mortality rates in the Madras Presidency.

The 1898 plague outbreak in the Madras Presidency was initially confined to districts bordering on Mysore, Hyderabad, and Bombay Presidency. The plague was first declared in Bangalore 1898 August, majorly affecting the areas of city of Mysore and the Kolar gold fields. The Annual reports of the Presidency shows that in Mysore between 1896 to 1918 around 3,00,000 lives were lost. In 1899-1900, an optional system of segregation was introduced, and it was found to be superior to the compulsory segregation. This change of tactics must have been a follow up of the relaxation in the Bombay plague control policies since their initial tactics were met with brutal resistance. Also, unlike the chaos in Bombay areas, there were no motive for concealment of cases of plague, destruction of plague corpses in houses, stealthily burying bodies in the backyard or throwing them into streets. In the city of Hyderabad under the Nizam around 5,00,000 lives were lost between 1911-21. In comparison to Mysore the mortality rates were slightly lower.

Since the spread of epidemic in the Madras Presidency was thought to occur mainly through infection from travelers, a system of issuing passports was used to enforce surveillance of contacts in this area. There were inspections in trains, an inspection in the station of Jalarpet led to the removal of 120 plague infected people³⁷ Such incidents indicates that infections were brought from areas beyond the control of the government of Madras. In the case of

³⁶ Arnold. *Colonizing the body*, 1993, pp.210-1

³⁷ Sanitary Commissioner. *The Thirty-Eight Annual Report of the Sanitary Commissioner, Judicial and Administration Statistics of British India, X111, Vital Statistics*. Madras: Government Press. (1901)

maritime quarantining policies. The shipping companies and chamber of commerce objected to ‘such a long period of four months’ of medical check up and quarantine policy. This led to a diluted provision and the port officers of Calcutta, Bombay and Madras announced that they would only inspect ships coming from infected ports and only those who were suspected of carrying infectious diseases were to be detained in quarantines.

Towards the south of Madras Presidency, the plague effects were relatively less. The plague outbreaks were predominantly in the urban areas of Bellary, Coimbatore, and Salem. One medical thesis of 1913 argued that the distribution of Plague in the presidency depended on the effects of climatic conditions on ‘the length of life of the rat flea at varying temperatures and humidity’s in different areas’ and ‘the length of life of the plague Bacillus in the flea’s stomach at the different temperatures. This behavior of the flea has definitely helped to lessen the impact of the plague in the southern India.

1.7 Instances of Plague Outbreaks in Kerala

In the north of Kerala Plague first became indigenous in Malabar in 1906. From 1906 to 1910 around 1026 deaths have occurred chiefly in the town of Calicut. Most of the outbreaks till then was confined to the taluks in proximity to borders of Palghat gap where they enjoyed elevation and the cooler climate. The topography of the Palghat gap also made it difficult for the plague to spread southwards because the travelling or trade communities wishing to avoid a road or rail inspection station would find their only possible detour difficult and dangerous. The road between Mysore state and the district of Malabar was bounded by a belt of forest inhabited by wild beasts of different kinds.³⁸

A report from Mattancherry, Cochin gives us an idea of the plague situation in central Kerala.

³⁸ J. Spencer Low, Some Preventive Measures Adopted in The Presidency of Madras During the Late Epidemic Prevalence of Plague in India, (1899)

The major outbreaks in this area were marked in 1919, 1928 and 1929 with a total of 39 attacks and 33 deaths. This report came in baffling in the view of the facts that this small town was one the most thickly populated towns in the world at that time and the general sanitation had much more to be desired³⁹ Here despite a large number of rat falls, the human attacks were considerably lesser. Since the last report of Mattancherry and British Cochin in 1930 which became part of an extensive survey of the Madras Presidency conducted under the auspices of the Public Health Department of the Government of Madras the survey of 1937 gives us an account of the trade and economy of this area.

According to this report, Cochin port has since been declared as a major port and its maritime trade has assumed enormous proportions. It had become the only safe and sheltered harbour on the west coast South of Bombay. Apart from being the nerve centre of commerce in the State, it promises to be the emporium of trade for the whole of South India, thereby easily entitling it to be christened the 'Queen of the Arabian Sea'. The towns growing prosperity also became an unmixed blessing because its maritime connections with other important ports in the world increased its the chances of importing infection to Mattancherry. The expanded volume of trade and the conditions in the crowded Mattancherry along with its large number of rat-infested grains godowns which were not rat- proof made the town dangerous alike to health and trade. This report came into being to collect information about Mattancherry that would require to organise and systemize more effective measures to prevent an outbreak of the plague which still considered a serious disease in 1937. The report concludes with a warning of the chances of importation of all varieties of fleas and infection to Mattancherry due to the growing importance of the town and indicates the need of permanent plague preventive measures such as making the godowns rat-proof, improved sanitation, and sustained rat-destruction etc.

³⁹ P. Mohammed Ali. A Rat-Flea survey of Mattancherry, Cochin in 1937, Indian Medical Gazette, (1938)

In the southern part of Kerala, the earliest reference to Plague comes from Travancore, where the government declared the areas of Aramboly, Munambom and Shencotta as plague observation centers. These three areas were guarding the entrance from Tirunelveli and Cochin to prevent further spread by travelers from infected areas. The first indigenous case of plague was reported from Devikulam taluk in 1927, which faced 13 attacks and 5 deaths. A special Plague officer was appointed for the control of this outbreak which was accompanied by mass inoculation, disinfection of goods and quarantining coolie lives and rat destruction. Similar outbreaks were recognised from the areas of Bonami and Peermade in the early 1930s, one possibility of infection was the free communication between Bonami and the neighbouring estates. Peermade taluk also had free communication with infected villages in Cumbum Valley from which they obtained their supply of rice and other grain. It was not therefore possible to say definitely whether the various estates in Peermade got infected from Bonami which was the biggest bazaar in the taluk or whether all the estates including Bonami got plague infection from infected villages in Cumbum valley.

1.8 Quarantining and its debates through times

The term 'Quarantine' invokes fear of restriction and separation. From the early fourteenth century quarantining people was set as the most effective tool to control the spread of an unknown deadly disease or an onslaught of imported infectious diseases. The immediate action of prevention was to separate the sick from the healthy and to restrict movement to prevent the transmission of disease to the larger population. There was not much care for the emotions and sentiments of people, in the past, the priority was set on saving as many as possible. At present not much has changed, when the fear of global contagion knocks at the doorstep, authorities scramble to reinstate quarantine as a public health strategy with the same vigour as before. The relevancy of quarantine has continued through centuries but going through various interpretations and changes according to the changing political realms, their

ideas and motives behind governance.

It was also argued that the practice of quarantine that began in the 14th century was a device to protect the coastal areas and cities against plague epidemics, and they did so by halting the ships that were reaching from the infected ports of Venice to stay put and anchored for forty days before being allowed to land on the shore. Therefore, it was more likely that the connotation behind the word quarantine might have been derived from the Italian word '*quaranta giorni*' which denotes 'forty days'.⁴⁰

Difficulties faced in separating the infected from the healthy by the authorities in the later phase of fourteenth century led to a more structured preventive quarantine. Containing the disease was the crucial aspect as it was both a major public health and economic threat. The implementations of structured rules and regulations of quarantine came to being with the need to protect the people, their trade and the growing potentiality of the mercantile relations from the fourteenth century onwards.

The act of quarantining went through several changes in relation to industrialisation, trade and colonial expansion. Historically quarantine was perceived as an unbending and draconian way of disease containment but these policies and rules are open playing a dual role when it comes to home countries and colonies. The British style quarantining was visible in London which was their main focus. Quarantining was done with disease reporting, hospital isolation and disinfection while simultaneously focusing on the development in towns and cities.⁴¹ Such quarantining and disease control was occurring in the sanitary zones of port cities as well but with disparities.⁴² This brings into the question of what causes the variability and what decides

⁴⁰ Conti, Andrea A. "Quarantine through history." *International Encyclopaedia of Public Health* (2008): 454.

⁴¹ Maglen, Krista. *The English System: Quarantine, immigration and the making of a Port Sanitary zone.* Manchester University Press, 2016

⁴² Huber, Valeska. "Pandemics and the politics of difference: rewriting the history of internationalism through nineteenth-century cholera." *Journal of Global History* 15, no. 3 (2020): 394-407

the standardisation of the quarantine rules. Most importantly what did these quarantine rules mean for the colonised people of the British colonies.

The major reason for the frequent sanitary conferences was due to spread of cholera, plague and yellow fever that were threatening the global projects of free trade and imperial expansion.⁴³ There were fourteen conferences in total that took place from 1851 to 1938. The first one was organised in Paris by the French government to standardise the international quarantine regulations. By the seventh conference which occurred in 1893, the situation was urgent due to the growing concern of cholera and the advent of steam ship which was spreading it easily across trade routes across the Mediterranean, Levant and Europe.⁴⁴ The sanitary conference in Dresden happened in the background of first cholera epidemic declared in Afghanistan, followed by outbreaks in Persia, Russia, Paris and Austria-Hungary.⁴⁵

The pressure to impose strict sanitarian rules in the form sanitary passports were also brought in these sanitary conferences. The debates were propelled by the fear of the disease which was drastically hiking due to the nearness and speed which was brought by the transport and communication revolution of the nineteenth century against the feelings of security and superiority of the emerging global bourgeoisies.⁴⁶ These sanitary conferences should be seen with the perception of shrinking time and space in the colonial expansion. They also highlighted the prejudices of the race around the origin of diseases. One such example was seen in a hygiene report presented to the international sanitary conference of 1866 which stated that-

⁴³ Alison Bashford, *Imperial Hygiene: A Critical History of Colonialism, Nationalism and Public Health* (New York: Springer, 2003), Robert Peckham, ed., *Empires of Panic: Epidemics and Colonial Anxieties*

⁴⁴ Abi-Rached, Joelle M. "Sanitary Passports and the Birth of the Immunized Self." *Comparative Studies of South Asia, Africa and the Middle East* 41, no. 3 (2021): 300-311.

⁴⁵ Joelle M. "Sanitary Passports and the Birth of the Immunized Self."

⁴⁶ Bashford, *Imperial Hygiene: A Critical History of Colonialism*

*“The Asiatic cholera, profiting, like man, from the modern discoveries, makes its incursions much easier than fifty years ago, and it spreads afar with all the rapidity of steamships and railway”*⁴⁷

From here on we see contagion being connected to politics with metaphorical meanings in intricate ways of spreading the broader colonising agenda.

Most of the solutions that proposed by these conferences were not of benefit to all regardless of its international nature. Their primary aim was to safeguard the trade and imperial traffic and they debated to find ways to lower traditional barriers against epidemics and the same time keeping Europe safe from the importation of disease. Eradication of the disease often took a backseat in these conferences.⁴⁸

The quarantine rules were often seen as arbitrary in nature and lacked a scientific basis on questions of disease proliferation through objects or touch. It was both time consuming and expensive for an individual traveller. There were strong criticisms of the functioning of the Mediterranean quarantine institutions as it was largely unsuccessful in halting the disease and was a hindrance to integrated systems of travel and trade where being on time was a matter of importance. An inmate in 1850’s described the quarantine system in Malta as -

‘the Moloch of Quarantine, an abuse which, having teased the travelling world in the East for the last three hundred and sixty-five years, should no longer be permitted to remain as a

⁴⁷ Benoît Pouget, ‘Quarantine, Cholera, and International Health Spaces: Reflections on Nineteenth-Century European Sanitary Regulations in the Time of the SARS-CoV-2’, *Centaurus* 62, no. 2 (2020): 302–10

⁴⁸ Huber, Valeska. "Pandemics and the politics of difference: rewriting the history of internationalism through nineteenth-century cholera." *Journal of Global History* 15, no. 3 (2020): 394-407.

—The first conference was much less standardized than later conferences, lasted almost six months, and saw scientists hold lengthy speeches on different theories of disease causation. At the 1859 conference, only diplomats were invited, in order to avoid long scientific debates. At the subsequent conferences of Constantinople (1866) and Vienna (1885), and in line with increasing political reliance on science and expertise, individual doctors such as the French delegates Antoine Fauvel and Adrien Proust became more vocal, proposing new scientific measures that would lower barriers, which was of course very much in the interest of many diplomats attending the meetings. As the conferences moved into the 1890s, their proceedings became more professional and institutionally mature.

blot upon the institutions of any nation pretending to be removed even one step beyond barbarism”.

Quarantine and contagion during this period witnessed the tensions between freedom of movement and control. Alison Bashford in her works portrayed how the epidemics underlined the vulnerability of empires and how they constantly feared dissolution as they were expanding. Especially for the European nations with imperialist motives, these routine measures to prevent the epidemic that was being discussed in the sanitary conferences, played against their political and commercial interests.⁴⁹

While the various schemes that were brought in the sanitary conferences were promoting an idea of the creation of modern quarantine stations which acted as ‘sorting house’ and contactless travel. What went underhand was differentiation and classification between groups of travellers and splitting mobile people as risk and non-risk groups. These quarantine and isolation came into effect but was applied to some and not to everyone. The warships were let to go freely and did not have to consent to the sanitary regulations while othering a set of people as risk groups and suspicious as potential disease spreaders. These groups mainly contained ‘gypsies’, itinerant people and cross-border migrants.⁵⁰ At place that was supposed to bring a consensus on health care, prevention and protection of people from epidemics emerged a key strategy along the imperial lines. The military and commercial movements was free from any kind of stigma while mass pilgrimage and other subaltern mobilities were discriminated with newly found identities as risk groups and unhygienic.

In the sanitary conferences Britain had blocked any kind of meaningful intervention in India.

⁴⁹ Mark Harrison, *Contagion: How Commerce Has Spread Disease* (New Haven: Yale University Press, 2012). More generally on mobility in the age of empire, see Valeska Huber, *Channelling Mobilities: Migration and Globalisation in the Suez Canal Region and Beyond, 1869–1914* (Cambridge: Cambridge University Press, 2013).

