CHAPTER - I

FORMATION OF THE HEALTH AND FAMILY WELFARE DEPARTMENT

The formation of the Health and Family Welfare Department in Kerala is the outcome of several decades of work starting from the establishment of dispensaries, asylums, private medical institutions, charity medical centres and Government hospitals. Each of these was formed during different periods and under varying circumstances. The formation of this Department as a whole did not happen in a single phase. It had its root of origin in several places of the Kerala State. The present modern State of Kerala has Travancore, Cochin, and Malabar regions as its integral part. Though the geographical boundaries are modified in modern Kerala, the contribution from all the three places namely Travancore in the south, Cochin in the centre, and Malabar in the north is noteworthy. The existing model of the modern Kerala State’s Health and Family Welfare Department is one which is a combination and reflection of those which existed in these three main regions of the State.

PUBLIC HEALTH ADMINISTRATION IN TRAVANCORE

Among all the regions of Kerala, Travancore played a pioneer role in the realm of modern medicine, public health and sanitation. In 1811, during the reign of Rani Gauri Lekshmi Bayi (1810-1814), the western system of medical treatment was introduced in the State.† At the beginning only the members of the royal family and the Government officers received the benefits of this method of treatment. With the help of the Durbar physician
Dr. Proven, the Maharani of Travancore established a small section for vaccination in 1813, thus laying the foundation for preventive medicine in the State.

**ESTABLISHMENT OF DISPENSARIES AND MEDICAL INSTITUTIONS**

During the reign of the Rani, the attitude which prevailed in the royal family and among the public about socializing with foreigners changed. European doctors were allowed to treat women members of the royal family. Dr. Proven was the first person appointed as the physician of the royal palace at Quilon (Kollam) and Dr. James Rose was appointed as the deputy physician at the palace. Rani Parvathi Bai (1814 – 1829), established a charity dispensary at Thykaud in 1816 where the jail convicts were treated first.

In 1818, two small dispensaries were opened, one in the palace and the other within the premises of the Nayar Brigade barracks. The Brigade hospital supervised by the Brigade commandant extended medical services to the military. A free dispensary was also opened under the supervision of the military medical officer at Quilon.

Rama Varma Swathi Thirunal Maharaja (1829 – 1847) established a charitable bedded Hospital at Thykaud under the responsibility of the residency surgeon and provided free medical treatment to the people there. Maharaja Uthram Thirunal Marthandavarma (1847 – 1860) had a special interest in the western system of medical sciences. He studied the subject and treated some cases in the dispensary attached to the palace.
He also trained some of his servants to help him in the treatment of diseases.\(^6\) During his reign, people were not discriminated in health related matters based on caste or other grounds.\(^7\)

The charity dispensary started by the king in the palace continued to function under the name as Elaya Raja’s Dispensary until the Fort Dispensary was established. Seven hospitals were opened in different parts of the State.\(^8\) The People thronged to these hospitals as they got free food and good treatment.

The Medical Department which was thus started made rapid advance during the early years of the reign of Ayilyam Thirunal Maharaja (1860 – 1880). He laid the foundation stone for the civil hospital in 1864. This later developed into the present General Hospital.\(^9\) In the same year, the Palace Medical Officer was put in charge of the Medical Department.\(^10\) The civil hospital was under the direct supervision and control of the Durbar Physician, Dr. H.M. Rose.\(^11\)

**ESTABLISHMENT OF HOSPITALS AND TRAINING CENTRES**

A Medical school was also opened in 1869 in the capital to improve the education of the officers in the department.\(^12\) A new mofussil hospital was opened in Quilon (1870 – 71) with accommodation for in patients. This hospital stood as the first mofussil hospital in the State. At first Deputy Surgeon of Madras Presidency supervised the functioning of the hospitals in the State but later, the Durbar Physician was entrusted with that responsibility.\(^13\)
People of all castes and classes received the benefits conferred by these medical institutions.\textsuperscript{14} Ayilyam Thirunal Maharaja in 1879 – 1880 issued a proclamation by which vaccination was made compulsory to all Government servants, school children, \textit{vakils}, persons seeking medical help from hospitals, inmates of jails and persons depending on the State charitable institutions.\textsuperscript{15} During the short reign of Visakam Thirunal Maharaja (1884 – 1885), many statutory changes were introduced in the Medical Department and he established one medical centre for every 277 square miles in the State. There were thirty one medical institutions in the State at the end of his reign.

**ROLE OF SREE MOOLAM IN PROGRESS OF THE DEPARTMENT**

Maharaja Sree Moolam Thirunal (1885 – 1924) took several measures for the extension and improvement of the State Medical Department. He began a system of grant-in-aid to private medical institutions. During his rule, a nursing training school named as the Victoria Jubilee Medical School began to function in Quilon which trained girls belonging to several castes.\textsuperscript{16} The Maharaja made arrangements at the Quilon hospital for training many more midwives and nurses. He contributed a sum of Rs. 50,000 to the training school. A fort dispensary was instituted by the Maharaja in 1886 – 1887 to treat the women living in proximity to the Maharaja’s palace who hesitated to go to the General Hospital.\textsuperscript{17} The Medical Department was strengthened by the appointment of three qualified officers, two of them who were licensed by the Madras University and one was an Apothecary of the Medical College. A small
Maternity Hospital was opened as an annex to the Zenana Mission Hospital in 1888 –1889. As the institution became popular and gained wide recognition, the maternity section was removed from the General Hospital and made into a separate institution. Under the charge of a special officer, arrangements were also made for the treatment of diseases specific to women.

In 1889, the Medical Department was re-organized and reformed at an additional annual cost of Rs.28,000/- \(^{18}\). During this period of reorganization, a large number of compounders were employed to help the medical officers. A separate officer designated as the chemical examiner was appointed and the *Durbar* Physician was relieved from that work. A class for educating the compounders was opened in 1890. Though the course was abolished in 1893, all the hospitals were provided with compounders by this time. Accommodation for inpatients was provided in most of the mofussil dispensaries during 1893 – 1894 and a separate hospital for women and children was opened in the next year.\(^{19}\) During the same period, the midwifery centre was shifted from the General Hospital to a new building near Trivandrum Museum and sub assistant Surgeon Dr. John Gomez was put in its charge. In 1894 the Maharaja invited a lady doctor to take charge of the women and children’s hospital and recommended that a separate hospital managed by women staff should be established in Trivandrum for the benefit of women and children.

In 1895 –1896, a separate Department was formed to control vaccination, collect vital statistics and to provide proper sanitation in
Dr. Punnan Luckos was appointed as head of the Medical Department. In the same year five medical graduates, four assistant apothecaries and fifteen hospital assistants were appointed in the Department. A separate hospital for patients with incurable diseases was opened at Oolampara in 1896 and certain drugs like Quinin and Chlorodine were distributed to the public through the anchal (postal) office. Again in 1897 – 1898, a thorough re-shuffling was conducted by increasing the strength of the medical staff, proper grading of the officers and an improvement in the salaries of officers in several grades.

The Government also gave full support in the form of grant-in-aid to allopathic practitioners and provided free medical checkup to villagers. Financial assistance was provided to all the hospitals, dispensaries and Vaidyasalas. Sree Moolam Thirunal Maharaja decided to constitute the code of rules for the Medical Department. On the direction of the Maharaja, a Medical Code was prepared by the Durbar Physician Dr. White in the year 1898. During 1899 – 1900, the Victoria Hospital at Quilon was separated from the local district hospital and a lady apothecary was put in subordinate charge of the institution. Midwifery classes were organized for women and scholarships were sanctioned for those who proceeded to study in the Medical College at Madras and Tanjore.

In a Medical Conference held at Trivandrum in 1904 – 05 it was decided to further extend the scope and usefulness of the General Hospital to cope with the increasing demand of the public. The Thykaud Hospital was converted into a Women and Children's Hospital and the Maternity
Hospital was amalgamated with it. A separate Ophthalmic Hospital was opened in 1905 in the capital under the charge of a medical officer who was specially trained in treating eye diseases. It was also decided to construct a new hospital at Oolampara, opposite to the Leper Asylum for the treatment of mentally ill patients. European Female Assistants were invited for assistance in 1906. Special arrangements were made for the treatment of women in the Nagercoil and Kottayam hospitals. After that every year the strength and staff of the department were strengthened upon royal orders.

In 1906, the services of eight European Nursing Sisters were made available in the hospitals. Later on in 1908 the Victoria Jubilee Hospital was placed under the direct supervision of a female Assistant Surgeon. A separate ward for treating patients with contagious diseases was opened at Iranimuttam during the same year. During the year 1911-12, the St. John’s Ambulance Association gave importance to the female compounders training and first aid training at many places including Nagercoil, Trivandrum, Quilon, Alwaye and Kottayam. X-ray and Dental Sections were opened in the General Hospital in 1912 and 1913 respectively.

The Maharaja sanctioned an annual donation to several private medical institutions in view of the Golden Jubilee of Queen Victoria’s reign. Of these private medical institutes the Nagercoil Dispensary of the London Missionary Society, the Charity Hospital at Allepey, the Archbishop’s Hospital at Maganmaye near Verapol, the Planter’s Hospital at Aryanad
and the Local Fund Dispensary at Bodinaikkanur deserves special mention. Revised salary and change of designation were announced in the year 1913-14. At the close of 1915, the State maintained twenty seven hospitals and twenty six dispensaries.\textsuperscript{30}

**CHARITABLE MEDICAL CENTRES IN TRAVANCORE**

In 1881, a small Leper Asylum (sanatorium) was established at Allepey by the Church Missionary Society.\textsuperscript{31} But this institution alone was insufficient to serve the needs of the whole State. Hence in 1896 arrangements were made for opening a State Sanatorium for lepers at Oolampara.

**SANATORIUM FOR LEPERS IN TRAVANCORE**

Mr. T.A. Bailey, the organizing secretary of the Mission to Lepers in India and the East visited the Leper Asylum in 1901. He was impressed with the work and remarked “I have seen at least thirty leper Sanatoriums belonging to the, Government, Municipality and Christian Mission but the Trivandrum one ranks well in the fore front, if not actually, the best I have seen”\textsuperscript{32} The lepers were treated as voluntary inmates. They could leave if they wished but those who left, returned soon to spend their days in this asylum retreat. A bill was presented before the Legislative Council to enforce the segregation of the lepers from the general public in the year 1901.\textsuperscript{33}
With a view to protect the public from the infectious disease, the British Indian Legislature passed Act III of 1898, which later became the Lepers Regulation III of 1901 – 1902. It was amended as the Regulation III of 1913 – 1914 and still continues as the present enactment on the subject. The rules of this regulation was passed in 1905. A Board was constituted for the welfare of lepers which consisted of the Durbar Physician, Chief Secretary to the Government and the Sanitary Commissioner. Under these rules, no lepers within the area notified in the Gazette were allowed to roam about freely. The total number of lepers in Travancore as per the census of 1890 was 968. There were 155 lepers in the Asylum at the beginning and 164 lepers at the close of 1915 – 1916.

LUNATIC ASYLUM

The Lunatic Asylum started in 1870 – 1871, was housed in a building near the civil Hospital. In 1903-1904, the institution was shifted to new site at Oolampara close to leper Asylum. European social worker Mr. R.C.C. Car visited this institution in 1905. He appreciated the management of this Asylum and the regional Government also. Kunjiraman Nair (the member of legislative council) introduced a bill in the legislative council to make provisions for the care of lunatics and to prescribe general rules for them. This awareness mainly happened because of the spread of education among the masses and the people’s realization of their rights.
The Guardians and Wards regulation was enacted in 1890 with statutory provision in it for the protection of incapable persons. The bill was rectified and passed into a law as the Lunacy Regulation in 1904 – 05.\(^{37}\) Provisions were made under the regulation for the arrest and detention of dangerous lunatics, who were found wandering at large in the public streets and of those who were found wild to cause obstruction and annoyance to the public residing near the Asylum.

**PRIVATE MEDICAL INSTITUTIONS IN TRAVANCORE**

Private Medical Institutions played a vital role in the maintenance of public health in the Travancore State. Organizations like London Missionary Society and Catherine Booth Hospital of Salvation Army contributed a lot in the development and spread of the western system of medicine in Travancore. Medical missionaries\(^{38}\) helped in spreading and widening modern medical techniques in the State. They also gave importance to the social development of the people.

**MEDICAL MISSION**

The idea of starting a Medical Mission was that of Rev. Charles Mead, the second missionary of the London Missionary Society who came to south Travancore in 1817. He was able to convince the authorities of London Missionary Society of the necessity for the services of more missionaries and for opening more centres for medical aid in south Travancore.
The first medical missionary Dr. Archibald Ramsay came to Travancore in March, 1838. He started his work in Neyoor, in a few thatched sheds and thus ‘The South Travancore Medical Mission’ was born. In the beginning there was only a single medical box and some medicines. The Medical Mission district was a large one, extending from Cape Comorin in the south to Kottarakkara in the north. In Travancore, the London Missionary Society worked under the Medical Mission which was a missionary enterprise. Neyoor was the centre for the Medical Mission in the State. The pioneers of these services were preachers who came to India to carry out the work of London Missionary Society.

Dr. Miller who was conducting a seminary for children in Neyoor shifted to Nagercoil, followed by Dr. Archibald Ramsay who also moved to Nagercoil and he was involved in teaching physiology to the seminary students. People belonging to several castes flocked to him for treatment. He treated more than 1500 patients within three months, till he left the mission in June 1840. After that, Dr. Leitch took over the mission work and built a larger and more convenient place of treatment and nearly 5318 patients were treated. During the period of Dr. Lowe who continued the mission from 1861 onwards, a medical school was started in Neyoor hospital. He was the pioneer to start branch hospitals in different areas. Dr. Lowe introduced ‘vaccination’ against epidemics. This kind of treatment was unknown till then. He also succeeded in training native people. After training the native people he gave them charge of the branch hospitals which he started at Santhapuram, Agasteeswaram and Attoor. These
medical assistants were also known as dressers. During the seven years of service of Dr. Lowe in Neyoor, over 11000 people were vaccinated. This formed the nucleus of the community health programme of the medical mission. Thus dispensaries and medical work came under the control of missionaries. In 1868, a branch hospital started to function in Kulashekaram. From 1864 – 1910, many more hospitals were opened.

Under Dr. Thomson who came to Travancore in 1873 there was a great advancement of the medical mission. He realized that facilities in Neyoor hospital were not sufficient and initiated efforts to build a new hospital. Honouring a request from him, the Travancore Maharaja Ayilyam Thirunal sanctioned the money needed. After his death, another LMS Medical missionary Dr. E. Sargood Fry took efforts to start a central hospital at Neyoor in 1885. A hospital for leprosy patients was started by him under the Medical mission. Miss Mac Donnell who was appointed as the woman superintendent found that there was a need for trained nurses and midwives. Batches of women were trained in Neyoor centre and in the branch hospitals. The Medical Mission Hospital’s maternity block was also the fruitful result for her efforts.