⁵⁰ *ibid.*,

The colonial India under the British rule went through series quarantine measures from the 1800s. The most notable was the Quarantine Act of 1825. This act was passed mainly due to the fear of losing trade overseas if the ports were deemed dangerous due to the absence of quarantine laws. There were a series of debates between the British officials in India and the British officials in England. A significant section of the British officials in India were anti-contagionists. From the mid- 1800s, more importance was given to the public health policies, and various sanitary measures were implemented in the commercial ports under British control.⁵¹

According to David Arnold, during the course of eighteenth century there was growing tendency to see tropical landscapes as “deathscapes”.⁵² He finds that with expansion of imperial territory there was an impulse to understand, record and control a colonial environment that was considered biologically threatening. India in the colonial narratives were slowly moulded to fit the frame of tropicality which brought with it the notions of death and disease. This image of a “tropical India” helped the people of the home countries to cope and understand the high death rates of Europeans in India. At the same time, it erased the memory of the longstanding Indian presence with tropicality which suggested wilderness and lack of human occupation enabling colonial dominance with a clear conscience.⁵³ Now along with impulse to tame colonial landscapes into familiar European landscapes there was an attempt to convert tropical colonial spaces to sanitary units on their own right that needs

⁵¹ Harrison, Mark. "Quarantine, pilgrimage, and colonial trade: India 1866-1900." *The Indian Economic & Social History Review* 29, no. 2 (1992): 117-144.

⁵² Arnold, David, and Fred Mason. "The Tropics and the Traveling Gaze: India, Landscape, and Science." (2006).

–There is a burgeoning historical literature on landscape theory, which considers the relationship that people have with a physical piece of land, with the environment, largely through exploring the influence and development of cultural interpretations and frameworks

⁵³ Arnold, David. *Colonizing the body: State medicine and epidemic disease in nineteenth-century India*. University of California Press, 1993

protection from the outside world and prevent invasions from the outside world. The tendency of the Quarantine imposed by the British imperial power was to discriminate, divide and segregate went hand in hand with the imperial techniques of colonizing. The arguments of the anti- colonialists in the sanitary conferences was closely aligned with their imperial ambitions, they blamed the epidemic on the “filthy” living conditions of the imperial subjects and avoided the responsibility of containing the spread of contagion that was not a responsibility of the indigenous people.

CHAPTER – 2

THE MECHANISMS OF PLAGUE PREVENTION AND OBSERVATIONS IN KERALA

In Kerala, the threat of mortality due to plague was minimal, but the fear of an outbreak by an imported case from the infected neighbouring villages and towns resulted in the plague observation stations and staff being established in areas of potential plague risk. Though massive-scale plague establishments with railway inspection stations, camps and sheds were built as a preventive measure for plague, it was more of a bureaucratic mess and inconvenience for the people.

2.1 Bureaucratic System and their Response to Plague

The suppression of the plague can be done through remedial methods like disinfection, inoculation, destruction of rats and Plague hospitals. The preventive methods were observation and passport systems. The plague administrative report of the madras presidency gives us the details of both remedial and preventive measures taken in the south of India. The District Medical and Sanitary officer of the Malabar district, Major C. H. L. Palk, had reported that there were 21 imported cases of plague in the district under his supervision.

In the Palghat Taluk of the Malabar district, the divisional officer J. K. Lancashire observed the situation at Natrampalli Tiruppatur division of Salem district and reaffirmed the need for increased attention given to disinfection to prevent the spread of plague. He pointed out that the same house was infected for three consecutive years. His argument was in agreement with germ theory and the revivification of the germs that were being debated during the time.

He also commented on the condition of the south Indian houses, which contained tatty shelves

that were supported on the beams of the roof and the remains of wood and pots that were frequently left aside when the villagers were evacuated in a hurry. This, according to him, became an area that was frequented by rats which could spread the bacteria. For the disinfection to be called satisfactory, he found there was a need to give special orders to be given to disinfecting staff to take down what was left behind before disinfection because often these were seen generally left untouched.

In the district of Palghat, the idea of Plague hospitals was unpopular. Even in areas like Salem, when the epidemic was raging, the only people who went to the hospitals were people who were homeless. The government had appointed observation staff for the detection and suppression of plague in every district. In the case of Palghat, there was only one reported plague case at *pudunagaram*, which was imported from Coimbatore. The family of the infected was carrying passports which helped in the detection of the plague by the *adhikari* and not the circle inspector appointed specially for the detection.

The minutes given by S. W.G.I Mac Iver, the divisional officer in Tellicherry taluk, mention there have been few imported cases before 1904, where persons arriving from infected areas have been attacked with illness, and these cases were promptly reported. There was no instance of an indigenous case in this division till 1904 that was discovered under his charge. He was of the opinion that the observation staff was absolutely necessary and no reductions in the staff could be made unless there was a decision to abolish it altogether.

Even though the detected plague cases in the Palghat Taluk were very minimal, there was consideration for enlarging the areas of circles under plague observation. The expenditure that was spent under this head had no intention of reduction. This was also the case in Tellicherry, where the divisional officer found no reason for any kind of alteration in their present scale.

The livelihood of the people under this head was also considered. The inspectors appointed

were aiming at procuring permanent appointments under municipalities and unions in the district. This also gave the administrative authority the power to tell off the men for plague duties, and also were more efficient in their work than the temporary workers. There was a consensus to not reduce the payment for plague supervision jobs to prevent the reluctance they might face from the workers to agree with transfers that would incur expenses which had to compensate advantage. Even though the divisional officer of Palghat taluk was against the reduction of the pay scale and the extent of supervision, he found no necessity to increase the scale of pay that was established in 1904. He also comments on how the strict adherence to the rules of the Civil Account Code led to a great delay in obtaining the current pay and mentions his dissatisfaction. Such delays often occurred when there was a new set of observation circles opened or a new supervisor appointed. There were often delays in instructions for paying the bill for the plague supervision to the Palghat taluk obtained from the Salem Treasury. Before the pay was given, the circle inspectors had to submit the last-pay certificates, certificates of handing over the charge and certificates proving the maintenance of serviceable ponies, causing a time delay before the pay reached them.

This was also the case for the plague assistants who were working in hospitals. In the Palghat division, there were frequent changes in the staff at Kollengod and at the Walayar frontier inspection station that led to delays in their payment. There were constant transfers between the taluks; if a hospital assistant at Walayar was transferred to Kawai under the Tellicherry taluk board, he could not receive his monthly pay until he had submitted the pay bill for the month. This, in turn, was only possible when the new assistant in the Walayar had got his last pay certificate, which had to be counter-signed by the District Medical and Sanitary Officer and forwarded to the taluk Board President in Tellicherry, who would then grant a last-pay certificate to him. This whole process could take a few months, which was harsh on the hospital plague assistants.

The circle inspectors were paid a salary of rupees 20 without any allowances, and the divisional inspectors were paid rupees 35 with a pony allowance of rupees 15. In regard to an enquiry whether the amount of pay scale could be reduced, the divisional officer in Tellicherry replied that

“I think the pay of the former might be reduced from Rs.20 to 15 and the latter from Rs.35 to 25, with Rs 15 pony allowance, provided natives of this district were trained and employed here.”⁵⁴

In the rural areas of the taluks, the observation circle inspectors were paid a total of rupee seventy-five, which included a salary of rupees twenty-five, a fixed travel allowance of rupees fifteen and a horse allowance of rupees fifteen. They were paid this amount irrespective of their being certificated, temporary or assistant sanitary inspectors. The pony was kept by inspectors nominally for the sake of receiving the allowance. They did not need a pony to do their plague-related work or could do better without one as they had to often travel over the ground where a pony could be an encumbrance and was more accustomed to walking long distances. This allowance could be scrapped if there was a need to reduce the pay scale, but the divisional officer was of the opinion that this extra allowance during the actual plague would be an encouragement which would induce better work and content. The collector of Malabar had also mentioned the futility of allowance given for ponies as nine out of ten inspectors were unlikely to ride whether they received allowance or not. In some cases, they were necessary, as he mentions that the supervisors in rural areas should be provided with a pony and an allowance.

The observation staff were considered useful during the ‘hot months’ both as means of detecting the possible ‘dropping cases’ and as a trained nucleus for a preventive staff in the

⁵⁴ J P Bedford, Report on the plague administration of the Madras Presidency: Appendices. (Madras, 1905)

event of plague breaking out. There was always an apprehension of plague appearing at any time, and observation staff were required to understand the geography of the area, which was indispensable in combating the plague. Also, if the staff were brought together in a hurry in a plague instance, they wouldn't be able to cope efficiently with the work. And it was impossible to get an entirely new staff in working order without much delay. It was mentioned that, preferably, the candidates selected to be trained as staff should be selected from the districts from which they were to be employed. There were complaints that the period of staffs training in madras was too short. And it was impossible to have these staff trained locally in Malabar as the District Medical and Sanitary Officer had stated that he couldn't undertake such responsibility in addition to his myriad duties, which was supported by the collector of Malabar who sympathised with him on the overwhelming responsibilities he had to do.

The work of the observation staff was to search out defaulting the passport-holders and get them to give intimation of change of address. There were complaints about this work not being done in the proper manner, even in times when the plague was raging for a while. The observation was found most useful in waking up the local authorities to their duties of surveillance in plague matters. Observation staff did the preliminary work to control the spread of the plague before the preventive staff was recruited and put in working order. The divisional officer of the Palghat taluk stresses the importance of an observation staff as he feared any instance of plague outbreak would get quite out of hand without them.

In Palghat taluk, all supervisors in rural areas were allotted ponies to do the surveillance work. Ponies were found not necessary to the circle inspectors of observation circles and the preventive circle inspectors in towns. In Tellicherry, pony allowance was found necessary where the inspectors had a large area to watch; in most cases, the pony remained unused, but the extra allowance was thought advisable as it seemed it would lead to more significant efforts to find evidence of the plague that existed.

In Tellicherry, the divisional officer mentions the difficulty they faced in confirming if the suspected cases in the division were caused by plague or not. The subordinate medical officers also were not able to form a decided opinion as to whether the disease was the plague. It was also hard to teach the hospital assistants to recognise the symptoms of the plague without the help of experts in the field. Most of the time, the better option was to transfer hospital assistants so that there was at least the presence of one man with practical experience of plague in each revenue division. The non-medical members of the plague staff could not do anything more than search for people obviously ill and with high temperatures. These plague staffs were instructed in advance of their duties in connection with segregation and disinfection of houses by the District Medical and Sanitary officer. Segregation and disinfection instructions were given out frequently when it was deemed necessary and was tested by District Medical and Sanitary Officer when he went on his tours of inspection.

A. F Pinhey, the collector of Malabar, gives us an account of the cases that were detected by the observation staff appointed in the stations. Even though they appeared to only detect a few cases, he affirms the need for observation staff as he found their work useful and recommends increasing their numbers in Palghat town. There were five cases detected in the Municipality, of which the observation staff detected one, and the other four cases were detected by hospital assistants on plague duty. Outside the Municipal limits, there was a total of six cases in which the observation staff detected one, and three were detected by officers in charge of frontier stations.

The European supervision over the observation and preventive staff in the taluks mainly revolved around reviewing the diaries of inspectors and supervisors. The inspector's duty in some taluks was to wander about and send diaries that contained remarks advising people to keep the houses clean to avoid infestations of rats. The working capabilities of the staff varied. It was noticed that the staff who had previous experience of plague work and those who were

specially selected, with knowledge of their qualifications, had got their work done in a satisfactory manner.

The divisional officers in the taluks find no exercise of favourable influence on public opinion and sentiment due to the working of plague staff and other supervision, or little value to make a comment on their influence due to minimal plague scare. The divisional officer of Tellicherry taluks commented that the people in taluk would be glad to assist the plague staff and help them out of danger if necessary. He attributes this nature of attitude to the considerable intelligence held by a fair proportion of people in every part of the population in his division. The collector of Malabar finds plague staff indifferent to exerting a positive influence on public opinion and sentiments.

In the case of rural areas, The Medical and Sanitary officer and Divisional Officers of Tellicherry and Palghat thought the village officers were not very dependable in terms of detecting plague cases. There was an antipathy against precautions taken against the plague. When a place was found to be infected, there were more chances of it likely hushed up with the connivance of the village officers than it reaching the ears of higher authorities. The British officers felt that village officers were of only little use unless the Circle Inspectors functioned as a stimulus to them. Without the circle inspectors exerting pressure for plague surveillance, they were often occupied with many other duties, and only the visits from the inspectors, whose only business was plague supervision, kept them on the mark. The District Collector of Malabar had a favourable opinion about the village officers; unlike the above, he had found them helpful as in 1904 alone, they had brought information about four imported cases to him. But he also commented on the need to have circle inspectors supervising them.

The work of the Circle inspector was to supervise the plague incidences, passport-checking and keep a tab on the various fever hospitalisation and causation of death. This work was also

simplified due to the passport register, fever register and death register kept by the village headman. The Circle inspectors found it easy to be independent of villagers in terms of obtaining information in a very short span of time.

There were no recorded instances of 'bad influences like terrorism or favouritism' from the side of observation staff in Palghat taluk. In some areas, nearby people were against the use of aniline dyes (highly poisonous), which were used for the colouring of disinfectant solution.

European supervision alone was not possible materially check or mitigate the problems of plague outbreaks and its surveillance if there comes such a situation. But they were enough to check on if there was any hostile behaviour from plague observation and preventive staff.

The extent of villagers' understanding of the danger of infection by means of contact with outsiders and their clothes was not up to the appreciable degree wished by British officials. This realisation was not achieved until they had suffered from epidemics several times. While this was the case in Palghat, In Calicut, on the other hand, when the plague was bad in Coimbatore, the fugitives could get neither food nor shelter after the first two or three imported cases had occurred. They were in despair and approached the chairman, who had them all sent to the plague camp.

The conversation from the minutes gives us an idea about how the British officials want the villagers to find the plague. There was a disappointment in the responses of villagers not wary enough of the plague. To some extent, they wanted a situation where the villagers would understand the danger of plague and, on their own, keep out outsiders, merchandise and baggage from infected villages.

In the case of Palghat, there seemed no reluctance to welcome refugees from a plague-infested Coimbatore. The divisional officer wanted the taluk to be supervised by the plague officers and not live it in the trust of the villagers by themselves. Though the idea of self-surveillance

was very desirable, the officer in Palghat found the idea very impracticable, especially in the case of Malabar. At the same time, he was firmly in favour of all kind's village patrol left to villagers and not officially worked by the plague staff. '*Kolkarans*' He stressed the need for Kolkarans to be insisted upon by the village officers to ferret out information about newcomers with even more persistence than how it was done previously.