Dr. Arthur Fells urged the leadership to open a number of dispensaries all over South Travancore. One such dispensary was started in the vestry of the LMS church at Palukal which was later shifted to Karakanom. Seventeen trained assistants called as medical missionaries and six native nurses trained by the mission gave a new face to the mission’s medical work. No consultation fee was charged in the mission
Gradually the service of the Medical Mission branched out to the Malayalam speaking areas of Travancore. Several hospitals managed by the South Kerala Medical Mission today were started during this period. These include the hospitals at Karakonam (1894), Kazhakoottom (1910), Attingal (1905), Kundara, Quilon, Kottarakkara, Nedumgolam and Nellikakuzhy.

**BIRTH OF THE SOUTH KERALA MEDICAL MISSION**

The present South Kerala Medical Mission is the portion, the South Kerala Diocese got from the South Travancore (Neyoor) Medical mission, when the erstwhile South Travancore Diocese was bifurcated in 1959 into the South Kerala and the Kanyakumari Diocese. The first superintendent of the newly formed South Kerala Medical Mission was the missionary doctor Dr. G.W. Milledge.

**WORK AMONG LEPROSY PATIENTS**

A separate home for leprosy patients was opened on 8 September 1888 at Allancode located at a few kilometers to the north of Neyoor. Moved by the suffering and on the appeal by the helpless lepers who were thrown out of their homes and chased out of the towns and villages, Dr. Fry provided accommodation to ten to twelve sufferers in the home. Soon the home became an asylum for men and women suffering from leprosy. The building’s first block was opened on 11 August 1892 with accommodation for twenty patients. An English woman Mrs. Charles Pease, who was a benevolent philanthropist, donated the entire sum of money to complete the
entire building work for the leprosy home. The new building was inaugurated by the then Diwan of State, Shankara Soobayar. A separate home for the healthy children of the leprosy affected parents was started in March 1891. Further on January 1, 1901, Dr. Fells opened a separate home for the women patients.

Since there was an increase in the number of patients and inadequate space, this home was shifted from Allancode to a village called Udayarvilai about five kilometers to the south of Neyoor. This was named as the Charles Pease Memorial Leprosy Home. In 1933 a Doctor’s residence and four hospital wards were opened by the Travancore Diwan Austin amidst strong opposition from the public.

THE TRAINING OF NURSES

In 1892 a fully qualified nurse named Miss MacDonald was sent by the London Missionary Society to Neyoor. She organized the nursing section and became the first Nursing Superintendent of the Medical Mission. Two more nurses Edith Mills and Eileen Pidcock were also appointed in the Medical Mission. Many young men and women were trained as nurses by this institution. In 1930, five of the students trained by the institution passed the Nursing Examination conducted by the Christian Medical Association of India.

THE SOMERVELL ERA

Dr. Theodor Howard Somervell was a trained and qualified surgeon, who came for a fortnight’s stay with his friend Dr. S.H. Pugh in Neyoor. He
was very impressed by Dr. S.H. Pugh’s dedication to his work at the Neyoor hospital. Realizing the great need at Neyoor, Dr. Theodor Howard Somervell joined the Neyoor mission hospital as a Medical missionary in the year 1923. With his arrival the input of patients increased tremendously. He built an innovative viewing gallery in the operation theater where friends and relatives of the patients could observe the surgery and learn about its benefits. This helped to create trust between the doctors and people living in surrounding areas.

It was a period of great expansion and progress in the Mission. In 1930, he introduced Radium for the treatment of cancer and Neyoor Hospital was the only one of its kind in India at that time to have a cancer ward. A new maternity ward and an outpatient ward were constructed and the hospital was functioning efficiently. In 1933, the Sri Chitra Thirunal Maharaja inaugurated the new laboratory, consulting room and Indian Nursing Home. Ramanadham Chettiar of Kottaiyur contributed funds towards construction of a new building consisting of private wards. A new cancer ward for more new patients was also constructed. By the middle of nineteenth century, the Government of Travancore started many hospitals in the south.

THE SALVATION ARMY AND ITS MEDICAL SERVICE

The Salvation Army is an International Christian organization which preaches, while teaching and healing. The believers belonging to the Salvation Army sailed round the globe, sharing their belief, inventions,
scientific and medical knowledge as well as their culture of home and community. On the basis of their beliefs many were influenced to serve the community. Harry Andrews was the founder of the Salvation Army’s medical mission work. In 1895 he started to care the sick in a small room. This became the first recorded missionary dispensary of the Salvation Army, known as the Catherine Booth Hospital, located at Nagercoil. It was opened by K.Krishnaswamy Rao (1898-1904) Diwan of the Travancore State in 1901.

In 1901 Dr. Percy Turner (Colonel Dayanesan) was appointed as the Physician of Catherine Booth Hospital. He opened the first Medical School in Travancore under the approval and funding of the Travancore Government. Later several hospitals were opened at Aramboly, Chemponvillai, Kothanaloor and Kulathummel. In the year 1912, Dr. Charles taught surgery to medical students and Dr. Percy Turner concentrated on medicine that had the distinction of being the first formal nursing educator in the Salvation Army.

The medical school lasted only a few years from 1908-1914, but many officers graduated from it. They were Brigadier T. Chacko Joseph and Senior Majors S. Ghanaiah and J. Manuel who were in charge of the branch hospital. Dr. William Noble and his wife Etna Dodds came to India and took charge of the Catherine Booth Hospital in Nagercoil where they worked until 1922. For the next 38 years, Dr. Noble developed the hospital until it was the largest mission hospital in India. At the Catherine Booth Hospital, William Noble had a trained nurse from Virginia, who was
qualified to conduct a nursing course. The School of Nursing was thus added in 1938 and it has since then met the necessary requirements of the Indian Nursing Council and also of the Tamil Nadu Nurses and Midwives council. In 1947 Captain Vera Williamson was appointed as Matron. Since 1985, the hospital has grown tremendously to achieve the present status of a well established charity hospital. So many progressive steps are taken even today for the benefits of the downtrodden, sick and needy of the local community. Programmes such as Rural Community Health Programmes, rehabilitation and vocational training centres for the physically challenged were introduced to help the deserted and the poor.

**STATUS OF THE MEDICAL MISSION AT THE BEGINNING OF TWENTIETH CENTURY**

In the beginning of the twentieth century it was realized that the rural population of Travancore needed greater medical care than the urban areas. It was recommended that more Indian doctors should be appointed in the mission hospitals and that the missionary doctors have to be provided with mobile operating units to create awareness of preventive causes and the promotion of hygiene in many remote villages. Though, there was a separate women’s ward, many women hesitated to go to the hospital because of the strong prejudice of being examined and treated by male doctors. The need of a female doctor was keenly felt and in 1936, the London Missionary Society sent out, Dr. Joan Thompson, the only woman missionary doctor to serve in the south Travancore Medical Mission. She visited the villagers and befriended some of the women there. It was also
possible to train the nurses in mid-wifery at the Neyoor Hospital from 1939. The health ministry of the church in South Travancore provided sufficient medical aid and other facilities for the alleviation of physical suffering of the people. The combined effort of these private Medical Missions along with the continual effort of the Government to raise the health status of the people contributed much towards the establishment and progress of the Health Department in Kerala.

The students passing out of the medical schools attached to the hospitals at Neyoor and Nagercoil were recognised as hospital assistants by the Government. Three surgeons, eighteen deputy surgeons and thirty two assistant surgeons, five sub assistant surgeons, and five apothecaries were employed in the medical institutions of Travancore. The General Hospital which was the largest medical institution in the State was under the charge of the senior surgeon.

Most of the medical institutions were accommodated in neat and easily accessible sites in the state. All the hospitals were provided with adequate number of beds and satisfactory dietary arrangements. Medicines were dispensed freely and adequate medical care was given in all these government institutions. The rules relating to medical attendance on public servants and private patients were passed in 1896. The Durbar Physician was an officer of Indian Medical Services. His service was fixed by the British Government for a period of five years. He had a variety of duties, including attending the medical needs of the Maharaja and members of his family. He was directly under the direction and control of
the Civil Medical Department. The Brigade Hospital which served the military department was under the control of the Brigade.

The number of patients treated in the State Medical Institutions rose from 1,09,387 in 1884 to 9,91,155 in 1915, out of this number about 8,69,563 patients were treated in sarkar hospitals and 1,21,592 patients were treated in grant-in-aid Medical institutions. 1,575 beds were available in various hospitals in 1915. The number of surgical operations performed rose from 632 to 38,267 during the same period.

Though the people of Kerala slowly started to appreciate the medical services offered under the aegis of the Government and private medical institutions the need for an organized sector for maintaining Health and Family Welfare in the State was realized by the Government. The health services rendered by both the Government and private institutions continued its good contribution on one side. At the same time, several steps were taken slowly but steadily to form the organization of Public Health as a department. Efforts were taken, in a full swing to bring the Public Health Services and Health Department under a single roof. These small but collective and continual efforts formed the strong foundation for the establishment of an independent department in Travancore and resulted in the formation of vaccination, sanitary, and Public Health Departments.
FORMATION OF VACCINATION DEPARTMENT

The Vaccination Department was formed in the year 1865. This department was put under the charge of a Medical Officer with European qualifications. He was designated as the Superintendent of Vaccination and placed under control of the Durbar Physician. Dr. Punley Andy was the first Superintendent of the Department. His staff consisted of a Head Vaccinator and twenty seven vaccinators in five grades. The Superintendent of Vaccination had to supervise the work of the vaccinators, inspect the outstation hospitals, treat cases and suggest measures for the improvement of sanitation. This step marked the first measures for the improvement of sanitation. It also marked the first stage in the progress of health measures in the State. The opening ceremony of this department was held at the Trivandrum civil Hospital under the King Ayilyam Thirunal Maharaja.

In 1868 the establishment of the vaccination department was reinforced by the inclusion of eight additional vaccinators, thus increasing the number to thirty five. This number remained practically unchanged for more than twenty years. A royal proclamation in 1878 made vaccination compulsory for public servants, which while pointing out the advantage of vaccination as a protection against small pox, also called upon the population to submit to the vaccination operation, setting before them the example of the royal family.
In 1888, the King Sree Moolam Thirunal gave permission to open a vaccine depot. Thus the first vaccine depot was established near the General Hospital, Trivandrum for the preparation and distribution of Vaccine Lymph. In the same year the use of the calf lymph was first introduced in Travancore and sanction was accorded for the maintenance of the vaccine depot at the capital. Hitherto the quality of the lymph used had to be improved by the occasional introduction of animal lymph obtained from Madras. The Superintendent of Vaccination was sent to Madras to collect animal lymph and arrangements were made to import vaccine (lanoline lymph) from Madras.\(^6\) He functioned as the sole Inspecting Officer till the end of the 1891. As arm-to-arm vaccination was found to be unsuited from an emotional as well as scientific point of view, steps were taken to abolish it in 1895. Medicines injected with hemline lying had two main side effects. The Injected area produced lot of puss. When it healed, a big scar remained. As a solution to this, Glycerin Vaccine was distributed in the year 1893 – 94. A trained Superintendent was appointed to direct the propagation of animal lymph in the vaccine depot. A temporary sub-depot was also established at Suchindram, but this was closed in 1897 – 98 and arrangements were made for the manufacture of the requisite quantity of Glycerin paste at the Central Depot.\(^8\)

From 1895 till the restructuring of the Public Health Department in 1933 the vaccine depot functioned as a separate laboratory with a fairly large number of staff, under a responsible officer next in rank to the Sanitary Commissioner.\(^9\) The State was divided into various vaccination
ranges. It was made imperative upon the vaccinators that they should visit every nook and corner of the country according to the programmes prepared and sanctioned previously. In 1913 a vaccination committee was appointed for the enforcement of vaccination. This committee examined the vaccine depot and they were pleased with the work carried out by the institution.

**FORMATION OF SANITARY DEPARTMENT**

A Sanitary Department was established in 1895 with a Sanitary Commissioner as its head. For the purpose of easy and efficient management of this Department, the whole State was divided into four districts viz., Trivandrum, Quilon, Kottayam and Vaikkam. Sanitary Officers of the four Districts and a Taluk Sanitary Officer for the taluk of Shenkotta, were newly appointed. These officers were medically qualified men and their duties included providing of medical relief too. The officers were classified into five grades and one of them was the Head Vaccinator. The Sanitary officer took charge of the vaccination. Strict rules were made in the year 1895 – 96 for spreading the vaccination programme. In 1896 an opinion was brought forward to make vaccination compulsory to which Maharaja did not agree. But during 1899 – 1900, the law related to vaccination was made strict. Vaccinators were given training in the Trivandrum vaccine depot. Almost all municipal towns followed these rules.

An Inspector was appointed to each district. His duty was to supervise and check the vital statistics throughout the districts, to inspect
the sanitation of all parts of the district where the Town's Improvement Regulation was not in force and to study and report on the state of public health within his district, to supervise the vaccination effort and to be a sort of a travelling dispensary, by actually imparting medical aid to all the villages. The Sanitary Officers were subsequently classified into two groups. They were District Sanitary Officers and Assistant Sanitary Officers and their total number rose to thirteen and included the palace circle and the vaccine depot.\textsuperscript{70} This classification however was abolished later leaving only a single class of sanitary circle officers. Four important functions were pertained to the sanitary department, viz., conservancy, drainage, water supply and the provision of public latrines. The Department engaged itself mostly with conservancy and to a slight extent with drainage. The removal of night-soil, which was the most important function of the Department, was practically unattended.\textsuperscript{71}

The Department first prepared village sanitary records in 1905. A separate rule was framed to improve the sanitation of the plague affected area. The Sanitary Department was re-organized on 15 April 1922 and new regulations were framed.\textsuperscript{72} This re-organization led to the reduction of two-district sanitary officers positions which saved Rs. 2,298 per annum. The Sanitary Commissioner was empowered to grant privilege leave for three months to the Assistant Sanitary Officers.\textsuperscript{73} Even after the re-organisation, the Sanitary Department did not function satisfactorily to meet the needs of the public. The press and legislative council criticized its activities. Hence, three important measures were adopted to improve the efficiency of the
sanitary department. As the previously appointed sanitary circle officers of the department were not qualified in medicine or to carry out propaganda work, three qualified divisional health officers in the grade of assistant surgeons were appointed in 1925 in each of the three divisions. They visited various places, provided intensive propaganda, gave public lectures on the importance of sanitation and published pamphlets, leaflets, newspapers article and posters. The service of the Divisional health officers was also utilized to give medical aid to the people. Efforts were also taken to improve rural sanitation of village markets. For this purpose, a Village Sanitary Act on the lines of the Mysore Village Sanitation Regulation was enacted. Suggestions were made for the formation of health committee in important taluks and villages with prominent non-officials of the place. The Thasildar acted as the president and convener of the committee. The committee was required to inform the Sanitary Commissioner and the Government, about the urgent needs of the sanitation in its area. By enacting a regulation, vaccination was made compulsory in the rural areas. However, the government was able to spend only ¼ anna per person annually on public health compared with one anna which was spent per person in Madras. Since the formation of the Sanitary Department, sanitation in the State was found improving in a good manner. To maintain efficiency the Vaccination and Sanitary Department were merged together to work for the benefit and the maintenance of good health of the general public. This laid the foundation for the formation of a modern Health Department.
ROCK FELLER FOUNDATION AND ITS HEALTH SERVICES