2.2 Plague and Passport System

The passport system was deemed very effective. In the Palghat taluk, great efforts were made by the local authorities to get the passport holders to give intimation of change of address. This was seldom done before 1904. The head of all villages was provided with books of passport forms in all observation circles. This was thought to be a necessity, but many times we see this not fulfilled properly. The administrative officers were concerned over fraudulent re-booking done by passengers to evade plague checking in railway stations. There was also a greater concern over travellers not registering correct addresses in their passports. According to Palk, securing and registering correct addresses was entirely depended on the travellers. In Tellicherry, the divisional officer was of the opinion that the 'local authority' in the vast majority of cases, was in a position too small to exercise any useful supervision over people of influence and their dependents. The local authority had no power over a big jenmi (landlord) or a native District Judge who was travelling to his village from an infected area, or a Colonel that went for a shikar expedition. In such instances, the village head was powerless and was expected not to insist on an inspection. According to the divisional officer, this was a concerning problem as the followers accompanying these influential people could also not be inspected. A request was made to prevent this source of real danger and have these people legally bound to report what followers accompanied them to an uninfected area from an infected area and then to report on the condition of health to the local authority. All servants of the government on salaries of rupees 50 per month and upwards, regardless of whether on

duty or leave, should be made departmentally responsible for observing the rule above. A list of people for each district should be made who will be inspected by this regulation. The list should include all income taxpayers, people who pay land revenue not less than rupees 100 and other people in positions such as members of District Boards and Municipal councils etc. This suggestion by the divisional officer was put forward with the faith that this would encourage these privileged people and their followers who otherwise would choose to escape the effectual supervision if forced to follow the passport rules, which they aggrieved to be forceful. Even though the list might seem to be a privilege, it should be seen as a necessary precaution and being on the list, which granted them a way out of passport checking, would be taken as an honour and accepted without resistance.

He mentions the problems in the administrative functions and the existing system of issuing passports and other observations. According to him, the intimations received in the district medical, and sanitary office from the passport issuing officers that were to be sent to the various Tahsildars, Deputy Tahsildars and Chairman of Municipal Councils was a waste of money, time and labour in every way. The statements received in his office were, in several instances, late to two to four days after the issue of passports, and by the time it reached the respective authorities, the observation period was over. He also complained about the passports and intimations written illegibly and incompletely, which were mostly received from outside the district, making it difficult to trace the defaulters. He thought there was a need for a different ruling that the passport-issuing officers who had failed to write their passports legibly and completely should be made liable to punishment.

He was of the opinion rather than intimations to be dealt with in the medical and sanitary office, it should be sent directly to the Tahsildar of the Taluk or the Chairman of the Municipality to which the travellers were proceeding, and they should be held responsible for the supervision of the passport. According to Palk, such an arrangement could save the delay

in receipt of the local authorities' intimations and do away with the clerical establishments that were entertained in the district offices on account of the Passport-system. He found these institutions not helpful and thought there was no need for an additional establishment for the Tahsildars and chairmen to process the intimations.

The district collector of Malabar also mentioned his displeasure with the order in which the triplicate passports and intimations were sent according to the plague regulations. The triplicate passports were sent directly to the local authorities concerned, while the intimations were sent to the District Medical and Sanitary Officer, who in turn had to send them to Chairman, Tahsildar and Deputy Tahsildar. This system of order causes a delay in the receipt of intimations by these officers. He endorsed the suggestion made by the District Medical and Sanitary officer that the intimations should be directly sent to the Chairman, Tahsildar and Deputy Tahsildar. Another suggestion made by the Sub-Collector of Malabar was to make officers of government receiving a salary of Rs.50 and above and certain classes of the Public legally responsible for reporting the health and condition of their followers who accompanies them from an infected area and those who were not sent to the local authority for inspection.

There were no accounts of inoculation practices in the taluk before 1904 in Malabar. According to Palk, 306 cases were inoculated during Colonel Hackett Wilkin's time in the Malabar district, but there have been no inoculations performed so far after he arrived in Malabar. From the Minutes given by the district collector of Malabar, we get the statistics that since the year 1898, 380 people have been inoculated in the district. He mentions that there were no inoculations done from 1900-1904, and the reason for such was due to the plague not being indigenous.

By whom Inoculated	No. of cases
District Medical and Sanitary Officer, Calicut	226
Civil Surgeon, Cannanore	74
Civil Apothecary, Palghat	70
Divisional Officer Sultan Battery	10
Total	380

According to the plague regulation, all dead bodies that did not have a certificate for the cause of death have to be checked upon by plague staff. But there were incidents of plague staff's insistence on seeing the bodies if they found the death certificate to be unsatisfactory. In many areas, rewards were offered to be given to persons or Native Medical Practitioners who would give information or report cases of plague victims. In Palghat, the divisional officer was against the idea of a system of rewards for reporting cases of the plague.

There was no cooperation or assistance from the vaidiyans and hakims (native doctors) in Palghat till 1904; however, it was highly desired by the administrative officers to get some amount of cooperation, and there were discussions on having measures implemented in this regard. Giving instructions would only be possible if they came forward on their own and could not be compelled to receive instructions. In Tellicherry, there were several private native practitioners of the European system of medicine, and there were hopes practitioners willing to receive instructions from the District Medical and Sanitary officer in case of a need. It seemed unlikely that the information about the first outbreak of the plague would be obtained from the native practitioners unless they were instructed on the diagnosis of the

plague.

2. 3 The Plague Police and their Functioning

The plague police in Malabar were chiefly employed in Municipalities, at road frontier Inspection Stations and at important Sea-Ports. In the Malabar district, two police constables were employed in each of the Municipalities, and their duties were to assist the medical officer in tracing out defaulting passport holders. In the inspection stations on the road frontiers, the plague police had to assist the officers in charge of the inspection of passengers and traffic. There were two constables employed at the Walayar station. In the frontier stations of Kanwayi and Perumpuzha in Chirakkal Taluk, there were one head constable and six constables appointed. The number of plague police was reduced when there were not enough funds provided for their allowance. In Sea-Ports, their duties were to prevent anyone other than registered *coolies* from boarding ships and otherwise assist in the inspection of vessels under the sanitary rules for the prevention on inward and outward-bound vessels. There were two constables appointed as plague police on this duty in the ports of Cannanore and Tellicherry. At sea Port of Cochin, one constable was employed for every forty men employed in a vessel. The police constables who were directly under the control of the medical officers were working satisfactorily, according to the reports. The collector mentions that the number of constables on plague duty cannot be reduced under any circumstances.

The colonial authorities had found the working of plague police in Palghat taluk not satisfactory. Station-house officers were not properly aware of the rules as the local authorities did. They only worked under the orders of their superior officers. Most times, unless they were instructed definitely to register a passport for any person arriving from a plague-infected area without a passport, they did not follow the plague regulations. There was a need to give further instructions to the district superintendent of police in an instance of plague spread that

calls attention to the plague police to do their duties. All police stations were supplied with a copy of the plague regulations. A problem that was frequently brought up was the instructions supplied being in English, which the station masters did not understand. There were instructions for the plague regulations to be issued in the vernacular languages. It was noticed that there were more cases of defaulting passport holders when the station-house master was a local authority as the attempts to trace defaulters were feeble in contrast to when station-house master was from elsewhere. In the Palghat division, the plague police were appointed to assist the hospital assistant at the Walayar frontier inspection station. Their duty was to patrol the frontier and also to stragglers entering by by-paths. In Tellicherry, there were no complaints from the chairman and plague officers about the works of plague constables, and it was assumed their work was satisfactory and fairly well. The few constables who were employed had the job of detecting cases of evasion of passport rules in the two municipalities of Tellicherry taluk and assisting the frontier inspection officers. In the Malabar district, Palk mentions the plague police were employed in certain frontier and railway stations, in municipalities and in certain ports, in connection with vessel inspection. They worked under the direct control of medical officers. Their duties were to maintain discipline and order in frontier and railway stations. They had trace defaulting Passport-holders in municipalities and prevented unregistered coolies from boarding the ships. In Malabar, he felt the plague police were employed in a satisfactory manner. The plague police did not have a fixed staff, and the number to be employed was ordered by the collector.

The expenditure spent on plague police was not reduced despite minimal cases; there was a demand to materially increase staff to carry out observations efficiently, especially in districts bordering on plague-infected areas. There were not enough staff to observe the whole area, but the authorities were of the opinion that even if the area of work and the number of houses under each observation circle inspectors were too large to cope properly, the plague staff as a

whole has done good work in Tellicherry. The documents also show that there were attempts to find ways to reduce the number of police on plague duty and even reduce the pay scale.

XXIII.—Income and Expenditure of Local Boards in 1912-13⁵⁵

	District Board	Taluk Boards including Unions in them					total
	(1)	Tellicherry (2)	Malapuram (3)	Palghat (4)	Wynad (5)	Calicut (6)	(7)
Expenditure (Medical)	Rs	Rs	Rs	Rs	Rs	Rs	Rs
Hospitals and dispensaries	7038	13421	13988	16326	14926	1313	67012
Vaccination	5956	2832	2159	2946	524	905	15322
Sanitation		1176	146	1205	232	73	2882
Plague	8702	117	145	186	910		5060
Other epidemics	27	24	743	508		155	1457

⁵⁵ XXIII.—Income and Expenditure of Local Boards in 1912-13, Madras District Gazetteer, Malabar (Vol 11), Statistical Appendix, Superintendent, Government press, 1915 p.59

(Public Exhibition and fairs, No data)

XXIV.—Income and Expenditure of Municipalities in 1912-13.⁵⁶

	Cannanore	Tellicherry	Palghat	Cochin	Calicut
Expenditure (Grant 3)	Rs	Rs	Rs	Rs	Rs
Hospitals and Dispensaries	6815	10252	9528	6794	14424
Vaccination	312	418	405	258	720
Plague charges	1,020	792	1,573	380	1757

⁵⁶ XXIV.—Income and Expenditure of Municipalities in 1912-13, p.62, Madras District Gazetteer, Malabar (Vol 11), Statistical Appendix, Superintendent, Government press, 1915

CHAPTER 3

THE CHANGING CONVENTIONAL STANCES ON PLAGUE PREVENTION

3. 1 Role of Rats and Combating Bubonic Plague

Stowaway rats and their fleas carried the bubonic plague to India due to the shipping between Hong Kong, Bombay and Calcutta in 1896. Still, it took the British authorities a few years to put the finger on exactly what was the channel of transmission of this disease that was rapidly spreading to other parts of India. The scientific reasons for the spread of the plague remained a cause of concern even in the 1900s. The questions regarding the extent of plague bacillus survivability in different environments were actively researched.⁵⁷ Many were debating whether the plague bacillus could survive without the support of living organisms. The recurring occurrences of plague outbreaks in the same house, even after years or after a gap of time, raised questions about the plague bacillus's ability to flourish on the floor of a hut. This was a huge matter of concern to find out how long a plague bacillus survives in an infected environment and whether it can lay dormant and recur later in a favourable season. Even the pattern of the spread of fleas carrying information was constantly reaffirmed. Observations were made about the spread of infection from rat to rat and from rats to human beings. More focused observations were constantly conducted to see if there were an instance of infection spreading spontaneously without the intervention of human agency.

It was in 1901 role of rats in spreading the disease was confirmed by the plague commission. In their report, the commission established bubonic plague as a bacillary infection and traced its origin to rat epizootic that gets transmitted to humans through fleas. This connection was

⁵⁷ J P Bedford, Report on the plague administration of the Madras Presidency: Appendices. (Madras, 1905)

demonstrated earlier by Jean Louis Simond, a French Pasteurian, in 1898 in India but was overlooked by British officials as they pursued the sanitarian plague prevention methods.⁵⁸ The rat-flea theory was often contested; an official publication in 1898 stated that the role of rats was unclear, but it is certainly not so common a cause of infection as the sick person and his surroundings'.⁵⁹ R Nathan, a civil servant who had compiled the plague prevention methods in the government of India in 1896, 1897 said that "epidemics among humans were 'solely attributable' to rat epizootics",⁶⁰ but the Indian Plague Commission until 1901 was adamant in their belief that plague was an air-borne contagion transmitted from travellers to other humans. According to David Arnold, the part played by rats' fleas was not decisively established until around 1908, partly with the help of research conducted by Glen Listen and W. B. Bannerman in India.⁶¹

The bacterium that was carried by the rat fleas was called *Yersinia pestis*, and it was initially transmitted by their bite to the rats.⁶² This bacillus was carried around by the local black rats and was ultimately transferred to the humans, who became their new alive alternate hosts when they died.⁶³ Once the role of rats in spreading the plague was confirmed, rodent control became the evident remedy for controlling the rapid spread of the plague. This caused an addition to an already existing surveillance system and inspection of the interiors of households and markets, and godowns. Along the sanitary lines of plague prevention

⁵⁸ Simond, Marc, Margaret L. Godley, and Pierre DE Mouriquand. "Paul-Louis Simond and his discovery of plague transmission by rat fleas: a centenary." *Journal of the Royal Society of Medicine* 91, no. 2 (1998): 101-104.

⁵⁹ Arnold, David. *Pandemic India: From Cholera to Covid-19*. Hurst Publishers, 2022.

⁶⁰ Nathan, R. "The Plague in India, 1896, 1897, 4 vols. (Simla: Government Central Printing Office, 1898), I, pp. 291–297.

⁶¹ David Arnold. *Colonizing the body: State medicine and epidemic disease in nineteenth-century India*. University of California Press, 1993

⁶² Klein, Ira. "Plague, policy and popular unrest in British India." *Modern Asian Studies* 22, no. 4 (1988): 737

⁶³ Hirst, Leonard Fabian. "Conquest of plague." *British Medical Journal* 2, no. 4851, 1953. p 312

measures, more men were put into action in effectively exterminating rats in plague-suspected and plague-prone areas. The Indian huts, grain bins, godowns and other storage areas where rats commonly house were under special invigilation as it was believed the initial transmission was through contaminated food grains.

In the western gaze, most saw the plague as a disease of race, class and a particular place; in their vision, the Indian rat-infested homes and unsanitary huts are totalling to their observation of plague as a disease of the Oriental poor. This further helped them to endorse the idea of difference and superiority and that, not all races and places were equal.

At some level, patterns of human activity helped to predict the dissemination and survival of the plague in India. The surveillance increased in areas where a large number of people were repeatedly exposed to infection, whether it was in densely populated cities, towns or villages. The mobility of people, which had increased due to the exodus from cities to the villages to escape the quarantining carrying their clothes and grains, provided a favourable medium for the rats and their fleas to reach new destinations. To the sanitarians, people and rats lived together in their homes and workplaces unhindered due to the poor sanitation and unhygienic lifestyle, and they blamed the socio-economic conditions to have assisted the spread and reoccurrence of the disease.⁶⁴

With the latest scientific findings and effective tools developed to combat the plague, the colonial administration loosened their initial counterproductive British measures of flushing out drains and demolishing houses and switched their main target from humans to rats. More expenditure was set on rat destruction and not on coercion which used to mostly prompt the hosts to flee and cause the infected rats to migrate in the distance. This shift went along with the more persuasive and passive mode that was adopted by the British authorities in the 1900s

⁶⁴ *ibid*

after the hostile reactions they faced in many regions for their forceful implementation of policies in the early years of the plague. It could also be argued that the change of attention to rats from humans as the perpetrator helped coax the masses to comply with sanitary measures as they are now a victim of a plague attack and not the carrier themselves. This also helped the colonial authorities to regain and uphold their own authority, which they were anxious to have lost control of in the health crisis and to calm the international alarm that was caused by the plague in India.

The mass killing of rats was undergone in most of the states that were threatened by the plague, but it was not without challenges as certain parts of India, like Rajasthan, worshipped rats as they were associated with the God Ganesha.⁶⁵ In the case of Madras' presidency, archival records confirm that the mass killings of the rat were taken as a very serious initiative in containing the spread of the plague. According to Mark Harrison, between 1906 and 1910, fewer deaths were registered, and he connects it to the fact that millions of rats were exterminated during this period.⁶⁶ With rats being recognised as the major preparator of the plague, it also backed the shifting discourse of the plague not only as an urban disease. Many Indian villages were large with closely packed houses with conditions suitable for the survival of the rats and fleas, and these areas could easily transmit plague and let them thrive like any other city slums or dwellings.⁶⁷

A wide range of variables affected the spread of the plague, and it was extremely complex. Research done on Plague in India showed that the effects of the plague differed due to various reasons like season and climate, rainfall, temperature and humidity. Other than ecological

⁶⁵ Mahammadh, Vempalli Raj. "Plague mortality and control policies in colonial South India, 1900–47." *South Asia Research* 40, no. 3 (2020): 323-343.

⁶⁶ Harrison, Mark. *Public Health in British India: Anglo-Indian Preventive Medicine 1859-1914*. Cambridge University Press, 1994: 157

⁶⁷ Arnold, David. *Pandemic India: From Cholera to Covid-19*. Hurst Publishers, 2022.

reasons, the storage of grains and the movement of these on which rats fed on was found to be a major problem, especially the proximity of these to human habitation. Black rats and their fleas were identified as the main carrier of the disease, this specific kind of rodent, found mostly in western and northern India, also known as 'Xenopsylla Cheopis' was found greatly effective in the transmission of plague bacillus from rats to humans. This species of rat X-cheopis was not generally found in southern and eastern India; this is considered one of the major reasons why these regions were less affected by the plague. Especially in Kerala, the species of X-cheopis was the least among all the other species found in a plague-affected area.⁶⁸

One of the important remedial methods that were being followed for the suppression of plague in South India was the destruction of rats. British officials took the destruction of rats, reporting rat falls and sanitising areas frequented by rats very seriously. Major. C. H. L Palk, who was the Medical and sanitary officer in Malabar district in 1904, had commented on the state of the south Indian houses, which contained tatty shelves that were supported on the beams of the roof and the remains of woods and pots that were frequently left aside when the villagers were evacuated in a hurry. This, according to him, became an area that was frequented by rats which could spread the bacteria. He complains that for the disinfection to be called satisfactory, he finds a need to give special orders to be given to disinfecting staff to take down what was left behind before disinfection because often these were seen generally left untouched. In Malabar, the European supervision over the observation and preventive staff in the taluks mainly revolved around reviewing the diaries of inspectors and supervisors. The inspector's duty in some taluks was to wander about and send diaries that contained remarks advising people to keep the houses clean to avoid infestations of rats.⁶⁹

⁶⁸ P. Mohammed Ali. A Rat-Flea survey of Mattancherry, Cochin in 1937, Indian Medical Gazette, (1938)

⁶⁹ J P Bedford, Report on the plague administration of the Madras Presidency: Appendices. (Madras, 1905)

In Travancore, the administrative documents of correspondence show us that every rat that was found dead in the vicinity should be immediately reported to the local authorities under plague charge or any other officials with the same duty in order to get its smear and be sent to the district medical officer in charge to conduct the bacteriological examination to find if it carried the plague bacillus. The district in charge of the town improvement committees was allowed to demand the cost spent on destroying the rats. In a case of death from plague at Kunnamkulam in Cochin state in 1909, a copy of a letter from the British resident demanded reimbursement of Rs 100 from the state that was applied for the killing of the rats around as a necessary precaution to prevent a possible importation of disease into the town of Alleppey.⁷⁰

Plague cases in the high ranges of Kerala have been documented very carefully; the estates that were occupied by the British officials were of great importance due to the cultivation of commercial crops in these places. These high ranges provided a suitable place for the large-scale profit-motivated cultivation of commercial crops that were indispensable for European life. In the Idukki district of Travancore, coffee plantations were first found in Peermade, and from Peermade, other nearby valleys of high ranges like nedumkandam and Munnar also came under coffee plantations.⁷¹ As the cardamon and tea plantations started to develop in the high ranges need for communication and transportation also increased, there was also development in transportation that was primarily focused on roads that would connect ports where the plantation products were exported abroad.⁷² In the Idukki district, this also led to the railway expansion, a tramway system to carry tea from Munnar to the thoothukkudy port in Tamil

⁷⁰ File No 576 of 1909 , General Section, Measures to prevent the importation of plague into Travancore, letter from British resident to chief secretary of state dated September 6th, 1909, Kerala State Archives

⁷¹ Santhosh George, British Planters and the Question of Ecological Imperialism -A Historical Study in the High Ranges of Kerala, International Journal of Research Vol.2, Issue-1, November 2016. P 1-6

⁷² Ibid.

Nadu, and the monorail remnants were all part of this expansion that had facilitated the high-speed mobilisation of commodities from estates to the rest of the world.⁷³ The archival documents concerning the plague problems in these estates demonstrate how the rapid development of roads in these plantation areas like Neriya Mangalam to Munnar, Munnar to Udumalpettu, Kumily to Mundakkayam, Kumbammetu to Cumbum, Kumily to Goodallur etc. that were given a final shape during the plantation era of Kerala also opened up spaces for transmission of plague from the neighbouring states plague infected villages.

Since these estates were focused on cultivating cash crops, the rice needed for the people in the estate was usually imported into the district from other areas. The storage of these imported grains and the diligent inspection that was compulsory was often thought of as a nuisance by the British officials in charge of these estates. The rice godowns and the rice stores for distribution were also under supervision. An urgent telegram received from the district magistrate in Munnar on June 3rd 1910, to the sanitary commissioner of Travancore reports of rats dying in Munnar near the rice stores, and they suspect the disease to have been imported by carts coming from the udumalpet observation camp near Chinnar.⁷⁴ Another letter from Krishnamurthy Iyer, the Sanitary Commissioner to the chief secretary of Travancore, informed him of the unusual rat mortality occurring in the Munnar estate. The medical officer, A.T. Thomas of Devikulam, wrote to Durbar Physician requesting him to take precautionary measures in the areas of Munnar, Kannimalay and Vajananaraya, as there was heavy traffic between these places and Udumalpet which was infected by the plague.⁷⁵ The carts bringing rice sacks from the neighbouring villages were seen as the major channel

⁷³ *ibid*

⁷⁴ File No 576 of 1909, General Section, Measures to prevent the importation of plague into Travancore-telegram from Munnar, Kerala State Archives

⁷⁵ *Ibid*, letter from Sanitary Commissioner to Chief secretary of the state, dated July 10th, 1910, Kerala State Archives

through which infected rats entered the state.

The inspection of the grain bags for rats and their fleas and their disinfection in open areas was a troublesome procedure for the estate managers. A complaint submitted by Mr M.J.J. Murphy of Yendavar estate against the Plague doctor and plague police at Ramakel mettu gives us a two-sided scenario as to how the plague supervision was considered by the Britishers in charge of estate management and the Bureaucratic authorities who were following the plague policies established by the government. Though Murphy's complaint against the officers was for causing obstruction to the transport of rice to his estate, the content of the letter was focused on accusing the plague doctor and police of asking for a bribe of Rs fifty per month to allow the transport of rice into the estate of Pampadampara. The complaint sent to the Sanitary Commissioner was given immediate attention and demanded further examination to find the truth behind the accusation. Both plague doctors and plague police had responded with claims to be unfounded, and they were being falsely accused. According to the plague doctor on duty, sub-assistant surgeon K. A. Arumugham Pillay, the rice that was brought into the estate was stopped because the rice contractor used to bring rice that was wet and stinking from the neighbouring area of Kombai where the plague mortality was extremely high. He stated that there was no way he could have allowed the contractor to import wet rice without asking him to get it exposed for some time and that this complaint was only submitted because the agents were not allowed to have their own way of importing the rice.⁷⁶

In the 1920s, plague rules had mostly been concentrated on rat destruction, an inspection of passengers and issuing passports. The annual revisions of the Madras plague rules continuously state that changes in measures taken were experimental and temporary for five

⁷⁶1920 -General Section – Plague in kumili, Complaint of Mr J.J Murphy of the Yendavar Estate, Mundakayam, against Plague Doctor and Police at Ramakel Mettu, for causing obstruction to the transport of rice to Mr. Murphys Estate, Kerala State Archives

years. There was never a definite reasoning given for any of the measures that were being implemented in the state. The Sanitary commissioner's letter to Dewan of Travancore in 1920 mentioned how it was still not established that human beings were not an important factor in the importation and spread of disease, and the question was still left open. Even with definite scientific studies that prove the human body was not a carrier of plague, the plague rules and the rhetoric of transmission of plague involving the human body remains unchanged two decades after its arrival. This could be due to the unwillingness of the British authorities to forego their absolute control of the movement they once had when human bodies were believed to be the carrier of the disease.

The district medical officer of Devikulam taluk, Dr Lakshmanan, gave his observation on the complaint in the Murphy case. He asks the government for their attention on section 18 of the plague rules, which stated

"Granaries are the favourite hunts of rats, and grain bags arriving from any place suspected of being infected with plague should be carefully examined, and any rat found should be destroyed and their bodies burnt; the bags and the grain should be well exposed to the sun for 48 hours if dead rats are discovered".⁷⁷

This rule made it impossible for the examination of carts and grains to not cause delay and trouble to merchants and agents who were naturally anxious about reaching their destination as early as possible.⁷⁸

In the princely state of Cochin, the outbreak of plague in Mattancherry was dealt with great care and precaution. From the proceedings of the government of Cochin on July 16th, 1919,

⁷⁷ File VII of 4 of 1920, general section, plague at devicolam division, letter from Medical officer of Devikulam to Durbar Physician, Kerala State Archives

⁷⁸ Ibid.

we get to know that immediately after the outbreak was informed to plague authorities, an additional eight temporary sanitary inspectors were appointed by the chief medical and sanitary officer. Four inspectors were posted in Cochin, and four were sent to Ernakulam to take charge of the municipal wards. The inspectors needed to make the mandatory house-to-house visits daily and ascertain all cases of fever that continued over twenty-four hours of duration. They also needed to maintain the information in their registers. In Cochin, special care was taken in the destruction of rats; it could be because of the then dewan Peishkar of Kottayam, who considered rat destruction to be one of the most important measures; he had requested the tahsildar to start a campaign for the destruction of rats which he thought has already been delayed than necessary. He also suggested an offer of a reward of 4 *fram* cash per rat produced, which would help to accelerate the destruction of rats. Many other measures were undertaken in this area regarding rodent control; each sanitary inspector was given a temporary peon with a salary of Rs seven if any rat falls were reported in his area by the town improvement council. The Cochin town council had about seventy rat traps in stock, and with the outbreak of plague in Mattancherry, they ordered seventy more from Chittoor with the help of the chief medical officer as a matter of urgency. Another telegraphic order for hundred more traps was placed with a Madras firm by the town president. According to the sanitary officer, it was desirable to have not less than five hundred traps in use in Cochin, and in addition to rat traps, it was highly recommended use rat poison to get rid of the rodent population. The rat extermination measures were carried out in each ward by the sanitary commissioner along with a rat coolie. The rat traps were issued to the household in the morning and were collected from them the next morning. One coolie appointed has to set fifty rat traps, and if the ward number increases by fifty, then an additional coolie can be appointed, and so on, the system followed.

The revised plague regulations of 1918 in Travancore had mostly given up on observation

camps as a preventive measure which was of extreme importance in the regulations of 1898. The newly revised regulations had the anti-plague measures grouped under four heads- a) Rat elimination or prevention of rat infestation, b) Protection of rats as a community from the plague, c) Rat destruction and d) Inoculation and evacuation of infected dwellings. The Press communique notification of July 23rd, 1919, mentioned that there were rumours of rats dying in the godowns situated at the junction of the main bazaar and new road in Mattancherry, which got noticed by the plague authority and conducted a search. The town council president necessitated that this rumoured godown and the adjacent godowns be inspected and to report back to him with mortality statistics and the result of the inspection. The medical officer the next day reported to the government that a Gujarati baniya lady was suffering from bubo and fever in a *chawl*⁷⁹ on 'new road' close to the first mentioned godown belonging to a Purushotham Ghelas and that this area was also occupied by about ninety other families of Gujarati's. The diwan and chief medical officer immediately went to cochin and inspection of this said chawl and disclosed 6 cases of fever and glandular swelling.⁸⁰ There was another incident in the same year with a bad type of highly infectious fever of the exact nature and causation noticed in a baniya girl that proved fatal. This got recognised sooner due to the surveillance that was placed due to the plague attacks among the banyas in Mattancherry.