The State Government, in February 1928 requested the Rock Feller Foundation, an international health division of the League of Nations to depute one of their representatives to the State to advise the government in organizing a Public Health Department on modern lines. As a result, Dr. Heiser, a Director of the Rock Feller Foundation visited India. The State Government took advantage of the opportunity and invited him to Travancore to obtain advice and co-operation of the foundation in the efforts of the Government to improve the public health conditions in Travancore. With the arrival of the Rock Feller Foundation advisors in Travancore in 1928, a new phase in public health work began. The advisors of the foundation remained in Travancore for nine years and during this period, provided the Public Health Work with a new direction and momentum.

The foundation appointed Dr. W.P Jacocks to reform the public health in Travancore, who reached Travancore in March, 1929. After studying the local conditions he prepared a comprehensive scheme of Public Health Work. An immediate working programme was drawn up by the Government and was put into operation in 1930. This programme comprised of hook worm treatment campaign, public health education, vital statistical investigation, health unit work, medical entomology and plague control measures.
Earlier two separate agencies were functioning till 1930, they were viz., the Sanitary Department formed in 1895 and the Public Health Organization established in 1930. In 1934, due to the encouragement of the Rock Feller Foundation, Bacteriological Laboratory, the Vaccine depot (established in 1889 and under the supervision of the sanitary department), the chemical Examiners section (established in 1890), the Public Analyst’s section and Anti Rabies Treatment section were all amalgamated and brought under the control of a single department. It was named as the Public Health Department and was brought the under the control of a Deputy Director. In 1935 the designation of the Department Head was changed into a new designation as Director of Public Health. Earlier, these services were considered to serve only as a platform for providing and prescribing medicine or sanitation but the perception changed in 1930’s and they came to be considered seriously in the matter of public health. As per Dr. Jacock’s recommendations, a public health laboratory was started in the newly formed Public Health Department. This laboratory consisted of various sub sections like the bacteriological section, bacterial and pathological examination section, and anti – rabies treatment section. The research section of the department included small pox vaccination section, public analysis section, medical entomology and chemical examination. The preparation of cholera vaccine on a large scale was a notable feature of work in the public health laboratory in the year 1935. A total of two samples of vaccine lymph and 1291 samples of water were subjected for bacteriological examination.78
PUBLIC HEALTH EDUCATION

Public Health Education is also an important part of the public health work in Kerala. The health educational officer undertook intensive lecture programmes in various parts of the State to provide vaccination campaign, cholera preventive measures, anti-malarial operation and mosquito control. The lectures were accompanied by demonstrations like cinema films, lantern slides, charts etc. Over 64000 copies of public health bulletin pamphlets and posters in English and vernacular languages were distributed among the people.79

SCHOOL MEDICAL INSPECTION

The school medical inspection work was started as an experimental measure in 1936. The programme comprised of a thorough physical examination of the school children and securing the help of specialists in cases where it was needed. It also included health education and inspection of the sanitary conditions in schools. This inspection work was conducted under the leadership of an assistant surgeon. The inspection team of 1936 suggested the inspecting of the following defects in the infrastructure of schools such as flooring, lighting and ventilation, accommodation, play ground, water supplies, urinals and latrines.

Re-organization and re-orientation in the Bacteriological Laboratory led to the expansion of entomological work which carried out surveys of malaria, plague, hookworm and filariasis in 1930’s. Incidence of filariasis was reduced due to the various new and scientific approaches adopted by
the Public Health Department. Thus the first step taken in the region was the completion of a survey to identify the type of filarial with that area and indentifying the transmitting mosquito. Once the latter was identified, its breeding place was sought out and destroyed or disinfected. In 1932, a field station was set up by the Public Health Department to destroy the breeding places of mosquitoes which act as vectors in carrying the filarial worms.80

Surveys were conducted and remedial measures were adopted in a number of rural areas including the taluks of Karthigapalli, Karunagapalli, Paraur, Pathanapuram, Kottarakkara as well as the towns of Trivandrum, Allepey, Eraniel and Shertallai in 1930. A survey in 1933 showed higher incidence of F. brancrofti infection. Repeated clearing of pistia plant in the area subsequently made the mosquitoes disappear. A survey conducted again in 1937, showed that of the eighty two children examined, some had filarial infection outside the cleared area, but 20% of the fifty six children within the area were infected and the incidence had fallen drastically.81 Moreover the Rock Feller Foundation was involved in forming a new Public Health Department and the communities and the municipalities were encouraged to share the burden of providing personnel and money. Municipalities often contributed as much as half of the expenditures. The rural and urban population helped to conduct surveys and helped to destroy mosquito breeding places. This allowed many more regions to benefit from filarial campaigns.
The second epidemic which had to be combated by the destruction of mosquito vector was malaria. The Public Health Department from 1932 carried out a number of surveys under Dr. Jacock’s supervision which helped to implement efficient mosquito and malaria eradication programmes. Malaria field stations were also constructed at Kulasekaram; South Travancore, from where surveys and research emanated to the surrounding regions. The surveys revealed that there were regions where optimal conditions existed for a malaria epidemic. In 1934 the monsoon had failed, creating plenty of muddy shallow pools for mosquitoes to breed. A malaria epidemic broke out in 1935. Numerous centres for quinine and rice distribution were set up in the affected taluks.

In 1936, the Department gave its full attention to control the epidemic. The Medical Department and the Ayurvedic Department opened many new dispensaries. The Public Works Department constructed roads to increase access to hospitals. The malaria relief committee of the Medical Association, through voluntary contribution, raised funds for the feeding of school children in the deprived areas. All the activities of these departments and organizations were supervised by a special Malaria Officer from the Public Health Department. The manner in which the malaria epidemic of 1936 was controlled reflected the new coordinating ability of the Public Health Department and altered the network of department responsibilities.

During the period 1938 – 1939, twenty three million people died of plague in India. Travancore did not suffer much as other states, because observation stations were placed at ports and entry points to control the
passage of infected persons into the region. In 1932 plague struck out at Peerimadu due to rat falls. The Department took extensive remedial measures to control the plague epidemic. Dr. Jacocks also contacted the Director of Public Health in Madras to encourage action against plague in the infected region of Madras bordering Travancore.\textsuperscript{84} No cases of plague occurred in Travancore in 1933 though the plague continued to prevail in the rest of India, including Madras. The flea, \textit{Xenopsylla Cheopis} was found to be the common plague carrier. A State wide rat survey was conducted to find out regions that are vulnerable to plague. Permanent Plague Officers were posted in many areas which were predicted as plague prone and many preventive measures were taken.\textsuperscript{85}

**COLLECTION AND RECORDING OF VITAL STATISTICS**

When the epidemic broke out, newer and more effective remedial measures were available. But it was difficult to ascertain statistically the degree to which all these new measures contributed to lower the death rate in the State. Vital statistics collected till 1930 were highly inaccurate, although Sanitary Commissioners were responsible for the collection. Since 1985, Revenue Officers collected the data which they turned to the Sanitary Commissioners. But there were inaccuracies and omissions in the statistics which were evident from the discrepancies between actual conditions and how the available statistics described them. The Government could not find an alternative to this system due to the absence of organizations in rural areas. Therefore, Dr. Jacocks and the Public
Health Department began experimenting with alternative methods of collecting vital statistics.

The taluks of Neyatinkkara and Vilavancode were selected for a study which lasted for three years. In both regions, similar systems were adopted. Vilavancode was divided into six sanitary ranges with a sanitary commissioner from the Sanitation Department, responsible for each range. A Sub Assistant Surgeon supervised the entire experiment. The Sanitary Commissioners made domiciliary visit throughout their assigned areas and collected data on birth, death, incidence of dysentery, malaria and other infectious diseases. This was tedious but was possible because of the help rendered by students, teachers, pastors and low caste co-operative societies in collecting the data.\(^86\) The data collected proved that there were large omissions in the earlier data collected by Revenue Officers.

A second experiment was then tried in the taluks whereby private agents who were nominally remunerated, collected the data. It was found that the results of the Sanitary Department staff were more accurate. Hence in 1936, when the Taluk Health Organization was formed, the method of having Sanitary Commissioners collecting data from taluks divided into ranges was adopted. The entire State adopted this system gradually and by 1956, the transformation was completed. In the rural regions, even in 1958 after it had become part of Kerala the village headmen were still collecting vital statistics.\(^87\)
CRITICISM TO JACOCKS AND ROCK FELLER FOUNDATION

Despite success in many endeavours, some activities of the Rock Feller Foundation were indeed criticized. Some criticized the selection of officials by Dr. Jacocks. The Hookworm campaign of 1930 also met with severe criticism. From the reports of the foundation, the success of the hookworm treatment campaign appeared unquestionable. Prior to the campaign of the treatment of hookworm, a survey had shown that the incidence of hookworm was as high as 92% among the 79,662 individuals treated, a post treatment survey showed that the incidence had dropped to 53%.88 However there were voices in the community, which questioned the value of this activity. They argued rightfully that treatment was useless if individuals would become reinfected again.89 The second public health activity of the foundation to come under the scrutiny of the newspapers was the Health unit at Neyatinkkara. Since it was meant to be a model for all the services and scientific attitude of the Rock Feller Foundation, it was considered ideal and necessary for conducting any comprehensive rural health programme. However it was also the most controversial projects undertaken by the foundation in Travancore.

The Neyatinkkara Health unit included a region of twenty eight square miles and a population consisting of 39,880 individuals where the following programmes were instituted (1) maternity relief and child welfare work (2) small pox vaccination (3) typhoid fever control (4) hook worm treatment (5) latrine construction (6) sanitation (7) public health nursing (8) health education (9) registration of vital statistics (10) school of medical
inspection (11) survey, control and treatment of various infectious diseases.\textsuperscript{90} A vaccination campaign was also begun along with these rural sanitation works. The staff responsible for all these activities was efficiently organized so that they could deal effectively with any emergency situation such as the epidemics of typhoid and malaria like the situation which struck in 1934 – 35.\textsuperscript{91} However, much of the attention was directed towards maternal and child welfare work. This programme was successful because of the ability of the trained female health workers in Travancore.

The activities of these public health nurses included holding of antenatal, postnatal and preventive health clinics, supervising the work of the midwives, home visits, vaccinating women in areas where purdah system was in practice, giving health talks and advice to mothers. The clinics they helped to run, in co-operation with the Medical Officer provided health education, physical examination, and minor treatments.\textsuperscript{92}

Training classes for public health nurses were held in the health units. The medical officer in charge of the taluk health unit and the sanitary inspectors working in different parts of the state were trained in the health units in successive batches. Despite serious efforts by the Government, it was difficult to extend the entire package of services offered at Neyatinkkara to the rest of the State. Apart from an insufficient number of trained personnel, financial resources were also clearly lacking. The issues were complex and reflected the different views of the foundation and its critics. The foundation wanted to establish a ‘model’ for rural health work.
The success of establishing this model was heavily dependent on the availability of medical personnel, health facilities, and also financial support.

Dr. Thampi, one of the physicians working under the foundation, toured the areas around Trivandrum to select a site for the health unit. The choice fell on Neyatinkkara as this place had facilities for successful medical work. But there were regions such as the taluks of Karthigapalli and Karunagapalli where health conditions were worse than Neyatinkkara and which needed health services urgently. The residents in these areas reacted angrily for showing discrimination in providing health services. Numerous newspaper articles appeared criticizing the Government for accepting many of the foundation's schemes. The situation was further exacerbated when the Government sought to divide the health staff working at Neyatinkkara and share it with Shertallai due to shortage of public health personnel. Work continued at Neyatinkkara but some of their staff was borrowed by the Public Health Department.93

A decade after work began at Neyatinkkara, infant mortality became as low as 83.02 per 1000 live births.94 During the same period (1931 – ‘41), in the rest of India, infant – mortality was 207 per 1000 but in the combined regions of Travancore, Cochin and Malabar it was reduced 173 per 1000. The representatives of the foundation were determined to have the Neyatinkkara Health unit intact amidst great controversy. Furthermore, the health unit with all its facilities proved to be very expensive. The Government would have to spend fifty lakhs rupees annually if this scheme should be put into effect.95 The Government was criticized for spending so
much money on a scheme which could not be expended for the welfare of the whole State. However the Health unit was an ideal of a good and comprehensive rural health programme. As an ideal, it was inevitable that it would have to be modified to exist in real circumstances. In fact, it took years for the whole State to benefit from these programmes which was a real drawback from the Foundation’s view point. The process of extension and generalization is still occurring today in Kerala. The taluk health units that were started in 1936 in five taluks of the State like Shenkotta, Agasthiswaram, Kalkuklam, Vilavancode and Thovala, though did not include all the minimal essential activities of a health unit in their scope of works, they were planned more or less on the health unit model.96

The foundation also carried out public works effectively so as to benefit the population at large. The Water Works and Drainage Department also was functioning actively under Rock Feller Foundation’s activities. The Willingdon water works which provided Trivandrum with an abundance of clean water was completed in 1933. A similar supply system was completed in Nagercoil in 1942. Deep bore wells with turbine pumps and tanks were constructed in Allepey in 1936. The Shencottah Municipality shared the costs with the government for supplying itself with a clean water system. By the fourth decade of the century, water supply systems were constructed in most of the large towns. In rural areas, on the other hand, initiatives centred on the construction of tube wells and simultaneously drainage systems were also constructed. Thus Trivandrum acquired an underground sewage system in 1940.97
To sum up, Travancore experienced a tremendous change in the field of public health work in the 1930’s. From limited programmes like vaccination and sanitation the Public health works has now evolved into a full-fledged Public Health Department. This change occurred with the arrival of the Rock Feller Foundation advisors who created the department, modernized its activities and made it scientific. The foundation set up a model for rural public health works at Neyatinkkara which was subsequently expanded to rest of the State. To the extent that the health unit introduced new public health activities into Travancore, from the government’s view point it was a success. This willingness on the part of the Travancore Government to spend so much money on public health work occurred in a response to local politically aware castes and communities who had organized themselves earlier and demanded the attention of their State representation body. The same communities also were, in turn, willing to participate in the programmes as they were instituted solely to contribute to their development. Thus local participation was crucial to the success of public health work and to its rapid expansion throughout the State.