Another infected case in Talliar imported from Goodallur, a neighbouring town connected through roads of plantation routes, became indigenous in the village, which was a rare happening in the plague scenario of Kerala. The importation was blamed on the heavy

⁷⁹ a large building divided into many separate tenements, offering cheap, basic accommodation to labourers.

⁸⁰ The Raja of Cochin in 1841 granted Gujarati merchants a piece of land in Mattancherry for warehouses for their goods. The earliest official records available which give evidence towards their attempts to form a permanent settlement is a deed executed at the instance of Raja Kesavadas, the Diwan to Travancore granting an area in Alleppey for their exclusive use. They obtained a place in Alleppey where the merchants could construct their houses to live with their families and also negotiated a special arrangement with regards to the custom duties and port duties. They were permitted to retain jurisdiction over their own nationals as well as the local labourers they employed.

passenger traffic through Kumili and other mountain paths and was seen as a potential risk to Travancore state. There was an incident in Devikulam in 1920 where a sub-inspector reported a dead rat found in the local station. This was reported to the commissioner of Devikulam, S.C.H. Robinson, who instantly went there accompanied by sheristadar and Tahsildar, who followed shortly after them. It was found that the dead rat was a muskrat, and it had died from the effects of the rainfall that happened the previous night as it was found dead in the garden. Even then, the commissioner made all arrangements ready to get its smear taken for bacteriological examination and directed to have the police station disinfected.

Finding a dead rat could now give the plague authorities every right to order inspection, disinfection and further supervision in an area. In 1920, in Peermade, the death of a rat in the Connemara estate resulted in close enquiries into the coolie lines.⁸¹ The rat was found dead lying in the centre of one of the occupied rooms in one of the coolie lines during the night, and it died while the coolies were sleeping after they had retired for their rest. The smear of the dead rat showed no infection, but this incident led to coolie lines being disinfected with kerosine emulsion and arrangements were made by the tahsildar to get all the coolies and others in the estate to permit themselves to be inoculated. Belongings of the coolies, like old gunny bags, rags, old blankets etc., were burnt with the grass roofing of the lines. Clothes that were taken from the coolies were disinfected with carbolic lotion. The coolies were also segregated under the estate medical officer if any among them were running a fever or suspected of plague. People connected plague and rats so closely with each other that, in a letter, Sanitary Commissioner addressed to Diwan of Travancore, he recommended the discontinuation of sending decomposed dead rats from distant places to taluk offices because of the large number of dead rats that were being sent to these offices in suspect of plague.

⁸¹ File V, 1920, General Section, Plague in kumili, Kerala State Archives.

3.2 'Disease of Filth' The Question of Sanitation During Plague

It was important to know why the localist perception of the plague as a disease attributed to filth, dampness, unsanitary conditions and miasma (the theory that epidemics spread through contaminated air) remained strong both before the peak of plague mortality and even when the plague was declining after the 1920s with the theory of oriental flea and rats as carrier widely established. According to Prashant Kidambi, the colonial rhetoric of plague was a disease of filth and overcrowding was placed on the poor as the common perception was that they were carriers of the disease. This led to the poor facing the brunt of the offensive anti-plague measures in Colonial Bombay. Even before the advent of the plague, the idea of diseases in the city was consistently attributed to the effects of localised miasma produced by contaminated air, water or soil, which were seen in the annual reports of Bombay's health officer in the latter half of the nineteenth century.⁸²

Such ideas of poor sanitary conditions within dwellings and neighbourhoods being the principal and prejudiced cause of the disease remained even after the germ theory and oriental flea theory were accepted in the first quarter of the twentieth century. The colonial medical and sanitary officials across the countries found it very hard to replace these ingrained long-standing localist ideas. Most of the new bacteriological theories were looked at with suspicion, and many were obstinate in following the changes. Still, most found ways to find the missing links in the new theories of microbial agency and applied the localist etiological framework of filth and environmental pollution to the new theories. According to them, germs that were causing the disease were the product of a localised sanitary disorder. This was necessary to retain the control over the added powers over ordinary law that had been conferred by the Epidemic Diseases Act to the local plague authorities, which gave them greater powers and

⁸² Prashant Kidambi. "'The Ultimate Masters of the City': Police, Public Order and the Poor in Colonial Bombay, C. 1893-1914." *Crime, History & Societies* 8, no. 1 (2004), p. 27-47.

increased control over the people, their movement and their properties. Also, the idea of a disease that was spread through the agency of bacteria was a lot more fearsome; it was unfathomable to think of the plague as a disease that could easily cross over to the west or even affect the Europeans residing in the country harshly. The awareness that anyone could succumb to the disease, not just the unhygienic Indian poor, could have been a narrative that they would never want to acknowledge in its fullness.

On the other hand, western societies continued to progress throughout the nineteenth and twentieth century with their evolving medical knowledge and advanced sanitary skills that went on par with new scientific findings to resist epidemics. Their colonies remained to be a place where they conducted a lot of their scientific medical experiments. And the findings that went against their colonial motives were never applied. The mortalities that happened in their colonies were something that was regrettably inescapable and unstoppable either due to lack of hygiene, tenacious poverty, larger population and utter absence of sanitary awareness.

Maintaining the sanitary aspect in the plague control measures legalised their entry and disinfection of buildings. Also, it empowered the plague local authorities to declare buildings unsanitary and unfit for humans to live in, to evict them, to demolish buildings, compel to reduce overcrowding in tenements. This situation was primarily based on the Epidemic diseases Act that had delegated its powers to all places in India. If we were looking at this situation from an international perspective, the colonial medical opinion in the late 19th century had its extent of stringency on the matter of sanitation to be used variedly. The delegates in the 1897 Venice international sanitary conference wanted the colonial surveillance regime to adopt selective policing rather than rigid sanitary measures.⁸³ This

⁸³ Huber, Valeska. "Pandemics and the politics of difference: rewriting the history of internationalism through nineteenth-century cholera." *Journal of Global History* 15, no. 3 (2020): 394-407

meant they wanted to only restrict the mobility of certain groups or individuals, mostly the pilgrims and wanted to keep it open for others especially find ways in which the trade, to a large extent not disrupted.

This selective policing chosen by the colonial British was quite different from other continental powers in Europe as they had always favoured quarantines and Sanitary regulations as a long-practised tool in keeping control of diseases like the bubonic plague.⁸⁴ Britain, however, was a rising pioneer of industrialisation. The main receiver of the profits of the flourishing international trade and was the greatest propounder of liberalism and free trade. They could not look favourably to the idea of quarantining when it came to matters of the trade from colonial India to the rest of the world. This emergence of the 'English System' of medical surveillance, according to Krista Maglen, was aimed at facilitating commercial traffic and displacing the older quarantine system.⁸⁵ In the case of Maritime quarantine, it was unavoidable that it would hinder trade and commerce and was often a question of debate in the conversations of the international conventions. In Colonial India, the quarantine and sanitary measures, to a large extent, were driven by commercial imperatives. They preferred rather adopt measures that would suit the colonial administrative and trade policies, which were to continue stringent measures in regulating the urban poor and unauthorised movement of people without supervision.

According to David Arnold, the responsibility for health and sanitation was taken away from municipal councils and was handed over to small groups of European doctors and civil servants in the areas of Bombay, Pune, Karachi and Calcutta. From the Archival documents of Kerala, we can see a similar situation; there were Sanitary inspectors and medical officers

⁸⁴ Polu, Sandhya L. *Infectious disease in India, 1892-1940: policy-making and the perception of risk*. Palgrave Macmillan, 2012.

⁸⁵ Maglen, Krista. *The English System: Quarantine, immigration and the making of a Port Sanitary zone*. Manchester University Press, 2016.

appointed for observation and surveillance in each taluk. He also mentions that the gradual decline of plague that was observed from the 1920s had very less to do with medical and sanitary intervention; it had more to do with natural limits set on its spread by various ecological and zoological factors like the geographical distribution of certain species of rats and the growing immunity of rats the plague bacillus.⁸⁶

In Kerala, the Durbar Physician had suggested the complete authority over plague inspection should be carried on by the sanitary department, and the medical officer should also be supplied from this department.⁸⁷ The town committee president of Allepey, in regards to keeping plague out the town in his letter to the chief secretary of state in 1909, was of the opinion that the best preventive measure that could be adopted was to have the town kept in the best sanitary condition possible and in order to do that he made a request to have more plague staff to be brought into the town. According to him, the town needed a large number of sweepers and scavengers to cope with the increasing demands of the town, which was crowded with numerous shops, merchants' yards and dwelling houses. Allepey, the chief commercial centre of the state with a large influx of people coming from outside, found it impossible to even keep the main streets, the canal sites and the public latrines clean without staff in spite of all the efforts their taking in preventing the plague from town. He also, in his letter, mentioned how the discontinuance of the plague establishment had made the examination of passengers and disinfection of the shore coolies unsatisfactory. He requested special care to take about this town as Alleppey had commercial dealings with Bombay and other places which were infected by the plague. There were several people from such parts, as well as the residents of the town, who went and came back for their commercial needs and

⁸⁶ Arnold, David. *Colonizing the body: State medicine and epidemic disease in nineteenth-century India*. University of California Press, 1993

⁸⁷ File No- 56,1904, Bundle No-6, Vital statistics department files

needed to be inspected and searched for the plague. He complained that checking their receipts of intimations of their arrival and passports took a great deal of time to plague subordinates, and there were not enough people to maintain the sanitary condition of the town.⁸⁸

In 1911, when a suspicious case of plague occurred in Munnar, the sub-assistant surgeon and local deputy tahsildar immediately proceeded to the spot to check on the patient, but a more competent British medical officer was brought to the scene later. The patient was removed to a place far away from the bazaar to a building owned by the company in the estate. The place he was staying was evacuated, and precautionary measures were taken until Dewan Peishkar arrived. As a sanitary precaution, all the adjoining shops were closed; also, shops that sold meat and mutton were closed in the neighbourhood probably to prevent any chance of overcrowding while there is a suspected case of plague in the estate. All rags and clothes were burnt, and iron and enamelled wared scalded by fire as a part of the sanitary measure. Floors of the rooms in the building, wall planks and the adjoining shops were washed and disinfected with perchloride of mercury lotion; sewing machines were washed and disinfected with carbolic lotion. All the contacts and all those who went inside the patient's room were asked to be kept under observation. The sanitary environment around the patient was considered essential; the room in which the patient stayed had a tilted ceiling with corrugated iron sheets; some planks of these ceiling and iron sheets of the roofing were taken away to admit air and sunshine into the patient's room.⁸⁹

The question of sanitation and measures around it was one of the consistent reinforcements that were taken by the administrators in Kerala to prevent the threat of plague being indigenous in the state. A case of suspected plague death in Kunnamkulam in the Cochin state

⁸⁸ File No 576 of 1909 ,General Section, Measures to prevent the importation of plague into Travancore, Kerala state Archives

⁸⁹ File No 328 of 1911, suspects case of plague at Munnar, measures to prevent plague, bundle 80, General Section, Kerala state archives

had the British resident of the town writing to the state to take necessary precautions to prevent the importation of the disease into the state of Travancore through Cochin. After a lot of consideration on the subject with the town committee, they ruled out quarantine to be of any use at Chungam or any other area in Allepey. To them, quarantining an area through which a lot of people come in and out for commercial purposes, especially from infected areas, will increase the hectic process of checking the plague passports and amassing a number of intimations the bureaucrats have to keep a check on. It was decided in this case, rather than imposing quarantine and conducting medical examinations of travellers from the north through Cochin; it was better to keep the town in the best condition possible. For that to be made possible house to house visit of special staff was suggested with a view to getting the premises of even private individuals cleaned and sending more sanitary staff to places more care is necessary. This shows that in areas of the state where commercial activities were an important part of the economy, they preferred to override quarantining with the promise of better sanitary conditions.⁹⁰ Here the importance of quarantine in the town was considered of not much use as a precautionary measure to prevent possible importation of plague into the town, though it has to be mentioned in another case of suspected plague, quarantine was imposed in the nearby town of Arikooty.

There were incidents that showed suspicion against outsiders in the locality where plague cases were suspected getting risen. Especially on coolies and the servants brought in by merchants during their stay for commercial purposes. One such case was around the plague incident in Mattancherry, a servant of one of the baniya's in a gala building was arrested by the police of British cochin for theft of gold ornaments which he had hidden in a dirty cloth from the building as he took them. Since the area was under surveillance for plague, he was

⁹⁰ File No 576 of 1909 , General Section, Measures to prevent the importation of plague into Travancore, Kerala state archives

immediately caught and locked up. He caught on fever the next day and was immediately taken to a British hospital, and serum from his bubo was sent to the bacteriologist for examination. Just due to the fact that he had used a dirty cloth from the building and tied this cloth around his neck after depositing the stolen items in a safe place made him suspect of plague. There was a fear that panic would spread in the neighbourhood, and to prevent that, a plague inspector was sent to the gala building, where he enquired to the people about the situation. He was informed there were no fresh attacks, and there were some patients still kept in the building, but there was no panic in the neighbourhood, and the plague was subsiding there.⁹¹

When the plague hit the Mattancherry baniya community, Dewan Peishkar instantly chose a high, open, sandy ground at Pallathuruthy for building sheds for healthy persons who wanted to leave the infected area rather than segregating the sick from their rooms immediately. This was in line with consideration that was requested by Kottayam Dewan Peishkar, who, in his letter to the sanitary commissioner, had mentioned that in the light of the recent experience and the advanced scientific knowledge, segregation of the sick is not necessary. He quotes from the sanitary commissioner of India, Norman White, “for all practical purposes, the patient suffering from bubonic plague is not capable of infecting those in close attendance on him. Like any other sick person, a plague patient should receive the most careful attention, and all efforts should be divided towards making him as comfortable as possible. A person suffering from bubonic plague is no more a source of disease than any other person who may carry an infected flea. Therefore, it was unnecessary to construct special plague hospitals or locate them in places remote from human habitation. Patients can be treated best in ordinary hospitals, special wards set for the purpose; there should be no objection to a patient being treated in his own house if his family and friends are ready to take proper care of them”. This

⁹¹ File No 62 of 1919, Vol I, Outbreak of plague in Mattancherry, Cochin, Kerala state Archives

was said with the exception of pneumonic plague, but there were instances seen from 1919 where the plague patients could choose to remain in their homes when suspected of plague as long as there was a proper observation on the patient and the contacts who chose to stay in the home to look after the patient.