PUBLIC HEALTH DEPARTMENT

The Public Health Department was formed in the year 1933 after the amalgamation of Sanitary Department, Temporary Health Department and Vaccination Department. The Department gave importance to the Health Services based on the principle of Rock Feller Foundation in the State. In 1936, Public Health Services were introduced in five selected taluks, viz.,
Shenkotta, Agasthiswaram, Kalkuklam, Vilavancode and Thovala. The first three taluks were under the charge of Sanitary Circle Officers and the last two under Sub Assistant Surgeons attached to the Medical Department. These taluks were divided into a series of limited ranges; each range was allotted to the Sanitary Inspector or a Vaccinator whose duties included intensive vaccination, prompt notification and control of communicable diseases, correct registration of vital statistics and rural sanitation. In the year 1937, the State was divided into two Public Health Districts, viz., Northern and Southern. Each district came under a District Health Officer who had to supervise the entire field work pertaining to his district.

The administration of the Public Health Department was vested in the Director of Public Health. The Department started vigorous and extensive measures for epidemic control. The important measures taken were vaccination, registration of vital statistics, control of communicable diseases, plague control measures, medical entomology, hook worm survey and treatment, campaign for rural sanitation, school medical inspection and public health education. After the formation of the department, a regular state-wide vaccination campaign was started in the middle of 1934. Thus Public Health Department started its health services to the people of Travancore. The Rock Feller Foundation also gave full support to the department for future progress.
PUBLIC HEALTH IN COCHIN

The native State of Cochin (Malayalam Kochi) lies between 9°48’ and 10°50’ Latitude; 76°5’ and 76° 58’ E. Longitude. It consists of two disconnected parts, one larger and a smaller one. The larger part is bound by British Malabar on the north; Malabar, Coimbatore and Travancore on the east; Travancore on the south and by Malabar and Arabian Sea on the west. The smaller part covering an area of 105 square miles comprises the Chittur taluk and is encircled by British territory Malabar and Coimbatore. There are several isolated tracts also, but of smaller extent. These are entirely surrounded by Travancore, viz., Vadavakode, Vellarapilli, Malayattur and Chennamangalam. The State is thus singularly diversified in its configuration. Its boundary lines extend over a length of 500 miles and the total area of the State is 1417 ¾ square miles.

For administrative purposes, Cochin is divided into five Taluks, viz., Kanayannur, Cochin, Mukundapuram, Trichur, Talapilli and Chittur. In addition, there is also the tiny principality of Cranganur. The head quarters of the taluks are Ernakulam, Irinjalakuda, Trichur, Vadakancheri and Chittur respectively. The five taluks of Cranganur are further subdivided into 165 revenue villages. The chief towns are Ernakulam, Mattancheri and Trichur. For administrative purposes Irinjalakuda, Kunnamkulam, Chittur and Tattamangalam are also treated as towns.

Though the general health of the people in the State is good on the whole, the monsoon months are the unhealthy parts of the year. This is the
season when diseases associated with damp and chill like rheumatism, bronchial infections, diarrhea, dysentery and fever are prevalent throughout the State. Outbreak of cholera in an epidemic form is not very frequent in the State owing to the preventive and remedial measures taken by the Medical and Sanitary Departments. On the other hand, whenever smallpox broke out in an epidemic form, it decimated the population as in 1848, 1861, 1874 and 1893. Vaccination has made great progress in recent years and the outbreaks since 1893 have never been much fatal as in previous years. Except for a few imported cases, plague has not made much appearance in Cochin due to a great extent of precautionary measures taken by the Durbar ever since its first outbreak.¹⁰¹

The census of 1901 reported that of the 1966 persons afflicted of every 10,000 persons; twenty four were insane, blind, deaf-mutes or lepers. Leprosy was most prevalent in the area to which elephantiasis was confined, and the proportion of lepers is highest among Velans and Kanakkans, who are fishermen and boatmen by occupation.

**VACCINATION**

Vaccination was introduced into Cochin in the year 1802 and six trained vaccinators were employed by the State since 1812. But still, it made only a little progress for over three quarters of a century since the people had no faith in vaccination. It was only when English education made progress in the State, people began to realize the advantages of it. But on the whole, its efficacy as a preventive measure was not generally
recognized. A department of vaccination was organized in 1886 with a staff of fifteen vaccinators under a superintendent assisted by a deputy inspector of vaccination. The office of vaccination superintendent was abolished in 1908 and the vaccinators were placed under the orders of the Division Sanitary Inspectors.

**MEDICAL RELIEF AND INDIGENOUS MEDICINE**

The western coast always had a plentiful supply of indigenous medical practitioners. From time immemorial, medicine has been the hereditary occupation of the well known Namboodhiri families. The members of these families devote their full attention to study, practice and teach Ayurvedic Science. Pupils of all castes carried this ancient art to every town and village in the State. Though they were not skilled in surgery, they enjoyed considerable reputation for their skill in curing diseases. Medicinal herbs indigenously found in forests and plains of this coast are used for medicinal preparations such as decoctions, mixtures, electuaries, confections, powders, pills, medicated ghee and oils. Animal substances and mineral preparations were also made. The native practitioners are still very much in demand, especially in rural parts and among the middle classes. The people in towns resort to English medicine or Allopathic as they can afford to pay for it, while the poor people go to the nearest sarkar hospital or dispensary where they are treated free. The lower middle class people prefer indigenous medicine on account of their immense faith in it and its comparative inexpensiveness.
INTRODUCTION OF ENGLISH MEDICINE

The first attempt to introduce European medical treatment into Cochin was made by a missionary Rev. J. Dawson who opened a dispensary in Mattancheri in 1818. It received a monthly grant from the sarkar but was closed within three years of existence. The Civil Surgeon of British Cochin was made ex officio Durbar physician in 1823. A dresser was attached to the jail at Ernakulum. The Trichur jail was placed under the charge of the dresser attached to the British Military detachment. By this time, the people of the State slowly began to realize the advantages of European medicine and surgery. The first sarkar hospital was opened by Diwan Chankara Variyar is 1848. This charity hospital of Ernakulum developed into the present General Hospital. After this there was no attempt to extend the operations of the Department. But in 1875 a hospital was opened at Trichur.102

MEDICAL INSTITUTIONS

In the subsequent years several hospitals and dispensaries were opened throughout the State. There are at present seventeen medical institutions, nine hospitals, and eight dispensaries besides the hospital attached to the Central Jail. There is one medical institution to every 83 square miles. The Mattancheri Hospital is for Women and Children and a separate dispensary is maintained for male out-patients. The Ernakulum and Trichur hospitals have separate dispensaries for women and children.103 A lunatic asylum, a special medical institution was opened at
Trichur in 1892 and they were placed under the medical sub-ordinate in charge of the local hospital. Though there was an idea of the establishment of a leper asylum since 1890, it was opened only in the year 1909 with accommodation for about forty inmates. A separate accommodation was provided for males and females. By regulation VI of 1909 an effort was taken to segregate lepers from the general public.

FORMATION OF MEDICAL ADMINISTRATION

The Civil Surgeon of Cochin was appointed as Medical Officer to the Durbar in 1823. His job was to supervise the work of the vaccinators and jail dressers. In 1829 the supervision over vaccinators was entrusted to the Travancore Durbar physician and that of the jail dressers to the residency surgeon. Again in 1846, the original plan was reverted, and the civil surgeon of Cochin continued to be in charge of the Medical Department including vaccination till 1895. Then a full time Chief Medical Officer was appointed as head of the department and he was made the Chief Sanitary Officer to the Government in 1908.