In the Devikulam case of a finding of the dead rat near the local station, commissioner S. C. H. Robinson, who went to inspect the Police station, made complaints about the lack of sanitation maintained inside the station and in its premises. He found the police station to be very dirty, with its cells that were unclean with an accumulation of dust; there were match ends, beedies and remnants of cigarettes all over the place. He also complained against the sub-inspector who was in charge of the station in a *mufto* and without wearing the required headdress and who he thought was acting in a very supercilious manner. He requested the Chief Secretary to sanction a sweeper for the station as he got to know they do not have a sweeper and wondered how the station was kept clean in the past.⁹²

3.3 Inoculation as The Final Measure

The Epidemic diseases Act conferred great powers to the lowest bureaucratic order in colonial India and placed great emphasis on isolation, segregation and quarantine measures. But gave no information on any scientific methods of outbreak prevention and control. There was absolute silence in regard to matters of vaccination and organised public health response. It was just an emergency act with no consideration for human rights and convenience. When the bubonic plague reached India in 1896, there was already a hunt for an effective vaccine for Asiatic cholera. Waldemar Haffkine, a Jewish Russian bacteriologist by October 1896, had already demonstrated the efficiency of his anticholera prophylactic when the panic of plague

⁹² File, 1920 General Section, Plague in Kumili, letter from Devikulam commissioner to Chief Secretary of the State, November 18th, 1920, Kerala state archives

had begun to consume the authorities. According to Haffkine, ‘the only measure known to science’ that can combat the spreading disease was mass inoculation. He stated that he could prove the value of his Vaccine through ‘accurate observations and measured in an unmistakable manner’.⁹³

While extreme control measures were accepted to be essential, it was important to note that mass inoculation wasn’t subjected to compulsion. It took a long time for the senior English figures of the Indian Medical Service to get convinced about Haffkine’s claims. The director general of the service called Haffkine’s method just hypothetical, and its effectiveness was not proven to follow any kind of compulsion on the part of the government.⁹⁴ Haffkine being a Russian Jew was considered an outsider in India’s medical establishment. There were not many side effects to the operation of inoculation. It was painless and could cause irritation and high temperature, which was a common effect of the process. Inoculation had little value in controlling the plague if it was not accepted universally, and getting people to accept inoculation was very difficult for an alien government in a colonised land.

There were plenty of rumours going around that inoculation would cause ‘instantaneous death,’ impotence, or sterility. In Punjab, there was a rumour that ‘the needle was a yard long’ and that you would die immediately after the operation. If you had survived the operation, you would collapse and died in six months. And that men lost their virility and women became sterile after undergoing inoculation and that a deputy commissioner who underwent the operation died in agony.⁹⁵ These rumours spread among the people and were recorded as the irrationality of the Indians when opposition to inoculation was a worldwide phenomenon and remains the same to date among many.

⁹³ Arnold, David. *Pandemic India: From Cholera to Covid-19*. Hurst Publishers, 2022.

⁹⁴ *ibid*

⁹⁵ *ibid*

Even when the Sanitary Commissioner of India was being pessimistic about inoculation, the provincial governments used inoculation as one of the most effective tools they had at their disposal. It was running smoothly when in October 1903, nineteen people died from tetanus in the village of Mulkowal after getting inoculated. This occurred due to the mistake of a European inoculator who used contaminated forceps to open the vaccine vial before the reason was uncovered; the immediate blame fell on Haffkine, who was blamed for the deaths pointing it was due to his overproduction of Vaccine to meet the rising demand to get inoculated. According to Pratik Chakrabarti⁹⁶, even after the damaging impact caused by the Mulkowal incident, there was strong demand for inoculation in Punjab; he pointed out that the incident was seen dampening in the colonial minds than the villagers as the inoculation continued back with vigour after the brief suspension.

The Bombay Plague laboratory was succeeded from Haffkine by W.B. Bannerman in 1905. After assuming the position, he declared that inoculation was the most efficient, practical and cheapest measure that could be adopted to compact the spread of the plague. He also said the government should seek the help of Indian elites and the native gentleman whose mediation would help get people inoculated. It was almost impossible for the government or its appointed local authorities to influence the public without their help. Another argument was that even the rajas and personages who helped assist the British in the plague operation or volunteered to get inoculated were seen as agents, collaborators and allies by the people who were suspicious of them.

There was some amount of medical control exercised through identification documents. Plague passports were given in Madras presidency if a traveller had undergone examination and was quarantined for ten days. Anti-plague inoculation certificates were given out in

⁹⁶ Chakrabarti, Pratik. *Bacteriology in British India: laboratory medicine and the tropics*. Rochester: University of Rochester Press, 2012.

Bombay, Bengal and Punjab to people who went under inoculation. There were also incentives printed on the inoculation certificate, like four *annas* as payment, a day off from work and exemption from detention for six months. The Municipal Commissioner of Bombay in 1900 noted that some people underwent inoculation multiple times to get these incentives.

But inoculation did not prevent the plague; it was just a short-term fix, and it did not prevent the plague from becoming endemic like many other diseases in India. David Arnold was of the opinion that it was unlikely that inoculation was the sole or even primary reason for the plague to fade out in the 1920s. He rather finds the absence of famine and improving health education and facilities to be the reason why the plague began to decline and scatter into small pockets in the latter half of the twentieth century. Fabien Hirst also mentions how the long-term decline of plague was probably not due to inoculation but the decline in the 'aggressive power' of the pathogen and the increase of herd immunity among rats.⁹⁷

From the state of Travancore, in the year 1898, the superintendent of the Vaccine depot, S Ramakrishna Pillay, was sent to Bombay for two months to study in detail the plague operations.⁹⁸ He was to meet with the president of the plague commission, the municipal health officer and Waldemar Haffkine and acquaint himself with equipping of a bacteriological laboratory and methods of bacteriological work generally. He was to spend two months there, giving special attention to the understanding of inspection of houses for plague, segregation, construction and administration of camps, disinfection etc. He was ordered to come back with a thorough knowledge of the detection of the plague bacillus and a complete description of the apparatus and fittings necessary for this process. He also learned the know-how of inoculation from Waldemar Haffkine himself. Though his Journey to

⁹⁷ Hirst, Leonard Fabian. "Conquest of plague." *British Medical Journal* 2, no. 4851, 1953

⁹⁸ File No- 56/1904, Bundle No-6/ Vital statistics department files, Kerala state Archives.

Bombay was not smooth functioning, and he was reprimanded for the delays, he was able to gather enough materials that would be necessary for the plague prevention measures that were to be established in Travancore.

There were more reports of inoculation made from the estates of Travancore plantation hills. Estates were usually a part of the enclaves that colonialism created as exclusive economic and segregated social spaces where they could easily exploit and manage natural and human resources. In one of the complaints raised by the special plague officer, Raman Pillai, who visited the chotupana estate in Kumili, criticised the superintendent of the estate as he did not advise or induce the coolie working there to undergo inoculation. He explains that the estate managers were not aware nor educated on what was at stake if plague obtained a foothold in the plantations.⁹⁹ In 1920, 158 people were inoculated in Kumili, and these inoculations were carried out mostly the domiciliary visits. The report states that there were only very few people in the village left to be inoculated.

In another instance of plague case imported from Cumbum to Thungamala estate, the Peermade tahsildar did not accept the medical officer's suggestion to adopt the system of quarantine. He was also against the idea of the temporary evacuation of Kumili and called it impracticable for just seven suspect cases. The medical officer's proposal to close the markets of Periyar and Pambanoor was also rejected by the tahsildar as he thought it would likely affect the interests of the estate owners. The only plague prevention measure he agreed to was doing a prevention round of inoculation. Unlike how the British portrayed the resistance to inoculation, the people were most accepting of the idea of inoculation in the plantation hills of Travancore by the end of the 1920s. It was only the British officials who remained to lack clarity about the nature of the disease or what precautionary measures should be adopted in

⁹⁹ File V, 1920 General Section, Plague in Kumili, Kerala State Archives.

different cases.¹⁰⁰ We can also see a certain amount of flexibility in the plague rules into the end of the second decade of the 1900s.

The department staff sent by the Travancore state to the observation stations in the neighbouring states were also inoculated at their request. In an instance of plague break out in Bodinaikanore on November 1920, the departmental staff posted in Bodi chowkey informed of their desire to get inoculated. There was a shortage of vaccine stock in the Devikulam dispensary, so the medical officer could not inoculate the staff. This was addressed to the Durbar Physician and urgently asked to do the needful. Following this incident, staff stationed at Karincolan chowkey also requested inoculation as a needful protection they have to take against the plague breakout. In December, the Medical officer wrote to Durbar Physician that ryots working the cardamom plantation themselves wished to get inoculated as the area of Bodinaikanore was under plague attack and pleased supply them with the necessary Vaccine and syringe to inoculate the people at an early date. From the special camp of Kumili, they were sent two syringes and 250 doses of inoculation medicine. The Travancore government also invited the cooperation of the public in taking measures to prevent the spread of the plague. They requested citizens to help by giving prompt communication to the nearest local authorities in any case of suspicious fever or mortality and also assisting in the destruction of rats and by availing themselves of the facilities offered for inoculation.¹⁰¹

¹⁰⁰ File V, 1920 General Section, Plague in Kumili, Kerala State Archives

¹⁰¹ File No 62 of 1919- Vol I- subject- outbreak of plague in Mattancherry, Cochin, Kerala state archives.

CHAPTER 4

THE PLAGUE ON MOVE

4.1 Restriction on Movement; Inconveniences and Grievances

The epidemics that ravaged India gained momentum through rails and roads that were built in need of British exports and imports. In Richard J Evans's¹⁰² work, he called the outward spread of disease 'Asia's revenge' against Western civilisation. As part of the advancing industrialisation, the British exploited Indian lines of trade and communication to reach significant progress of modernity; this very advancing technology with railroads and steamships became the route that opened up the diseases to migrate westwards. The railways played a major role in disseminating diseases all over the country, and the labourers and coolies who helped in building these railroads were always at great risk of being exposed to diseases due to the unsanitary living conditions and lack of clean food and water.

Once the plague had reached India, it set both people and pathogens on the move. People started migrating both in fear of the disease and also the plague rules and quarantines that were being introduced in the urban centres. The disease in the first decade was rapidly spreading along roads and rails with the exodus of the urban population to the spread-out rural villages. This movement resulted in the imposing of surveillance on the land routes through plague passports. While medical and sanitary regulations were on the increase, restricting movement through land affecting all the people, inspection through ports though strengthened initially, had become lenient as years progressed. They did not want to sacrifice the trade motives at the expense of the disease. Inspection of the goods was reduced, and the focus of

¹⁰² Evans, Richard J. "Epidemics and revolutions: cholera in nineteenth-century Europe." *Past & Present* 120 (1988): 123-146.

examination on specific groups and individuals who used the sea route got increased. Especially the passengers on steamers were stopped and searched thoroughly; this was the case for pilgrims to Jeddah and coolies boarding to Burma, Ceylon and other plantations outside the country.

It was the plague refugees and merchants that carried plague southwards to Poona, Hyderabad, south of Deccan and the British provinces and princely states.¹⁰³ They carried the disease through fleas attached to their clothes and other belongings. Physical examination was conducted on every passenger prior to their departure. In the ports, they were lined up in the docks individually and checked for plague symptoms like high temperature and swelling of the lymph node. In the main routes of travel, inspection stations were established, and travellers were stopped and examined. But these inspections were of little use as the disease was spreading widely all over India. Particularly in the case of Kerala, Plague establishments were taken very seriously, and inspection through railways was a matter of great concern to the plague authorities, but the documents of their exchange show how the institutions failed miserably because of the intimation delays and slow bureaucratic process. It brings us back to David Arnold's observation that the decline of plague had very less to do with the surveillance and inspection that was being conducted, rather it needs to be seen as geographical and ecological change that affected the flea survival and the reduction of its aggressive nature due the herd immunity acquired by the rats.

The scale of the inspection was massive and but the bureaucratic process was a mess. In Kerala, the plague administrative procedures were a constant routine that brought very few results. The focus was placed on the methodical manner in which it was taking place; complaints were issued more on the delays and misplacements that were occurring in the

¹⁰³ Arnold, David. *Pandemic India: From Cholera to Covid-19*. Hurst Publishers, 2022.

bureaucratic process and not so much on easing the concerns of the people who were suffering on a day-to-day basis due to these inspections. The inspections had a racial and class dimension to them.¹⁰⁴ The first-class passengers were mostly spared unless they looked greatly ill. The second-class passengers were checked inside their carriages, and the third-class passengers were usually taken out of the compartments and checked outside on the platforms in front of the public in full view with no consideration of age or gender. Detention was placed on people whom authorities thought were not trustable to reach out to them in an occurrence of plague, for example, emigrants or coolies travelling in large numbers and couldn't be easily traced.

Many of the complaints and narratives were often brought out into visibility by people who thought of themselves as having a 'respectable' position in society and did not want to be treated the same as the common people.¹⁰⁵ They were furious that they were being treated the same way as the coolies and had to bribe the officials to get off from this humiliating ordeal. It could be assumed these middle-class testimonies that surfaced along with growing nationalist assertion and resentment towards the colonial rule had led to some of the violent reactions that occurred in north and central India. The lack of a middle class and a growing press situation against the colonial mindset in Kerala could be one of the reasons why the inconveniences placed by plague observations never blew out of proportion. One incident of racial preference in the plague ordeal was shared by a first-class passenger Shyamji Krishnavarma who complained he was ordered to leave the carriage while an Englishman travelling in second class was examined in his compartment and was treated with great consideration.¹⁰⁶

¹⁰⁴ *ibid*

¹⁰⁵ *ibid*

¹⁰⁶ *ibid*

There was a withdrawal from confrontational plague measures in the 1900s, which created a separation of this emerging middle class from the 'unruly' and 'unhygienic' lower caste and class. The British authority's new strategy was to grant the middle class and elites in the urban areas privileged status that spared their bodies and home from supervision and surveillance, unlike the lower sections of the societies, which continued to be examined and searched for their homes demolished and evacuated.

In an interesting occurrence in 1905, the Sanitary Commissioner of Travancore wrote to Durbar Physician about the revisions made in the draft of the plague rules, that there should be no exception made for the 1st class and 2nd class passengers for the mere reason that they had happened to pay little more money for travelling than the 3rd class passengers.¹⁰⁷ This was not out of concern for the 3rd class passengers nor about the preferential treatment given to 1st and 2nd class passengers. What worried the commissioner was that this revision would lead to many trying to pay for the 1st or 2nd class compartments to travel if they came to know of this change and made an exception. He argued that this was neither advisable in the interests of correct plague inspection nor safe in the interests of proper plague administration. He continued to say that there could be nothing done about the 3rd class passengers being taken out of their compartments for inspection as it was the discretion of the inspecting officer to decide, as was the case in Madras.

The reason given as to why the passengers were required to be removed from their compartments for inspection was chiefly to afford good lighting for a thorough inspection. He mentioned how this reason was not valid in some compartments of the 1st and 2nd class as there was no good lighting to conduct a thorough examination and search under the seats for hidden cases of plague. Citing his experience of plague inspecting as a medical officer in

¹⁰⁷ File No 553 of 1911, General and political section, Kerala State Archives.

Madras Presidency, he said there was a practice of hiding cases of plague or suspicious plague under the seat during inspection to evade detention was occasionally resorted to by the railway passengers. To make his suggestion clear, he states that if the medical officers find the compartments to be well-lighted and the number of passengers travelling in it few, it should be made that there should be no objection to examining the 1st and 2nd but also the 3rd class passengers within their compartments. He, therefore, requested for no alterations to be made. Whether this request was made as to no more inconvenience to fall the 1st and 2nd class passengers due to travellers trying to procure tickets that gave them exceptions from inspection or he really wished for the plague measures to be conducted in its appropriate manner could not be deciphered from this letter alone.

The vessels that came to the ports in Kerala had to go under inspection and quarantine accordingly from which port it was coming. In cases where the vessel touches down on an infected port on the way to its destination, a yellow flag signifying the need for quarantine will be tied to the vessel. One such case in detail was when the Sanitary commissioner wrote to the Chief Secretary of Travancore complaining about the lack of vigilance and awareness among the port officers on plague inspection of vessels that arrived on Kolachel in 1906.¹⁰⁸ A Sanitary commissioner who was on his rounds to the port of Kolachel came across a steamer which was anchored in the port and discharging cargo with a quarantine flag flying. He said the mast attendant, who was the magistrate, was not present, and the port officer was ignorant about the significance of the yellow flag flying as he said the medical officer did not inspect the steamer as it did not come from a plague-infected area. This was despite the fact that the port officers were provided with a book with the meaning of signals to refer to. The steamer that was anchored in the port was named S S Henzeda, and it was a coasting one sailing from Calcutta and had touched Madras on 2nd February. Upon checking the bills of Health and

¹⁰⁸ File 531 A of 1908, General Section, Plague inspection of vessels at Kolachel, 1906, Kerala state Archives

Ports clearance and the bill of Health given in Madras, he came to know that the port was infected and the quarantine flag was put up because the steamer had not completed the quarantine period on the 11th, which was the day it arrived on Kolachel.

The Medical officer informed the commissioner that he was not informed of the arrival or asked to examine it. It was evident from his records that there had been no inspection of vessels conducted by a medical officer since May of 1905. It was usually the master attended who used to send a word to the medical officer if the steamer was in need of inspection. From the further examination, it was found that from the beginning of the year 1906, there were ten coasting steamers that had arrived from Calcutta and no requisition was made from the master of attendant, and none of the steamers was examined. This was investigated, and a post office clerk named the excise commissioner to be the one who ordered that vessels from Tuticorin need not be examined. The Chief Secretary then wrote to the Excise Commissioner reprimanding him on his neglect of duty considering the constant communication Travancore state had with the ports of Madras, Rangoon, and Calcutta and there always was an imminent risk of the introduction of plague here if proper precaution were not taken correctly and systematically. Especially in this case, the coasting steamers had touched Tuticorin on their arrival to Kolachel, which was an infected port. He was warned of the grave responsibility that he and his subordinates had to face if every precaution against the importation of plague into the state was not taken systematically. An order was issued on the basis of this case with clear instructions to the port officers regarding the plague rules that were in force and that were to be strictly followed both in case of vessels arriving and departing.

The plague rules and measures that were regulated through inspection stations and ports left a lot of room for mismanagement. There were a lot of powers invested in the lower levels of authorities that could be misused at their will. One such complaint was raised in 1901 on behalf of a British navigation company, Andrew and co-, in Allepey to the dewan of

Travancore.¹⁰⁹ The complaint was raised to bring to the attention that a sum of Rs. five was being charged by the health officer at Allepey for each health certificate of the port issued by him to steamers being called there. As this seemed out of the ordinary, they wrote to the commercial agent to enquire under what regulations the sum referred to was being levied under instructions from the managing agents of the company. They also pointed out that the bill of health to which the charge was imposed was merely a bare certificate of the health of the port and that in no other port such a charge was made to them for granting such a certificate from a medical officer. The commercial agent had replied to them by sending a copy of a letter and enclosure received from the health officer in which the health officer claimed that he had the right to alter the amount of the charges at pleasure. The company objected that this was a grant of arbitrary powers and an anomaly that could not have been in the contemplation of the government and suggested that the officers referred to could have misapprehended the rule on the subject. They added there was no way such a rule existed. Apart from that, they also dissent the formality of granting the bill of health to be “unfitting” and with a fee of any kind as absolutely unjustifiable. They requested the Travancore government to recognise the reasonableness of their complaint and to grant them the relief they seek.

This complaint was later brought back in 1913, on 29th September by the Town Improvement Council of Allepey in their complaint to the Chief Secretary of Travancore about the expenses that they had borne in connection with the inspection of vessels at the port. In their letter, they wrote that earlier, the steamer agents and others were paying a certain amount of money to meet the expenses and their representation. This was discontinued along with the port dues paid by them by the government, and this expense was met by the government thereafter, referring to the complaint raised in 1901. The annual cost of the medical inspection comes to Rs. 600, and other expenses such as boat hire come to nearly Rs.400, in round the sum of the

¹⁰⁹ File No- 56,1904, Bundle No-6, Vital statistics department files, Kerala State Archives

cost comes to nearly Rs. 1000 every year. Therefore, the town council requested the government to either let the council realise the amount or recompensate this amount from the general revenue they receive from the vessels touching the port.

There were often complaints that were being sent to the government related to the expenses a town had to incur and what areas came under the jurisdiction. In this particular complaint sent on 3rd November 1913, they addressed the salt-laden vessels coming from Bombay at the port of Munambom, which was five miles away from Parur town. They claimed that the Parur town had nothing to do with this port and the inspection had to be done by officers attached to the local hospital and thereafter also, but since the expense of inspection comes from the Parur TIC fund and not recompensated by the government, under no circumstances funds from their will spent for plague observation at the Munambom port.¹¹⁰ Another complaint from Quilon, TIC, to the government to sanction them an extra allowance of Rs. 65 and Rs.150 under prevention of plague contingencies for their order of inspection of vessels by the local authority.

We get a glimpse of the inconveniences and difficulties faced in the day-to-day commute of passengers by steamboats from a letter sent by the Malabar Navigation and Industrial Limited to the Dewan of Travancore. Addressing the challenges, he was in due to the plague outbreak in Cochin and the restrictions placed on travel through steamboats.¹¹¹ He grievance about the rule in which the passengers that left Cochin in the steamships were required to land for inspection at Arikooty for inspection purposes where there was no jetty or any other convenient and safe halting station for the passengers. This would cause the passengers to suffer much inconvenience and trouble, especially during this monsoon time. He requests that they allow the inspection to be done at the launch itself before departing, saving the passengers

¹¹⁰ TIC- Town Improvement council

¹¹¹ File No 62 of 1919, Vol I, Outbreak of plague in Mattancherry, Cochin, Kerala state Archives

from the trouble and inconvenience mentioned before. And that it would be fine if the boat was delayed for half an hour for this purpose as no harm was done to passengers. He also mentioned the order by Dewan Peishkar of Kottayam, who had ordered him to avoid night service and objects that night service was considered more convenient by the passengers. It was also inconvenient for passengers who arrived at Ernakulam by Mangalore and Madras Mails to catch the boat on time and also the passengers for Anchel if delayed by morning mail. Though he added this as the last addition to his letter, he also mentioned how he would suffer a heavy loss if the night services were stopped along with the passengers and commercial class who also suffer very considerably. If also added that if they allowed him to recontinue the night service, he would be ready to launch the boats from Ernakulam direct instead of Cochin and would also avoid booking passengers from Cochin.

It was interesting to know that many of the grievances that were documented came from Estate managers, Commercial agents and Merchants. In a complaint raised by the Traffic Manager of the Kannan Devan hills in 1920, he laments the extensive damages that were caused to the goods by being unloaded from the trains at the Karinkolam chowkey and being exposed to the sun.¹¹² This complaint was taken quite seriously by the Sanitary Commissioner of Devikulam, S. C. H. Robinson. At the same time, most inconveniences caused to pilgrims and other passengers were found unavoidable due to the need for strict observation of the Plague rules. Mr Hills' inconvenience was considered real as at the Karinkolam station; there were no proper sheds to store grain that was unloaded. The company had suggested the alternative of conducting disinfection of the food at the top station as a good option and could be adopted with an advantage as the top station was in British territory, and the company had proper godowns there. The commissioner recommended that the goods passing through the Karinkolam might be examined and disinfected in the top station by the plague medical officer

¹¹² File V, 1920, General Section, Plague in Kumili, Kerala State Archives

if the government of state approved.

In another letter to Sanitary Commissioner Robinson from Blair Hill on 27th November 1920, he informed the impossibility of exposing the rice to sunlight due to continuous rain and mentioned the same reason for not being able to get any rice despatched from the top station the whole week. Therefore, it was impossible to conform to the plague rules. He also talks about how they could avert a possible famine due to the rice surplus at the Palar and Madupatty bridge stations, which he had brought down so that there was enough rice on Munnar estates for the week and warns of the serious position they will be in if the weather did not clear up and estates stock deplete. He mentioned how they had over 3000 bags of rice at the top station, all godowns were taxed to their utmost capacity, and there was not an inch to spare for storage anymore. He was suggested to write to the commissioner by one Mr Pinches while discussing this issue to get his assistance to prevent any real difficulties. In his letter, he tried to persuade the commissioner to let the rice be disinfected within the top station that was under British territory and not at the Karinkolam inspection station.

“Rice, as you are aware, is not only exposed at the bottom station but has a certain amount of exposure when it is sent up the ropeway, and I think if rice was exposed for, say, an hour at the top station in the engine shed and in the veranda of the fuel shed it would suffice, and on receipt here the bags would be put outside for some hours prior to being sent to estates. I shall probably see you tonight and we can discuss the question which is of great importance and we would be grateful for any help you can extend to us in preventing any actual famine. I believe that the bazaars have been denuded of rice, and to prevent actual starvation, I have issued a few bags to different government officials here.” - Blair Hill

After receiving the letter from Blair Hill, Commissioner immediately sent a telegram to the Chief Secretary of Travancore.

“no rice in the district, plenty top station but detained by plague rules owing no sunshine. Finer weather prevalent Munnar having consulted Dr Nicolson. I Request permission to bring all rice to Munnar immediately, and Dr Nicolson guarantees necessary exposure at Munnar; imperative rice comes immediately prevent starvation” - S.C.H. Robinson.

This shows that there were certain relaxations in plague rules when it came to the needs of the Britishers residing in Kerala; their commercial wants, loss and difficulties were addressed to the state as a request of urgency.

Even though there were a lot of grievances that came from the commercial agents and estate owners, the State of Travancore was not completely compliant with their requests, as seen in Durbar Physician’s letter to the Chief Secretary of Travancore warns about the problems of relaxing the rules for these set of individuals.¹¹³ He states that even if the merchants and agents found the delay troublesome and inspection a nuisance, it was better to allow such careful, ‘though may seem to harass and needless’, examination to be made. This was to prevent as far as possible the chances of introducing plague into the country that does the work in a haphazard manner and gets influenced by considerations of any kind, and runs the risk of allowing the disease to gain a foothold in the state.

He also described a medical officer to be someone with a clear sense of duty, who need to be scrupulously honest and should have an efficient manner of work. Since the people whom the medical officers had to deal with were cart men, donkey men, merchants and agents, who were interested parties that wished to get to the destination without any obstruction or delay. These people resented interference or detention. They hardly understood the objects of plague rules or realised the consequences of evading them. Their one objective was to get to their destination as quickly as possible, finish their business, and return. And these people, for

¹¹³ File VII of 4 of 1920, General section, Plague at Devikulam division, Kerala State Archives.

years, had been accustomed to carrying on their trade or transport with no obstruction whatsoever. They were of a class who may be easily tempted to evade plague rules and, if possible, to use questionable to threaten Sarkar officers on duty who may not be highly placed officers of the state. And if charges were raised against them, then there should be a judicious investigation done before they were presented as such before the government by those who, it was presumed, understand the object of the plague rules as also the tendency among a class of people to look upon them as means to employed merely to harass them.

4.2 Monster turned Saviour, The Political Fiction

O V Vijayan's short story 'The Examination', one of the three short stories (The Wart, Oil and The Examination) that he wrote in 1978 in the backdrop of the ongoing Emergency period, dealt with his anxieties of concentration of power in a few hands. This work was part of his modernist writing phase, just departed from his days of writings on themes of social realism as a card-holding communist. The stories revolved around the themes of Power and Terror, recalling back on the days of emergency which had curtailed civil rights, banned political activity and a time of dictatorship. All three short stories were allegories of power with underlying themes of a Despot- Prajapati, a ruthless dictatorship that suppressed dissent and public opinion with sycophants around the despot. Therefore, these works can be called political fiction, and with the help of fantasy, he makes his work politically effective.