SANITARY BOARDS

No special arrangements were made by the Durbar for the town sanitation and there were no municipal or local boards in the State till 1910. In 1890, committees consisting of official and non-official members were appointed by the Government to look after the sanitation of Ernakulam and Trichur. A monthly grant was sanctioned to a committee formed by the merchants of Mattenchery to keep their bazaar clean. These committees
were superseded by sanitary boards in 1896 for the towns of Ernakulum, Mattenchery and Trichur. In the subsequent years similar boards were established in Kunnamkulam, Irinjalakuda, Tripunitara, Nemmara and Nelliampati. The chief function of the boards was keeping the roads and drains of the towns clean and lighting the streets. The boards were financed entirely by the Government.105

In 1908, the Sanitary Department was reorganized and constituted as a Public Health Department under the immediate control of the Chief Medical Officer. The Sanitary Boards continued to perform the same function in the towns. Qualified sanitary inspectors appointed the State were divided into two divisions, each one being placed in-charge of a first grade Sanitary Inspector to perform sanitation of rural parts. These inspectors were responsible for supervision over vaccination, fairs and festivals and epidemics subject to the control of the Chief Sanitary Officer. A special conservancy was also sanctioned wherever an epidemic may break out. All the markets in the State were brought under the control of the department and a Market Inspector was appointed.

VITAL STATISTICS

The registration of birth and death began in 1897-98. The duty was entrusted to praviritti (Village) Officers. It was difficult for them to register the statistics with exactness as the average area of a praviritti was very large about twenty square miles and its average population being 19,000. In absence of any legislation to compel the people to give intimation of birth
and death, it was impossible to record the vital statistics. With the introduction of new settlements the forty three pravritties were split into 173 revenue villages. Regulation II of 1905 made the registration compulsory. Since 1909 these measures were followed and there has been considerable improvement in the registration of vital statistics.

PUBLIC HEALTH DEPARTMENT IN MALABAR

Malabar was an administrative district of Madras Presidency in British India and independent India's Madras State. The British district included the present-day districts of Kannur, Kozhikode, Wayanad, Malappuram, Palakkad (excluding the Chittur Taluk), and Chavakad Taluk of Trichur district (former part of Ponnani Taluk) in the northern part of Kerala State. The district lay between the Arabian Sea on the west, South Canara district on the north, the Western Ghats to the east, and the princely State of Cochin to the south. The district covered an area of 15,009 km (5795 square miles), and extended 233 km (145 miles) along the coast and 40–120 kilometers (25–75 miles) inland. The name Mala-bar means the ‘hill country’.

In Malabar for the benefit of officials of the army and jails, district or zillah surgeons were appointed in the middle of the nineteenth century. The first public hospital was opened in 1845. After twenty years municipal hospitals were opened in all municipalities of Malabar. Malabar was divided into the north and south Malabar. A Women and Children Hospital was opened at Kozhikode with the help of Raja, Sir Ramaswamy
Mudalyar of Madras. The first Mental hospital was opened on 28th May 1872 at Pudiyara of Malabar. Hospitals and dispensaries were opened in some of the Police and railway stations. The 'mission to lepers' maintains the leper asylum at Cherayur. There were thirteen hospitals in the district at the end of the year 1931.107

Malabar was also noted for the great advance it had made in the teaching and practice of certain indigenous system of medicine, especially Ayurveda. Three Ayurvedic colleges were attached to Vaidyasalas of the Malabar. The students were taught the theory and practice of Ayurveda. These students ventured out and settled in other parts of the presidency as Malabar Vaidyans, and carried on the practice of medicine in their own villages or town. The local boards and municipalities are now establishing Ayurvedic dispensaries in charge of students trained in the Malabar colleges or at the school of Indian Medicine, Madras. In Malabar births and deaths were clearly registered by the special officer. With the establishment of the Public Health Department in 1925, registration of vital statistics has improved.

**MEDICAL AND HEALTH DEPARTMENTS IN MODERN KERALA**

In 1935-36, a separate self-supported cadre was created for the specialists in the Medical Department and many European qualified medical officers were appointed.108 The efficiency of the medical staff and the free treatment in hospitals and dispensaries attracted large number of people for treatment. The Medical and Public Health Departments closely
co-operated in giving medical aid and health services to the people. This organizational setup continued till the formation of the modern Kerala State. In organizing the various activities of the Medical Department, the Government policy was to ascertain that proper medical aid is made easily available to all classes of people in the State.

The year 1946-47 was the second year of the reorganization of the State medical institution on the basis of a three year plan according to which, the General Hospital, Trivandrum and District hospitals at Quilon, Alleppy, Kottayam and Alwaye were to be maintained as major hospitals equipped with all modern facilities for medical aid, while all the other institutions were to be minor hospitals and dispensaries were to be serving as feeder institutions to the major hospitals. All the State medical institutions were under the direct control of the Surgeon General. The Medical Advisory Committee was also reconstituted during the year.109

The State was divided into three public health districts. They were northern, the central, and the southern. Their respective jurisdiction corresponded closely with the revenue divisions.110 The immediate control and supervision of each Public Health District was vested in the hands of a District Health Officer. Every taluk in the State was provided with a local health organization sanitary circle office and these institutions later catered to the public health needs of the people in the respective taluks. The prevention and control of epidemics and the collection of accurate vital statistics had been considerably facilitated by these taluk health organizations which function throughout the State.111
The Modern Kerala State had its beginning from 01-11-1956. On the same day the Medical and Public Health departments were united into a single Department of Health Services. Moreover a separate department of Public Health Engineering was constituted for the execution of the water supply and sanitation schemes. The State's water supply and sanitation works were undertaken by the Public Health Engineering Department.

In 1960 the Government sanctioned the formation of a Health Education Bureau in the State under the control of the Chief Health Education Officer. The Department of Health Services consisted of several wings including the laboratory wing. This set up continued up to 1962, after which that the Department's name was altered by the Government.

In 1962, the Department of Health Service and the Labour Department were amalgamated to be named as Health and Labour Department. After the formation of Health and Labour Department, importance was given to the infrastructural works of the Health Department. After a lapse of five years, in the year 1967 this Department was again renamed as Health Department. The Health Department has been conducting its services perfectly up to 1985. That same year the Health Department's name was altered into Health and Family Welfare Department. Since a number of family welfare measures were undertaken by the Health Department, it was renamed as Health and Family Welfare Department. Now, the Health and Family Welfare Department is one of the important departments in modern Kerala.
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68. *TAR* for the Year, 1892 – 93, p.247.
70. Travancore Cover File No: 2634, 1896, State Archives Trivandrum.
71. Ibid., No. 2656 , 1896, State Archives Trivandrum.
77. *TAR* for the year 1936 – 37, p.61.
78. Ibid., p.139


89. Editorial on public health *Malayala Manoroma* dated September 30, 1932 – found in the correspondence of Dr. Jacoks to Dr. Heiser 19-10- 1932.


94. Rock Feller Foundation Travancore, *Correspondence of Dr. Sweet to Dr. Jacoks dated 23-08-1935*.


98. Rock Feller Foundation Travancore, *Correspondence of Dr. W.C. Sweet to Victor Heiser, 18-08-1932*.


104. C. Achutha Menon, *op.cit.*, p.370