The short story, 'The Examination,' has two distinct parts connected mid-way through the protagonist Venugopalan, who entered the story towards the end linking the flashback and flash-forward of the story. The story opens with a flashback to the village of Palghat, infected with the plague epidemic in 1918. A government-appointed officer Ananthan Pillai arrives at this village and occupies a vacant shop on the principal street that he turns into a plague control

outpost. Before Ananthan Pillai had arrived, ten people died in the village from the epidemic; people of the village tended to hush the nature of deaths as it was from the Bubonic plague. The boils that appeared near the groin area were often mistaken for a disease of pleasure and shame until they started appearing on children, and they realised it was a symptom of the plague. The story talked about how the town's newspaper sympathised with the historic nature of the town and found it a pity that the plague had come to affect such a town and how there was panic when more inhabitants began to die. Teachers of primary schools conducted campaigns among people and gave them advice on controlling the plague.

'the epidemic is spread by rats, so it is the need of the hour to farm cats to control the disease without state intervention.'

The story also talked about the immigrant community of Chettiars settled in Sultanpet who worshipped Ganapathy and the men of indigenous caste in the town spread defamation about them that rats were turning the Ganapathy temple in the street into a fortress due to their involvement. The Chettiar priest declared that if there was to be an assault on their temple by the people of the town, they would be resisted by the clan.

In the story, villagers wanted to avoid state intervention, but with the coming of Ananthan Pillai, the diverse views of the people regarding the disease became irrelevant. With their scientific medical knowledge, the state had taken over 'rat and parasite and the carbuncle on the thigh'. Ananthan Pillai was provided with a lady municipal Inoculator. The story described the plague control centre as a place with no privacy '*a one-room shop, open-fronted, with no privacy, and passer-by would gaze...*' Initially, when there were no cases in the village, Ananthan Pillay would try to assert his power in the village by walking up and down the street wearing his '*Hitlerian moustache on swirl, ...enormous cheroot dangling from pendulous lips, hooked walking stick swinging, blazer, shorts and felt hat*' showing off his intimidating

presence at the same time trying to convince himself of his authority. The village at first showed very little response to his presence, village folk were placid, and the aboriginal women saw him as an added 'new bridgehead of power' to which they showed both annoyance and unconcern; only the primary teachers viewed his presence as a historic catastrophe'.

The story also talks about the plague policemen who were distinguished from ordinary policemen as they wore Khaki fatigues and red berets. These policemen recruited from the able- bodies in the village gradually increased in numbers. Ananthan Pillai trained them in a ceremonial fashion and sent them to hunt the rats. The villagers at first thought this new invasion to be only directed at the rats, and the worst, they thought the diseased with evident symptoms might be taken up for special disposal. The central character Venugopal who then was a child along with the other grandchildren of the family, was very excited by the display of sovereign power by Ananthan Pillai. As a forecast as to what would happen next, his grandmother had said whatever was happening in the village was not for good. With his rat hunt for controlling the plague, Ananthan Pillai had acquired a populist image of a liberative personality who saved people from catastrophe. His despotic actions gained more legitimacy by not accepting bribes and other incentives.

The village's complacency lasted until the following major incident when Ananthan Pillai targeted a very prominent and wealthy Muslim merchant who had connections with powerful people in the village.

"Ananthan Pillai waited a minute, and then snared the old man's neck in the crook of his stick, and with one tug brought him tumbling down. Muthalif's handymen cried out in panic. The plague policemen now entered the shop, and assisted by saturnine scavengers, carters of shit, began flinging out the hoarded provisions. With the provisions came a teeming horde of rats

and bandicoots. Catching hold of the old man's wispy beard, Ananthan Pillai addressed the awed onlookers, 'Look you, all of you, at the largest bandicoot of them all.'

This was a great show of power from Ananthan Pillai's side; with this, he assumed more power. His rat hunt had also unearthed the black market managed by the merchants and led to a parallel epidemic of fear in the alleys of black markets. He prohibited many things; He made people bow to him and went around perishing legions of rats and bandicoots. With him taking down the Ganapathy temple and standing against the deity with a gas gun, people in the village started seeing him as the Sovereign. They related him to their ancient memory of Tipu Sultan's invasion, and he was now the 'New Emperor of the Hooked Sceptre, the dispeller of rats'. As the number of mortalities increased due to the plague, more power was gained by Ananthan Pillai and his troupe of plague police. He had come in with the guise of the saviour and gradually assumed more power to rule over them and crush them.

Even after the plague bacilli left the town and rats recovered, Ananthan Pillai continued to maintain his place in the plague inspection centre, launching on his chair daily routine. He remained unchanged as he grew older in this place; the plague police and inspectors who had succeeded from others went on with taking tributes and women offered to them. Ananthan Pillai did neither, and his presence grew, and people treasured his benevolent terror. After he turned eighty, he no longer sat in the plague shop. But the people continued his legacy; they celebrated his eightieth birthday, and activists lauded his excellent captaincy. No one no more had clear memories of the epidemic, but he became a permanent fixture of the village. People did not see him anymore; His age count had reached one hundred and twenty, and they believed he was still alive. They believed that he continued to stay in Palghat and exercised control from his secret residence in Tipu's fortress. In this story, O. V Vijayan was also portraying how Myths of people grow to be part of the culture. Some personalities assume stature in people's minds that even if they do not exist, people come to believe they exist and they have

supernatural powers. This was how some rulers could get people to believe they were gods. Even religious personalities create myths around them, like they have powers to protect and heal and assume the role of gods. Here in this story, O V Vijayan shows how a monster like Ananthan Pillai, who terrorised the village during the Plague epidemic, legitimised his position through assuming the character of a righteous plague dispeller who had absolute control over the village.

In the second half, the story was flash-forwarded to when the protagonist Venugopalan was now a great-grandfather. In the story, he went out to buy items to celebrate his great-grandson's seventh birthday. He forgot to take his purse and was about to return back to their home when the story takes a darker turn. He was stopped by a familiar friendly plague police Ravi in the street, where a friendly conversation changes into an invigilation. He was ordered to follow along the streets and move according to the instructions given by the plague police waiting along the streets. Others joined him, and it was a silent, aimless march with people fearfully looking at them through the windows of their homes. The following scenarios do not make sense to Venugopalan and the reader. It was bewildering and perplexing; the protagonist wants to snap out of the confusion so does the reader. Both were grappling to make sense of the situation when Venugopalan was forced to follow instructions without any reasoning. People Venugopalan knew were turning into terrifying characters, and familiar places were turning into horrors; there were loops of bewildering fantasies, and the protagonist was trapped in them, unable to snap out of them. In the following events, he was made to take an examination; his verdict was to be hanged until death. All the questions without answers like what, why, and when in the second half were symbolic of the emergency period. Venugopalan's arbitrary arrest, punishment for the crime he didn't do, and the predicaments that he was going through were all nearly realistic narrations of what was happening in society during the emergency period.

This story can't be taken as a historical narration of the plague incident. But we can't ignore it completely as if it was void of any factuality since O. V Vijayan has a past of closely working with novels that were based on the social realities, and even after his turn towards modernist writings, we keep finding influences of real occurrences in his work. His most famous modernist work *Khasakkinte Itihasam* was based on real happenings around his sister and village, where the story that happened was also based on a real place with a similar name. We could argue it was a mix of historical memories with fantasy to make a political fiction about Power and Terror. In the last paragraph of the story, when Venugopalan was about to be hanged, the writer tells us about his unawareness of the incident where his great-grandson had left the abandoned birthday in search of him and died appalling death trampled by the march in the streets uttering his last words to him "grandpa everything is dark" which can be seen as a statement about the condition of the country.

There is an underlying message the short story provides apart from the narration of the plague in the village and the villager's acceptance of it as a part of their life. The story gives us a glimpse of what an unwarranted power could do if it remained unchecked. In both, the flashback and flash-forward of the story, the power that was delegated to a lower-level official to supervise the plague in a village turned him into a dictator figure who could misuse his power to make the lives of the villagers miserable. From a curious figure who had come to control plague in the village with the powers to disrupt and punish the daily lives of the villagers as part of his duty to a fearsome despot who legitimised himself as the sovereign power in the minds of the people and letting his underlings cause terror on his behalf was a result of power unchecked. The Epidemic Diseases Act 1897, which was still being reiterated in the happening of deadly diseases and epidemics to date, was one such Act that gave enormous unchecked powers to people who were appointed to control the disease regardless of what level of position they managed. The Act was silent on the human rights of the people who had to abide by the

disease control measures. It was only concerned about the punishments that could be sustained by people for harming or disrupting the official who was performing disease-controlling activities. In the story, as the number of plague cases increased, so did the legitimacy and power of Ananthan Pillai in the village increased and even when the plague left the village, the power that he held did not decline; rather, the trauma immortalised itself in the minds of the people as myth.

CHAPTER 5

CONCLUSION

Bubonic Plague that ravaged India killing more than 12 million people was more than just a deadly epidemic during colonial times, it brought many changes in India's political and social sphere. The powers that were delegated through the Epidemic Diseases Act 1897 gave the colonial state absolute power to control and check the public and private lives of the people. The Act was a colonising tool and a harbinger of keeping the mobility of the people under their constant observation in years to come. Even though quarantining and medical supervision existed prior to the coming of the bubonic plague in India, it was the Epidemic Diseases Act of 1897 that brought the whole country under their surveillance and control. The rules and regulations that were imposed in every region of the country were under the powers of the Epidemic Diseases Act. In the Madras Presidency and the Princely states of Cochin and Travancore, the Mufassal Plague regulations and Rules were made functional under the Epidemic Diseases Act. Annual revisions and changes were allowed to be made in the Princely states of Cochin and Travancore with respect to the ongoing plague situation in the region as long as it was approved by the Madras government. The Act was fully functional in princely states from 1898; the plague rules and regulations were exercised immediately.

The administration in the Malabar region under the Madras Presidency and Princely states of Kerala who were answerable to the Madras government, had the plague infrastructures like inspections stations and posts, plague camps and hospitals established in areas where the suspected plague threats or in areas they wanted to prevent importation of plague cases from the neighbouring plague infected towns and villages. Plague reinforcement in the form of Plague police and inspectors, Plague surgeons and medical assistants was added to the

Sanitation and Public Health departments. These officers were given powers to stop, inspect, segregate and arrest anyone they felt suspicious of having been infected with the plague or evading the plague rules. Most often, the evasion cases were the primary reason for the inspection and punishment. There were difficulties in accommodating this added layer of bureaucracy. Often there were complaints about the piled-up intimations received from the inspection stations that either arrived very late, making it impossible to take adequate measures to prevent possible infection or intimations sent to the wrong offices. The British officials appointed in the higher administrative levels were of the opinion that the system of order in which the intimations were being sent needed to be fixed, causing them difficulty to manage the plague control in a responsible manner. Most importantly, many criticisms arose from the factor that the added responsibilities put on a few officials were the cause of the poor performance in their already existing duties. For example, the registrar who was supposed to keep the records of birth and death in a town was given extra duties to handle the records of the arrival of people from the plague-infected areas, which led to the poor maintenance of the vital statistics in that area.

In Malabar, local authorities were appointed as plague supervisors as they were better acquainted with the towns areas and the language spoken. But the British officials found the local authorities to be lacking enough power to exercise any kind of supervision over people of influence in that area. The Travancore state officials, on the other hand, wanted to make sure the Madras government allowed them to appoint local authorities in Inspection stations, especially in the bordering areas of the princely state like Shoranur, as they faced a lot of problems in plague quarantine evasion by travellers giving the wrong address in the passport to officials. To avoid such evasion, local authorities who were aware of the areas in the state were requested to be posted as plague supervisors, which they believed to be unquestionably necessary.

The plague regulations and rules that were imposed all across the country achieved in making Indian travellers wherever they were moving under the direct colonial gaze and their record keeping. Whether they were travelling to a distant relative, ceremony, occupation, trade, festivities or fair, the moment they boarded a train or a ship, they became active participants in the surveillance system. This also made the Indians a part of their ongoing stereotype that they were carriers of the 'disease of filth'. It was important for the colonisers to maintain this discourse as, on one side, they wanted to prevent any kind of hindrance to the trade motives to the outside world, and on the other side, it aided as a tool for their colonising intentions. As long as the disease was blamed on the lack of sanitation and unhygienic habits of Indians, medical inspection and examination of the passengers would be the main target and not the goods and stocks that were being exported and on the move. The disease being attached to dirt and poor was entrenched in the minds of the administrators for so long that many British residents themselves believed the disease would never reach or affect them. It was also due to this belief that even after the discovery of the role of rats as the carrier of bacteria-infected rat flea, sanitary improvement remained one of the main focuses of a plague prevention methods for decades. Even after the revised plague rules and regulations incorporated rat extermination as one of the most imperative plague-controlling measures, the administration and plague officials in Kerala still upheld their biases on the lack of hygiene and poor sanitation to be one of the causes of the disease.

The plague rules and regulations that were established did not treat the passengers equally. There was class, caste and racial differentiation in the examination process. Many reports were concerned about bribing the plague officials to evade the quarantine and medical examination. There was a nexus formed between the plague police, the medical men and some passengers, merchants and businessmen who were affluent enough to pay their way into avoiding the entire quarantine procedures. The British officials who were managing the plantation hills and estates

also managed to pressure and convince the plague officials to lessen the strict observation of quarantine and other plague rules, which they found a hindrance and inconvenience to the smooth running of their dealings.

Restriction and constraints on movement were fundamental to colonialism and the colonial privileges to sovereign jurisdiction and paramountcy. By obstructing mobility, colonial rulers successfully seized the agency with which people and their goods moved around. The colonial intentions behind the strict observation of plague rules and the establishments, even in the state of Kerala, where plague mortality was minimal, can be seen as part of their larger imperialistic motives, which required greater penetration into the Indian Economy and society.

This made sure that a larger bureaucratic system and record keeping were ready to serve the requirements needed in the exploitation of the colony. Thus, in this study, we can see how under the pretext of the control of epidemics and diseases, the colonial state managed to set-up a bureaucratic system and order which was rather futile in controlling the Bubonic plague but was very efficient in creating a systematic surveillance system and laws around it to rule the people and also make them govern themselves.

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